Preparatory study to gather evidence on ways to empower consumers to play an active role in the green transition - ANNEXES

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Annex 1. Reviewed Literature

Document title	Type of document	Year of publication	Product group	Common aspects: Durability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Regulatory factors: Guarantee rights	Other consumer rights	Legal issues	Enforcement	Consumer drivers: Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry drivers: Industry practices	Incentives	Obstacles for producers	Market	Other	Summary
Sala, S., Beylot, A., Corrado, S., Crenna, E., Sanyé-Mengual, E. and Secchi, M., 2019. Indicators and assessment of the environmental impact of EU consumption. Consumption and Consumer Footprint for assessing and monitoring EU policies with Life Cycle Assessment. Science for policy report. Publications Office of the European Union. doi, 10, p.25774.	Report	2019	General														x				x	x	It provides an overview of the results gathered from the application of LCA (Life Cycle Assessment) to evaluate the environmental impacts of consumption in the EU. The LCA-based framework the Commission has developed intends to monitor the evolution of environmental impacts and consumption. For this, two indicators are used in this study: the Consumer Footprint and the Consumption Footprint.
Union, I., 2014. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A new skills agenda for Europe. Brussels.	Report	2019	General		x	x		x	x	x	x								x	x			The document covers different initiatives to make the economy more circular. Collects the need to build confidence in secondary raw materials to increase reusability and to promote ecodesign. Following positive experience with Energy-Labelling regulation, it is in the Commission's plans to develop a scoring system on product reparability. Proposals include extending the reversal of the burden of proof period and combat greenwashing and planned obsolescence practices via better opportunities for individual and collective redress. Revision of UCPD.
COM(2016) 773. Communication from the Commission. Ecodesign Working Plan 2016-2019	Communication	2016	General				x				x	x					x						The Working Plan established the Commission's priorities under the ecodesign and energy labelling framework 2016-19. It further identifies additional product groups to be further analyses with the purpose to inform potential proposals for ecodesign and/or energy labelling requirements.
COM(2013) 196. Communication from the Commission to the European Parliament and the Council - Building the Single Market for Green Products. Facilitating better information on the environmental performance of products and organisations.	Communication	2013	General			x		x														x	In this Communication, the Commission proposes the Council and the Parliament the implementation of two methods for measurement and a set of principles for informing about the environmental performance of products and organisations. These two methods are the Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF). This is introduced in the context of the need to improve the availability of clear, reliable and comparable information on the environmental performance of products and organisations.
COM(2018) 773. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Clean Planet for all A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy	Communication	2018	General																		x		It provides an overview of the impact of global warming in our environment and the urgency to protect the Planet against the current changes. It highlights that immediate and decisive climate action is essential and it sets out pathways for the transition to a net-zero greenhouse gas emissions economy and strategic priorities to embrace in Europe.
SEC(2009) 1666. Commission Staff Working Document - Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices	Working Document	2016	General				x																Includes main point of actions to address the use of misleading green claims. See section 2.5 on misleading environmental claims.
Montalvo, C., Peck, D. and Rietveld, E., 2016. A longer lifetime for products: benefits for consumers and companies. Study for Internal Market and Consumer Protection (IMCO) Committee.	Report	2016	General	x	x	x																	Initiatives suggested in this report to maximize the utility of products include harmonised repair costs, support of technical expertise and the dissemination of service manuals, aftermarket brands and information comparing sales channels, as well as support for service and repair through internet platforms.

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SWD(2019) 91. Commission Staff Working Document - Sustainable Products in a Circular Economy - Towards an EU Product Policy. Framework contributing to the Circular Economy	Working Document	2019	General	x		x	x												x	x			This document analyses to what extent EU policies have contributed to the green transition and identify where there is a potential for a stronger contribution. It provides an analysis of the priority sectors and products identified. Additionally, it looks into policies protecting and informing consumers.
Deloitte (2016) Study on Socioeconomic impacts of increased reparability – Final Report. Prepared for the European Commission, DG ENV.	Report	2016	General; furniture; plastic products			x	x				x		x			x								The BEUC study reveals very significant and relevant insights for this study. For instance, it analyses the repair market at socioeconomic level and discovers that the market for repair of electrical items has seen a general long-term decline, driven by falling costs of new products, greater product complexity and reliability. But also, the report reviews the logic behind the decision of replace a product instead of repair it. It is highlighted that the most relevant barriers for repair are closed markets of spare parts and monopolies. Additionally, it recognises that the price sensitivity of repair services is high. Prices of spare parts are a limiting factor, as well as consumer demand and the profitability of the repair business. The technical barriers that may hinder repair include product design, choice of the materials, difficulty to disassemble the components, and the lack of manuals provision. As to legal barriers, currently manufacturers are not obliged to ensure the availability of spare parts or other components. Moreover, the current legal framework does not promote reusability. The recycling and reuse targets are in the WEEE Directive do not distinguish between these two activities, which promotes material recycling over preparation for reuse.
GfK 2014. Consumer market study on environmental claims for non-food products; European Commission: Brussel, Belgium.	Report	2014	General					x		x														This study looks into the market of environmental claims and reveals some insights about the perceptions of consumers towards environmental claims and how this influences their purchasing choices.
Cordella M, Alfieri F, Sanfelix J, Analysis and development of a scoring system for repair and upgrade of products – Final report, EUR 29711 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-01602-1, doi:10.2760/725068, JRC114337	Technical Report	2019	General; electronics	x		x	x	x																This report develops the configuration of a potential scoring system to inform about the reparability of products. It analyses the existing methods for assessing reparability and upgradability and product specific scoring systems (household products). It also covers existing methods, labels, schemes or conditions influencing the reparability and upgradability of specific families of products
Report presented at the European Consumer Summit 18-19 March 2013 - Environmental Claims. Report from the Multi-Stakeholder Dialogue - Helping consumers make informed green choices and ensuring a level playing field for business	Report	2013	General				x	x		x								x						Participants of the Multi-stakeholder Dialogue on Environmental Claims (MDEC) contributed to this report which presents challenges related to the knowledge base, to definitions, terminology and methodology, to confusion and understanding and to achieving a coherent enforcement. But it also analyses existing best practices
Lupiáñez-Villanueva, F., Tornese, P., Veltri, G.A. and Gaskell, G., 2018. Assessment of different communication vehicles for providing Environmental Footprint information. Final Report	Report	2018	General				x	x		x					x			x	x					Focuses on the assessment of different communication vehicles (CVs) for providing Environmental Footprint Information in order to test the implementation of CVs and gather feedback on the effectiveness and use of CVs. The latter includes the understanding of CVs by different target audiences; changes in purchasing intentions and/or behaviour; influence on attractiveness of the product/ reputation of the organisation.

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Elsen, M., van Giesen, R., van den Akker, K., Dunne, A. 2019 - Consumer testing of alternatives for communicating the Environmental Footprint profile of products. Final report	Report	2019	General			x	x		x															It reviews the wide range of methodologies used to calculate environmental impacts as well as the large variety of communication tools being used. It highlights the importance of using reliable tools to measure environmental impacts of products, but also the need to adopt consistent and uniform ways in which communicate environmental information to consumers.
Farmer, A., Watkins, E., Withana, S., Paquel, K., Iles, A., Oosterhuis, F.H., Kuik, O.J., Haines, R., Rayment, M., McNeil, D. and Martinez-Granado, M., 2015. Study to analyse differences in costs of implementing EU policy.	Report	2015	General										x											The study analyses why costs of EU environmental law differ between Member States with the purpose of identifying best practices.
Rademaekers, K., Svatikova, K., Vermeulen, J., Smit, T., Baroni, L. 2018 - Environmental potential of the collaborative economy. Final report and Annexes	Report	2018	General; Services (transport; accommodation sector); consumer durables sector			x													x			x		This research work aims to fill the existing gaps in the collaborative economy literature by providing qualitative and quantitative analysis of the environmental impacts of such collaborative platforms. It includes five case studies and it uses the LCA method to analyse in detail the environmental impacts per platform. Results of this assessment reveals that the environmental impacts generated by the collaborative economy are complex to harmonise as they differ widely per business model.
Fazekas, D., Gionfra, S., Paspaldzhiev, I., Pollitt, H., Schweitzer, J., Seizov, P., Smith, A., Stenning, J. - Links between production, the environment and environmental policy - Summary report	Report	2019	General; Food, tobacco, plastics, motor vehicles, water supply; waste & sewerage															x		x	x	x		This study assesses Europe's largest manufacturing sectors (food and drink, plastics, motor vehicles, water, waste) to explore the links between production. The environment and environmental policy. It is observed that the action required in each sector is different and that comprehensive action across sectors is needed in order to achieve the environmental policy goals
Umpfenbach, K., 2014. Influences on consumer behavior-Policy implications beyond nudging. Final Report of European Commission, pp.1-25.	Report	2014	General			x									x			x						The report is based on the assumption that if individuals' actions are the prime causes influencing environmental outcomes, then policy should be about behavioural change. Behaviour research should feed environmental policy making. The report covers the reconsideration of information provision; biases in decision making processes; the influence of motivations and norms; and the influence of situations.
DG Research&Innovation - Accelerating the transition to circular economy - Improving access to finance for circular economy projects - A report by the Informal Commission Expert Group "Support to Circular Economy Financing"	Report	2019	General																	x	x			In the context of the early stages of the transition to a circular economy in the EU, the report analyses barriers and identified the main areas where incentives need to be provided and provides recommendations based on that. These areas include: level playing field; value-chain collaboration; long-term value creation; market participation; integration of the public good; finance knowledge build-up; first mover's action.
Research & Innovation Projects relevant to the Circular Economy Strategy - CALLS 2016-2018 - HORIZON 2020	Report	2019	General																x	x				The report provides a snapshot of the numerous projects resulting from the Circular Economy Strategy calls 2016, 2017 and 2018 that were financed by H2020 and are contributing to the circular economy strategy.
Crippa, M., De Wilde, B., Koopmans, R., Leyssens, J., Muncke, J., Ritschkoff A-C., Van Doorsselaer, K., Velis, C. & Wagner, M. A circular economy for plastics – Insights from research and innovation to inform policy and funding decisions, 2019 (M. De Smet & M. Linder, Eds.). European Commission, Brussels, Belgium	Report	2019	Plastics			x	x												x	x	x	x		The report presents insights of the entire plastics value chain, identifying a broad range of challenges and opportunities in the transition towards the circular economy. It is also observed how this systemic change can be supported by innovation in business models, collection systems, and sorting and recycling technologies.

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EU research - Social innovation for sustainability - Research and Innovation - European Commission.	Report	2012	General															x	x				It contains a number of innovative research initiatives being supported by the EU, from involving CSOs in sustainability decisions to understanding sustainable consumption to linking science to policy
SWD(2018) 36. Report on Critical Raw Materials and the Circular Economy	Report	2018	General			x													x	x	x			It provides a sectorial analysis of the strategic importance of raw materials for the EU manufacturing industry.
COM(2015) 614. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Closing the loop-An EU action plan for the Circular Economy	Communication	2015	General																			x		The Commission's Communication sets the lines of action of the EU to move towards a circular economy - that is instrumental in reaching the SDGs by 2030.
DG Justice and Consumers- Consumer market study on the functioning of legal and commercial guarantees for consumers in the EU - European Commission	Report	2015	General			x					x	x		x	x			x						It explores to what extent sellers are aware of, and comply with, the requirements of relevant EU and national legislation in the area of legal and commercial guarantees. It examines the way in which guarantees are communicated to consumers as well as to what extent consumers are aware of their rights and are willing to make use of them. Additionally, it assesses the experience and problems consumers encounter when seeking redress and how legal guarantees influence in consumers' purchasing decisions.
DG Justice and Consumers - Summary of the results of the public consultation on the targeted revision of EU consumer law directives - European Commission		2018	General				x	x		x	x	x	x	x				x						Results of this public consultation collects stakeholders' views on possible legislative changes in some key EU consumer law directives. The evidence gathered points to the need of adopting legislative changes in areas such as the provision of more transparent information to consumers in online sales; individual redress/remedies for consumers harmed by unfair commercial practices (e.g. greenwashing); more proportionate and effective financial penalties; and simplification of some rules and requirements.
Van Camp, S., Bouyon, S. and Zarra, A., 2017. Introduction of a lifespan guarantee in the proposed online sales and digital content directives. Impact assessment of substantial amendments. Final Study. CEPS Study, October 2017.	Report	2017	Online sales	x			x	x			x													It tests some potential policy options and evaluates possible costs of introducing a lifespan guarantee in online sales. Includes analysis of the amendments: producer must give information on lifespan vs producer must not give information on lifespan
Cordella, M., Alfieri, F., Sanfelix, J., Donatello, S., Kaps, R. and Wolf, O., 2019. Improving material efficiency in the life cycle of products: a review of EU Ecolabel criteria. The International Journal of Life Cycle Assessment, pp.1-15.	Report	2019	General	x	x	x		x						x										The objective of this paper is to assess the state of implementation of material efficiency requirements for products as required in EU Ecolabel criteria. Results of analysing EU Ecolabel criteria for 26 product groups show a broad range of material efficiency aspects. However, it is suggested to seek further ways to implement additional material efficiency requirements (e.g. minimum lifetime of products)
Vanegas, P., Peeters, J.R., Cattrysse, D., Tecchio, P., Ardente, F., Mathieux, F., Dewulf, W. and Duflou, J.R., 2018. Ease of disassembly of products to support circular economy strategies. Resources, Conservation and Recycling, 135, pp.323-334.	Report	2018	General			x	x							x				x					x	Reparability and reusability of products require a facilitation of the disassembly of products. Although it has been claimed the need to include design for disassembly requirements in legislation or voluntary instruments, there is no standardised method to evaluate how easy disassembling a product is. This work proposes a robust method "eDiM" (ease of Disassembly Metric) to calculate the disassembly time. It is suggested using this method in a policy context to improve "disassembly" of products.

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DG Research and Innovation RTD - A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment Updated Bioeconomy Strategy- European Commission	Report	2018	General																			x	Following the review of the 2012 European Bioeconomy Strategy, this document presents an update to address challenges identified. It includes a set of 14 concrete actions that were due to be launched in 2019 the latest.
EEA (European Environment Agency) Report No 2/2016 - Circular Economy in Europe. Developing the knowledge base	Report	2016	General	x		x	x													x	x		x	x	Description of the concept of the circular economy as well as its key characteristics. Identification of the benefits and challenges the transition to a circular economy entails, highlighting possible ways to measure progress.
EEA Report No 6/2017 - Circular by Design. Products in the circular economy	Report	2017	General	X		X	X											X	X	X				This report explores the circular economy from a product perspective, applying a systemic approach and transition theory. Drivers of product design and usage are discussed in the context of emerging consumption trends and business models. For governance to be effective, it has to address the product life cycle and the societal context determining it. Indicators and assessment tools are proposed that can help fill the current data and knowledge gaps.
Pardo, R. and Schweitzer, J.P., 2018. A long-term strategy for a European Circular Economy-Setting the course for success. Policy paper produced for the Think2030 Project. Brussels, Belgium.	Policy paper	2018	General																x	x		x		In the context of the transition towards a circular economy, this paper offers some policy recommendations to set up a credible policy framework. These recommendations include the development of clear targets to reduce the EU's ecological consumption footprint; use of fiscal instruments to incentivise circularity; extend the scope of ecodesign criteria; integration of circular economy goals in long-term plans - including EU's external policies.
WWF Report EU 2019 and Global Footprint Network - EU overshoot day: Living beyond nature's limits	Report	2019	General																			x		Identifies some policy recommendations for Europe. These are classified in different areas: shift to sustainable consumption and food systems; make Europe climate-neutral by 2040; restore nature; protect the oceans; and financing our sustainable future.
Eurobarometer, F., 2009. Europeans' attitudes towards the issue of sustainable consumption and production. Flash Eurobarometer, 256, pp.1-18.	Statistics	2015	General												x		x							The survey analyses the levels of awareness and comprehension of the issue of sustainable consumption and production.
Eurobarometer, F., 2014. Attitudes of Europeans towards waste management and resource efficiency. Report, Flash EB Series, (388).	Statistics	2014	General		x													x	x			x	x	It examines consumers' perceptions on waste generation and management; circular economy; second-hand products, willingness to buy, reasons for not buying and alternatives.
DG Justice and Consumers - Consumer Conditions Scoreboard - Consumers at home in the Single Market - European Commission	Statistics	2019	General					x	x															The study touches upon consumers' perceptions on environmental claims. More than half of consumers are influenced by green claims when making purchases. More than 70% of retailers think environmental claims are reliable in 2018. More than 55% of consumers think environmental claims are reliable in 2018. These figures have increased over the years. The study also reviews guarantee rights. In 2018, 38.8% of consumers gave a correct answer regarding faulty product guarantee legislation

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Eurobarometer, F., 2018. SMEs, resource efficiency and green markets - Flash Eurobarometer, 456, Conducted by TNS Political & Social	Statistics	2018	General			x												x			x		The survey examines the current levels of resource efficiency actions and the state of the green market amongst Europe's SMEs, neighbour countries and the US. It covers topics such as resource efficiency actions or barriers when implementing resource efficiency actions. Results show that around two thirds of SMEs across the EU are minimising waste (65%) and saving energy (63%) to become more resource efficient.
Science for Policy Brief - Consumer and Consumption Footprint: assessing the environmental impacts of consumption in the EU - JRC, European Commission	Data	2019	General																		x	x	Following the implementation of the LCA-based framework, this document presents some quantitative results of the environmental impacts generated by consumers in the EU resulting from the use of the indicators "Consumer Footprint" and "Consumption Footprint".
Vidal-Legaz, B., Mancini, L., Blengini, G.A., Pavel, C., Marmier, A., Blagoeva, D., Latunussa, C., Nuss, P., Dewulf, J., Nita, V. and Kayam, Y., 2016. Raw materials scoreboard. Publications Office of the European Union.	Statistics	2016	General			x																x		The Raw Material Scoreboard offers quantitative data on the supply and use of raw materials to policymakers. It is also used to monitor progress towards a circular economy and it further identifies a number of challenges and opportunities along the entire raw materials value chain.
Eurostat, U.E., 2019. Waste statistics.	Statistics	2019	Waste																			x	Provides data on waste generation and treatment at EU and Member State levels.
Eurostat, U.E., 2000-2019. Resource Efficiency Scoreboard	Statistics	2000-2019	General																			x	It presents key indicators relating to natural resources. It aims to establish the link between resources and economy as well as serve as a monitoring system.
Test Achats dossier - Quelle devrait être la durée de vie d'un appareil ?	Data	2019	Electronic products	x											x		x				x		It collects the views of members of a Belgian consumer organisation on their expectations on the normal lifetime of their appliances. The article then compares whether their members expectations are realistic or not. Electronic products covered are: laptops, smartphones, vacuum cleaners, tablets and washing machines.
Special Eurobarometer 501 – Attitudes of European citizens towards the Environment	Statistics	2019	General	x		x	x								x		x					x	The survey explores citizens' attitudes towards the environment and studies individual actions to tackle environmental issues as well as the environmental impact of individual consumption habits. Focus on the clothing industry.
Special Eurobarometer 468 - Attitudes of European citizens towards the environment	Statistics	2017						x							x		x						This report presents the results of the Special Eurobarometer public opinion survey on the environment carried out in the 28 European Union Member States. The survey covers the following issues: - General attitudes towards the environment and sources of information; - The impact of environmental issues, and the impact of plastic products and chemicals; - Ways of taking action to tackle environmental issues; - The role of the EU in environmental protection; - Awareness of and attitudes towards ecolabels; - Perceptions of air quality and ways of tackling air pollution.
Flash Eurobarometer 441: European SMEs and the Circular Economy	Statistics	2016	General															x	x		x		The Eurobarometer shows that 73% of European SMEs have invested in the transition to a more circular model for their businesses over the past three years. Around 1 in 4 SMEs (27%) said they had encountered difficulties in accessing financing in this area.
Special Eurobarometer 490: Climate change	Statistics	2019	General												x		x						The survey covers citizens' awareness of climate change, their desire for the EU and Member States to act, and willingness to take personal action to fight climate change

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Flash Eurobarometer 438: The use of collaborative platforms	Statistics	2016	Collaborative economy			x									x			x					x		The survey collects the views of 14500 EU consumers and it assesses their awareness and frequency of use of collaborative platforms. It also analyses advantages and disadvantages of collaborative platforms
European Circular Economy Stakeholder Platform	Data	2019	General																x						Compiles circular infrastructure initiatives being carried out all over Europe.
Position Paper. Priority measures for durable and repairable products in Europe. Platform - Halte a l'obsolescence programme	Position paper	2020	General	x		x	x		x		x														Following the publication of the New Circular Economy Action plan by the European Commission, in this position paper, HOP identified several measures to help make this transition a reality. These include provision of better information to consumers, better design, support repair sector.
BEUC study - Consumer groups join up in EU-funded project to stop products failing too early		2019	General						x																Press release promoting PROMPT project regarding the investigation of premature obsolescence in consumer products.
BEUC Study - Consumer priorities for the 2019 European Parliament elections		2019	General	x		x	x	x	x	x					x										Durability of consumer products is one of the five issues highlighted by BEUC for the European legislators. Mentions premature obsolescence, durability, reparability and recommendations to address these issues.
Umwelt Bundesamt - Lifetime of electrical appliances becoming shorter and shorter	News article	2016	Domestic appliances	x		x			x									x							Press release promoting report from Öko-Institut e.V. and Bonn University commissioned by the German Environment Agency (UBA) regarding durability and planned obsolescence. The study on the development of strategies against obsolescence is the first detailed investigation of consumer behaviour, replacement patterns and the causes of defects in electrical and electronic appliances in the four product groups “large household appliances”, “small household appliances”, “information and communication technology”, and “consumer electronics”.
EP press statement - Making consumer products more durable and easier to repair	Press release	2017	General	x		x		x	x																Recommendations from the Parliament concerning longer product lifespan, in particular by tackling programmed obsolescence. Parliament asks the Commission to consider a “voluntary European label” covering, in particular, the product's durability, eco-design features, upgradeability in line with technical progress and reparability.
European Environment Agency - Europe's circular economy still in its infancy	Report	2019	General			x	x	x	x						x			x	x	x					The EEA report ‘Paving the way for a circular economy: insights on status and potentials’ takes stock of the initiatives for creating a circular economy that reduce the use of natural resources and minimise harmful emissions and waste. The new report also notes that monitoring progress on circular economy needs further investment. Many relevant data — for example, on the production and consumption phase of product lifecycles — are not available in established information systems, including national statistics. The EEA report also points out that circular economy policies and initiatives require better integration with bioeconomy and climate policies.
Von der Leyen, U., 2019. Political Guidelines for the next European Commission 2019-2024. A Union that strives for more: My agenda for Europe, 16.	Agenda	2019	General																			x			Agenda of the Commission President highlighting goals and targets regarding consumer protection and green transition.

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Ursula von de Leyen President-elect Mission Letter to Didier Reynders. Brussels, 10 September 2019.	Communication	2019	General																			x	Letter from Commission President to Justice Commissioner urging the latter to work on consumer protection and finding new ways of empowering consumers to make informed choices and play an active role in the green and digital transitions.
EC Press release - New Deal for Consumers: European Commission welcomes provisional agreement on strengthening EU consumer protection rules. Brussels, 2 April 2019.	Press release	2019	General								x		x										Promotes reaching a provisional agreement on stronger and better enforced consumer protection rules by the EP and Council within the negotiations for the "New Deal for Consumers" proposal.
EC press release - New rules make household appliances more sustainable. Brussels, 1 October 2019.	Press release	2019	Domestic appliances	x		x	x																Press release promoting the adoption by the Commission of new eco-design measures for products such as refrigerators, washing machines, dishwashers and televisions. The measures include requirements for reparability and recyclability, contributing to circular economy objectives by improving the life span, maintenance, re-use, upgrade, recyclability and waste handling of appliances.
BEUC - X - 2018 - 057 - June 2018 Premature obsolescence when products fail too quicky	Report	2018	General	x		x	x	x	x	x	x	x											BEUC identifies reasons why products do not last as long as expected: design; unavailability of spare parts; high repair costs; early failure of products; marketing practices encouraging replacement of products at early stage. On that basis, BEUC suggests some lines of actions to empower consumers. These include better design of products aligned with Ecodesign rules; provision of lifetime information at the point of sale; or reinforcement of guarantee rights.
Porter, A., Which? 17 June 2015 - Are washing machines built to fail?	Press release	2015	Domestic appliances - Washing machines			x		x															Investigation of Which? (UK consumer association) into the planned obsolescence of several washing machines brands.
EC press release - Consumer Authorities and the European Commission urge Volkswagen to finalise repairs of all cars affected by emissions scandal. Brussels, 7 September 2017.	Press release	2017	Mobility - Cars			x	x					x		x									Details Commission's action regarding "dieselgate" scandal.
EC press release - The European Commission and EU consumer authorities publish final assessment of dialogue with Volkswagen - 17 July 2018	Press release	2018	Mobility - Cars			x	x					x		x									Details Commission's action regarding "dieselgate" scandal.
Feuille de Route Economie Circulaire. Entrons dand la boucle, changeons de modele. 50 measures pour une economie 100 % circulaire. PLAN CLIMAT, REP FR		2018	General	x		x	x													x		x	It establishes a Roadmap towards a Circular Economy that includes 50 initiatives to help achieve greater circularity in the system.
PROMPT - Independent testing programme assessing the lifetime of consumer products	Testing Project	2019	General	x		x																	Independent testing programme assessing the lifetime of consumer products. The Project has received funding from the European Union´s Horizon 2020 research and innovation programme. PROMPT has the ambition to help extending the useful lifetime of products and to contribute to the transition to a circular economy. It aims at boosting durable design, providing access to repair services, upgrades and disassembly options. Furthermore, it intends to help reducing resource depletion, prevent waste generation and mitigate associated societal and environmental impacts.

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RDC Environment SA - L'obsolescence programmée: politiques et mesures belges de protection du consommateur - Rapport Final, Mai 2017		2018	General	x					x															The purpose of this study is to identify concrete measures to tackle planned obsolescence and to analyse their efficiency and feasibility.
Motion for a European Parliament Resolution - On a longer lifetime for products: benefits for consumers and companies - 2016/2272 (INI).	Report	2016	General	x		x	x		x		x		x											Calls on the Commission to encourage, where practicable, the establishment of minimum resistance criteria covering, inter alia, robustness, reparability and upgradeability for each product category from the design stage onwards, facilitated by standards developed by all three European Standardisation Organisations (ESOs) (CEN, CENELEC and ETSI); Stresses that a balance must be struck between the extension of product lifetimes, the conversion of waste into resources (secondary raw materials), industrial symbiosis, innovation, consumer demand, environmental protection and growth policy in all the phases of the product cycle, and considers that the development of increasingly resource-efficient products must not encourage short lifetimes or the premature disposal of products; Points out that issues such as product durability, extended warranties, the availability of spare parts, ease of repair and the interchangeability of components should be part of a manufacturer's commercial offer in meeting the various needs, expectations and preferences of consumers, and are an important aspect of free market competition; States that the pursuit of product durability and reparability should go alongside the objective of sustainability by means of, for instance, the use of environmentally friendly materials;
Press Release - 3rd PLATE conference - Product Lifetimes and the Environment - 18-20 September 2019	Press release	2019	General	x		x	x		x															The biennial conference brought together academics, industry, civil society as well as policy makers and dealt with product lifetimes in the context of sustainability. Participants' contributions focused predominantly on sustainable practices in the development, production, use, reuse and recycling of products from various fields like electronics, textiles, furniture, vehicles, etc. Particularly popular topics in 2019 were current trends in the circular economy, ecodesign and collaborative consumption.
Terryn, E., 2019. A Right to Repair? Towards Sustainable Remedies in Consumer Law. European Review of Private Law, 27(4), pp.851-873.	Academic paper	2019	General			x							x											This contribution analyses one particular way to contribute to a more sustainable consumer law: repair. Repair can contribute to a more circular economy but is currently not always the preferred option. A mix of policy measures could overcome obstacles to obtain repair from the seller under the legal and commercial guarantee as well as obstacles for do-it-yourself ('DIY') or independent repair.
KU Leuven - International Conference - Consumer Protection in a circular economy - Friday 4 May 2018	Presentation	2018	General			x	x																	Conference on circular economy. Discussions about production, consumption, repair and remanufacturing and consumer protection issues at these stages
BEUC Conference: Towards sustainable consumption – Durable goods and legal guarantees	Presentation	2015	General	x					x															Presentation from speakers on ways to improve durability of products and insights on planned obsolescence - drivers in the markets and possible measures and policy options.
Assembly, G., 2015. United Nations: Transforming our world: The 2030 agenda for sustainable development. Tech. Rep. 1.	Policy paper	2015	General																			x		Contains targets on environmental protection, sustainable consumption and production.

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EC Press Release - The Commission calls for a climate neutral Europe by 2050 - Brussels, 28 November 2018.	Press release	2018	General																			x	The strategy shows how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance, or research – while ensuring social fairness for a just transition.
EC- Monitoring consumer markets in the European Union 2015 - Final report - Part I - DG Justice and Consumers	Report	2015	General												X	X	X	X						Indicators on various markets. complaints, consumer trust. The report presents the results of the fifth wave of the consumer Market Monitoring Survey (MMS) carried out by GfK for the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA). This wave was carried out in spring 2015, following on from previous waves in 2010, 2011, 2012 and 2013, and evaluates 42 consumer markets in the 28 EU Member States, Norway and Iceland. The main purpose of the survey is to monitor consumer markets and identify the ones that are perceived and experienced as not delivering the desired outcomes for consumers.
Prakash, S., Dehoust, G., Gsell, M., Schleicher, T. and Stamminger, R., 2020. Influence of the service life of products in terms of their environmental impact: Establishing an information base and developing strategies against "obsolescence". Final report - UBA-Texte 09/2020.	Report	2020	General	X		X	X			X														Contains a database for describing and assessing the phenomenon of obsolescence, and trends on lifespan and use times, and based on this, to develop strategies against obsolescence. The results show that there are various reasons for replacing electrical and electronic appliances. Study confirms that the first useful service life of most of the analysed product groups has decreased over recent years. According to this German study, the average life time evolved as following in the past 10 years in Germany for the category of "white goods" (i.e. big household appliances such as washing machines): • first-use duration declined from 14.1 years (2004) to 13.0 years (2013/14); • main reasons (data for 2012/13) for replacing are to 55.6% due to a defect of device, and to 30.5% the wish for a better device (while old one still works fine); • average age of washing machines in the recycling system declined from 16 years (in 2004) to 13.7 years (2013); with more than 10% having 5 years and less as age. The German study contains also similar analysis results for further categories (e.g. for TV devices and notebooks); all of them showing a rather similar situation.
Applia - Home Appliance Europe - "The Home Appliance Industry in Europe 2017-2018"	Data	2018	Domestic appliances																			X		Statistics on employment related to home appliance industry are presented, units sold, waste, energy consumption of some appliances, main producers, smart appliances, export destinations, etc.
European Environment Agency - Trends in appliance energy efficiency and ownership in households, EU-27 - 17 August 2012	Report	2012	Domestic appliances																			X	X	A time series of the available stock of three household appliances in EU27 compared to the specific energy consumption of those appliances and the total electricity consumption of households.
European Commission, DG Communications Networks, Content & Technology - Study on the Electronics Ecosystem - OVERVIEW, DEVELOPMENTS AND EUROPE'S POSITION IN THE WORLD.	Report	2020	Electronics																			X		This study presents the situation of the electronic value-chain (end-user electronic equipment & systems, electronic components, materials & tools…), in the world in 2017 and describes the position of the EU in terms of activity, production, main R&D and industrial players, value-chain specialization and the evolution of Europe's position since 2010. Contains data on sales, labour, main producers, lots of relevant graphs on production mostly on 2010-2016 Eurostat Data.

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European Commission, DG Communications Networks, Content & Technology - Study on the Electronics Ecosystem - OVERVIEW, DEVELOPMENTS AND EUROPE'S POSITION IN THE WORLD. Annexes 4 and 5	Report	2020	Smartphones																		X		Annex 5 analyses Telecommunication electronics and has very relevant data on the Smartphones market
European Commission, DG Communications Networks, Content & Technology - Study on the Electronics Ecosystem - OVERVIEW, DEVELOPMENTS AND EUROPE'S POSITION IN THE WORLD. Annexes 6, 7 & 8	Report	2020	Computers and ICT equipment																		X		Annex 6 is has relevant data on PC and Data processing electronics. Annex 8 focuses on Domestic Appliances. Contains a lot of relevant data on the production market and Europe's position in the value chain
Tecchio, P., Ardente, F., Marwede, M., Clemm, C., Dimitrova, G. and Mathieux, F., 2018. Ecodesign of personal computers: an analysis of the potentials of material efficiency options. Procedia CIRP, 69, pp.716-721.	Report	2018	Computers and ICT equipment	X		X	X																Contains possible measures to improve material efficiency of the personal computer product group, to support the ongoing review of the Ecodesign Regulation. The analysis aims to support policy actions by applying the principles of the circular economy, thus by improving (a) resource saving and waste prevention, (b) repair and reuse, and (c) the design for recycling
Carton, B., Mongardini, M.J. and Li, Y., 2018. A New Smartphone for Every Fifth Person on Earth: Quantifying the New Tech Cycle. International Monetary Fund.	Working Paper	2018	Smartphones																X	X	X	X	Some insights on the smartphone value chain but mostly focuses on the Asian market as the main manufacturer.
Vanegas Pena, P., Peeters, J., Cattrysse, D., Duflou, J., Tecchio, P., Mathieux, F. and Ardente, F., 2016. Study for a method to assess the ease of disassembly of electrical and electronic equipment. Method development and application to a flat panel display case study.	Report	2016	Electronics		X	X	X	X															Discusses the inclusion of ease of disassembly criteria in European policies to improve the reparability and recyclability of products and provides for methods to measure or quantify the disassembly time
Reale, F., Castellani, V., Hischier, R., Corrado, S. and Sala, S., 2019. Consumer Footprint-Basket of Products Indicator on Household Appliances.	Report	2019	Domestic appliances	X	X	X																X	Environmental impact of household appliances, lifecycle stage, reparability. Overview of existing literature for each category of appliances is analysed to model each product in the basket of products (Table 6). Collection rate, Recyclability rate are also discussed. Eco-innovations relevant for the Appliances (page 53). Relevant tests scenarios: scenario 7 - Density of devices in our society, scenario 8 - Increase of reusability Stock numbers and projections (Table 60) Annexes have additional info for every category of appliances
Civic Consulting , Directorate-General for Justice and Consumers (European Commission) , Grimaldi Studio Legale , ICF , Ipsos MORI - Study on the costs and benefits of extending certain rights under the Consumer Sales and Guarantees Directive 1999/94/EC	Report	2017	General		X	X	X				X	X	X	X									The study assessed the costs and benefits of extending certain consumer rights under the Directive. It specifically focuses on assessing the impacts of extending the legal guarantee period to more than two years for all products or applying varying guarantee periods for a selection of products depending on product type, value or life-span as declared by the manufacturer. In addition, it explores the impacts of uniform EU rules allowing the consumer to freely terminate the contract when the seller fails to repair or replace a defective good within a specified deadline; introducing an obligation on sellers to inform consumers about the availability of spare parts; and introducing an obligation on sellers to keep or facilitate access to spare parts for all or some products.

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Bobba, S., Ardente, F. and Mathieux, F., 2015. Technical support for Environmental Footprinting, material efficiency in product policy and the European Platform on LCA. Durability assessment of vacuum cleaners. JRC Science and Policy Report, Institute for Environment and Sustainability, Ispra.	Report	2015	Domestic appliances - Vacuum cleaners	X	X		X								X										The report showed that extending the lifetime of VCs generally implies benefits, from both environmental and economic perspectives, for the large majority of scenarios considered. In general, these benefits already exist for small extensions of lifetime, and they become significant if the lifetime is extended further. These results could be used to promote the design of more durable products, e.g. via more ambitious policy measures. The report also highlighted the relevance of reparability of VCs from both environmental and economic points of view. Reparability could be promoted for instance through a proper 'design for repairing' of products but also the availability of information and tools for the repair and/or replacement of some components. Finally, the importance of the role of consumers has been confirmed, in terms of proper use of VCs during their operation phase and the proper maintenance/repair operations (e.g. to grant the energy efficiency of the product throughout the lifetime).
Tecchio, P., Ardente, F. and Mathieux, F., 2016. Analysis of durability, reusability and reparability-application to washing machines and dishwashers. Technical report of the Joint Research Centre.	Report	2016	Domestic appliances - Washing machines and dishwashers	X	X	X																			The report analyses material efficiency aspects, such as durability, reusability and reparability, for the two product groups washing machines (WM) and dishwashers (DW).
Boulos, S., Sousanoglou, A., Evans, L., Lee, J., King, N.C., Facheris, C. and Donelli, M., 2015. The durability of products: standard assessment for the circular economy under the Eco-Innovation Action Plan. Report for European Commission, DG Environment.	Report	2016	General	X	X		X	X							X	X			X						Analyses the role that extended durability can play in reducing the life time environmental impacts of products. Factors that need to be considered before the benefits of extended product durability are assessed, including: - Practical limits on lifetimes from current manufacturing methods; - Cost implications of changes to product materials, components and manufacturing to extend lifetime; - Innovation rates that could make extended lifetime products obsolete and inefficient; - Consumer buying habits and expectations of product performance for different types of product; - In complex products, the role of key components that determine overall lifetimes; - Possible impacts of more durable products on their second life potential – e.g. any risk of reduced refurbishment potential; - Availability and acceptance of appropriate standards, testing and compliance methods for enhanced durability
Rizos, V., Bryhn, J., Alessi, M., Campmas, A. and Zarra, A., 2019. Identifying the impact of the circular economy on the Fast-Moving Consumer Goods Industry Opportunities and challenges for businesses, workers and consumers–mobile phones as an example STUDY.	Report	2019	Smartphones	X	X	X													X	X	X	X			This study looks at the opportunities and challenges that arise from implementing circular economy approaches in the mobile phone value chain. A review of the value chain and different circular approaches is complemented by a scenario analysis that aims to quantify the potential impacts of certain circular approaches such as recycling, refurbishment and lifetime extension. The study finds that there is a large untapped potential for recovering materials from both the annual flow of new mobile phones sold in Europe once they reach the end of their life and the accumulated stock of unused, so-called hibernating devices in EU households.
European Commission, DG Research and Innovation - 'Made in Europe' The future of European manufacturing? - Independent Expert Report - Sarah Mc Cormack, November – 2019	Report	2020	General										X						X	X	X	X			Policy recommendations regarding the innovation of the manufacturing process

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Nita, V., Castellani, V. and Sala, S., 2017. Consumer's behaviour in assessing environmental impact of consumption-State of the art and challenges for modelling consumer's behaviour in life cycle based indicators. European Commission, Joint Research Centre, Publication Office of the European Union, Luxembourg.	Report	2018	General												X	X	X	X							After a brief review of theories and models explaining consumer behaviours, this report discusses the main approaches for measuring the environmental impacts of consumption and the key drivers that influence consumers' shift towards more environmentally friendly consumption choices and behaviours.
Peeters, J., TECCHIO, P., ARDENTE, F., Vanegas Pena, P., COUGHLAN, D. and Duflou, J., 2018. eDIM: further development of the method to assess the ease of disassembly and reassembly of products: Application to notebook computers.	Report		Computers		X	X																			This study aims to provide scientific evidences for regarding the ease of disassembly, reparability and reusability, and to serve as basis for the potential development of standardised metrics. The report includes a review of available statistics about frequent failures of notebook computers.
European Commission, DG ENV Workshop Report- Promoting remanufacturing, refurbishment, repair, and direct reuse. As a contribution to the G7 alliance on resource efficiency 7-8 February 2017 Brussels, Belgium	Report	2017	General		X	X																			It documents the workshop that took place in Brussels (Belgium) to present the preliminary findings of the upcoming report by the International Resource Panel on remanufacture, refurbishment, repair and direct reuse, and discuss measures for overcoming market and policy barriers to promote these circular economy processes. The workshop was held back-to-back with a G7 Meeting on Resource Efficiency.
Schindler, H.R., Schmalbein, N., Steltenkamp, V., Cave, J., Wens, B. and Anhalt, A., 2014. SMART TRASH: Study on RFID tags and the recycling industry: Executive Summary of Final Report (D6) in English, with German and French translations.	Report	2014	General		X	X	X												X	X	X				The study, funded by the European Commission, aims to obtain expert input necessary for assessing (i) the environmental impact of RFID tags and (ii) the environmental advantages that RFID can provide for product lifecycle management. An integral part of the study was to identify the associated obstacles and needs for policy action and/or research activity.
European Circular Economy Stakeholder Conference - Brussels, 20-21 February 2018 - Civil Society Perspectives	Report	2018	General												x										The move towards a circular economic model requires overcoming cultural challenges – Awareness raising is needed, but not enough – new behaviour must come from linking circular economy to values and norms. Suggests looking at the past inspire present and future changes in behaviour, e.g. collection and reuse of milk bottles?
2019 Circular Economy Stakeholder Conference: Success Stories and New Challenges Consumers in the Circular Economy	Report	2019	General															x							The Document supports the importance of taking into account consumer behavioural and consumption aspects in the circular economy transition, factors which have been overlooked so far.
European Circular Economy Stakeholder Platform. Stakeholder meeting: Consumer Insights into the Circular Economy (CICE). European Economic and Social Committee (EESC), Brussels. 25 October 2018	Report	2018	General															x							The document looks to explore consumer insights into the circular economy and suggests some initiatives to include these into account. These recommendations include i) move beyond assumptions of rationality; ii) Address rebound effects / increase of resource consumption; iii) Understand and explore 'prosumerism'
Circular Economy - Stakeholder Conference 6-7 March 2019 -CONSUMERS IN THE CIRCULAR ECONOMY – WORKSHOP REPORT	Report	2019	General		x																				This report looks to explore new ways to introduce circular economy policies

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Circular Economy - Stakeholder Conference 6-7 March 2019 -SOCIAL DIMENSION OF CIRCULAR ECONOMY – REPORT OF THE WORKSHOP	Report	2019	General	x											x	x					x			Among different actions to take, it includes the importance to build living labs to create circular economy solutions. It reflects the importance that consumers understand the full cost of producing a product to make them more inclined towards sustainable goods. It also supports the idea that technology and innovation will only come from social changes. On a different note, it suggests that the development of rental/leasing models will help address the issue of affordability of more sustainable products.
BEUC study (2015) Pachl, U., Maurer, S., Durable goods: More sustainable products, better consumer rights - Consumer expectations from the EU's resource efficiency and circular economy agenda	Report	2015	General; electronic goods; furniture; plastic products	x		x	x	x	x		x							x				x		Reviews some studies on consumers attitudes towards durability, reusability and reparability of products. Main finding: consumers would wish products to last considerably longer and that information concerning the durability of products matters to them. Also, many consumers feel frustrated when products bought do not live up to their expectations. It confirms that sometimes basic products (e.g., washing machines) break shortly after the end of the guarantee period and can't be replaced – putting pressure on consumers' budgets and the environment. Collects results of an Austrian consumer association survey that found that 55% of respondents believed that artificial shortening of product's lifetimes is done intentionally and systematically by manufacturers. Despite lack of evidence, it is likely that consumers lose considerable amounts of money due to the need to continuously replace products earlier than necessarily. Environmental costs and resources used are tremendous. The decision to replace products should be left exclusively to the consumers. The study proposes some measures to increase the lifespan of products (e.g., better design, useful consumer information, technical standardisation and better reparability in a cost-effective way). BEUC also recommends to adopting rules on information about the availability of spare parts, the lifetime and reparability of products to consumers. BEUC welcomes a revision of the Consumer Sales Directive to improve guarantee rights. Ecolabel criteria could be aligned with Ecodesign minimum requirements.
Libaert, T., and J. P. Haber. "Opinion of the European Economic and Social Committee and the Committee on Towards more sustainable consumption: industrial product lifetimes and restoring trust through consumer information CCMI/112,"." Product Lifetimes and Consumer Informati" European Economic and Social Committee Brussels 17 (2013).	Position paper	2013	General	x		x		x		x	x			x										In this document, the EESC addresses measures to move towards a more sustainable consumption. These include the ban of planned obsolescence practice such us built-in defects design to end the product's life; the provision of information on a product's estimated life expectancy so consumers can make informed purchasing choices; or recommends expressing prices in different terms such as estimated cost per annum.
WRAP, 2019, The Effectiveness of Providing Pre-Purchase Factual Information in encouraging more Environmentally Sustainable Product Purchase Decisions: Expert Interviews and a Rapid Evidence Assessment Prepared by Dr. Colin Whittle, Fiona Brocklehurst, Catriona McAlister & Prof. Lorraine Whitmarsh	Report	2019	General; electronics; textiles; hygienic and care products; construction materials; vehicles				x	x																Reviews the existing evidence on how the provision of environmental information about products (including circular economy aspects) can influence more sustainable purchasing. Provisions may take the form of a label displayed at point of sale, information that is provided prior to sale (e.g., on the internet), information accompanying the product for sustainable use and disposal, or information that can be searched out during ownership of the product (e.g. on the internet)
Facts and figures on EU Ecolabel key figures as per March 2020	Data	2020	General					x																The document offers relevant facts and figures on Ecolabel. For instance, as of March 2020, 1,456 licences were awarded for 70,692 products (goods and services) available on the market, which is almost double the amount of available EU Ecolabel products of 2016.

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Legislative Train 05.2020. 1 A European Green Deal. Empowering consumers for the Green Transision / Before 2021 - 7	Website	2020	General	x		x	x	x	x	x	x															In the New Circular Economy Action Plan, published on 11 March 2020, the Commission announced that it would empower consumers for the green transition by: i) proposing a revision of EU consumer law to ensure that consumers receive trustworthy and relevant information on products at the point of sale, including on products' lifespan, the availability of repair services, spare parts and repair manuals; ii) working on establishing a new 'right to repair' and considering new horizontal rights for consumers, such as availability of spare parts or access to repair and, in the case of ICT and electronics, to upgrading services; iii) exploring possible further strengthening of consumer protection against green washing and premature obsolescence, and setting minimum requirements for sustainability labels and information tools; iv) exploring possible changes to guarantees in the context of the review of the 2019 Sale of Goods Directive; including more systematically durability, recyclability and recycled content in the EU Ecolabel criteria and exploring the possibility to integrate the Product and Organisation Environmental Footprint methods in the EU Ecolabel.
EURACTIV, Consumer empowerment: Helping shoppers to buy green, 13 July 2011	Position paper	2011	General														x									For many consumers, the perception that sustainable products are more expensive is perhaps the greatest obstacle to buying green. The European Commission acknowledges this. "Personal action can be expensive" said EU Climate Action Commissioner Connie Hedegaard. "Not everyone can afford to buy a new car. Not everyone can afford to install new geothermal or solar systems; not everyone can afford to retrofit their houses with new insulation. Lower prices would of course increase demand, and thereby increase action" […] At the same time, Hedegaard insisted, "if we consider the cost over a lifetime, there are huge savings to be made. With the right information, the consumer has the incentive to make the right choice"
BEUC The European Consumer Organisation - The Consumer Voice in Europe - Consumers at the centre of the drive to sustainability. BEUC's view on the European Green Deal	Position paper	2020	General	x		x	x		x	x	x					x	x		x							It rethinks the limits of consumer information, considering that counting on labelling alone is not enough as risks shifting the responsibility of buying a more sustainable product onto consumers. Therefore, the document suggests the need to complement consumer information initiatives with additional measures such as regulatory requirements or bonus/malus schemes. Additionally, it highlights the effectiveness of well-designed price signals as an instrument to steer consumer behaviour. It also reviews different initiatives to strengthen consumer rights with regards to more durable products and as to consumers' right to information.
Joshi, Y. and Rahman, Z., 2015. Factors affecting green purchase behaviour and future research directions. International Strategic management review, 3(1-2), pp.128-143.	Academic paper	2015	General													x	x	x	x							Very insightful paper where the authors classify factors influencing consumer decisions in two broad categories: individual and situational. Individual factors include variables related to an individual decision maker whereas situational factors comprise variables that make and describe the various situations in which an individual consumer makes consumption decisions.

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LE Europe, VVA Europe, Ipsos, ConPolicy and Trinomics - Behavioural Study on Consumers' Engagement in the Circular Economy. Final Report, October 2018. Specific contract - No 2016 85 06 Implementing Framework Contract - CHAFEA/2015/CP/01/LE	Report	2018	General; electronic products; textiles	x		x	x	x	x	x	x	x	x		x	x	x	x						This is a key document where attitudes and behaviours of consumers are studied in the context on how to empower them to play a more active role in the transition to a circular economy. It covers consumers' willingness to engage in the circular economy, collecting evidence from stakeholder interviews, focus groups and a consumer survey. Likewise, drivers, barriers and trade-offs faced by consumers are also reviewed. This also includes evidence from a behavioural experiment. A specific section studies consumers' awareness, understanding, and expectations on durability and reparability. Finally, the study focuses on durability and reparability information and its potential role in consumers' decision making. Academic reports, regulatory reports, and other sources reviewed in this document stress that better information for consumers on product features may drive their participation in more Circular Economy (CE) practices. In that sense, labels are useful tools for the information they provide. In March 2016, a study was carried out on the influence of lifespan labelling on consumers -products displaying lifespan information were on average chosen 4.6% more often than the ones without such information. In addition, in the same category of products, the ones with a lifespan information label were sold 13.8% more often than the ones without. Providing information on a product's lifespan could also encourage less wealthy households to pay more for a product that is expected to last longer. However, a report carried out for the French Ministry of Environment stressed the risk of potential confusion for consumers by the possible duplication of information with the existing Ecolabels. A clearer hierarchy would be in that sense useful. Underlying further The White Book for a Circular Economy in Greater Paris suggests the creation of a label for second-hand goods.
Eurobarometer, F., 2013. Attitudes of Europeans towards building the single market for green products.	Statistics	2013	General				x	x																This survey reveals consumers' attitudes towards a market of green products and the provision of environmental information, including the trust and attitudes of consumers towards green claims.
Choice, T., 2010. The Sins of Greenwashing: home and family edition. Underwriters Laboratories.	Report	2010	General				x																	It explores how the market of green products/services and the use of green claims have developed
BEUC (2015) Misleading green claims. Extract of the Guidance for the implementation/application of Directive 2005/29/EC on unfair commercial practices.	Report	2015	General				x																	Reflects main take aways from the Commission's guidance on misleading green claims.
Focus, C., 2009. Green expectations. Consumers understanding of green claims in advertising. Available online: https://www. gov. uk/government/uploads/system/uploads/attachment_data/file/218594/Green-expectations-single-page. pdf.	Report	2009	General				x																	Behavioural study exploring consumers' understanding of green claims in advertising. A survey reveals that 58% of consumers asked think that a lot of companies pretend to be green just to charge higher prices
Polonsky, M. J. (1994). An introduction to green marketing. Electronic Green Journal, 1(2), 388–412.	Academic paper	1994	General				x																	Defines key concepts such as "green or environmental marketing"

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Szabo S., Webster J. (2020) Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions. Journal of Business Ethics	Academic paper	2020	General				x		x															Highlights that some of the effect of the bad use of green claims (misleading, unclear) is that they generate confusion among consumers and create unfair competition towards companies who make genuine claims.
Darke, P. R., & Ritchie, R. J. (2007). The defensive consumer: Advertising deception, defensive processing, and distrust. Journal of Marketing Research, 44(1), 114–127.	Academic paper	2007	General				x																	Reviews some of the negative consequences of greenwashing (e.g. undermine favourable perceptions)
Organization for Economic Cooperation and Development OECD, 2012. OECD Science, Technology and Industry Outlook 2012. OECD.Transitioning to green innovation and technology.	Report	2012	General				x																	Among other findings, it reveals that the existence of multiple, misleading and low-quality claims increases information barriers and information asymmetries.
2019 Circular Economy Stakeholder Conference: Success Stories and New Challenges Montalvo, C., Rietveld, E., A LONGER LIFETIME FOR PRODUCTS benefits for consumers and companies. Prepared in cooperation with Policy Department A for European Parliament's Internal Market and Consumer Protection Committee	Report	2019	General																x		x			Emphasises the need to integrate bio-based industries into circular economy as they are not mutually exclusive. Recognises the importance of more R&D resources to help biobased products bicome biodegradable, compostable or recyclable. Includes some good practices from Sweden, an example of how one sector's residual can be another sector's value added.
House of Commons Environmental Audit Committee - A green economy - Twelfth Report of Session 2010-12, Volume I		2012	General																x					UKTI is leading a green export campaign which consists of a programme of activities that is helping UK companies with green solutions access international buyers and investors and boosting the reputation of the UK's low carbon capabilities in international markets. New activities include: - Low Carbon exhibitions in British Embassies overseas to which we bring UK companies to showcase products and services; and - A green technology roadshow for 109 innovative SMEs to meet overseas buyers and commercial officers from 10 international markets at three locations across the UK
Grean European Journal - GREEN TRANSITION 'Make Do and Mend': Industrial Conversions and Sustainability Transitions		2013	General																x	x				To really accelerate the conversion of European industry it is suggested that governments invest in ecological enterprise zones and the creation of clusters of eco-social enterprises. In UK parliamentary it was proposed the idea of a system of Ecological Enterprise Zones in some of Britain's post-industrial areas: 'These EEZs would be supported by government grants to become hot-houses for the innovation of green technologies and sustainable lifestyles'. On the other hand, clusters of eco-social enterprises would help create a circular economy. If waste from one product/factory is to become the feedstock for the next industrial process it would make sense to have factories in a near position. It is suggested that focus of cohesion funding on sustainability and social could be rethought.
Clusters of Social and Ecological Innovation. European Commission	Website	2020	General																x	x				This website collects different successful stories of Clusters of Social and Ecological Innovation across Europe. Report from the GECES working group to be released in December 2020
Institut National de l'Economie Circulaire (2020) OREE Major Circular Economy Networks in Europe	Report	2020	General																x					It identifies the major players in the circular economy in Europe as well as their roles.

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Cordella, M., Alfieri, F. and Sanfelix Forner, J., Guidance for the Assessment of Material Efficiency: Application to Smartphones, EUR 30068 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-15411-2, doi:10.2760/037522, JRC116106.	Technical Report	2020	Smartphones	x		x												x	x	x	x			This technical report identifies key material efficiency aspects of products as well as defines tangible improvement measures. The purpose is to serve as a guidance to improve the material efficiency of products with potential to bring benefits to the environment and the economy, especially with application to the smartphone sector. Table 39 very relevant.
MARCUS, J.S. et al., Promoting product longevity, Study for the Committee on Committee on the Internal Market and Consumer Protection, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020	Report	2020	General, Vehicles, electric products	x															x	x				This study considers the idea that there is not a "one size fits all" approach when it comes to prolong products lifetime as it may bring negative environmental impacts. Therefore, it suggests studying the particularities of every product category and product type. The study focuses especially on the automotive and smartphone and tablet sector.
Eurostat. EU Monitoring framework for circular economy	Statistics	2020	General			x													x	x	x	x			It provides relevant figures on circular economy indicators regarding production and consumption; waste management; secondary raw materials and competitiveness and innovation at EU level.
EC - The new ecodesign measures explained - Brussels, 1 October 2019	Website	2019	General											x							x				It explains in detail the 10 ecodesign regulations the Commission adopted, which focus on implementing energy efficiency and other requirements for the following product groups: refrigerators, washing machines, dishwashers, electronic displays (including televisions), light sources and separate control gears, external power suppliers, electric motors, refrigerators with a direct sales function. power transformers, welding equipment.
MacArthur, E., 2013. Towards the circular economy. Journal of Industrial Ecology, 2, pp.23-44.	Report	2013	General															x			x			This study examines how the circular economy practices have contributed to improving efficiency within today's "take-make-dispose" economy. It aims to identify success stories of circular business models and to determine what factors enable these success stories. For this purpose, the study reviews about a dozen mainstream products reflecting circular design concepts; collects data from more than 50 interviews with experts; and carries out economic analysis for key resource-intense business sectors.
World Health Organization (WHO), 2018. Circular Economy and Health: Opportunities and Risk. World Health Organization Regional Office for Europe: Copenhagen, Denmark.	Report	2018	Services - Health															x			x			The report seeks to start to address the limited coverage of the health implications of a transition to a circular economy. It frames the transition in a health context to set the scene for further policy development. Results reveal that the transition to a circular economy provides a major opportunity to yield substantial health benefits, such as direct benefits to health care systems and indirect benefits from reducing negative environmental impacts. But risks are also observed, including adverse and unintended health effects.
Improving product reparability: Policy options at EU level (Rreuse Report 2015)	Report	2015	General, automotive sector	x				x	x					x				x						The document provides recommendations on how EU legislation could better help ensure that products are repairable, including the Ecodesign, WEEE, Energy Label, EU Consumer Rights, Batteries and VAT Directives. It highlights that policies introduced in the automotive sector can serve as an inspiration for other sectors.

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Putting re-use and repair at the heart of the EU's Circular Economy Package (Rreuse 2015)	Report	2016	General, Household goods, vehicles			x	x				x	x	x	x				x				x			This piece of work provides feedback and recommendations on how current legislation could be adapted to help create more jobs in the re-use and repair sector through the development of re-use centres and networks. It focuses on the re-use of household good, as well as construction and demolition materials. It emphasizes that there is significant opportunity for the re-use of packaging.
MAKING MORE DURABLE AND REPARABLE PRODUCTS Building a rating system to inform consumers and trigger business innovation – Report for the European environmental Bureau (EEB) Brussels, Belgium. February 2015	Report	2015	General, electric products, furniture	x		x	x																			It seeks to identify some durability and reparability criteria to make products last longer. In particular, it focuses on tablets and wardrobes.
DIGITALEUROPE - 19 July 2019 -The Future of Ecodesign - How can Ecodesign continue to deliver and provide benefits to the environment, consumers and industry in Europe?	Report	2019	General								x	x	x	x								x	x		DIGITALEUROPE provides relevant recommendations to align Ecodesign with the circular economy agenda. These relate to material efficiency requirements, the effectiveness of the Ecodesign procedure or the guarantees market, amongst other areas.
Study on the Common Charger 2.0 - Final Report prepared for DIGITAL EUROPEMOBILE & WIRELESS FORUM 16 December 2019	Report	2019	Smartphones										x	x				x				x			The study seeks to provide relevant data and analysis for the discussions on a common charger. For this purpose, it undergoes a market analysis study; forecasts the uptake of the different wired charging solutions; and compares several policy scenarios.
Maitre-Ekern, E. and Dalhammar, C., 2016. Regulating planned obsolescence: a review of legal approaches to increase product durability and reparability in Europe. Review of European, Comparative & International Environmental Law, 25(3), pp.378-394.	Academic paper	2016	General	x	x			x	x		x	x													It reviews different legislative approaches to incentivise durability and reparability of products at the EU and Member State levels. This covers areas such as the regulation of durability through Ecodesign Directive or legal approaches taken by Member States such as longer consumer guarantees or the criminalisation of planned obsolescence.
Ceschin, F. and Gaziulusoy, I., 2016. Evolution of design for sustainability: From product design to design for system innovations and transitions. Design studies, 47, pp.118-163.	Academic paper	2016	General															x				x			This work explores the evolution of Design for Sustainability (DfS) under four innovation levels: Product, Product-Service System, Spatio-Social and Socio-Technical System.
Vasseur, L., Chasson, A., Ghesquiere, Q., 50 mesures pour une consommation et une production durables. Le guide des politiques publiques pour une société sans obsolescence accélérée. Livre Blanc. Halte à l'Obsolescence Programmée: HOP	White Paper	2019	General	x	x	x			x		x														This White Paper aims to propose measures to public policy makers to enable the extension of the of the products' lifespan and thus develop environmental externalities, positive social and economic outcomes. 50 proposals are formulated, which are grouped in 6 different axes: improving the design of sustainable products; enabling repair; developing the second-hand market; sustainable consumption; strengthening guarantees; avoiding software obsolescence.
Leslie, H.A., 2014. Review of microplastics in cosmetics. IVM Institute for Environmental Studies, 476, pp.1-33.	Report	2014	Cosmetics				X	X			X	X										X			Environmental impact of cosmetics which contain microplastics that can pollute marine life and river water because of their rinse off characteristic. Dangers to consumers

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Ecologic, Study for the European Parliament- DG for exteral Policies - Policy Department - New Options for Strengthening Standards on Social and Environmental Responsibilities of Corporations and their Implementation	Report	2013	General				X	X											X	X	X			Study shows that CSR has become highly susceptible to greenwashing, which has weakened its reputation. Under the general frameworks, participating companies use CSR to communicate on their claimed high environmental and social performance, while at the same time they often fall short in delivering and reporting on standards and criteria. In contrast, specific frameworks are often more effective, because of their narrow approach and the enforcement through the use of labelling and certification schemes. However, the thematic scope of specific CSR frameworks is often selective and very issue specific (e.g., human rights in the textile industry).
Cosmetics europe - the personal care association - Guiding principles on responsible advertising and marketing communication	Guidelines	2012	Cosmetics				X	X											X			X		Cosmetics Europe is the association of cosmetic companies in Europe. This is their proposed policy on advertising
Europe, C., 2018. Partnership for change.	Report	2018	Cosmetics																X	X	X	X	X	Future trends, market data for 2018, industry pledges
Statista - Cosmetics market in Europe	Statistics	2019	Cosmetics																			X		statistics and facts about the personal care and cosmetics market in Europe, including an overview of the market size, sales, trade and production. The dossier also includes a country by country overview of the leading five European cosmetic markets: Germany, France, the United Kingdom, Italy and Spain.
Statista - Cleaning products in Europe	Statistics	2019	Household cleaning products																			X		This dossier presents a range of statistics and facts on household cleaning products in Europe. The dossier gives an overview of the industry in Europe as a whole, as well as in selected leading European countries. Data on the European market, main producers, sales, revenue, etc.
Statista - Tissue and hygiene paper 2019	Statistics	2019	Hygiene products																			X		In this report, growth potentials, market drivers, consumer insights, key companies, and future developments for three major Tissue & Hygiene Paper markets, North America, Europe and Asia are analysed.
Statista - Cosmetics and hygiene industry in France	Statistics	2019	Cosmetics, Hygiene products																			X		This dossier provides statistical information regarding the cosmetics and hygiene industry in France. The dossier is broken down into the following categories: an international market overview, the French cosmetics market, the leading French cosmetics companies and the French shopping behaviour.
Boyano, A.; Kaps, R.; Medyna, G.; Wolf, O, Revision of six EU Ecolabel criteria for detergents and cleaning products, EUR, doi	Report	2016	Cleaning products																			X		Mainly analyses the criteria for EU Ecolabel but has also relevant data on the detergents and cleaning products market
Europe, C., 2019. Socio-economic contribution of the European cosmetics industry.	Industry report	2019	Cosmetics																			X		Data on cosmetic market - sales, employment, main products, sustainability, waste, etc.
BEUC alerts Ombudsman about EU Commission dragging its feet on endocrine disruptors in cosmetics Copy of complaint submitted on 30 November 2017	Complaint		Cosmetics																			X	X	BEUC complaint to European Ombudsman over cosmetics dangerous substances. Highlights environmental issues of the cosmetic market.
Consumer complaints statistic	Statistics	2017	General								X	X	X	X				X						Complaints per year by trader country/consumer country and sector/market 2006-2018

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Castellani, V., Hidalgo, C., Gelabert, L., Riera, M.R., Escamilla, M., Mengual, E.S. and Sala, S., 2019. Consumer Footprint. Basket of Products Indicator on Household Goods.	Report	2019	Cosmetics and hygiene products															X				X		Relevant products tested: shampoo, laundry detergent, soap, dishwasher detergent in Scenarios 5, 6, 7, 8. Findings on waste, environmental aspects, consumption.
AISE International Association for Soaps,Detergents and Maintenance Products - Activity & Sustainability Report 2018-2019	Report	2018	Cleaning products																			X		Sustainability initiatives, market details
THE HUGGARD CONSULTING GROUP -THE HOUSEHOLD CARE AND PROFESSIONAL CLEANING AND HYGIENE PRODUCTS INDUSTRY - A SOCIO-ECONOMIC ANALYSIS	Industry Report	2016	Cleaning and hygiene products																			X		Supply chain data, sales, revenue, market details for household care and professional cleaning and hygiene products.
Cerri, J., Testa, F. and Rizzi, F., 2018. The more I care, the less I will listen to you: How information, environmental concern and ethical production influence consumers' attitudes and the purchasing of sustainable products. Journal of Cleaner Production, 175, pp.343-353.	Academic paper	2018	General					x		x								x						Demonstrates that a complex interaction between previous environmental knowledge and the use of green labels influence attitudes towards sustainable products, rather than environmental concern per-se. For this, the paper analyses the data from a survey to a large sample of Italian consumers (n = 8001).It also advances 6 hypotheses to explain the main drivers behind consumers' selection of sustainable products
Sabbaghi, M., Esmaeilian, B., Cade, W., Wiens, K. and Behdad, S., 2016. Business outcomes of product reparability: A survey-based study of consumer repair experiences. Resources, Conservation and Recycling, 109, pp.114-122.	Academic paper	2016	General			x		x										x	x					It carries out a survey of 8403 consumers who have had personal repair experiences in year 2013. Results show that usefulness of guidelines, complexity of repair, and willingness to repair have significant impact on the consumer's loyalty
European Economic and Social Committee - ILLC Study - The Influence of Lifespan Labelling on Consumers Executive summary - March 2016	Report	2016	General	x			x	x																It examines whether lifespan labelling on products might influence consumers' purchasing decisions. Several different ways of displaying this information were tested. The research maps the determinants when purchasing green products as well as the effects of labelling by product categories
Steffen, A., 2017. Second-hand consumption as a lifestyle choice. In International Conference on Consumer Research (ICCR) (pp. 189-207). DEU.	Academic paper	2016	General; books; textiles; electronic goods; furniture			x									x			x						It aims to understand the rationale for second-hand consumption and argues that this modest consumption form is a lifestyle choice. For this, 231 participants filled out the online questionnaire which was distributed in February 2015. The results show that German second-hand consumption is influenced by social and nostalgic motives more than by economic and ecological motivations. The study suggests that second-hand consumption is a lifestyle choice for many consumers rather than an economic necessity.
Borusiak, B., Szymkowiak, A., Horska, E., Raszka, N. and Żelichowska, E., 2020. Towards Building Sustainable Consumption: A Study of Second-Hand Buying Intentions. Sustainability, 12(3), p.875.	Academic paper	2020	General			x									x			x						It revealed that the following constructs are positively related to second-hand buying (SHB) intention: the attitude towards the positive impact of SHB on sustainable consumption, and the perceived behavioural control over SHB and the personal norm regarding SHB. An awareness of the consequences of SHB and the ascription of responsibility for the environmental issues are positively related to the personal norm regarding SHB. The intention to buy second-hand products (SHP) is positively related to the intention to visit a second-hand shop.

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Deloitte, M., 2017. Car Sharing in Europe– Business Models, National Variations, and Upcoming Disruptions. Dosegljivo: https://www2. deloitte. com/content/dam/Deloitte/de/Documents/consumer-industrial-products/CIP-Automotive-Car-Sharing-in-Europe. pdf.	Report	2017	Transport services - vehicles			x																x		It provides relevant market trends, facts and figures on car sharing in the EU. It also describes the existing car sharing business models.
ICT Aftermarkets in Europe Free ICT/Deloitte Report (2019)	Report	2019	ICT																			x		It describes the ICT Aftermarket in Europe, analysing the benefits of Third Parties for consumers in ICT Secondary markets as well as competition issues in ICFT aftermarkets.
Statista - Report on Electric Mobility in Europe	Statistics	2020	Mobility - Electric Cars																			X		Electric vehicles market share, projected sales globally, Main brands, Electric car sales volume, electric vehicles in European countries, Data on charging stations
Statista - Small cars report	Statistics	2020	Mobility - Small Cars																			X		Class profile, market worldwide, market share by region, revenue and unit sales, price comparison, top brands
Statista - Bicycle industry in Europe	Statistics	2019	Mobility -Bicycles																					This dossier presents a range of statistics and facts about the bicycle industry in the European Union. It provides data on bicycle sales, production, employment and trade, and other interesting key industry figures. Market overview 2000-2016, production, parts and accessories share, sales volumes per countries, etc.
European Environment Agency Report No 13/2018- Electric vehicles from life cycle and circular economy perspectives TERM 2018: Transport and Environment Reporting Mechanism (TERM) report	Report	2018	Mobility - Electric Cars	X	X																	X		in-depth consideration of the environmental impact of the product using life cycle assessment (LCA) as well as taking a broader 'circular economy' approach. Data on Electric Vehicles, lifecycle, repair, second-hand use.
Castellani, V., Fantoni, M., Cristòbal, J., Zampori, L. and Sala, S., 2017. Consumer Footprint Basket of Products indicator on Mobility.	Report	2018	Mobility		X							X				X		X	X	X	X			aims at assessing the environmental impacts of consumption. The methodology for assessing the impacts is based on the life cycle assessment (LCA) of products (or services) purchased and used in one year by an EU citizen. This report is about the subset indicator of the consumer footprint of the basket of product (BoP) on mobility.
European Commission, DG Justice and Consumers - Study on the second hand cars market (ISBN 978-92-79-45691-6)	Report	2014	Mobility - Cars		X	X					X				X	X	X	X				X		Study on the functioning of the market for second-hand cars from a consumer perspective in the European Union. The study covered purchases of second-hand cars by consumers from franchise dealers, independent dealers and auctions (private sales of second-hand cars between individuals were not included). It focused on dealers' practices and compliance with the existing regulatory framework for selling second-hand cars, consumers' ability to make informed choices with the information they receive prior to purchase and at the point of sale, as well as problems experienced by consumers. Particular attention was given to cross-border aspects of this market.
ACEA (European Automobiles Manufacturers Association) - Economic and Market Report - EU Automotive Industry Full-year 2019	Report	2019	Mobility - Cars																			X		Statistics, Production, Labour, Sales
ACEA (European Automobiles Manufacturers Association) - ACEA Report - Vehicles in use Europe 2019	Report	2019	Mobility - Cars																			X		Statistics, Graphs, Existing fleet at EU level. Statistics per country. Vehicles in use by age and by country

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Kuhnert, F., Stürmer, C. and Koster, A., 2018. Five trends transforming the Automotive Industry. PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft: Berlin, Germany, 1(1), pp.1-48.	Report	2018	Mobility - Cars																			X		Trends, market data
Breitschwerdt, D., Cornet, A., Kempf, S., Michor, L. and Schmidt, M., 2017. The changing aftermarket game–and how automotive suppliers can benefit from arising opportunities. Study McKinsey.	Report	2018	Mobility - Cars		x														x		x	x			Aftermarket description, availability of spare parts, sharing economy
EU Commission, 2014. Study on the operation of the system of access to vehicle repair and maintenance information. Final report.	Report	2014	Mobility - Cars		x		x								x										This study aims to assess the operation of the system of access to vehicle RMI in the European Union, as well as its effects on competition, the internal market, environment and safety.
Frowein, B., Lang, N., Schmieg, F. and Sticher, G., 2014. Returning to Growth: A Look at the European Automotive Aftermarket. Marktstudie, The Boston Consulting Group, Berlin and München.	Report	2014	Mobility - Cars																x	x	x	x			description of the aftermarket, repair industry, available parts and main players in this market, competition in the market and effect on consumers
Annual Report 2019 - European Furniture Industries Confederation	Industry Report	2019	Furniture																			x			Number of employees, sales and other data for 2019, industry trends
Statista - Furniture Report	Statistics	2019	Furniture																			x			This dossier presents a range of statistics and facts about the furniture industry in Europe. The dossier brings together official Eurostat statistics for the overall industry in the European Union, including data listed by country. Chapters cover the manufacture, production, trade, wholesale, retail and consumption of furniture, in order to give a quantitative overview of the EU furniture market.
Renda, A., Pelkmans, J., Schrefler, L., Luchetta, G., Simonelli, F., Mustilli, F., Wieczorkiewicz, J. and Busse, M., 2014. The eu furniture market situation and a possible furniture products initiative. Submitted to the European Commission DG Enterprise and Industry Within Framework Contract. ENTR/008/006. Retrieved July 11th 2015 from: http://ec. europa. eu/DocsRoom/documents/7572/attachments/1/translations/en/renditions/native.	Report	2014	Furniture			x									x				x	x	x	x	x		This study examines the economic situation of the EU furniture market and assesses the need for and added value of improved information on furniture products to consumers. The study hence analyses existing measures promoting the quality of furniture products, and results from a consumer survey as well as from a public consultation to draw a more comprehensive picture of those problems. The study finally outlines and evaluates possible policy options to tackle the identified problems, aimed at improving market transparency and increasing consumer awareness in decision-making when buying furniture products. Contains production data, EU in the global market, market conditions, value chain, evaluation of national measures promoting quality furniture products, consumer survey, impact assessment
European Commission - European Union furniture sector scoping study- Main Report - June 2018 - International Tropical timber Organisation / FLEGT Independent Market Monitor	Report	2018	Furniture			x									x		x					x			Study aimes at analysing the situation of the EU furniture market and at identifying how improving information provided to consumers on furniture products could respond to some of the main challenges currently affecting the industry. Data on the furniture market in 2018, distribution channels, characteristics by country

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Donatello, S., Moons, H. and JRC, O.W., 2017. Revision of EU Ecolabel criteria for furniture products. European Commission, On line at: http://ec. europa. eu/environment/ecolabel/documents/technical_report_furniture. pdf.	Report	2017	Furniture				x															x		Market analysis, product information, environmental aspects
EEB (European Environmental Bureau) - Circular Economy Opportunities in the Furniture Sector	Report	2017	Furniture			x	x															x		This report contributes towards the debate around the benefits of expanded policy options to support the transition towards circularity across the European furniture sector. Circular economy interventions have the potential to help counter these trends, with repair, refurbishment and remanufacture allowing value recovery, economic growth and job creation within the European furniture industry, while saving on resources and the environment.
Marcus, J.S., 2020. Promoting product longevity. How can the EU product safety and compliance framework help promote product durability and tackle planned obsolescence, foster the production of more sustainable products, and achieve more transparent supply chains for consumers?.	Report	2020	General	x			x		x									x						Study analyses existing literature on planned obsolescence and product lifetimes. Found that the literature on planned obsolescence focuses on suppliers who intentionally supply products with short lifetime in order to sell replacements to consumers. The degree to which this is actually the case is largely unknown – surprisingly little is concretely known about producer preferences in terms of product lifetime. Also found there are suggestions in the literature that product lifetimes are becoming shorter.
KEIRSBILCK, B., TERRYN, E., MICHEL, A. and ALOGNA, I., Sustainable Consumption and Consumer Protection Legislation - How can sustainable consumption and longer lifetime of products be promoted through consumer protection legislation? Study for the EP's IMCO Committee	Report	2020	General	x			x		x									x						This in-depth analysis investigates the contribution, or lack of contribution of, the current EU consumer protection legislation to a sustainable consumption and a longer lifetime of products. In addition, it gives an overview of the most relevant best practices at national and international level and provides recommendations on the future development and possible reforms of European consumer protection legislation in order to contribute to a more sustainable consumption and a longer lifetime of products.
The One Planet Network Consumer Information Programme - Shout it Out: Communicating Products' Social Impacts - a White Paper of the One Planet Network Consumer Information Programme	Report	2018	General				x	x	x	x						x			x				x	This white paper aims to identify good practices of communicating on-product social impact and sustainability to consumers. As well as providing insights on measuring products' social impacts, it also includes concrete industry examples of good communication of sustainability. Finally, whilst most of the paper focusses on business to consumer communication it also provides suggestions on business to business communication.
Mudgal, S., Muehmel, K., Kong, M.A., Labouze, E. and Gerstetter, C., 2012. Study on different options for communicating environmental information for products. European Commission–DG Environment Final Report. Paris: BIO Intelligence Service.	Report	2012	General				x	x		x						x			x	x				This study reviews and analyses industry practices to provide consumers environmental information related to products. Based on this, the study focusses on what to communicate (focussing particularly on number of indicators that consumers will realistically check and understand) and how and where to communicate information. Overall, the study aimed to determine which mechanisms will maximise consumers' usage, understanding and ability to compare between different substitutes.

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
Consumer Information Programme - Guidelines for Providing Product Sustainability Information: Global guidance on making environmental, social and economic claims, to empower and enable consumer choice	Guidelines	2017	General				x	x	x	x					x			x	x	x	x			These Guidelines aim to provide value chain and public sector professionals guidelines on the most effective and trustworthy ways to communicate product-related sustainability information to consumers. Additionally, the Guidelines aim to empower consumers to make informed sustainable choices. The Guidelines lay out the fundamental principles (reliability, relevance, clarity, transparency and accessibility) and aspirational principles (showing the complete picture of product sustainability, behaviour change and longer term impact, multi-channel and innovative approach, collaboration and comparability) that should underpin on-product sustainability communication.
Delmas, M.A. and Burbano, V.C., 2011. The drivers of greenwashing. California management review, 54(1), pp.64-87.	Academic paper	2011	General							x					x				x	x				The paper concludes that companies are engaging more and more in greenwashing and so misleading consumers about their environmental performance or the environmental benefits of their products and/or services. It highlights the negative consequences of greenwashing on confidence consumers and investors have on green products and services. The article examines the external (both institutional and market), organizational and individual drivers of greenwashing and provides recommendations to mitigate and reduce the prevalence of greenwashing.
Siano, A., Vollero, A., Conte, F. and Amabile, S., 2017. "More than words": Expanding the taxonomy of greenwashing after the Volkswagen scandal. Journal of Business Research, 71, pp.27-37.	Academic paper	2017							x											x				The paper describes and analysis the "Volkswagen scandal" and extends the greenwashing taxonomy by identifying a new type of irresponsible behaviour, namely "deceptive manipulation" and suggests some approaches to prevent this specific type of greenwashing.
de Freitas Netto, S.V., Sobral, M.F.F., Ribeiro, A.R.B. and da Luz Soares, G.R., 2020. Concepts and forms of greenwashing: a systematic review. Environmental Sciences Europe, 32(1), pp.1-12.	Academic paper	2020							x															The paper provides a systematic literature review of the main concepts and typologies of the phenomenon of greenwashing in the past 10 years. The paper suggests a meta classification of greenwashing: firm-level executional, firm-level claim, product-level executional, and product-level claim.
Rahman, I., Park, J. and Chi, C.G.Q., 2015. Consequences of "greenwashing". International Journal of Contemporary Hospitality Management.	Academic paper	2015							x															The results of this study revealed that an ulterior motive of hotels' environmental claims evoked consumer scepticism, which, in turn, negatively influenced consumers' intention to participate in the linen reuse program and intention to revisit the hotel. Consumers' ecological concern was not found to moderate the relationship between scepticism and intention to participate in the linen reuse program and scepticism and intention to revisit the hotel. In addition, a significant positive direct effect between ecological concern and intention to participate and a non-significant effect between ecological concern and revisit intention were revealed.
Lyon, T.P. and Montgomery, A.W., 2015. The means and end of greenwash. Organization & Environment, 28(2), pp.223-249.	Academic paper	2015							x															The paper reviews and synthesizes the fragmented and multidisciplinary literature that covers greenwashing. It shows that greenwash is a broad umbrella term that encompasses a variety of specific forms of misleading environmental communication.
Zaman, A.U., Miliutenko, S. and Nagapetan, V., 2010. Green marketing or green wash?: A comparative study of consumers' behavior on selected Eco and Fair trade labeling in Sweden. Journal of Ecology and the Natural Environment, 2(6), pp.104-111.	Academic paper	2010							x															The paper compares eight selected eco-brands used on the Swedish market. The comparison was based on environmental justice and ecosystem services perspectives. The paper concludes that most of the eco brands analysed do not comply with environmental justice and ecosystem services in their label policy initiatives.

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Wilson, M.C., 2013. A critical review of environmental sustainability reporting in the consumer goods industry: Greenwashing or good business. J. Mgmt. & Sustainability, 3, p.1.	Academic paper	2013								x														This paper reviewed consumer good companies and concluded that they tend to (a) under-reported carbon emissions and greenhouse gases, often omitting emissions resulting from transportation and distribution; (b) change performance metrics between reporting periods which hinders comparability, and (c)generally engaged in inconsistent reporting practices. The paper also shows that upstream supply chain partners tend to provide more thorough reports regarding environmental impacts than downstream supply chain partners.
Lewis, J.K., 2016. Corporate social responsibility/sustainability reporting among the fortune global 250: Greenwashing or green supply chain?. In Entrepreneurship, Business and Economics-Vol. 1 (pp. 347-362). Springer, Cham.	Academic paper	2016								x														This paper analysed the efforts of 25 Multinational Corporations (MNCs) who are members of the Fortune Global 250 (FG250) reporting the sustainability of their supply chain impacts to determine if greenwashing was occurring or whether MNCs had committed to operating a green supply chain. The paper concluded that there were great variations among the MNCs in their level of sustainability reporting about their supply chains and that a majority of the sampled MNCs could be accused of greenwashing due to the lack of detailed quantitative information provided by the MNCs on the environmental impacts of their supply chain.
Sirieix, L., Delanchy, M., Remaud, H., Zepeda, L. and Gurviez, P., 2013. Consumers' perceptions of individual and combined sustainable food labels: a UK pilot investigation. International Journal of Consumer Studies, 37(2), pp.143-151.	Academic paper	2013						x																The paper investigates: (1) the perceptions that consumers in the UK have about sustainable labels vs. other labels, such as origin or nutrition labels; and (2) consumers' 'reactions to combinations of different sustainable labels. The paper reports on the findings from two focus groups conducted in the UK: (a) consumers have positive perceptions of organic and fair trade labels but tend to be sceptical about unfamiliar labels and general claims such as 'climate friendly', (b) familiarity, trust and fit between combinations of labels as well as between associating a label with a brand are important. The paper also concludes that while the combination of certain labels can enhance the value of a food product, other label combinations (e.g. private and sustainable label) can detract from a label's value.
Fischer, C. and Lyon, T.P., 2014. Competing environmental labels. Journal of Economics & Management Strategy, 23(3), pp.692-716.	Academic paper	2014						x																Overview of literature on environmental labels. Simulation of competition between labels (NGO, company, etc) and analyse when label competition is likely to be environmentally beneficial.
Cheah, I. and Phau, I., 2011. Attitudes towards environmentally friendly products. Marketing Intelligence & Planning.	Academic paper	2011						x																This paper identifies the key drivers and factors that influence consumers' willingness to purchase environmentally friendly products: eco-literacy, interpersonal influence and value orientation. The paper concludes that: (a) consumers with favourable attitudes towards environmentally friendly products are more likely to purchase environmentally friendly products, but that (b) perceived product necessity moderates the relationship between attitudes toward environmentally friendly products and the willingness to purchase environmentally friendly products.

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Michaud, C. and Llerena, D., 2011. Green consumer behaviour: an experimental analysis of willingness to pay for remanufactured products. Business Strategy and the Environment, 20(6), pp.408-420.	Academic paper	2011	General			x																		This paper explores whether consumers are willing to pay for remanufactured products, especially when they are informed that these products are 'green', through an experimental auctions to elicit consumers' WTP for specific characteristics of remanufactured products. The paper concluded that consumers tend to value the remanufactured product less than the conventional one unless they are informed about their respective environmental impacts, but found no evidence that consumers are willing to pay a premium for the green (i.e. remanufactured) product (however, providing environmental information to consumers has an effect on their WTP for the conventional product: they generally decrease significantly their WTP for the conventional (and thus most polluting) product).
Essoussi, L.H. and Linton, J.D., 2010. New or recycled products: how much are consumers willing to pay?. Journal of Consumer Marketing.	Academic paper	2010	General			x																		This paper explores whether consumers are willing to pay a price premium for products with reused or recycled content and how the product category influences the consumers' willingness to pay premium prices. The paper concludes that perceived functional risk is an important determinant of the price that consumers are willing to pay for products that have recycled or reused content. It also found that consumers will switch from a recycled product to a new product within a smaller range of price for products with high functional risk.
Kang, K.H., Stein, L., Heo, C.Y. and Lee, S., 2012. Consumers' willingness to pay for green initiatives of the hotel industry. International Journal of Hospitality Management, 31(2), pp.564-572.	Academic paper	2012	Hospitality	x		x			x															This paper examines hotel guests' willingness to pay a premium for environmentally friendly and sustainable practices of the U.S. hotel industry. This study found that U.S. hotel guests with higher degrees of environmental concerns declare a higher willingness to pay premiums for hotels' green initiatives and also that luxury and mid-priced hotel guests are more willing to pay premiums for hotels' green practices than economy hotel guests.
Atkinson, L. and Rosenthal, S., 2014. Signaling the green sell: The influence of eco-label source, argument specificity, and product involvement on consumer trust. Journal of Advertising, 43(1), pp.33-45.	Academic paper	2014	General	x		x			x															This paper examines the influence of argument specificity, eco-label source, and product involvement on consumer trust and attitudes.
Moser, A.K., 2015. Thinking green, buying green? Drivers of pro-environmental purchasing behavior. Journal of Consumer Marketing.	Academic paper	2015	Food and drinks	x		x																x		The paper suggests that consumers care for the environment and that they mirror environmental attitudes in their purchasing behaviour and that whereas WTP represented a strong potential obstacle to green consumption, personal norms reflecting ethical motives were a second major driver for green buying.
Paul, J., Modi, A. and Patel, J., 2016. Predicting green product consumption using theory of planned behavior and reasoned action. Journal of retailing and consumer services, 29, pp.123-134.	Academic paper	2016	General	x		x																x		The paper reports empirical results showing that extended Theory of Planned Behaviour (TPB) has higher predictability than Theory of Reasoned Action in green marketing settings. Consumer attitude and perceived behavioural control significantly predicts purchase intention whereas subjective norm does not. Our findings also suggest that TPB mediates the relationship between environmental concern and green products purchase intention.
Borin, N., Lindsey-Mullikin, J. and Krishnan, R., 2013. An analysis of consumer reactions to green strategies. Journal of Product & Brand Management.	Academic paper	2013	General																					This paper investigates the impact of three green strategies on key consumer metrics. More specifically, it aims to measure consumers' purchase intentions of new green, recycled/refurbished products, green company processes and a non-green product/process. The paper concludes that purchase intentions for green product and process strategies are significantly higher than non-green approaches. However,

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																								post-hoc analysis shows no significant advantage of one green strategy over another.
UNEP. (2013). Green Economy and Trade – Trends, Challenges and Opportunities.	Report	2013	General																		x			This report analyses, through case studies and a review of available literature, emerging opportunities, and persistent challenges in six economic sectors of particular interest for developing countries: agriculture, fisheries, forestry, manufacturing, renewable energy and tourism.
International Trade Centre (2019). The European Union Market for Sustainable Products. The retail perspective on sourcing policies and consumer demand. ITC, Geneva.	Report	2019	General																		x			This reports analysis the results of a survey to consumers and retailers in five European countries: France, Germany, Italy, the Netherlands and Spain. It concludes that the emphasis on environmentally friendly products, fair and ethical trade, and decent jobs in supplier companies has strong consumer support. But sustainable sourcing also draws equally strong support from the retailers themselves.
Joshi, Y. and Rahman, Z., 2015. Factors affecting green purchase behaviour and future research directions. International Strategic management review, 3(1-2), pp.128-143.	Academic paper	2015	General			x	x		x												x			This paper reviews 53 empirical articles on green purchase behaviour from 2000 to 2014. It identifies various prevalent motives, facilitators and barriers affecting purchase decision-making towards green products and provides possible explanations for inconsistencies reported in green purchase behaviour. Consumer's environmental concern and products functional attributes emerged as the two major determinants of consumer green purchase behaviour.
Nielsen Media Research, 2015. The Sustainability Imperative.	Report	2015	General																					Reports on the results of an online survey of 30,000 respondents with online access in 60 countries: - In the past year alone, sales of consumer goods from brands with a demonstrated commitment to sustainability have grown more than 4% globally*, while those without grew less than 1%. - Sixty-six percent of consumers say they are willing to pay more for sustainable brands—up from 55% in 2014 and 50% in 2013
Forrest, A., Hilton, M., Ballinger, A. and Whittaker, D., 2017. Circular Economy Opportunities in the Furniture Sector. European Environmental Bureau: Brussels, Belgium.	Report	2017	Furniture	x		x	x			x														This report presents a range of scenarios including policy measures which offer potential options addressing barriers and advancing circularity across the European furniture sector. It suggests that as a first key option (compatible with several policy packages described in the report), it would be desirable to develop an agreed common set of core criteria that could work across different instruments. The criteria should cover a variety of CE criteria across durability, the use of recycled material content and reused components (i.e., remanufacture), hazardous substance content, and design to facilitate repair, remanufacture and recycling. These core criteria could be used to define a 'Green Furniture Mark' (GFM) - a new A to G rating instrument similar to the EU energy label

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Julie Gobert, Romain Allais, José-Frédéric Deroubaix. Repair and reuse initiatives: which interactions between stakeholders. European Roundtable on Sustainable Consumption and Production Conference, Oct 2019, Barcelone, Spain. ffhal-02329857	Report	2019	General		x	x																		This paper analyses how the new French initiatives concerning the upcycling, repair and reuse of "waste" conceive the future or current users of their business or activities and if and how these representations and associated goals meet with inhabitants and possible users' expectations.
Watson, D., Gylling, A.C., Tojo, N., Throne-Holst, H., Bauer, B. and Milios, L., 2017. Circular Business Models in the Mobile Phone Industry (Vol. 2017560). Nordic Council of Ministers.	Report	2017	Mobile Phone	x	x	x																		The report analysis the extent to which more circular business models are being adopted in the mobile phone and service industry, and explores how this adoption can be accelerated. The focus is on models that can extent the lifespan of mobile phones and of their components.
Commission Communication — EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs. OJ C 341, 16.12.2010, p. 5–11	Communication	2010	Agricultural products and foodstuff					x																Details the EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs
Prag, A., Lyon, T. and Russillo, A., 2016. Multiplication of Environmental Labelling and Information Schemes (ELIS). OECD Environment Working Papers, No. 106, OECD Publishing, Paris.	Report	2016	General					x																This report explores potential effects of the recent rapid growth in Environmental Labelling Information Schemes (ELIS) around the world, with a focus on the implications of ELIS multiplication for environmental effectiveness and international trade. The report also documents a range of ways that government and non-government bodies have responded to ELIS multiplication, such as mutual recognition of schemes and creation of "focal" schemes or standards that can lead to market convergence.
Gruère, G., 2013. A characterisation of environmental labelling and information schemes. OECD Environment Working Papers, No. 62, OECD Publishing, Paris.	Report	2013	General					x																This report provides a comprehensive overview of the international landscape of environmental labelling and information schemes (ELIS), defined as policies and initiatives that aim to provide information about one or more aspects of the environmental performance of a product or service to external users. Results show a rapid growth in the number of ELIS, especially in the late 1990s and between 2007 and 2010 and that this growth might have slowed since 2010. The growth in ELIS appears to be driven by the combination of an increase in the number of "traditional" ELIS, such as single-issue environmental seals, and the emergence of "more recent" types of ELIS, including quantitative reports.
Klintman, M., 2016. A review of public policies relating to the use of environmental labelling and information schemes (ELIS). OECD Environment Working Papers, No. 105, OECD Publishing, Paris	Report	2016	General					x	x															This report provides a brief review of how national government policies and guidelines apply to or regulate the use of environmental labelling and information schemes (ELIS) in selected OECD countries. The report also reviews countries' different approaches to guidance and regulations relating to such green claims, as well as approaches to monitoring and enforcement of compliance with rules and guidance. The report notes the extensive similarities in how different national guidelines categorise misleading environmental claims, which might be linked to the fact that those guidelines are derived in part from the International Organization for Standardization's (ISO) 14020 series of internationally-agreed standards.
OECD, 2016. Environmental labelling and information schemes	Report	2016	General					x	x															This synthesis report presents key findings from three recent OECD reports on Environmental labelling and information schemes (ELIS).

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
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Rubik, F. and Frankl, P., 2017. The future of eco-labelling: Making environmental product information systems effective. Routledge.	Report	2017	General				x																	The book analysis the effectiveness of environmental labelling and information schemes in promoting more sustainable production and consumption
RREUSE, 2017. Reduced taxation to support re-use and repair	Position paper	2017	General		x	x					x													This paper puts forward some RREUSE recommendations on how VAT can be differentiated in order to boost jobs in re-use and repair activities, based on current examples from around Europe and the views of social enterprises working in this field.
RREUSE, 2016. RREUSE response to the European Commission's Circular Economy Package Proposals	Position paper	2016	General	x	x	x	x	x	x	x														This paper provides feedback and suggestions by RREUSE to policy makers on how the laws could be amended to help further cut the amount of resources and energy wasted in Europe and help foster and develop re-use centres and networks as is promoted by Article 11 of the existing Waste Framework Directive.
European Commission. Consumer policy – Strengthening the role of consumers in the green transition.	Website	NA	General																			x		This website presents the open consultation that the European Commission launched between 30 June 2020 and 6 October 2020 on "Consumer policy – strengthening the role of consumers in the green transition". It introduces the aim and background of the project, and seeks inputs from a variety of stakeholders including NGO, business organisations and public administrations.
European Commission, 2019. Reflection Paper 'Towards a Sustainable Europe by 2030'. COM (2019)22.	Reflection	2019	General																			x		This Reflection Paper puts forward the EU's sustainable development vision and focus of sectoral policies from 2020 onwards, with the aim of implementing the SGS.
European Commission. Climate strategies & targets.	Website	NA	General																			x		This website provides the EU climate strategies and targets in order to achieve a low-carbon economy as part of the 2050 long-term strategy, in line with the Paris Agreement.
European Commission, 2020. Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law).	Legislative Proposal	2020	General																					With this legislative proposal, the European commission proposes the first European Climate Law as part of the European Green Deal. It is a legal binding text which aims to ensure to achieve net zero greenhouse gas emissions by 2050. Furthermore, it ensures that all policies in all sectors contribute to these goals and provides a framework to monitor the progress.
European Commission, 2020. Circular Economy Action Plan. For a clearer and more competitive Europe.	Action Plan	2020	General	x	x	x		x	x					x										The new Circular Economy Action Plan – as part of the Green Deal – presents a series of initiatives along a product's life cycle with the aim of promoting circular economy processes, fostering sustainable consumption and using resources efficiently. To this end, it provides a series of both legislative and non-legislative measures
European Commission, 2014. Towards a circular economy: A zero waste programme for Europe'.	Communication	2014	General	x	x	x										x								This document presents a series of proposals to modify EU legislation on waste in order to improve waste management practices, stimulate innovation in recycling and reusing, reduce losses of resources, limit landfilling and incentivise consumers' behavioural chance.
European Commission, 2020. Changing how we produce and consume: New Circular Economy Action Plan shows the way to a climate-neutral, competitive economy of empowered consumers.	Press release	2020	General																			x		This Press release presents the new Circular Action Plan as part of the European Green Deals. It provides a policy and legal background of the Plan and it explains the measures and proposals put forward in it.

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European Commission, 2020. Inception impact assessment.	Report	2020	General																			x	The inception impact assessment provides information on the Commission's initiative on "empowering the consumer for the green transition". It presents the context, the problem the initiative aims to address, the objectives and policy options as well as a preliminary assessment of the expected impacts. The aim is to provide citizens and stakeholders with enough information on the problem at stake so that they can effectively participate to stakeholder consultation activities.
European Commission, 2018. Commission Communication on a New Deal for Consumers	Communication	2018	General															x				x	This Communication present the Commission's initiative "New Deal for Consumers". This initiative seeks modernise EU consumer protection rules with the aim of strengthening the enforcement of consumer law and providing a high level of consumer protection.
Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC.	Legislation	2019	General																			x	This Directive replaces the Consumer Sales and Guarantees Directive 1999/44/EC with regard to distance online and offline sale of tangible goods. It provides a maximum harmonisation, which prohibits Member States from introducing a higher level of consumer protection within the scope of the Directive. It is part of the Digital Single Market Strategy.
Global Footprint Network, 2016. Ecological Deficit/Reserve.	Infographic	2016	General																			x	The website presents a world map showing the ecological deficit/reserve occurring in the different regions of the world.
European Environmental Agency, 2020. Trends and drivers of EU greenhouse gas emission	Report	2020	General																			x	The report provides an overview of greenhouse gas emissions trends and drivers in the European Union between 1990 and 2018.
European Environmental Agency, 2019. The European environment — state and outlook 2020. Knowledge for transition to a sustainable Europe.	Report	2019	General																			x	This report provides an assessment of a series of gaps between the state of the environment and existing EU policy targets. It identifies several environmental challenges that Europe is currently facing against Europe's policy measures. It shows that the EU has made progress in relation to resource efficiency and circular economy. The policies implemented have also been effective in reducing environmental pressure. However, the current rate of progress does not seem sufficient to meet 2030 and 2050 climate targets.
Pörtner, H.O., Roberts, D.C., Masson-Delmotte, V., Zhai, P., Tignor, M., Poloczanska, E., Mintenbeck, K., Nicolai, M., Okem, A., Petzold, J. and Rama, B., 2019. IPCC, 2019: Summary for Policymakers. IPCC Special Report on the Ocean and Cryosphere in a Changing Climate	Report	2019	Genera;																			x	This Summary for Policymakers provides key finding of the Special Report on the Ocean and Cryosphere in a Changing Climate. It is structures in three parts: (i) observed changes and impact; (ii) projected changes and risks and (iii) implementing responses to ocean and cryosphere change.
Hertwich, E., van der Voet, E., Suh, S., Tukker, A., Huijbregts M., Kazmierczyk, P., Lenzen, M., McNeely, J., Moriguchi, Y, 2010. Assessing the Environmental Impacts of Consumption and Production: Priority Products and Materials, A Report of the Working Group on the Environmental Impacts of Products and	Report	2010	General																			x	This Report asses the causes and consequences of environmental pressure. It shows that this pressure is the direct result of economic activities pursued to satisfy consumption. Therefore, it investigates the link between production, materials and consumption at global level.

Document title	Type of document	Year of publication	Product group	Common aspects: Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Regulatory factors: Guarantee rights	Other consumer rights	Legal issues	Enforcement	Consumer drivers: Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry drivers: Industry practices	Incentives	Obstacles for producers	Market	Other	Summary
Materials to the International Panel for Sustainable Resource Management. *UNEP*																								
Eurobarometer, 2013. Flash Eurobarometer 367 -Attitudes of Europeans towards building the single market for green products.	Survey	2013	General												x							x		This survey aims to examine EU's knowledge of green products as well as their reasons for buying (or not) environmentally friendly goods.
Markets and Markets, 2019. Green Technology and Sustainability Market by Technology (IoT, AI & Analytics, Digital Twin, Cloud Computing, Security, & Blockchain), Application (Green Building, Carbon Footprint Management, & Weather Monitoring & Forecasting) – Global Forecast to 2024	Report	2019	Digital products																			x		This report studies the rise of the green technology and sustainability market across segments. It estimates the potential market size and growth of this market across different segments, notably technologies, applications and regions. It also provides an analysis of the main players offering green technology and sustainability services, as well as their company profiles and observations related to their products.
European Commission, 2017. Consumer Market Study to support the Fitness Check of EU consumer and marketing law	Report	2017	General												x		x							This report contributes to the Fitness Check of EU consumer and marketing law by assessing consumers' perception and experiences of their rights. More specifically, it assesses the awareness, perception and experience with five specific consumer rights directives, namely the Consumer Rights Directive (CRD), the Unfair Contract Terms Directive (UCTD), the Unfair Commercial Practices Directive (UCPD), the Consumer Sales Directive (CSD) and the Price Indication Directive (PID).
European Environment Agency, 2020. Electronic products and obsolescence in a circular economy.	Report	2020	Electronic products	x		x	x		x	x														The Report shows how the development of electronic industry has contributed to enable welfare, economic growth and job creation around the world. It presents the current electrical and electronic industry in Europe, including insights on production, consumption and on products' lifetime as well as environmental pressure. It reveals that the economic growth came at the expense of the environment, resources and human health. Finally, it examines potential business models and policy measures to increase the lifespan of electronic products.
Jaeger-Erben, M. and Hipp, T., 2018. All the rage or take it easy–expectations and experiences in the context of longevity in electronic devices. *Descriptive analysis of a representative online survey in Germany Obsolescence Research Group (ed) OHA texts*	Survey	2019	Electronic produces															x						This survey provides an insight on consumers-related attitudes and behaviours towards electronic devices, including their practical knowledge of these devices and their perception of responsibility for these products.
B.R., Magnier, L. and Mugge, R., 2020. Too good to go? Consumers' replacement behaviour and potential strategies for stimulating product retention. *Current Opinion in Psychology*.	Academic paper	2020	General															x						This academic paper explains how consumers' replacements of goods is not only based on rational decision making, but also on a series of emotional, functional, social, epistemic and conditional values that influence the value trade-offs that consumers make during the decision to either maintain an owned product or replace it with a new one.

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
European Commission, 2019. Attitudes towards the impact of digitalisation on daily lives. Special Eurobarometer, 503.	Survey	2019	Digital products															x						This survey aims to estimate public opinion on a variety of areas related to the impact of digitalisation on European citizens' daily lives.
Iraldo, F., Facheris, C. and Nucci, B, 2016. Is product durability better for environment and for economic efficiency? A comparative assessment applying LCA and LCC to two energy-intensive products.	Academic Paper	2016	Energy-using products	x																				The academic paper seeks to assess the extent to which extended durability of energy-intensive products is desirable from both an environmental and economic point of view. The study concludes that from an economic perspective more durable product are always preferred by the user, but this is not always the case from an environmental perspective. Only in the case where the production and the end-of-life stage have a significant impact compared to the use, the more durable option is the favourite one from both and economic and environmental perspective.
Ardente, F. and Mathieux, F, 2014. Environmental assessment of the durability of energy-using products: method and application. Journal of cleaner production	Academic paper	2014	Energy-using products	x		x	x																	This academic article shows that extending the lifespan of energy-using products is not necessarily an optimal strategy as the product's efficiency progressively decrease, whereas their replacement can be more environmentally beneficial in the long term. The study concludes that while some environmental benefits can be achieved by extending the lifetime of a product, these benefits depends very much on the category of the product, the extension of the lifetime, the impact of repair, as well as the efficiency of the substitution.
Estevan, H., Schaefer, B. and Adell, A., 2017. Life Cycle Costing - State of the art report. Local Governments for Sustainability.	Report	2017	General	x																				The report presents the technique of "Life Cycle Costing" (LCC) which allows to take the most cost-effective decision between different products by estimating the costs incurred during the entire life cycle of the product. It provides the challenges LLC arise and the potential solution. Finally, it also presents existing LCC tools and best practices.
Bakker C, Wang F, Huisman J, Den Hollander M, 2014. Products that go round: Exploring product life extension through design.	Academic paper	2014	Electronic product	x		x	x																	This academic paper assesses a series of product life strategies and it determines that a case-by-case approach has to be adopted. In this context, the main challenge consists in determining the best life extension strategy to apply to each product.
Bakker, C., den Hollander, M., Van Hinte, E. and Zijlstra, Y., 2019. Products that Last 2.0: Product Design for Circular Business Models. BIS Publishers.	Book	2019	General	x																				The book provides an innovative methodology to unravel a product's afterlife.
Cooper, T. ed., 2016. Longer lasting products: Alternatives to the throwaway society. CRC Press.	Academic article	2016	General	x		x	x											x						The book argues that we are living in a 'throwaway society' where consumers discard products long before they have reached the end of their 'technical life span', meaning the maximum time a product can function.
Ruth Mugge, Jan P. L. Schoormans & Hendrik N. J. Schifferstein, 2005. Design Strategies to Postpone Consumers' Product Replacement: The Value of a Strong Person-Product Relationship, The Design Journal.	Academic article	2015	General	x														x						This article argues that a crucial precondition for a long-lasting relationship between the consumer and the product is that the consumer perceives that product as irreplaceable. Hence, the author encourages designers to create products that are irreplaceable by stimulating the creation of memories associated with that product.

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
Prakash, S., Dehoust, G., Gsell, M., Schleicher, T. and Stamminger, R., 2016. Einfluss der Nutzungsdauer von Produkten auf ihre Umweltwirkung: Schaffung einer Informationsgrundlage und Entwicklung von Strategien gegen „Obsoleszenz ".	Report	2016	Electronic products	x		x			x															The aim of this project is to describe and assess the phenomenon of obsolescence.
Berwald, A., Clemm, C. and Prewitz, C., 2020. Environmental evaluation of current and future design rules. PROMP.	Report	2020	Electronic products	x					x															This report presents the PROMPT Project, which aims to develop an independent testing programme in order to assess the lifetime of electronical and electronic equipment. To this end, the report (i) identifies current and future design trends and their environmental impacts; (ii) makes a comparative assessment of different life cycle analysis; (iii) and assess the potential advantages of a lifetime extension. The analysis is based on smartphones, televisions, washing machines and vacuum cleaners.
Defra. 2011. Longer Product Lifetimes – Summary Report.	Report	2011	Electronic products	x																				This report assesses the potential for reducing the environmental impact of product by extending the duration of their lifespan; and how to implement this in practice
CentERdata. The influence of durability and reparability information.	Report	NA	Electronic products	x	x		x																	This study analyses whether and the extent to which certain EU Directives on consumer behaviour should be amended. More specifically, it assesses whether providing information on durability and reparability of a product would influence consumers' choices.
European Commission, 2016. Study on socioeconomic impacts of increased reparability of increased reparability.	Report	2016	Electronic products		x		x	x																This report seeks to collect information on the potential socioeconomic impacts of a range of initiatives aimed at increasing product reparability. To this end, the report explores different policy options to improve products' reparability by assessing the impact of applying reparability requirements on four different product groups.
European Parliament, 2019. Consumers and repair of products.	Report	2019	Electronic product	x	x				x															The European Parliament briefing provides an overview of the policy and legal background for repairing broken or damaged products.
European Commission, 2012. Impact Assessment on Building the Single Market for Green Products: Facilitating better and credible information on environmental performance of products and organisations, which supports its conclusions, amongst other, on available evidence that energy labelling has increased the share of more efficient products on the market.	Report	2012	General																x					The Impact Assessment accompanies the Commission's package of measures aimed at building the Single Market for Green Products. It provides the data and information on whether green production and consumption is beneficial for all, including companies, household and the environment.
Lee, Y.H. and Han, C.Y., 2002. Partitioned pricing in advertising: Effects on brand and retailer attitudes.	Academic article	2002																		X				
Kaenzig, J. and Wüstenhagen, R., 2010. The effect of life cycle cost information on consumer investment decisions regarding eco-innovation.	Academic article	2010	General													x								The article reviews several studies that assess the effect of life cycle cost (LLC) on how consumers take investment decisions. It concludes that marketing should increase awareness of LLC as a well-established instrument that enable to evaluate intertemporal choices.

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
European Commission, 2019. Consumer Credit Scoreboard – Consumers at home in the Single Market.	Report	2019	General															x						The report shows consumer condition across EU Member States, Iceland and Norway. It shows that the overall consumer conditions are more equal across EU regions, with a decline in consumer trust in certain western countries and an increase in Southern and Eastern countries. Furthermore, it concludes that more than 50% of consumers are influenced by green claims during the purchase decisions process.
Bakker, C. A., Schuit, C. S. C., *et al., 2017.* The long view: Exploring product lifetime extension.	Report	2017		x		x	x			x														The report provides recommendation on the options available to address the extension of product lifespan. It concludes that product lifespan is not yet a diffuse practice in developed economies, which are instead characterised by waste consumption. Instead, in developing and lower-income economies, repair markets are more widespread.
European Parliament, 2016. Planned obsolescence : Exploring the issue.	Report	2016	Electronic products						x															The report explores the emergence of planned obsolescence, the different types of obsolescence and the research for a clear and accepted definition. It also presents the legal and policy background with the aim of introducing policies that would ensure increased product durability and sustainability.
JRC, 2017. Follow-up of the preparatory study for Ecodesign and Energy Label for household washing machines and household washer dryers.	Report	2017	Large household appliances					x																This report presents the study of two household washing machine regulations and the Energy Label Directive for household washer dryers.
Jürgen Reuß/ Cosima Dannoritzer: Kaufen für die Müllhalde, 2013. Das Prinzip der geplanten Obsoleszenz.	Book	2013	General						x															This book addresses the practice of planned obsolescence.
Oldyrevas, E., McAlister, C., 2020. Long live the Machine. *ECOS.*	Report	2020	Electronic products	x		x	x		x															The Report aims to assess the existing obstacles in repair electronic devices in order to extend their lifespans. It also seeks to identify possible ways to tackle these obstacles, by paying specific attention to codesign and energy labelling.
Ecolabel Index. All ecolabels in Europe.	Website	NA	General					x																The website provides a list of all Ecolabels present in Europe.
Frey, M., Testa, F., Iraldo, F. and Tessitore, S., 2011. La pubblicità ambientale quale strumento di comunicazione per l'eco-consumatore.	Book chapter	2011	General							x														This book chapter address environmental advertising as a communication tool for the eco-consumer. It provides researchers, administrators and evaluators with the tools to monitor research results, increase their visibility and effectively allocate their available resources.
European Commission, 2013. Project to Support the Evaluation of the Implementation of the EU Ecolabel Regulation.	Report	2013	General					x																This report provides an ex-post evaluation of the EU Ecolabel to identify key findings learned throughout its implementation, and an ex-ante evaluation to assess different policy options to improve the EU Ecolabel scheme.
European Commission. Annexes to the impact assessment on the policy initiative on 'Building the single market for green products: Facilitating better and credible information on environmental performance of products and organisations.	Annex	2012	General					x		x				x								x		The Annex to the impact assessment on 'Building the single market for green products' present a detailed overview of certain aspects of the assessment. It is structured in the following 21 chapters: (i) justification of the assessment of economic, environmental and social impacts; (ii) the SME test); (iii) additional evidence; (iv) consistency with other EU policies; (v) mid-term evaluation of the SCP/SIP Action Plan – Executive Summary; (vi) SCP actions proposed in the Roadmap to a Resource Efficient Europe; (vii) the stakeholder consultation: (viii) benefits of using

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reparability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing	Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
																								Life Cycle based approaches; (ix) the Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF) Methodologies; (x) assessment of costs of PEF; (xi) assessment of costs of OEF; (xii) potential voluntary uptake of the PEF methodology; (xiii) screening of policy instrument for the voluntary application of PEF and OEF; (xiv) environmental risks in investment; (xv) environmental monitoring and innovation0; (xvi) the importance of indirect environmental impacts; (xvii) existing EU policy with environmental reporting elements; (xviii) key initiatives in the area of reporting on environmental performance; (xix) examples of existing environmental labelling schemes and related initiatives; (xx) incentivising performance improvement for organisations; (xxi) list of studies; links between green production and consumption an environmental improvements.
Advertising Standards Authority, 2008. Compliance Report – Environmental claims survey 2008.	Survey	2008	General																					The survey assessed the compliance of 195 broadcast and non-broadcast ads with environmental claims on different types of media during February 2008. It concluded that there is compliance rate with the CAP (Committee of Advertising Practice) Code of 94%.
European Commission, 2020. Report on 2018-2019 stakeholder consultations regarding the potential future use of the Product and Organisation Environmental Footprint methods.	Report	2020	General																			x		The report provides a summary of all the findings resulting from the stakeholder consultation on circular economy. It also presents key-policy related results per type of consultation (i.e. stakeholder consultation on circular economy, consisting in a half-day stakeholder event, a targeted online consultation).
European Environmental Agency, 2019. Textiles and the environment in a circular economy. *ETC/WMGE 209/6.*	Report	2020	Textile products	x																x				The report addresses the role that the manufacturing sector plays in Europe. it underlines that whereas it significantly contributes to the economic growth, it also has a considerable negative environmental and social impact. To tackle this issue, the report suggests the introduction of incentives to develop a circular economy and the introduction of regulatory action.
Marx, A., 2014. Legitimacy, institutional design, and dispute settlement: the case of eco-certification systems.	Academic article	2014	General	x							x	x												The article assesses over 400 eco-certification system on three legitimacy-related components: (i) opened of standard-setting process; (ii) the independence of conformity assessment; and (iii) the presence of dispute settlement systems. In particular, the article focuses on the third component and it show that only few eco-certification systems have a system to settle disputes.
Marx, A., 2013. Varieties of legitimacy: a configurational institutional design analysis of eco-labels. *Innovation: The European Journal of Social Science Research.*	Academic article	2013	General	x							x		x											The article analyses over 400 eco-certification system on their different components related to legitimacy. It argues that most attention has been given to the standard setting and process of granting certificate, rather than accountability mechanisms.
Brécard, D., 2014. Consumer confusion over the profusion of eco-labels: Lessons from a double differentiation model. *Resource and energy economics*.	Academic article	2014	General	x																				The article analyses eco-labels by using a double differentiation framework. It argues that whilst consumers consider labels a sign of quality compared to unlabelled products, they cannot assess the environmental quality of each label.
Yokessa, M. and Marette, S., 2019. A review of eco-labels and their economic impact. *International Review of Environmental and Resource Economics.*	Academic article	2019	General	x																				The article explores the effectiveness and limitations of eco-labels. It argues that whereas ecolabels are useful from a regulatory point of view, they are not sufficient to limit the environmental impact of products and services.

Document title	Type of document	Year of publication	Product group	Common aspects							Regulatory factors				Consumer drivers				Industry drivers			Market	Other	Summary
				Durability	Reusability & share economy	Provision information	Labels, logos and IT tools	Planned obsolescence	Greenwashing / green marketing		Guarantee rights	Other consumer rights	Legal issues	Enforcement	Awareness	Price / Cost	Availability / Product offer	Consumer insights	Industry practices	Incentives	Obstacles for producers			
Packard, V., 1960. The waste makers.	Book	1960	General																					This book on consumerism argues that US citizens overconsume, especially in terms of quantity rather than quality. The author blames business community and in particular advertisers for creating false standards. As a result, the culture and the future are negatively impacted.
Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, OJ L 328, 18.12.2019	Legislation	2019	General								x	x	x					x						This Directive is part of the 'new deal for consumers' package of strategies. The Directive covers a series of issues that have been identified as problematic by the fitness check of the EU consumer and marketing law and the evaluation of the Consumer Rights Directive. The Directive amends seven directives of EU consumer legislation. Hence, it covers a series of unrelated topics, such as harmonisation of penalties for infringements, increased online transparency, dual quality of products and protection for consumers of 'free' digital services.
European Consumer Centres Networks, 2019. Commercial Warranties – Are they worth the money?	Report	2019	General								x													The Report compares the different legal guarantee and commercial guarantees scheme across EU Member States, plus Iceland and Norway. It aims to analyse the extent to which commercial warranties are worth the additional costs.

Annex 2. Proposed Minimum Criteria for Sustainability Labels and Digital Information tools

Criteria:

- Sustainability labels can only be applied to products to inform that those products are compliant with one or more sustainability certification schemes and must be designed to ensure that they accurately reflect the meaning of those schemes[1]
- All information related to the sustainability of products provided by a digital information tool (e.g., website or app or tool that helps consumers compare products based on their sustainability) needs to either be based on evidence from a recognised public organisation or a peer-reviewed source or, alternatively, be based on assessments done by sustainability certification schemes.
- All voluntary sustainability certification schemes must comply with the criteria listed in the table below:

Specific Criterion	Area	Justification and further information
*The [recognition/*certification] *scheme's business model must be transparent and easily available free of charge in a clear and complete way.*	**Transparency of the scheme owner[2]**	In order to prevent vested interests, it is important to ensure that interested parties (including consumers and public authorities) can have free access to information about the entities that own/run/manage the scheme (including their relations and commercial ties with any parties that could lead to conflicts of interest), their purpose and motivation in managing the scheme.
*The [recognition/*certification] *scheme must be open under transparent and non-discriminatory criteria to all companies/entities willing and able to comply with its recognition requirements.*	**Accessibility to companies/ participants**	The recognition/certification scheme must be open for participation to all relevant stakeholders, including government bodies, consumers, social partners, manufacturers, distributors and non-governmental organisations. Moreover, the recognition/certification procedures must be transparent and easily accessible to encourage participation by all potential users, thereby increasing uptake and the resulting impacts. This includes not discriminating against parties, for instance based on the size of the enterprise (ISEAL alliance 2013)
The scheme's stated principles/objectives, recognition requirements (underlying methods/standards) and procedures for monitoring	**Procedural transparency for consumers**	Recognition/certification schemes are generally composed of three elements (Marx et al. 2015): (1) a set of principles or objectives that the scheme wants to achieve, which are often linked to international regulatory frameworks such as the International Labour Organisation

[1] See https://www.isealalliance.org/sites/default/files/resource/2017-11/ISEAL_Claims_Good_Practice_Guide.pdf

[2] "The organisation that determines the objectives and scope of the scheme, as well as the rules for how the scheme will operate and the standards against which conformance will assessed". See https://www.isealalliance.org/sites/default/files/resource/2017-11/ISEAL_Claims_Good_Practice_Guide.pdf

Specific Criterion	Area	Justification and further information
compliance are documented, published and accessible free of charge to consumers in a clear, easy to understand and sufficiently detailed way.		convention (example for social improvement) or the UN Convention on Biological Diversity (example for sustainability; (2) a set of standards (i.e. award criteria and measurable indicators) that operationalise these principles, and (3) a set of procedures to monitor compliance with these standards and possibly sanction non-compliance. Transparency is widely recognised as one of the cornerstones of a [recognition/certification] scheme's credibility (see ISEAL alliance 2013; Marx and Wouters 2014, among others), as it "builds trust in the process by allowing stakeholders to understand how decisions are made or how content is determined" (ISEAL alliance 2013). More specifically, "procedural transparency" refers to "openness of the decision-making process", i.e. how the [recognition/certification] scheme works (Marx and Wouters 2014). According to the ISEAL credibility principles, transparency of recognition/certification schemes entails making relevant information freely available regarding the principles, standards as well as decision-making and monitoring procedures. This should include information about the process of development and revision of the [recognition/certification scheme] (including how stakeholders have been involved in it), as well as about its contents and governance structures (ISEAL alliance 2013). Moreover, it should include information about which parties have been evaluated by the scheme and under what processes. Finally, it also is very relevant to make information publicly available about the ways in which stakeholders can engage in the further development of the scheme, for instance through complaint and dispute mechanisms (ISEAL alliance 2013).
The compliance assessments of [recognised/certified] parties are documented, published and accessible free of charge to consumers in a clear, easy to understand and sufficiently detailed way.	**Outcome transparency to consumers**	Analogue to procedural transparency, it is very important for the credibility of a recognition/certification scheme that the outcome of the recognition/certification procedure of different parties (e.g., entire companies or specific products or services), as well as of any further evaluation or monitoring of their performance, can also be easily accessed. This is especially relevant to enable consumers to use disclosed information to compare the performance of all parties that have been subject to the same recognition/certification scheme across all its different assessment categories (for example for assessing sustainability or social performance). Through this, consumers should be able to recognize in which categories the different parties had more or less positive results and identify trade-offs between them, which will allow them to make more informed decisions. Furthermore, publicly available information

Specific Criterion	Area	Justification and further information
		about the compliance assessments help consumers to hold [recognized/certified] parties accountable to their commitments (Marx and Wouters 2014).
The recognition/ certification requirements must be developed by experts that can ensure their scientific robustness, and submitted to a broader group of key stakeholders to validate its social and practical relevance	**Scientific robustness and stakeholder relevance**	Recognition/certification scheme should be based on scientific evidence, but they should also be fit for purpose from a social and practical perspective. This means that it is ensured that they include "best scientific or current understanding of good practice and are written to enable an objective assessment of compliance" (ISEAL Alliance 2014). For this, the direct involvement of experts in the respective field is required. Moreover, the process should be sufficiently inclusive and participatory, engaging a balanced and representative group of stakeholders in recognition/certification scheme's development (ISEAL Alliance, 2014). Stakeholders are often experts in the respective fields and may have an interest in the success of a scheme. Thus, if a recognition/certification scheme actively involves variety of stakeholders in its development and decision making, it will more likely represent of the diversity of stakeholder views surrounding it. Moreover, this may help ensure their continued input on the overall direction taken by the recognition/certification (ISEAL alliance 2013), helping it gain legitimacy by remaining socially and practically relevant (Marx and Wouters 2014).
Monitoring of compliance with recognition/ certification requirements must be done by an independent third party.	**Impartial compliance monitoring**	The credibility of a recognition/certification scheme relies on its ability to effectively verify the compliance with the recognition/certification requirements (Marx and Wouters, 2014) which is achieved through the compliance monitoring procedures. The assurance of compliance can be carried out by a variety of parties. However, in order to avoid potential conflicts of interest and to assure the confidence of consumers and stakeholders in the recognition/certification scheme, it is crucial that the impartiality in this compliance monitoring is guaranteed (ISEAL Alliance, 2013). The most effective and credible way for doing this is through independent third-party verification (Marx et al. 2015). In a so-called "third-party conformity assessment", three independent parties are involved: an organisation applying for a *recognition/ certification scheme*, a body setting the *recognition/ certification requirements* and an accredited party verifying and monitoring compliance with the requirements (Marx and Wouters, 2014). In order for it to be considered independent, the party in charge of verifying compliance must be a separate legal entity from the other parties and be financially independent from them (Siegelklarheit, n.d.).

Specific Criterion	Area	Justification and further information
The recognition/ certification scheme should have complaint and dispute resolution mechanisms in place.	**Dispute resolution**	Complaint and dispute resolution mechanisms help strengthen the enforcement potential of recognition/ certification schemes since they allow for a "form of constant bottom-up monitoring of the enforcement of the rules" (Marx et al. 2015) since they serve a two-fold purpose (Marx 2014): 1. Allowing 'internal' participants such as holders of the recognition/ certification to appeal decision 2. Empowering 'external' stakeholders such as consumers by allowing them to raise issues relevant for the functioning of the of recognition/ certification schemes According to the ISEAL credibility principles, the provision of a complaint and dispute mechanism is also pivotal for the stakeholder engagement in general (see criterion on *scientific robustness and stakeholder relevance* above) as "Complaints and appeals processes provide necessary checks and balances that the stakeholder engagement or assurance processes are working and provide a means for participants in the [recognition/ certification schemes] to be held accountable. Stakeholders, including applicants for certification, will have greater confidence in the objectivity of the system if they know they have an opportunity to question decisions that they feel do not adequately take into account their views." (ISEAL alliance 2013) Even though dispute resolution (or settlement) systems are still rather uncommon in recognition/ certification schemes, they are crucial for their legitimacy as they establish mechanisms for "retrospective accountability" as they allow the "questioning of the rules developed by the [recognition/ certification scheme] as well as the application of these rules" (Marx 2014). Thus, as a minimum, dispute a dispute settlement must (Marx 2014): • provide an overview of the administrative steps that have to be taken to submit a complaint, • define clearly who can submit a complaint and which complaints are eligible, • designate and communicate appropriately who will be involved in the dispute settlement process Moreover, information of complaints, disputes and their resolution should be publicly available (ISEAL Alliance 2014).

Specific Criterion	Area	Justification and further information
Procedures for dealing with non-compliance must be implemented and should at the very minimum include the implementation of corrective action plans, and foresee the withdrawal or suspension of the "recognition/ certification" in case of persistent and flagrant non-compliance.	**Sanctioning of non-compliance**	A recognition/ certification scheme can only be properly enforced if non-compliance is sanctioned in some way, meaning that the recognition/certification is either not awarded or withdrawn (Marx et al. 2015). For this, a the mandatory use of so-called corrective action plans (CAPs) represent a good minimum for forcing stringent compliance with the recognition/ certification requirements. CAP's require certification holders to make adjustments in order to conform to the scheme's CAPs once irregularities are identified (Marx et al. 2015). Furthermore, a mechanism for the management of claims should be linked to withdrawal of a recognition/certification, in order to prevent claims from being used further by the party or by actors downstream in the value chain after they have been withdrawn from the recognition/certification.

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Annex 3. Legal Analysis

This annex provides an overview of the current EU legal framework regarding the extent to which it already addressed the six sub-problems and for which products (see section A3.1) and an in-depth analysis of the most relevant EU legislation (see section A3.2)

A3.1 Summary table

Table A1 provides an overview of the current EU legal framework regarding the extent to which it already addressed the six sub-problems.

Table A1. Overview of the EU legal framework

□ partially addressed for all products ◣ fully addressed for a set of products ◺ partially addressed for a set of products / not addressed

EU law/initiative	Provision of information						Product scope	Gaps
	Durability	Reparability	Environmental characteristics	Obsolescence	Greenwashing	Sustainable labels		
Consumer Rights Directive 2011/83/EU	/	/	/	/	/	/	Horizontal	The Directive requires traders to provide consumers with information on, among others, the main characteristics of the goods or services. It includes specific information requirements about the existence of the legal guarantee of conformity and commercial guarantees, which are related to "durability". There are, no explicit requierments regarding the other substansive analysed elements.
Consumer Sales and Guarantees Directive 1999/44/EC, until 1 January 2022 and Sale of Goods Directive 2019/771	◺	◺	◺	◺	/	/	Horizontal	While the Directive promotes durability and reparability of products through the legal guarantee, the impact is limited to the minimum 2-years legal guarantee period.
Unfair Commercial Practices Directive 2005/29/EC	/	/	/	□	□	□	Horizontal	The UCPD is a principle-based instrument prohibiting unfair commercial practices. It operates as a safety net complementing sector and product-specific legal requirements. It generally requires the traders to provide the consumers with information that they need to take informed transactional decisions but it does not contain specific information requirements about product durability or reparability. Its general provisions on unfair practices apply also to planned obsolescence and greenwashing practices when those are misleading and negatively affect consumers on the basis of a case-by-case assessment. There are no specific provisions in these areas in the Directive or in its Annex I (blacklist) which sets out practices regarded as unfair in all circumstances. Greenwashing is considered in the Guidance to the UCPD as a type of misleading claims that can be prohibited in accordance with the Directive. However, the absence of specific rules on misleading environmental claims in the Directive and the requirement for case-by-case assessment of their effects on the consumers reduces its potential to be enforced in this area. Planned obsolescence could be considered contrary to the professional diligence requirements in Article 5 or information about planned obsolescence practices could be deemed material under Article 7 that, if not provided, could fall under the definition of misleading omission. However the lack of explicit rules and the need for case-by-case assessment of the effects of the practice on the consumers makes it difficult to enforce in this area.

EU law/initiative	Provision of information						Product scope	Gaps
	Durability	Reparability	Environmental characteristics	Obsolescence	Greenwashing	Sustainable labels		
EU Ecolabel Regulation 66/2010/EC and related EU Ecolabel criteria	◺	/	◣	/	◣	◣	Horizontal	The EU Ecolabel scheme is a voluntary system covering the "best in class" products in terms of environmental performance for a given product category. It the official European Union EU wide labelling scheme for environmental excellence which can be considered as an important tool to avoid the proliferation of environmental labelling schemes. Art 6 of the Regulation requires the criteria for environmental performance to consider 'the potential to reduce environmental impacts due to durability and reusability of the products'. Product durability and reparability, being crucial aspects of the circular economy, are already included in the criteria for relevant product groups. However, the information how long a product is expected or guaranteed to last is not given through the logo. Often consumers do not have information on the product regarding the extent to which durability has been considered to grant the ecolabel, but they can research in EU Ecolabel webpage.
Ecodesign Directive 2009/125/EC and related Regulations and voluntary agreements	◺	◺	/	◺	/	/	Energy related products	The Ecodesign framework establishes minimum requirements on energy efficiency and other environmental aspects via product design requirements and, where relevant, information requirements for various categories of energy related products. This is being operationalised via implementing regulations per product category, in accordance with regular working plans (the latest available is the Working Plan 2016-2019; Working plan 2020-2024 is forthcoming (in 2021) setting out priorities and timelines for product categories. These regulations, when they enter into force, prevent the worst performing products in terms of energy efficiency and other environmental aspects (including durability, reparability) to enter the EU market for a given product category. While durability requirements have been very limited due to technological methodological and enforcement challenges (there are durability requirements only for 2 components of a vacuum cleaner; as well information on durability for lightbulbs), a series of reparability requirements will enter into force in March 2021 for a number of product categories. Since the first Circular Economy Action Plan (2015) the Commission considers more systematically durability, reparability, upgrade, reuse, recyclability and recycled content aspects when preparing or revising Ecodesign requirements. In future a possible scoring system on products reparability, based on JRC method, could be considered (see also EU Energy Label below). Ecodesign establishes a public enforcement mechanism for non-compliance (including fines and possible withdrawal of the product from EU market) but does not foresee consumer redress/rights in case a product (or component) fails to comply with specific requirements. In Q4 2021, the Commission plans to table a legislative proposal which will aim to widen the scope of the Ecodesign Directive to include the broadest possible range of products. and to other aspects of sustainability and circularity.

EU law/initiative	Provision of information						Product scope	Gaps
	Durability	Reparability	Environmental characteristics	Obsolescence	Greenwashing	Sustainable labels		
Energy Labelling Framework Regulation EU/2017/1369	◺	/	◣	◺	◣	◣	Energy related products	The Energy labelling Framework legislation has the same product scope and follows a similar approach and timeline like the Ecodesign legislation, with implementing options per product category in accordance with regular working plans. It establishes a consistent and for consumers easy to understand EU wide labelling system with information on the energy efficiency of goods (most prominent feature of the label with A-G scale), its energy use as well other environmental (e.g. water use, noise) and functional parameters (e.g. washing efficiency) where relevant. Unlike other claims, all energy products must display the claim of how much energy is used based on a consistent labelling system used and comparable across Member States. It aims to encourage consumers to purchase and use goods which use less energy and are more environmentally friendly. Planned obsolescence is not specifically covered by the Regulation, however Art 3 refers to planned obsolescence linked to updates that could reduce a product's energy efficiency and be detrimental to the energy efficiency label. A European product database for energy labels and product information sheets (EPREL) is expected to be available for consumers in 2021. The possibility of showing a reparability score (based on a JRC method) will be explored for future.
Directive 2018/851/EU on waste	/	/	/	□	/	/	Horizontal	The Directive aims to improve and transform waste management in the Union into 'circular material management' and facilitate the transition to 'more sustainable material management and to a circular economy. It provides MS with the opportunity to take options to encourage the design of products to reduce their environmental impacts and the generation of waste by developing, producing and marketing of products that are technically durable 'and easily reparable'. There is an obligation to modulate fees in the collective Extended Producer's Responsibility (EPR) schemes based on criteria such as durability, reparability, reusability and recyclability as well as the presence of hazardous substances, which however are not harmonized at EU level (Art. 8a). Member States must take options to prevent waste generation, including options to 'encourage the design, manufacturing, and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), reparable, re-usable and upgradable. The legislation does not set out harmonized requirements in relation to durability and reparability. In addition to criteria suggested for eco-modulation of collective EPR schemes (Articles 8, 8a), it rather requires (Article 9) Member States to encourage the production of durable and reparable products. Member States are required to monitor and assess the implementation of options taken to prevent waste.

EU law/initiative	Provision of information			Obsolescence	Greenwashing	Sustainable labels	Product scope	Gaps
	Durability	Reparability	Environmental characteristics					
Energy Market Directive 2019/944/EU amending the Energy Efficiency Directive 2012/27/EU	/	/	◺	/	◺	/	Horizontal Energy generation and storage	It establishes common rules for the generation, transmission, distribution, energy storage and supply of electricity, together with consumer protection provisions, with a view to creating truly integrated competitive, consumer centred, flexible, fair and transparent electricity markets in the Union. The Directive does not directly concern the areas of the IA, however, it has strong information elements, especially with regard to consumer rights, for example when choosing an energy supplier. It implicitly contributes to preventing greenwashing, as it ensures consumers are well informed. The enforcement system designed to ensure the implementation of the internal market on electricity is applicable.
Renewable Energy Directive 2018/2001/EU recasting Directive 2009/28/EC, Directive 2015/1513/EU and Directive 2013/18/EU	/	/	◺	/	◺	◺	Horizontal Energy sources	The Renewable Energy Directive promotes the use of renewable energy sources by consumers. It primarily concerns the sustainability of energy – both in terms of reducing the need for conventional energy by promoting and facilitating the use of renewable energy, but also ensures the sustainability of renewable energy itself, through the guarantee of origin and certification systems. The Directive has a strong information requirement, which, coupled with the certifications, reduces the amount of greenwashing. It requires consumers as well as other stakeholders are clearly and accurately informed, with regard to the energy options available to them as well as the origin of the energy. The guarantee of origin ensures suppliers have sourced renewable fuels (e.g. for biofuels). It also facilitates self-consumption by clarifying the legal and regulatory framework and ensuring that justified, fair/and non-discriminatory rules are applied to final or household customers.
Car labelling Directive 1999/94/EC	◺	/	◺	/	◺	◺	Cars	The Directive aims to help consumers buy or lease cars which use less fuel and thereby emit less CO_2 and to encourage manufacturers to reduce the fuel consumption of new cars. The directive is a complementary option to the CO2 emission standards set under Regulation (EU)2019/631. It requires the use of information tools addressed to consumers including a label showing fuel economy and CO_2 emissions to be attached to all new cars or displayed nearby at the point of sale and a poster or display showing prominently the official fuel consumption and CO_2 emissions data of all new car models displayed or offered for sale.
Regulation (EU) 2020/740 on energy labelling for tyres	◺	/	◺	/	◺	◺	Road transport tyres	It establishes a framework for the provision of harmonised information on tyre parameters through labelling to allow end-users to make an informed choice when purchasing tyres, for the purpose of increasing safety, the protection of health, and the economic and environmental efficiency of road transport, by promoting fuel-efficient, long-lasting and safe tyres with low noise levels.

EU law/initiative	Provision of information			Obsolescence	Greenwashing	Sustainable labels	Product scope	Gaps
	Durability	Reparability	Environmental characteristics					
Recommendation 2013/179/EU on common methods for measuring and communicating the life cycle environmental performance of products and organisations (establishing the Product and Organisation Environmental Footprint (PEF and OEF) methods)	◺	◺	◺	/	◺	◺	Horizontal Overall method applicable to any product category. 19 product-specific calculation rules were developed. 16 environmental impacts are covered.	The UCPD Guidance refers to the use of lifecycle environmental performance of products and organisations, referencing also the Commission's PEF and OEF methods. PEF studies can be carried out both based on the overall PEF method (applicable to any product) and based on Product Environmental Footprint Category Rules (PEFCRs). PEFCRs are quite detailed to guarantee the reproducibility, comparability and reliability of the information. The information that can be derived from a PEF study or a PEFCR concerns any of the 16 environmental impacts in scope, information about the most relevant production processes (those contributing with a larger share to the total impact), the most relevant life cycle stages, even the most relevant emissions. When a PEFCR exists, it is also possible to compare the different elements of information with those of the benchmark (the environmental performance of the average product sold on the EU market). Some of the information in PEFCRs may require a certain amount of product-specific & environmental expertise to fully understand and link to an environmental claim. A PEF Study, whether based on the PEF or based on a PEFCR, considers duration/life time of the product. Under the use-stage processes, repair and maintenance of the product are covered. Current PEFCRs were developed during a pilot phase, where the interest of volunteering industry was determining the scope of the document. This resulted in some PEFCRs that have a good coverage of a product category (e.g. dairy, beer) and a limited scope to others (e.g. the washing machine detergent PEF only covers liquid heavy-duty detergent; laptops only cover storage; pasta only covers wheat pasta).). There is a risk that consumers would not understand which products are covered by this information and can be compared to a benchmark. In case a company communicates information based on the PEF study to external parties, they have to make available the full PEF study and they have to carry out a 3r party verification. As explained elsewhere in this document, in Q2 2021, the Commission will table a legislative proposal on substantiating Green Claims via the PEF/OEF methods and PEFCRs/ OEFSRs. The initiative will be based on the version of the PEF/ OEF methods that considers the ample learnings from the pilot phase (https://eplca.jrc.ec.europa.eu/permalink/PEF_method.pdf) and will clarify elements regarding implementation, enforcement, communication, etc. An IA is being undertaken in parallel with this IA.
Directive (EU) 2020/1828 on representative actions for the protection of collective interests of consumers (repealing Directive 2009/22/EC)	/	/	/	/	/	/	Horizontal	The Directive does not provide for information obligations or for substantive consumer rights. It improves the protection of collective consumer interests, thus strenghening enforcement of consumer rights.
Consumer Protection Cooperation Regulation 2017/2394	/	/	/	/	/	/	Horizontal	The CPC Regulation aims to improve enforcement of EU consumer protection legislation. It establishes a network of national competent authorities of EEA countries (CPC Network) to address cross border infringements of EU consumer rules, and sets rules for cooperation between Member States.

A3.2 In-depth analysis of most relevant EU legislation

A.3.2.1 Consumer Rights Directive 2011/83/EU

A.3.2.1.1 Description

Directive 2011/83/EU[3] on consumer rights, as amended by Directive 2015/2302[4], adopted in November 2015 and applicable from July 2018, and by Directive 2019/2161[5], adopted in November 2019 and applicable from 28 May 2022, aims to contribute to a high level of consumer protection and a better functioning of the business-to-consumer internal market by harmonising rules related to contracts concluded between consumers and traders, in particular regarding pre-contractual information, contract cancellation rights, delivery responsibilities, excessive payment fees and consent related to additional costs. The below analysis is based on the provisions of the Directive as amended in 2018.

Directive 2011/83/EU applies to any contract concluded between a trader and a consumer, including contracts for the supply of water, gas, electricity or district heating, including by public providers, to the extent that these commodities are provided on a contractual basis (Article 3). The Directive also applies to the supply of digital content which is not supplied on a tangible medium and digital service (Article 3(1)). Part of the provisions of the Directive apply to distance contracts and off-premises contracts. A distance contract is defined as a contract concluded under an organised distance sales or service-provision scheme without the simultaneous physical presence of the trader and the consumer, with the exclusive use of one or more means of distance communication (Article 2(7)). An off-premises contract is defined as a contract concluded in the simultaneous physical presence of the trader and the consumer, in a place which is not the business premises of the trader (Article 2(8)). Article 3(3) however contains a series of exceptions including, among others, contracts for social services, healthcare, gambling, financial services, immovable property, package travel, the supply of foodstuffs and beverages, or passenger transport services.

A.3.2.1.2 Interplay with the areas covered in the study

The Consumer rights Directive is relevant for the study as it provides consumers with information on essential characteristics of the product.

Provision of reliable information on durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

Article 5 of the Consumer rights Directive contains minimum information requirements for contracts other than distance or off-premises contracts (i.e. contracts concluded in physical shops in particular). In particular, it requires the trader to provide the consumer, in a clear and comprehensible manner, with information including on the 'main characteristics' of the goods or services and a reminder of the existence of the legal guarantee of conformity of goods (currently 2 years), the existence and the conditions of after-sales services and commercial guarantees, where applicable, digital content and digital services as provided in the Sales of Goods Directive and the Digital Content Directive.

[3] Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council, OJ L 304, 22.11.2011, p. 64–88.

[4] Directive (EU) 2015/2302 of the European Parliament and of the Council of 25 November 2015 on package travel and linked travel arrangements, amending Regulation (EC) No 2006/2004 and Directive 2011/83/EU of the European Parliament and of the Council and repealing Council Directive 90/314/EEC, OJ L 326, 11.12.2015, p. 1–33.

[5] Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, OJ L 328, 18.12.2019, p. 7–28.

Article 6 sets out information requirements for distance and off-premises contracts. These requirements are, in principle, subject to full harmonisation. Article 4 of the CRD Directive 2011/83/EU states that Member State should not 'maintain or introduce, in their national law, provisions diverging from those laid down in this Directive, including more or less stringent provisions to ensure a different level of consumer protection, unless otherwise provided for in this Directive'. However, further to Article 6(8) Member States are not prevented from imposing additional information requirements in accordance with the eCommerce Directive 2000/31/EC and the Services Directive 2006/123/EC.

The information requirements under the CRD Directive 2011/83/EU strengthen the ability of consumers to make informed decisions about their consumption taking into account the main characteristics of the product and the existence and the conditions of after-sales services and commercial guarantees, of the contract. These requirements also include reminder of the legal guarantee which prevents from the development of products that have a duration lower than the legal guarantee.

The information that should be disclosed as part of the 'main characteristics' of the product is not defined in the CRD Directive as it depends on the product. Whether the durability of the product could be included is therefore not clear. The guidance document[6] published in 2014 by DG Justice states that the 'information requirement about the main characteristics of the product in Articles 5 and 6 of the Consumer Right Directive is identical to the one in Article 7(4)(a) of the 'UCPD'[7] regarding misleading omissions and what material information means. The details of the information to be provided depends on the complexity of the product but it is important to ensure that it integrates restrictive conditions concerning the offer. This could potentially lead to the interpretation that those conditions restricting the durability of a product should be part of the information to be disclosed, but it is not clear.

Accordingly, it can be concluded that **information on the durability and the reparability of products** is not generally covered by the notion of the main product characteristics[8] under the CRD and its provisions could only be interpreted as requiring that information in specific cases subject to an individual assessment taking into account specific circumstances.

A European Parliament report, requested by the IMCO committee in 2020, indicated that the interpretation of 'essential information' determining a misleading omission could be broad and include information on the durability of products. The report quotes for instance a case by the Maltese Consumer Tribunal, which 'ruled on 6 December 2010 (Kenneth Ciangura v AR Tech Limited) that not providing information on the expected lifetime of a product [here, a solar water heater system], constitutes a misleading

[6] European Commission, DG Justice (2014) DG Justice Guidance Document concerning Directive 2011/83/EU of the European Parliament and of the Council of 25 October2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

[7] European Commission, DG Justice (2014) DG Justice Guidance Document concerning Directive 2011/83/EU of the European Parliament and of the Council of 25 October2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

[8] This issue has been debated at national level, for example in France, where Article 90 of the Law on Energy Transition adopted in 2015 required 'producers who voluntarily make an environmental communication or claim concerning their products to jointly make available the main environmental characteristics of those products'. A report from the sustainable development commission of the French parliament, adopted during the legislative procedure of the 2020 Circular Economy Law mentioned that 'no implementing measures have been taken on the basis of Article 90 of the Law on Energy Transition, because of its extremely general character and because of *questions of compatibility with European law, as such pre-contractual information is not provided for by European law*'. The interpretation here is that main characteristics do not include environmental characteristics of the product.

The Report from the from the sustainable development commission related to the Circular Economy Law is available at:

http://www.assemblee-nationale.fr/dyn/15/rapports/cion-dvp/l15b2454-t1_rapport-fond#_Toc256000054

omission'. Although outside the pre-contractual context and therefore not covered by the CRD information requirements, the report also quotes the decisions in the French and Italian Apple cases. In those cases, not informing consumers that downloading certain updates would slow down the performance of some older phone models and impede owners to enjoy the full functionality of their device, was considered as constituting a misleading omission[9].

The European Parliament report also mentions that, since 'Article 5 of the Consumer Right Directive is based on minimum harmonisation, Member States are allowed to maintain or adopt additional national information requirements' at pre-contractual stage. Some Member States have done this[10], showing the need for further information requirements on durability at this stage. The report proposes as a recommendation to 'include durability and reparability information in the list of mandatory pre-contractual information' in the Consumer Rights Directive. It has to be kept in mind, however, that the Consumer Rights Directive only applies to traders that conclude contracts with consumers and not to manufacturers or importers of the goods, for example.

A clearer requirement to provide consumers with information on durability and reparability of products under the consumer legislation should be linked to consistent provisions under product legislation. For example, the Ecodesign Directive and the specific regulations should systematically introduce specific technical requirements regarding durability and reparability of the products. While this legislation requires the introduction of technical standards for the products to be considered Eco-designed, consumers do not necessarily have access to detailed information on the product characteristics required. The consumer legislation would ensure the link with the product legislation standards and ensure that the consumer has access to information on the durability and reparability of the product as part of the product characteristics required in the product legislation.

Enforcement

The CRD Directive 2011/83/EU is enforced at national level. As per its Article 23, Member States should ensure that one or more bodies, such as public bodies or their representatives, consumer organisations and professional organisations, are enabled to 'take action before the courts or before the competent administrative bodies to ensure that the national provisions transposing this Directive are applied' (Article 23(2)). Article 24 requires Member States to provide for penalties applicable to infringements of the national provisions transposing the Directive. The Consumer Protection Rules Directive (EU) 2019/2161 amended this Article 24 by providing indicative and non-exhaustive criteria for the application of penalties.

With respect to major cross-border infringements subject to coordinated enforcement actions under the Consumer Protection Rules Directive (EU) 2019/2161, the amended Article 24 also requires Member States to set in their national law the maximum fine for infringements of the Directive of at least 4 % of the trader's annual turnover in the Member State or Member States concerned. If information on the trader's annual turnover is not available, Member States should introduce the possibility to impose fines up to a maximum amount of at least EUR 2 million.

[9] European Parliament, IMCO committee (2020) *Sustainable Consumption and Consumer Protection Legislation. How can sustainable consumption and longer lifetime of products be promoted through consumer protection legislation?*, p. 12. Available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/648769/IPOL_IDA(2020)648769_EN.pdf

[10] Such as France with the repairability index and the obligation to inform about environmental characteristics of waste generating products – although such information requirements are not linked to the pre-contractual information as required by the Directive – and some legislative proposals in Belgium are proposing to include information on durability in pre-contractual information.

A3.2.2. Sale of Goods Directive 2019/771

A.3.2.2.1 Description

Directive 2019/771 on certain aspects concerning contracts for the sale of goods repealed Directive 1999/44/EC on certain aspects of the sale of consumer goods and associated guarantees. National implementing measures to comply with this Directive will become applicable from 1 January 2022. The provisions of this Directive will apply to contracts concluded from 1 January 2022.

Objectives

The Sales of Goods Directive 2019/771 aims to 'contribute to the proper functioning of the internal market' by addressing 'contract law-related obstacles for the cross-border sales of goods in the Union' (recital 70). For that purpose, the Directive lays down 'common rules on certain requirements concerning sales contracts concluded between sellers and consumers, in particular rules on the conformity of goods with the contract, remedies in the event of a lack of such conformity (i.e. goods brought into conformity by the seller either by repairing or replacing the good, proportionate price reduction or termination of contract), the modalities for the exercise of those remedies (including the duration for which consumers are entitled to remedies, which is a minimum period of two years) and on commercial guarantees' (Article 1).

Scope

The Sales of Goods Directive 2019/771 applies to sales of goods contracts – 'contracts under which the seller transfers or undertakes to transfer ownership of goods to a consumer, and the consumer pays or undertakes to pay the price thereof' (Article 2(1)) – between a consumer and a seller. Consumers include natural persons who are acting outside their trade, business, craft or profession (Article 2(2)). The Directive applies to sales contracts of tangible movable goods (including goods that are still to be produced or manufactured), goods with digital elements, and provision of water, gas and electricity where they are put up for sale in a limited volume or a set quantity. Member States can exclude from the scope of this Directive contracts for the sale of second-hand goods sold at public auction and living animals (Article 3(5)).

An important novelty of Directive 2019/771 compared to Directive 1999/44/EC is to take up technological progress and introduce obligations regarding goods with digital elements (e.g. smart fridge or intelligent watch). The Directive applies to 'goods that incorporate or are inter-connected with digital content or a digital service in such a way that the absence of that digital content or digital service would prevent the goods from performing their functions' (Article 2(5)(b)). This covers digital content or services (either preinstalled or installed subsequently) which supply is explicitly required by the contract and/or which are normal for goods of the same type and that the consumer can therefore reasonably expect (Recital 15). Digital content or services that do not prevent the good to perform its function and that are therefore separate from the good itself fall under the scope of a complementary Directive, Directive 2019/770 on certain aspects concerning contracts for the supply of digital content and digital services. Article 3 of Directive 2019/771 mentions that the Directive does not apply to goods that serve exclusively as carriers for digital content.

A.3.2.2.2 Interplay with the areas covered in the study

Directive 2019/771 is relevant for the study as it promotes the durability and reparability of products by creating a **legal guarantee of conformity of goods** to the contract and providing for remedies in case of lack of conformity.

Requirements regarding product durability and reparability (e.g., availability of spare parts, period to deliver those, etc..., updates/upgrades)

Relevant provisions

The relevant provisions of The Sales of Goods Directive 2019/771 regarding product durability and reparability and that start to apply at national level as of 1 January 2022, are:

- Obligation for the seller to deliver to the consumer goods that meet certain requirements for conformity (Articles 6 and 7). Unlike to Directive 1999/44, Directive 2019/771 includes as an objective criterion for assessing the conformity of goods the **durability of the product**, defined as the 'ability of the goods to maintain their required functions and performance through normal use'. To be in conformity, goods need to 'possess the durability which is normal for goods of the same type and which the consumer can reasonably expect given the nature of the specific goods' (Recital 32 and Article 7(1)d)).
- **Legal guarantee of conformity, i.e. a minimum two-year guarantee** for all products during which the buyer is entitled to remedies. If a lack of product conformity with the sales contract which existed at the time of delivery becomes apparent within the liability period, the consumer is 'entitled to have the goods brought into conformity (i.e. repaired or replaced) by the seller, or under certain conditions to receive a proportionate reduction in the price, or to terminate the contract' (Article 13). The Sales of Goods Directive 2019/771 upheld the hierarchy of remedies, already present in the previous directive, in which consumers have to accept first repair or replacement and are entitled to refund or termination. The Sales of Goods Directive 2019/771 allows the consumer to choose between repair and replacement, unless one option is impossible or would impose disproportionate costs on the seller. If the seller refuses to complete repair or replacement, or cannot, despite attempts, bring the goods into conformity, or in the case the non-conformity is very serious, the consumer is entitled to a proportionate price reduction or the termination of the sales contract (Article 13). For second-hand goods, Member States may add a rule in their national law allowing the seller and consumer to agree on a shorter liability period of at least one year. .
- Extension of the period during which any **lack of conformity** is presumed to have existed at the time when the goods were delivered, unless proven otherwise by the seller, from a minimum of six months (Directive 1999/44) **to a year, and to two years** if Member States decide to do so (Article 11 of Directive 2019/771).
- Obligation for the seller, in the case of single supply of goods with digital elements, to **supply updates**, including security updates, that are necessary to keep the goods in conformity, for the period of time that the consumer may reasonably expect. However, for continuously supplied digital elements, the obligation to supply update applies during the supply period. This provision has been introduced by Directive 2019/771 and will therefore apply as of 1 January 2022.
- Definition and certain general principles for commercial guarantees (liability of the guarantor, clarity, ease of use, explicit statement that it does not affect the legal guarantee). Any commercial guarantee is binding on the guarantor under the conditions laid down in the commercial guarantee statement and associated advertising available at the time, or before the conclusion, of the contract.
- Clarification that, where a producer offers to the consumer a commercial guarantee of durability for certain goods for a certain period of time, the producer will be liable directly to the consumer for repair or replacement of the goods during the entire guarantee period (Article 17).
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These provisions are not open to variations at Member State level (except when stated otherwise in the text of the Directive, for example in relation to the two-year's liability

period for the legal guarantee). One of the main objectives of adopting a new Directive (and of repealing Directive 1999/44) was to **fully harmonise** these common rules across Member States as much as possible. As explained in Recitals 6 to 10, national provisions transposing Directive 1999/44/EC significantly diverged from one Member States to another on essential elements of the Directive as Member States were allowed to maintain or adopt rules going beyond the minimum harmonisation rules laid down in Directive 1999/44/EC, leading to legal fragmentation and negatively affecting traders' and consumers' decision whether to sell or purchase goods cross border. Article 4 of Directive 2019/771 therefore states that Member State should not 'maintain or introduce, in their national law, provisions diverging from those laid down in the Directive, including more, or less, stringent provisions to ensure a different level of consumer protection, unless otherwise provided for in the Directive'.

Enforcement

National authorities must ensure that the rules of the directive are enforced. As per Article 19, Member States should adopt the necessary measure to enable one or more bodies, including public bodies or their representatives, consumer organisations, and professional organisations, to 'take action before the courts or before the competent administrative bodies to ensure that the national provisions transposing this Directive are applied' (Article 19(2)). In addition to those designated authorities and/or private organisations, enforcement may also be triggered by individual claims of consumers against sellers.

Effect on durability / reparability of products

In addition to protect consumers against faulty products, the provisions described above indirectly promote the durability and reparability of products.

The legal guarantee of at least two years and the reversed burden of proof may increase the demand of sellers for more durable products (that at least do not fail in the first two years of use) and influence sellers' choice of brands that produce more durable products.

In turn, this can lead manufacturers to design more durable products, in which case the legislation would create a virtuous circle, leading to a general increase in the durability of products. The Directive's aim is to ensure consumers' protection placing the responsibility on the seller as consumers have a relationship with the seller and not with the manufacturer. Consumers can more easily reach the seller to apply for remedies or enforcement. In terms of durability, the effectiveness of placing the responsibility (and therefore the costs) **on the seller** can be more questionable, as the durability of the product is typically the responsibility of the **manufacturer**. This issue can be sort out through B2B agreements. In addition, Article 18 of the SDS Directive enables the seller to pursue remedies against the person or persons liable in the chain of transactions in those cases where the seller is liable to the consumer because of a lack of conformity resulting from an act or omission. Therefore, manufacturers would be made liable through the seller's action and consumers have an easy access to remedies by turning to the seller.

Placing the costs of the guarantee on the manufacturer increases the impact of the guarantee in promoting more durable products[11].

The **duration of the legal guarantee** has also been questioned[12]. Although two years can be appropriate to protect consumers against faulty products, as defects present at the time of the purchase should become apparent rather quickly, it might be less appropriate if the legal guarantee is considered as a tool to promote the durability of

[11] Liability of manufacturers with regard to the legal guarantee is a recommendation of the report: Libaert, T. (2018) For a more sustainable consumption, in line with European challenges (Pour une consummation plus durable, en phase avec les enjeux européens), available at: https://www.vie-publique.fr/sites/default/files/rapport/pdf/194000090.pdf It is also supported by organisations such the NGO HOP – Halte à L'obsolescence programmée (interview with HOP, 8 April 2020).

[12] Interview with UFC-Que choisir, 17 April 2020.

products. . The introduction of the durability as an objective criterion for assessing conformity of goods suggests that products should remain in conformity for a duration that 'consumers can reasonably expect' (Recital 32), which could reasonably be, for most household goods or digital products, longer than two years. In this sense the limitation of the legal guarantee to two years could have a perverse effect. In addition, other legal developments, such as the obligation to provide spare parts for seven to ten years in some Ecodesign Regulations[13], also show that the lifetime of certain products is expected to be much longer. This could give reasons **for extending the legal guarantee based on the average lifetime of products** that can be reasonably expected by consumers[14]. Alternatively, it could be considered that the objective of the legal guarantee is limited to protect consumers from faulty products and, therefore, other measures might be needed to promote product durability.

The study supporting the regulatory fitness check of Directive 1999/44/EC stated that around a third of business respondents would see the extension of the legal guarantee to three or five years as not generating additional costs, however, another third of businesses interviewed expected such a system to generate 'major costs'.

The two-year legal guarantee and the commercial guarantees, where they exist, give the right to consumers to demand the repair of the product, at no cost (legal guarantee). This can promote repair and discourage consumers to buy a new product. However, the fact that there is no hierarchy between repair and replacement – i.e. consumers are entitled to choose between the two in all cases – might reduce the impact of the guarantee in terms of changing consumers' behaviour towards repair. Giving priority to repair might be an option to promote repair through this Directive[15].

The Sales of Goods Directive has been adopted in 2019; the deadline for transposition has not passed yet and national implementing measures will be applicable from January 2022. The first review of the Directive is scheduled for 2024 (Article 25 of the Directive), which could provide an opportunity for amending the provisions of the Directive, based on some lessons learnt from the implementation.

A3.2.3 Unfair Commercial Practices Directive (Directive 2005/29/EC)

A.3.2.3.1 Description

Directive 2005/29/EC[16] concerning unfair business-to-consumer commercial practices in the internal market (Unfair commercial practices Directive – UCPD) aims to achieve a high level of consumer protection against unfair business-to-consumer commercial practices, including unfair advertising, and to approximate national laws regulations and administrative provisions of the Member States on unfair commercial practices, to ensure the proper functioning of the internal market.

Directive 2005/29/EC defines unfair commercial practices which include, in particular, misleading and aggressive commercial practices, as set out in Articles 5, 6, 7 and 8 of the Directive. A commercial practice is considered unfair if it leads the average consumer to take transactional decisions that they would not have otherwise taken. In

[13] Annex II of Commission Regulation (EU) 2019/2019 laying down ecodesign requirements for refrigerating appliances; Annex II of Commission Regulation (EU) 2019/2021 laying down ecodesign requirements for electronic displays; Annex II of Commission Regulation (EU) 2019/2022 laying down ecodesign requirements for household dishwashers; Annex II of Commission Regulation (EU) 2019/2023 laying down ecodesign requirements for household washing machines and household washer-dryers.

[14] Interview with UFC-Que choisir, 17 April 2020.

[15] Giving priority to repair in the hierarchy of remedies is supported by organisations such the NGO HOP – Halte à L'obsolescence programmée (interview with HOP, 8 April 2020).

[16] Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council('Unfair Commercial Practices Directive'), OJ L 149, 11.6.2005, p. 22–39.

addition, Annex I of the Directive sets out a list of practices that are considered unfair in all circumstances (the 'blacklist'). The UCPD provides in principle for full harmonisation although Member States are allowed to adopt more stringent measures in some areas, such as to regulate commercial practices in the context of unsolicited visits by a trader to a consumer's home or excursions organised by a trader, or in relation to financial services, as stated in Article 3(5) and 3(9).

The Commission has issued a guidance document[17], first published in 2009 and revised in 2016, to facilitate the application of the Directive. The guidance explains key concepts and provisions of the Directive and provides concrete examples from case-law of the Court of Justice of the European Union and from national courts and administrations. The guidance includes specific sections on planned obsolescence and on the application of the Directive to environmental claims.

Directive 2005/29/EC applies to all commercial practices defined as 'any act, omission, course of conduct or representation, commercial communication including advertising and marketing, by a trader, directly connected with the promotion, sale or supply of a product to consumers' (Article 2(d)), before, during and after a commercial transaction in relation to a product (Article 3(1)).

A.3.2.3.2 Interplay with the areas covered in the study

The principle-based rules of the UCPD are relevant for two areas covered by the study, namely, the prevention of planned obsolescence and the prevention of greenwashing. These practices are susceptible to be prohibited as misleading actions or omissions which is confirmed in the Commission Guidance document in relation to environmental claims.

Prevention or banning of obsolescence

The UCPD guidance explains planned obsolescence or built-in obsolescence in industrial design as a commercial policy involving deliberately planning or designing a product with a limited useful life so that it will become obsolete or non-functional after a certain period of time[18].

Planned obsolescence is not specifically referred to in the Directive, and does not form part of the unfair commercial practices listed in Annex I. It is therefore not prohibited in itself as an unfair commercial practice. However, as mentioned in the UCPD guidance, failing to inform the consumer that a product has been designed with a limited lifetime, could be considered under Article 7 on misleading omissions, on a case by case basis, as an omission to provide 'material information' on the product. Examples provided by the guidance are the omission of providing information such as about the impossibility to replace a phone battery or that the functional lifetime of a refrigerator is planned to be significantly shorter than for comparable products[19].

The UCPD defines 'material information' as the 'information that the average consumer needs, according to the context, to take an informed transactional decision. It accordingly depends on the product and the context. Article 7(1) prohibits omission of material information that causes or is likely to cause the average consumer to take a transactional decision that he would not have taken otherwise'. Accordingly, once it is established that the product's lifespan has been intentionally reduced (planned obsolescence), it needs to be determined whether the average consumer would have taken a different transactional decision if he/she were informed that the lifetime of the product has been shortened by the trader.

[17] Commission Staff Working Document, Guidance on the implementation of Directive 2005/29/EC on unfair commercial practices, SWD/2016/0163 final.

[18] UCPD guidance, section 3.4.8 on planned obsolescence, p. 75.

[19] UCPD guidance, section 3.4.8 on planned obsolescence, p. 76.

Koolhoven, & Heerema (2018)[20] indicated that there are many parameters that might influence a transactional decision and while information on the lifetime of the product and the use of techniques that might reduce this lifetime might not be leading causes in the decision, they still contribute to the decision-making process.

Article 7 has been used in cases related to obsolescence for instance in the French and Italian decisions against Apple and Samsung. Not informing consumers that downloading certain updates would impede owners of older models to enjoy the full functionality of their phones, was considered as constituting a misleading omission[21].

As mentioned above, Article 7 of the UCPD does not explicitly address the issue of planned obsolescence and the UCPD, in general, does not expressly prohibit the practice of planned obsolescence. As mentioned in Koolhoven, & Heerema (2018), "*Article 7 can be used to claim that informing the consumer about the reduced lifetime of the product, can lead to consumers making informed decisions and turn to longer lasting products. As it may enable consumers filing a complaint against a manufacturer for misleading omission, in that perspective, it could potentially discourage manufacturers from creating faulty designs, but in practice, it does not really protect the consumer against planned obsolescence. Another flaw of addressing planned obsolescence through Article 7 is that it places the burden of solving the issue on the individual consumer"*[22].

Another UCPD legal basis to tackle planned obsolescence could be the general clause defining unfair commercial practices in **Article 5(2)** (Koolhoven, & Heerema, 2018). The general clause includes two cumulative conditions:

- it is contrary to the 'requirements of professional diligence', defined as 'the standard of special skill and care which a trader may reasonably be expected to exercise towards consumers, commensurate with honest market practice and/or the general principle of good faith in the trader's field of activity' (Article 2(h) of UCPD) and
- it 'materially distorts or is likely to materially distort the economic behaviour of the average consumer with regard to the product'.

Planned obsolescence could be considered as contrary to the professional diligence that the consumer can reasonably expect from the trader, in particular, since that producers' responsibility is now often extended to the environmental issues. However, it might not make it easier to prove the breach of the UCPD as the standards of professional diligence are difficult to establish –there is a thin line between a cheap product and an intentional conduct to artificially shorten the product's lifespan. According to those authors, using the general clause would however increase legal certainty in the sense that the existing literature and jurisprudence are already shaping the contours of professional diligence and care[23].

For the second condition, the issue is to determine whether the average consumer would take a different decision if informed that the lifetime of the product has been shortened by the trader. As mentioned above, Koolhoven, & Heerema (2018) indicated that it can be expected that such information participates to the decision-making. However, an

[20] Koolhoven, R., & Luc Heerema (2018). Fighting planned obsolescence or 'the lightbulb conspiracy' as an unfair commercial practice: For a circular economy. In M. M. Carvalho (Ed.), Law & Technology: E.Tec Yearbook (pp. 27-56). (E.Tec Yearbook). JusGov, Research Centre for Justice and Governance.

[21] See : https://en.agcm.it/en/media/detail?id=385e274c-8dc3-4911-9b8c-9771c854193a&parent=Press%20Releases&parentUrl=/en/media/press-releases and https://www.economie.gouv.fr/files/files/directions_services/dgccrf/presse/communique/2020/CP-Ralentissement-fonctionnement-iPhone200207.pdf

[22] Koolhoven, R., & Luc Heerema (2018). Fighting planned obsolescence or 'the lightbulb conspiracy' as an unfair commercial practice: For a circular economy. In M. M. Carvalho (Ed.), Law & Technology: E.Tec Yearbook (pp. 27-56). (E.Tec Yearbook). JusGov, Research Centre for Justice and Governance.

[23] Koolhoven, R., & Luc Heerema (2018). Fighting planned obsolescence or 'the lightbulb conspiracy' as an unfair commercial practice: For a circular economy. In M. M. Carvalho (Ed.), Law & Technology: E.Tec Yearbook (pp. 27-56). (E.Tec Yearbook). JusGov, Research Centre for Justice and Governance.

explicit recognition of planned obsolescence in the Directive or the Guidelines would increase the legal certainty.

A recent European Parliament report, requested by the IMCO committee in 2020, also considered that some cases of premature obsolescence could be blacklisted through UCPD[24].

Prevention or banning of greenwashing

Also greenwashing and misleading environmental claims are not explicitly addressed in the UCPD but are susceptible to fall under the prohibition of misleading commercial practices. A section of the UCPD guidance refers to environmental claims and details the application of the Directive to them. The guidance presents "'Environmental claims' and 'green claims' as the practice of suggesting or otherwise creating the impression (in a commercial communication, marketing or advertising) that a good or a service has a positive or no impact on the environment or is less damaging to the environment than competing goods or services"[25]. Greenwashing is the practice of making untrue or unverifiable environmental claims.

Article 6 of the UCPD prohibits misleading claims by traders containing false or untruthful information or information that is presented in such a way that it deceives the consumer. Such information can relate to the nature of the product, its main characteristics, including its environmental benefits, method of manufacture, and geographical or commercial origin. This information can take the form of any statement, information, symbols, logos, graphics and brand names, and their interplay with colours, on packaging, labelling, advertising.

Article 7 addresses misleading omissions, which includes the practice of providing unclear, unintelligible, ambiguous information on the product. According to Article 12, traders must be able to present evidence supporting the accuracy of their factual claims to competent enforcement authorities in case the claim is challenged. All these provisions apply to environmental claims.

The UCPD applies horizontally to all commercial practices, and in this respect also to environmental claims. However, given the specificity of environmental claims, and considering that they are widespread and of multiple nature, the practice of greenwashing could be better addressed by adopting more specific legal provisions prohibiting greenwashing in **the text of the Directive and/or, as it was recommended by a recent European Parliament report[26], by adding specifically defined activities in this area to the list of prohibited commercial practices in Annex I to the Directive**.

However, it must be recalled that UCPD is a principle-based horizontal instrument that cannot be used for adopting specific criteria or methodology for substantiating environmental claims. In some cases, these criteria are set in other legislation (for instance, labelling of tyres), but this is not the case for all environmental claims. Therefore, there is no uniform methodology for assessing and substantiating green claims, making the enforcement of the Directive more difficult[27]. This would call for complementary action to the UCPD to support traders to substantiate their claims in a reliable manner. This issue was raised in the Circular Economy Action Plan, in which the Commission proposed that 'companies substantiate their environmental claims using

[24] European Parliament, IMCO committee (2020) Sustainable Consumption and Consumer Protection Legislation. How can sustainable consumption and longer lifetime of products be promoted through consumer protection legislation? Available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/648769/IPOL_IDA(2020)648769_EN.pdf

[25] UCPD guidance, section 5.1 Environmental claims, p.95.

[26] European Parliament, IMCO committee (2020) Sustainable Consumption and Consumer Protection Legislation. How can sustainable consumption and longer lifetime of products be promoted through consumer protection legislation?

[27] European Parliament, IMCO committee (2020) Sustainable Consumption and Consumer Protection Legislation. How can sustainable consumption and longer lifetime of products be promoted through consumer protection legislation?

Product and Organisation Environmental Footprint methods'[28]. Following this, he Commission has launched an initiative to develop methods to measure the environmental performance of a product, based on which certain environmental claims would need to be substantiated. The Roadmap[29] has been published in July 2020 and the completion of the initiative is planned for the second quarter of 2021.

Enforcement

The UCPD is enforced by the national competent enforcement authorities, which can be courts or administrative authorities. Member States must ensure that these authorities have adequate and effective powers to address unfair commercial practices. Directive 2005/29/EC has been amended in November 2019 by Directive (EU) 2019/2161[30] on the better enforcement and modernisation of Union consumer protection rules. These amendments also strengthen rules on penalties for the breaches of the Directive and provide for consumer rights to individual remedies. It introduced in Article 13, which requires Member States to provide for penalties applicable to the infringements of the provisions transposing the Directive. Directive (EU) 2019/2161 amended Article 13 by providing indicative and non-exhaustive criteria for the application of penalties.

With respect to major cross-border infringements subject to coordinated enforcement actions under the Consumer Protection Rules Directive (EU) 2019/2161, the amended Article 13 requires Member States to set in their national law the maximum fine for infringements of the UCPD, of at least 4 % of the trader's annual turnover in the Member State or Member States concerned. If information on the trader's annual turnover is not available, Member States should introduce the possibility to impose fines up to a maximum amount, of at least EUR 2 million.

In addition, Directive (EU) 2019/2161 introduced Article 11 on redress, allowing consumers to have access to proportionate and effective remedies, including compensation for the damage suffered and, where relevant, a price reduction or the termination of the contract. The conditions for the application of the remedies are left to Member States.

These provisions will be applicable from 28 May 2022.

A3.2.4 Ecodesign Directive (Directive 2009/125/EC as amended)

Implementing measures under the Ecodesign Directive set minimum design requirements for the energy efficiency and other environmental performance parameters of energy-related products. In recent years, increased attention has been given to parameters such as product durability, reparability, upgradeability, design for disassembly, information (e.g. marking of plastic parts) and ease of reuse and recycling. In addition, the Directive allows for voluntary industry agreements, which are currently in place for three product categories.

These measures are enabling conditions supporting the ability of consumers to engage in the green transition, for example, by repairing their own products or buying more energy efficient products.

[28] European Commission (2020) Circular Economy Action Plan For a cleaner and more competitive Europe: https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

[29] Inception Impact Assessment, Legislative proposal on substantiating green claims, July 2020: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12511-Environmental-claims-based-on-environmental-footprint-methods

[30] Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, OJ L 328, 18.12.2019, p. 7–28.

A.3.2.4.1 Description

Objective

The Directive establishes a framework for minimum eco-design requirements which goods that consume energy must meet before they can be used or sold in the EU. As Recital 7 states "Action should be taken during the design phase of energy-related products, since it appears that the pollution caused during a product's life cycle is determined at that stage, and most of the costs involved are committed then."

Products which satisfy the requirements established by implementing measures may be sold anywhere in the EU. Before a product is placed on the market and/or put into service, a CE marking shall be affixed and an EC declaration of conformity issued whereby the manufacturer or its authorised representative ensures and declares that the product complies with all relevant provisions of the applicable implementing measure' (Article 5)

The Directive establishes "ecodesign requirements for energy-related products with the aim of ensuring the free movement of such products within the internal market… It contributes to sustainable development by increasing energy efficiency and the level of protection of the environment, while at the same time increasing the security of the energy supply" (Art 1(1) and 1(2)).

Before placing a product covered by implementing measures on the market and/or putting such a product into service, the manufacturer or its authorised representative are required to ensure that an assessment of the product's conformity with all the relevant requirements of the applicable implementing measure is carried out.

Requirements cover all stages of a product's life: from raw materials, manufacturing, packaging and distribution to installation, maintenance, use and end-of life. The conformity of the different regulated parameters is verified for each use-phase of the product. The conformity assessment procedures are specified by the implementing measures leaving up to manufacturers the choice between the internal design control and the management system The environmental aspects are therefore assessed by the manufacturers (self-declaration) and verified through inspections by the Market Surveillance Authorities designated in each EU MS. They verify aspects such as the materials and energy consumed, expected emissions and waste and possibilities for reuse, recycling and recovery.

Directive 2012/27/EU amended the 2009 legislation to further promote energy efficiency. It requires national authorities to, among other things, establish an indicative national energy efficiency target and introduce energy efficiency obligation schemes.

Scope

The scope covers energy-related products. 'Energy-related product' covers any good that has an impact on energy consumption during use which is placed on the market and/or put into service, and includes parts intended to be incorporated into energy-related products covered by this Directive which are placed on the market and/or put into service as individual parts for end-users and of which the environmental performance can be assessed independently" (Art 2(1)). The Directive does not apply to means of transport used to carry people or goods.

Responsibility

Manufacturers are responsible for the conformity of the Directive, ensuring products on the market comply with the requirements (Art 2(6)) and the relevant information is disseminated. In the case products are manufactured outside the EU, this responsibility lies with the importer (Art 4).

Responsibility lies with Member States to "take all appropriate measures to ensure that products covered by implementing measures may be placed on the market and/or put

into service only if they comply with those measures and bear the CE marking" (Art 3(1)).

Member States were required to transpose the Directive into national legislation, however, the implementing measures that set requirements do not need to be transposed and their standards are applied uniformly across the EU. Member States may vary with regard to enforcement (Art 20) as well as the practical implementation – "Member States shall designate the authorities responsible for market surveillance. They shall arrange for such authorities to have and use the necessary powers to take the appropriate measures incumbent upon them under this Directive… Member States shall define the tasks, powers and organisational arrangements of the competent authorities" (Art 3(2). Member States also have some discretion as to how they provide information to the public with regard to translations (Art 5(5)).

Priority areas

The Directive has the potential to impact product durability, reparability, upgradeability, design for disassembly, information (e.g. marking of plastic parts) and ease of reuse and recycling, and indeed in recent years there has been an increased focus on these aspects. However, the Directive itself does not set out measures or standards required for all and each product category – this is to be done through implementing measures. The latest Ecodesign Working Plan highlights the need for measures concerning durability, reparability, reuse, or recycling. Reparability and lifetime (durability) are included in Annex I of the Directive as parameters that must be used, as appropriate, for evaluating the potential for improving the environmental aspects of the product. Reuse, recycling and recovery are also included in Annex I of the Directive as the environmental aspects that should be assessed, where relevant, in each phase of the products subject to eco-design parameters.

Greenwashing is covered only implicitly – the harmonised standards reduce the ambiguity on the market, as consumers can be confident the product complies with the requirements set out in implementing acts. Furthermore, there are certain mandatory information requirements which should be displayed and made accessible to the public through free websites, user manuals, etc.

A.3.2.4.2 Interplay with the areas covered in the study

According to the Ecodesign Working Plan 2016-2019, product design "can have significant impacts across the product life cycle e.g. in making a product more durable, easier to repair, reuse or recycle. The Ecodesign directive already covers all significant environmental impacts along the life cycle of products but the focus so far has been on energy efficiency improvements. In future, Ecodesign should make a much more significant contribution to the circular economy, for example by more systematically tackling material efficiency issues such as durability and recyclability[31]". This commitment has already produced results through the latest implementing acts that set out requirements in that respect[32].

Furthermore, voluntary agreements or other self-regulation measures can be presented by the industry certain criteria are met the Commission formally recognises these voluntary agreements (Art 17).[33]

Future

The Directive sets a framework for future measures, which means work is ongoing to propose, consult, and finalise measures. To this end, mechanisms are in place e.g. the

[31] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[32] https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889

[33] https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889

Working Plan (Art 16), self-regulation/voluntary agreements (Art 17), and the Consultation Forum (Art 18).

In October 2019, for example, the Commission adopted 10 ecodesign implementing regulations[34].

According to Recital 39: "The Commission should, on the basis of the experience gained from applying this Directive, Directive 2005/32/EC and implementing measures, review the operation, methods and effectiveness of this Directive and assess the appropriateness of extending its scope beyond energy-related products. Within that review, the Commission should consult Member States' representatives as well as concerned interested parties."

The Directive's review published in 2012 concluded that there was no need for an immediate revision of the Ecodesign Directive or for its scope to be extended to non-energy related products. However, in the context of the new Circular Economy Action Plan, a Sustainable Products Policy initiative was announced, whose core would be the revision of the Ecodesign Directive in order to broaden its scope beyond energy-related products and to make it applicable to the broadest possible range of products.

Provision of information on durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

Certain information requirements are defined in the Directive which must be provided to the consumer (Article 14) in relation to the product.

Information to the public includes the CE logo (set out in Annex III), and logos that mimic this are prohibited (Art 5(4)), and information must be provided in the languages of the end user (Art 5(5)).

In addition, the Directive foresees the exchange of information between the authorities and the Commission regarding the compliance of a product (although durability and reparability would only be relevant if they are included in the implementing measures). Member States shall keep the Commission informed about the results of the market surveillance, and where appropriate, the Commission shall pass on such information to the other Member States.

Member States shall ensure that consumers and other interested parties are given an opportunity to submit observations on product compliance to the competent authorities

Requirements regarding product durability and reparability (e.g., availability of spare parts, period to deliver those, etc…, updates/upgrades)

Annex I of the Directive sets out the significant environmental aspects to be used:

(a) raw material selection and use;

(b) manufacturing;

(c) packaging, transport, and distribution;

(d) installation and maintenance;

(e) use; and

(f) end-of-life

Reuse, recycling and recovery are environmental aspects that must be assessed where relevant.

[34] https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889

Annex I refers to durability (lifetime) and reparability. Annex I, section 1.3(i) includes as a parameter for evaluating the potential for improving the environmental aspects of products: "extension of lifetime as expressed through: minimum guaranteed lifetime, minimum time for availability of spare parts, modularity, upgradeability, reparability".

Additionally, parameters that must be used for evaluating the potential for improving the environmental aspects include how easily parts and components can be reused and recycled – it could be assumed that if products are designed to be dis-assembled at end-of-life, this could also benefit reparability. (Annex I, section 1.3(f) and (h)).

According to the Working Plan 2016-2019[35], the possibility to repair, remanufacture or recycle a product and its components and materials depends on the initial design of the product, even if the focus has so far has been on improving the energy efficiency of products. However, **durability** has been considered in the past for certain products, and under the Work Plan, it was stated that the Commission was to explore "the possibility of establishing more product-specific and/or horizontal requirements in areas such as durability (e.g. minimum lifetime of products or critical components), reparability (e.g. availability of spare parts and repair manuals, design for repair), upgradeability, design for disassembly (e.g. easy removal of certain components), information (e.g. marking of plastic parts) and ease of reuse and recycling (e.g. avoiding incompatible plastics)" for both new product groups and existing product-specific.[36]

The Working Plan 2016-2019[37] also referred to a standardisation request to the European Standardisation Organisations[38] on material efficiency aspects, which covers, primarily:

- Extending product lifetime
- Ability to re-use components or recycle materials from products at end-of-life
- Use of re-used components and/or recycled materials in products

This has resulted in a series of published horizontal EN standards (EN 4555X series) that cover among other things durability, ability to repair, remanufacture, reuse and upgrade, declaration of critical raw materials, recyclability and recoverability, proportion of reused components and proportion of recycled content.

The European Commission on 1 October 2019 adopted several ecodesign regulations including product requirements related to the circular economy (e.g. availability of spare parts and repair information to professional repairers) such as electronic displays, washing machines, dishwashers and refrigerators.

To promote the reparability of the appliances, and thus to enhance their lifespan, several new ecodesign measures aim at facilitating products repair by ensuring the availability of spare parts. Examples include the availability of spare parts over a long period after purchase (7 years minimum for refrigerating appliances; 10 years minimum for household washing-machines and household washer-dryers; 10 years minimum for household dishwashers), including the obligation, during that period, for the manufacturer to ensure the delivery of the spare parts within 15 working days. Moreover, under the new ecodesign measures, manufacturers have to ensure the availability of repair and professional maintenance information for professional repairers.[39]

[35] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[36] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[37] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[38] Commission Decision C(2015) 9096 adopted on 17.12.2015

[39] ANNEX I 'Professional repairer' means an operator or undertaking which provides services of repair and professional maintenance of refrigerating appliances.

Table A2. Overview of the Ecodesign regulations - by product group

Product type	Ecodesign legislation
	Framework Directive: 2009/125/EC Use of tolerances: Regulation (EU) 2016/2282
Air conditioners	Regulation (EU) No 206/2012 Harmonised standards: 2012/C 172/01, 2014/C 110/01 and 2018/C 092/03
Domestic ovens and range hoods	Regulation (EU) No 66/2014 Harmonised standards: 2017/C 267/01
Electrical lamps and luminaires	Regulation (EU) No 66/2014 Harmonised standards: 2017/C 267/01
Household dishwashers	Regulation (EC) No 244/2009, amended by Regulation (EC) 2015/1428 Repealed by (EU) 2019/2020 – in application from 1 September 2021
Household refrigerating appliances	Regulation (EC) No 1016/2010 Harmonised standards: 2014/C 22/05 Repealed by (EU) 2019/2022 - in application from 1 March 2021
Household tumble driers	Regulation (EC) No 643/2009 Harmonised standards: 2014/C 22/03 Repealed by (EU) 2019/2019 – in application from 1 March 2021
Household washing machines	Regulation (EU) No 932/2012 Harmonised standards: 2014/C 149/01
Local space heaters	Regulation (EU) 2015/1188 Regulation (EU) 2015/1185
Professional refrigerated storage cabinets	Regulation (EU) 2015/1095
Residential ventilation units	Regulation (EU) No 1253/2014
Solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices	Regulation (EU) 2015/1189
Space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device	Regulation (EU) No 813/2013
Electronic displays and televisions	Regulation (EC) No 642/2009, amended by (EU) No 801/2013 Repealed by (EU) 2019/2021 – in application from 1 March 2021
Vacuum cleaners	Regulation (EU) No 666/2013 Harmonised standards: 2017/C 267/02
Water heaters, hot water storage tanks and packages of water heater and solar device	Regulation (EU) No 814/2013
Air heating products, cooling products, high temperature process chillers and fan coil units	Regulation (EU) 2016/2281

Product type	Ecodesign legislation
Circulators (glandless standalone circulators and glandless circulators integrated in products)	Regulation (EC) No 641/2009, amended by (EU) No 622/2012
Computers and computer servers	Regulation (EU) No 617/2013 Regulation (EU) 2019/424 (servers and data storage products)
Electric motors	Regulation (EC) No 640/2009, amended by (EU) No 4/2014 Repealed by (EU) 2019/1781 – in application from 1 July 2021
External power supplies (no-load condition electric power consumption and average active efficiency of external power supplies)	Regulation (EC) No 278/2009 Repealed by (EU) 2019/1782 – in application from 1 July 2021
Fans driven by motors with an electric input power between 125 W and 500 kW	Regulation (EU) No 327/2011
Simple set-top boxes	Regulation (EC) No 107/2009
Small, medium and large power transformers	Regulation (EU) No 548/2014, amended by (EU) 2019/1783
Standby and off mode electric power consumption of electrical and electronic household and office equipment	Regulation (EC) No 1275 /2008, amended by (EU) 2019/1783
Water pumps	Regulation (EU) No 547/2012
Welding equipment	Regulation (EU) 2019/1784 – in application from 1 January 2021
Refrigerating appliances with a direct sales function	Regulation (EU) 2019/2024 – in application from 1 March 2021

The Directive has the potential to fall short because it relies on implementing measures to ensure that durability and reparability are properly recognised. While it is clear that there are at least measures in place for some products, there is no guarantee that all implementing measures would consider adequately durability and reparability for all products nor that all relevant products are subject to implementing measures.

It is noted that these implementation measures are the result of a preparatory or review study carried out according to an established methodology followed by consultation with stakeholders and Member States, while the Member States have to vote on the final text.

Each implementing measure is discussed within the framework of the Consultation Forum which is composed of 'a balanced participation of Member States' representatives and all interested parties concerned with the product or product group in question, such as industry, including SMEs and craft industry, trade unions, traders, retailers, importers, environmental protection groups and consumer organisations. These parties shall contribute, in particular, to defining and reviewing implementing measures, to examining the effectiveness of the established market surveillance mechanisms. (Article 18)

Prevention or banning of obsolescence

There are no specific requirements in the Directive regarding obsolescence. These may well be found in the implementing measures.

Prevention or banning of greenwashing

There are no specific requirements in the Directive regarding greenwashing. However, – the harmonised standards reduce the ambiguity on the market, as consumers can be confident the product complies. Furthermore, there are certain information requirements which should be displayed and communicated to the public

Monitoring & Enforcement

According to Art 3(2) Member States designate the authorities responsible for market surveillance and ensure they have and use the necessary powers to take appropriate measures incumbent upon them under the Directive. This includes checks on product compliance, recalling non-compliant products from the market, requiring parties to provide all necessary information, and take samples of products and subject them to compliance checks.

In the case of non-compliance, Member States are to take the necessary measures, which, depending on the gravity of the non-compliance, can go as far as prohibiting the product on the market until compliance is stablished (Art 7(1)).

Article 20 states Member States are to lay down the rules applicable to infringements of the national provisions and shall take all measures to ensure they are implemented – penalties shall be effective, proportionate and dissuasive, taking into account the extent of non-compliance and the number of units of non-complying units places on the EU market.

A3.2.5 Energy Labelling Framework Regulation (Regulation EU 2017/1369)[40]

A3.2.5.1 Description

Objective

The Directive sets out the basis for labelling energy-related products, providing standard information about energy efficiency — as well as the consumption of energy and other resources — to help consumers in purchase decisions.

The Regulation supports consumers in engaging in the green transition by enabling them to buy more energy efficient products. It sets energy efficiency labelling requirements for energy-related consumer products using an A-G scale (from 2019; previously the scale was A+++ to G) (Article 5). Labelling requirements under implementing measures can include additional environmental information, such as water consumption, for relevant products (e.g. washing machines, dishwashers).

The Commission must maintain a product registration database, which provides information to consumers on the energy rating of products (Article 12).

Scope

The scope remains identical to the existing Directive 2010/30/EU: energy-related products, in line with the Ecodesign Directive (2009/125/EC). However, the definition of energy-related products has been extended to any 'system' with an impact on energy consumption during use, in addition to 'goods'[41].

The regulation does not cover second-hand products, unless they are imported from outside the EU, or means of transport.

Priority area: Environmental claims

The supplier and dealer responsibilities are to:

- display the label and provide and make available to the consumers the product information sheet;
- cooperate with market surveillance authorities and take immediate action to remedy any non-compliance;

[40] Repealing Directive 2010/30/EU

[41] https://industriaeformazione.files.wordpress.com/2017/08/orgalime-partnership-note-energy-label.pdf

- for products covered by delegated acts, not display other information likely to mislead customers about energy consumption;
- for products not covered by delegated acts, or non-energy related products, not display labels which mimic those under this regulation.

Dealers, including online dealers, must display the label provided by the supplier and make available to customers the product information sheet at the point of sale. It bans the use of 'defeat devices', which alter a product's performance under test conditions.

The Commission will establish a product registration database:

- to support market surveillance authorities in carrying out their tasks, including enforcement;
- to provide the public with information about products, their energy labels and product information sheets;
- to provide the Commission with up-to-date energy efficiency information to review energy labelling.

The database will allow the public to consult product labels and information sheets, making it easier to compare the energy efficiency of household appliances.

Priority area: Obsolescence

The regulation also requires manufacturers to inform consumers if software or firmware (software that is embedded in a piece of hardware and serves as the interface between that hardware and the operating system, e.g. on a smartphone or computer) updates could reduce a product's energy efficiency (Recital 24).

A3.2.5.2 Interplay with the areas covered in the study

Current

The legislation regulates specific environmental claims: energy efficiency of goods and water consumption and noise emissions, where appropriate. Unlike other claims, all relevant products must display this information. The regulation ensures a consistent labelling system is used in all Member States and aims to encourage consumers to purchase and use devices which use less energy. It also forbids the supply/display of labels which mimic the labels provided for in the Regulation or in delegated acts (although a few exemptions exist). The regulation thus ensures the efficiency claim is clear and unambiguous, accurate, and substantiated (as required by UCPD).

Obsolescence is not specifically covered by the Regulation, however, one of the recitals specifically refer to software updates which are typically intended to improve product performance but may also impact the energy efficiency and other product parameters indicated on the energy label. In addition, Art. 3(4) states suppliers must inform consumers if updates are to be made which will be detrimental to the energy efficiency label for that unit. Within the average life-span of the product, the supplier shall give the option to refuse the update without avoidable loss of functionality. In addition, a recital mentions that the Commission should also look at supplementary information including the possibility and cost of providing consumers with information on the performance of an energy-related product, such as its energy consumption, durability or environmental performance, in coherence with the objective to promote a circular economy.

Future

The Regulation itself is fairly new, and will continue to come into effect (Directive 2010/30/EU requirements remain in place until then). This means that five product groups will be 'rescaled' in the course of 2021:

- fridges
- dishwashers
- washing machines
- electronic displays including televisions
- lamps

From 2019, suppliers (manufacturers, importers or authorised representatives) have to upload information about their products into the European product database for energy labelling (EPREL) before placing these products on the European market. Consumers will be able to search the database for energy labels and product information sheets starting from March 2021[42].

The Energy labelling 'Working Plan' is combined with the 'Ecodesign Working Plan' (named the Ecodesign and Energy Labelling Working Plan) and it is reviewed periodically; the Ecodesign and Energy Labelling Working Plan 2020-2024 is currently under preparation[43].

A **Product Database** (i.e. EPREL) is to be compiled based on information submitted by suppliers to help the Commission gather the necessary information to provide up-to-date energy efficiency information to review energy labelling. It is to be updated regularly, based on new products/technology, and the Commission is tasked with issuing delegated acts. These include updating delegated acts already in place pursuant to Directive 2010/30/EU so as to rescale the relevant labels, but may include new acts (as set out in Art 16).

The Commission, together with the Consultation forum, will establish a publicly-available long-term working plan, which will set out an indicative list of product groups which are considered to be priorities for the adoption of delegated acts. That analysis should also look at supplementary information including the possibility and cost of providing consumers with information on the performance of an energy-related product, such as its energy consumption, durability or environmental performance, in coherence with the objective to promote a circular economy. Such supplementary information should improve the intelligibility and effectiveness of the label towards consumers and should not lead to any negative impact on consumers.

It is noted that the Energy Labelling Regulation does not contain any provisions for voluntary agreements on energy labels, nor does it cover second-hand goods, unless if they are imported from third countries or means of transport for persons or goods. There do not seem to be any planned actions to include these (although perhaps only the latter might be feasible).

Provision of information on durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

Certain information must be provided both to the consumer and the Commission regarding the compliance of a product. Specific provisions regarding information for consumers (for example, the required information to be displayed on the shop) are to be set out in the delegated acts for each product category.

Prevention or banning of obsolescence

[42] https://ec.europa.eu/info/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/energy-label-and-ecodesign/about_en

[43] https://industriaeformazione.files.wordpress.com/2017/08/orgalime-partnership-note-energy-label.pdf

Planned obsolescence is not specifically covered by the Regulation, however one recital alludes to planned obsolescence. Recital 24 specifically states "Increasingly, customers are offered software or firmware updates of their products after the products have been placed on the market and put into use. While such updates are typically intended to improve product performance, they may also impact the energy efficiency and other product parameters indicated on the energy label".

One provision in the Regulation requires that suppliers must inform consumers if updates are to be made which will be detrimental to the energy efficiency label for that unit. Within the average life-span of the product, the supplier shall give the option to refuse the update without avoidable loss of functionality:

Art. 3(4) states "Once a unit of a model is in service, the **supplier shall request explicit consent from the customer** regarding any changes intended to be introduced to the unit by means of updates that would be **detrimental to the parameters of the energy efficiency label** for that unit, as set out in the relevant delegated act. The supplier shall inform the customer of the objective of the update and of the changes in the parameters, including any change in the label class. For a period proportionate to the **average lifespan** of the product, the supplier shall give the customer the option of **refusing the update without avoidable loss of functionality**." (emphasis added)

This provision does not restrict updates that would render a product obsolete – it only ensures the consumer is informed of it and can opt out. However, it only covers the energy efficiency of a product (rather than speed or other functions of the product) – consumers could be enticed to accept an update regardless (e.g. with promises of processing speed at the detriment of energy efficiency). Furthermore, the provision is only relevant to the average lifespan of the product (which means statistically half the products would still be in use outside this time period) and that refusing the update will not cause unavoidable "loss of functionality". The Regulation does not make clear what avoidable loss of functionality entails, so it could be seen as a loophole by suppliers, both regards to "avoidable" as well as "functionality". This could also be open to variations at MS level.

There are no specific provisions regarding the provision of this requirement, so enforcement falls under the general enforcement of the Regulation.

Prevention or banning of greenwashing

The Regulation clearly addresses greenwashing, as it sets out a system for setting environmental claims (i.e. energy efficiency, noise levels, water consumption)) that are clear and unambiguous, accurate, and substantiated (as required by the UCPD). It ensures the energy efficiency claim is not only comparable between products, suppliers, and Member States, but also ensures products do not omit this information, as every (relevant) product is to be adequately labelled.

The Regulation sets out the requirements for the energy efficiency claims for products on the market (either currently or in the future), but it also includes a substantial rescaling of the labels used under the previous Directive 2010/30/EU. This needed to be done, as advances in technology mean the old standards are mostly obsolete for modern products, and at the top end of the scale, the solution of adding multiple "+" to the "A+" label is considered confusing (it is argued that A++ looks very similar to A+++).

Before the adoption of each delegated act required for the product categories, the Commission is to carry out the appropriate preparatory studies (Recital 19). Furthermore, the **products database** to be compiled should have an impact on the capacity that consumers have to improve their behaviour towards the Green Transition.

The Regulation primarily impacts consumers, as they are (implicitly) encouraged to buy products with a better energy efficiency rating. Suppliers are also impacted, as they can be motivated to improve their products and invest in R&D to ensure their products

achieve a top rating, thus promoting themselves are market leaders. Recital 2 states "Information on efficient and sustainable energy-related products makes a significant contribution to energy savings and to reducing energy bills, while at the same time promoting innovation and investments into the production of more energy efficient products. Improving the efficiency of energy-related products through informed customer choice and harmonising related requirements at Union level benefits also manufacturers, industry and the Union economy overall."

As a Regulation, it sets a standardised framework for calculating energy efficiency and supplementary information (i.e. water consumption or noise emissions during use where appropriate) on labels and reduces the extent to which the legislation is open to variations at Member State level.

The Regulation represents a comprehensive effort to tackle greenwashing and false environmental claims with regard to energy efficiency and supplementary information (i.e. water consumption or noise emissions during use where appropriate). It provides a standard approach, with a focus on customer-recognisability, and sets out provisions that ensure the label cannot be misused: for example, logos mimicking the label are forbidden, as are other attempts to mislead consumers (Article 6), 'defeat devises' which could give misleading results during testing are forbidden (Article 3(5)), and setting out how the label should be displayed by the dealer (Article 5).

The Regulation, however, only covers specific types of environmental claims. While there are other labelling systems in place, there is perhaps more scope to include other EU-wide labelling systems modelled on the Energy Label framework.

Monitoring & Enforcement

Member States are to set the rules on penalties and enforcement mechanisms applicable to infringements of this Regulation and the delegated acts, and shall take all measures necessary to ensure that they are implemented. Furthermore, Art. 8(3) states that "Member States' general market surveillance programmes or sector specific programmes established pursuant to Article 18 of Regulation (EC) No 765/2008 shall include actions to ensure the effective enforcement of this Regulation".

A3.2.6 Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel

A3.2.6.1 Description

Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel[44], hereinafter referred to as the Regulation, established the EU Ecolabel scheme with the aim of promoting products which have a high level of environmental performance through the use of the EU Ecolabel.

It formed part of the sustainable consumption and production policy of the Community, which had the aim of reducing the negative impact of consumption and production on the environment, health, climate and natural resources[45]. The scheme replaced the Community eco-label award scheme[46]. One of the reasons for the development of the EU Ecolabel scheme was to avoid the proliferation of environmental labelling schemes

[44] The Regulation was amended by Commission Regulation (EU) No. 782/2013 of 14 August 2013 amending Annex III to Regulation (EU) No 66/2010 of the European Parliament and of the Council on the EU Ecolabel and Commission Regulation (EU) 2017/1941 of 24 October 2017 amending Annex II to Regulation (EC) No 66/2010 of the European Parliament and of the Council on the EU Ecolabel

[45] Regulation (EC) No. 66/2010 Fourth recital

[46] Established under Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme.

and to encourage environmental performance[47]. The Regulation lays down the rules for the establishment and application of the voluntary EU Ecolabel scheme[48].

The Regulation is of particular relevance to the Study because it establishes an EU Ecolabel scheme, which provides information to consumers on the environmental performance of goods and services.

Article 2(1) of the Regulation specifies that it applies to '*any goods or services which are supplied for distribution, consumption or use on the Community market whether in return for payment or free of charge'*. However, pursuant to Article 2(2) the Regulation does not apply to medicinal products for human use[49] or for veterinary use[50] or to any medical devices.

The label criteria were devised using scientific data on the whole of a product's life cycle, from product development to disposal. This scheme is based on EU level criteria and is promoted by both the Commission and Member States. It promotes the transition to a circular economy and supports sustainable production and consumption. The criteria stated in Article 6 of the Ecolabel Regulation (EC) No 66/2010 include:

- the most significant environmental impacts, in particular the impact on climate change, the impact on nature and biodiversity, energy and resource consumption, generation of waste, emissions to all environmental media, pollution through physical effects and use and release of hazardous substances into the environment;
- the substitution of hazardous substances by safer substances;
- the potential to reduce environmental impacts due to durability and reusability of products;
- ultimate impact on the environment, including on consumer health and safety;
- compliance with social and ethical standards, such as international labour standards;
- taking into account criteria established by other labels at national and regional levels;
- reducing animal testing.

Therefore, the Regulation explicitly requires durability and reusability as criteria which must be considered for the EU Ecolabel to be granted to a product.

While the Regulation does not explicitly refer to reparability amongst the explicit list of criteria, the requirements to ensure reparability are considered through proper design of the product. Ensuring reparability implies considering the resource consumption and generation of waste, which are listed in the first bullet point criteria of Article 6 of the Ecolabel Regulation (EC) No 66/2010. The same may be said in relation to availability of repair manual, of repair information and of spare parts and also the provision of a minimum 3-year commercial guarantee (without prejudice to the legal obligations of the seller under national law on legal and commercial guarantees).

Furthermore, the EU Ecolabel criteria are based on the **environmental performance** of products, taking into account the latest strategic objectives of the Community in the

[47] Regulation (EC) No. 66/2010 Sixth recital

[48] Regulation (EC) No. 66/2010 Article 1

[49] As defined in Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use.

[5050] As defined in Directive 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal products.

field of the environment. Product durability and reparability, being crucial aspects of the circular economy, are already included in the criteria for relevant product groups (see chapter below).

Moreover, the Commission, in the New Circular Economy Action Plan[51] committed to include more systematically durability, recyclability and recycled content in the EU Ecolabel criteria. The recently adopted EU Ecolabel criteria for Electronic Displays[52] for example, aim to promote products that are energy efficient, durable, repairable, easy to dismantle (in order to facilitate the recovery of resources from recycling at the end of their useful life), have a minimum recycled content and which may only contain a limited amount of hazardous substances.

A3.2.6.2 Interplay with the areas covered in the study

Current

Information on product durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

What do the requirements consist of?

The EU Ecolabel scheme established under the Regulation covers the provision of information on durability. Article 6(3) of the Regulation provides that the criteria must be determined on a scientific basis considering the whole life cycle of the product and must consider '*the potential to reduce environmental impacts due to* ***durability and reusability*** *of the products'.*

To which products/services do the requirements apply?

As set out above, the Regulations apply to all products and services except medicines, veterinary medicines and medical devices. However, the EU Ecolabel scheme is voluntary. The EU Ecolabel can be awarded to products for which criteria have been established. At the moment EU Ecolabel criteria exists for 24 product groups[53] including electronic displays, furniture, bed mattresses, wood-, cork- and bamboo-based floor coverings, hard coverings, textiles and footwear.

Recently, in order to avoid duplications, it has been decided to avoid the development of EU Ecolabel criteria for product groups for which Energy label requirements already exist (with the exception of Electronic Displays).

With whom does responsibility lie?

A number of entities at national and EU level are responsible for the implementation of the Regulation as set out below:

- the Commission, Member States, competent authorities or other stakeholders can initiate and lead the development of new EU Ecolabel criteria however the proposal must be submitted to the EUEB;
- the criteria for the EU Ecolabel scheme are developed through a multi-stakeholder process usually led by the JRC and involving relevant stakeholders, including the European Union Ecolabelling Board (EUEB), the advisory board to the EU Ecolabel, composed of representatives of the competent bodies of all the EEA Member States and other stakeholders; the consultation include at least two ad Hoc Working Group (AHWG) meetings.

[51] COM(2020) 98 final

[52] COMMISSION DECISION (EU) 2020/1804 establishing the EU Ecolabel criteria for electronic displays

[53] The full list of EU Ecolabel product groups and related criteria is available at: https://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html

- The EU Ecolabel are voted by the Regulatory Committee composed of Member States representatives and, after scrutiny by the Council of the European Union and the European Parliament are adopted as Commission Decisions.
- the EU Ecolabel is awarded by the national competent authorities;
- products bearing EU Ecolabels are included on a publicly available register of EU Ecolabel products established and updated by the Commission.
- the competent authority which awarded the EU Ecolabel shall verify compliance with the award criteria on a regular basis;
- the competent authority which awarded the EU Ecolabel can prohibit the use of the EU Ecolabel on products bearing the EU Ecolabel not complying with the relevant product group criteria or when the EU Ecolabel is not used appropriately, informing the Commission and the Member State competent authorities of the prohibition; and
- the Commission and Member States in consultation with the EUEB are responsible for the promotion of the EU Ecolabel.

Durability and reparability: Is the current version sufficient to promote durability/reparability?

As mentioned above, according to Commission experts both aspects are considered by the Ecolabel. Even if the Regulation mentions durability in the criteria list, but does not explicitly refers to the reparability of products, reparability is part of the environmental impacts to be assessed when considering resource consumption and generation of waste, which are listed in the first bullet point criteria in Article 6 of the Regulation. Reparability is considered through proper design of the product. The same may be said in relation to the availability of repair manual, of repair information and of spare parts and also the provision of a minimum 3-year commercial guarantee (without prejudice to the legal obligations of the seller under national law on legal and commercial guarantees).crucial to the circular economy and have been taken into account in all new relevant EU Ecolabel criteria[54] such as:

- Electronic Displays – (see related text under 3.6.1)
- Furniture – specific requirements on physical quality of leather/textiles/coated fabrics used as upholstery covering material (ensuring product durability) are included. Moreover fitness for use requirements require EU Ecolabel furniture to comply with the requirements set out in the latest versions of relevant EN standards that relate to the durability, dimensional requirements, safety and strength of the product. A minimum of a five year guarantee effective from the date of delivery of the product shall moreover be provided (without prejudice to the legal obligations of the manufacturer and seller under national law.)
- Bed mattresses – criteria contain specific requirements on durability and warranty.
- Wood-, cork- and bamboo-based floor coverings – similarly to furniture, fitness for use criteria ensure the durability of the products. Moreover specific requirements are set on reparability and extended product guarantee.
- Hard coverings – there is a requirement on the provisions of information to the users in order to proper maintain the products and ensure their durability (these criteria are old and new ones are expected to be adopted in Q1 2021)
- Textiles: Several fitness for use criteria (covering: dimensional changes during washing and drying; colour fastness to washing, perspiration, wet and dry

[54] All EU Ecolabel criteria are available at : https://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html

rubbing, light; wash resistance of cleaning products; fabric resistance to pilling and abrasion, durability of function) ensure durability of the EU Ecolabel products.

- Footwear – EU Ecolabel footwear products should comply with several requirements ensuring their durability. The following information should be supplied with the product: - Cleaning and care instructions specified for each product – '**Repair** your footwear rather than throw it away. This is less damaging to the environment'

To what extent is the legislation open to variations at MS level? (max harmonisation/Regulation, etc.)

The Regulation is not open to variation at Member State level because it is a Regulation and must therefore be applied uniformly in the Member States.

How is this monitored/enforced?

The EU Ecolabel is monitored and enforced at national level. The awarding competent authority is responsible for verifying compliance on a regular basis[55]. To this end, the use of the EU Ecolabel must allow the competent authority to undertake investigations[56]. The overall scheme is managed by the Commission at EU level to ensure that it is implemented.

Future

How does the legislation address product durability and reparability (e.g., availability of spare parts, period to deliver those, etc…, updates/upgrades) identified in the Study?

The EU Ecolabel Regulation addresses product durability and reparability. These are crucial aspects of the circular economy that are extending the life-cycle of the products and are already included in the criteria for relevant product groups. Moreover, the Commission, in the New Circular Economy Action Plan[57] committed to include more systematically durability, recyclability and recycled content in the EU Ecolabel criteria.

The EU Ecolabel itself could provide the consumer with specific visual information on the key environmental performance aspects of concern: the durability and the reduced carbon emissions of the product.

Are there any issues with amending the legislation in this particular field?

No issue with amending the legislation has been identified. An amendment of the EU Ecolabel to provide more information might make it less appealing to users of the label and it might have an impact on the uptake of the EU Ecolabel. A colour coded scheme could become more confusing for consumers.

The EU Ecolabel Regulation promotes durability simply by including durability as one of the elements to be considered in developing the EU Ecolabel criteria as set out in 1.2.1 above.

How could the legislation be amended so as to address the issues related to obsolescence identified in the Study?

The EU Ecolabel Regulation does not prohibit or deter planned obsolescence. If new legislation is adopted to properly forbid planned obsolescence, the Ecolabel Regulation would not need to address it as it only covers those aspects going beyond and not addressed by legislation. If no EU legislation forbids planned obsolescence, planned obsolescence would, in principle, be considered as part of the durability criteria to be

[55] Regulation (EC) No. 66/2010 Article 10(2)

[56] Regulation (EC) No. 66/2010 Article 10(3)

[57] COM(2020) 98 final

assessed. Therefore, no changes in the legislation seem to be required, unless, for legal certainly purposes, an explicit mention of planned obsolescence under Article 6(3) of the Regulation or under any other provision, would be considered useful.

Prevention or banning of greenwashing

The EU Ecolabel is a reliable environmental claim verified by third party. It supports those products that claim to have a lower environmental impact than other products in the same group without the ecolabel. EU Ecolabel Regulation does not address greenwashing in general but it provides the rules to ensure that the label guarantees the environmental performance of the products and that consumers can trust it. It is also set rules for a certain harmonisation between ISO 14024 Type I ecolabels (see art 11 of the EU Ecolabel Regulation) and with other national Ecolabels.

Monitoring & Enforcement

The EU Ecolabel Regulation does not address monitoring and enforcement of consumer protection legislation in general. However, it establishes a monitoring and enforcement system for the implementation of EU Ecolabel.

Article 4(4) relating to national competent bodies calls for a verification process to be carried out in a consistent, neutral and reliable manner by an independent party, based on international, European, or national standards and procedures concerning bodies operating product-certification schemes.

While the applicant has the responsibility to keep the product performance in continued compliance with the EU Ecolabel criteria, Regulation 66/2010 requires the competent body to undertake any necessary investigations to monitor the ongoing compliance by the holder of the EU Ecolabel license as regards to both the product group criteria and the terms of use and provisions of the contract. Article 9 refers to the possibility for the competent authority to undertake on-site verifications or assign an authorised agent for that purpose and ensure that verifications are performed by bodies which are accredited under the EN 45011 standard (replaced by EN ISO/IEC 17065 in 2012) or an equivalent international standard. It also establishes that the competent bodies shall collaborate in order to ensure the effective and consistent implementation of the assessment and verification procedures, notably through the meetings of the Competent Body Forum.

The EU Ecolabel has become, after its reform, more participative, as it grants large room for expressing the points of view of the different stakeholders, such as environmental NGOs, trade unions, consumers, the industry and commerce in defining the ecological criteria for awarding this European mark. Key bodies and authorities competent for the implementation of the EU Ecolabel include the EU Ecolabelling Board (EUEB), the Commission and the Regulatory Committee, which votes on the criteria and the Ad Hoc Working Groups (AHWG) created to develop a more transparent and wider discussion involving all relevant stakeholders.

A3.2.7 Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste

A3.2.7.1 Description

Objective

Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste, hereinafter 'the Directive', aims to improve and transform waste management in the Union into 'sustainable material management'[58]; facilitate the transition to 'more sustainable material management and to a circular economy'[59] and set long term policy objectives to guide investment in Member States[60].

Article 1 of the Waste Framework Directive[61], as amended by the Directive 2018/851, provides that the Directive's objective is to *lay down 'measures to protect the environment and human health by preventing or reducing the generation of waste, the adverse impacts of the generation and management of waste and by reducing overall impacts of resources use and improving the efficiency of such use, which are crucial for the transition to a circular economy for guaranteeing the Union's long-term competitiveness'*.

The amending legislation has added the objective of reducing the generation of waste and the link to the circular economy to the original Article 1 of the Waste Framework Directive.

Scope

According to Article 3(1) 'waste' means any substance or object which the holder discards or intends or is required to discard and under paragraph 2 'hazardous waste' means waste which displays one or more of the hazardous properties listed in Annex III. A substance or object shall be considered to be waste only where the requirements in the above mentioned definition are met.

The list of waste shall include hazardous waste and shall take into account the origin and composition of the waste and, where necessary, the limit values of concentration of hazardous substances. The list of waste shall be binding as regards determination of the waste which is to be considered as hazardous waste. The inclusion of a substance or object in the list shall not mean that it is waste in all circumstances.

The definition of waste excludes certain items which are regulated in Article 2(1) of the Waste Framework Directive, as amended, setting out a list of items that are **not** included in the scope of the Directive as follows:

(a) gaseous effluents emitted into the atmosphere;

(b) land (in situ) including unexcavated contaminated soil and buildings permanently connected with land;

(c) uncontaminated soil and other naturally occurring material excavated in the course of construction activities where it is certain that the material will be used for the purposes of construction in its natural state on the site from which it was excavated;

(d) radioactive waste;

(e) decommissioned explosives;

(f) faecal matter, if not covered by paragraph 2(b), straw and other natural non-hazardous agricultural or forestry material used in farming, forestry or for the production

[58] Directive (EU) 2018/851, First recital

[59] Directive (EU) 2018/851, Second recital

[60] Directive (EU) 2018/851, Fifth recital

[61] Directive 2008/98/EC

of energy from such biomass through processes or methods which do not harm the environment or endanger human health.

Article 2(2) of the Waste Framework Directive provides an additional list of items that are **not** included in the scope of the Directive to the extent that they are covered by other EU law:

(a) waste waters;

(b) animal by-products including processed products covered by Regulation (EC) No 1774/2002, except those which are destined for incineration, landfilling or use in a biogas or composting plant;

(c) carcasses of animals that have died other than by being slaughtered, including animals killed to eradicate epizootic diseases, and that are disposed of in accordance with Regulation (EC) No 1774/2002;

(d) waste resulting from prospecting, extraction, treatment and storage of mineral resources and the working of quarries covered by Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries;

(e) substances that are destined for use as feed materials as defined in point (g) of Article 3(2) of Regulation (EC) No 767/2009 of the European Parliament and of the Council (2) and that do not consist of or contain animal by-products.

Substances destined for use as feed materials (Article 2(2)(e)) was added by the Directive.

A3.2.7.2 Interplay with the areas covered in the study

Provision of information on durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

The Directive does not include provisions or provide information on durability, reparability and/or sustainability.

Requirements regarding product durability and reparability (e.g., availability of spare parts, period to deliver those, etc…, updates/upgrades)

The Directive amends the Waste Framework Directive to add requirements in relation to the generation of waste and to link the Waste Framework Directive to the Circular Economy. The twentieth recital to the Directive states that:

'*Member States should take appropriate measures to encourage the development, production, marketing and use of products and components of products that are suitable for multiple use, that contain recycled materials, that* ***are technically durable and easily reparable*** *and that are, after having become* ***waste****, suitable for preparing for re-use and recycling in order to facilitate proper implementation of the waste hierarchy and without compromising the free movement of goods in the internal market. Those measures should take into account the impact of products throughout their life cycle, the waste hierarchy and, where appropriate, the potential for multiple recycling'.*

Current

What provisions of the legislation promote durability/reparability?

The Directive amends requirements to the extended producer responsibility under Article 8 of the Waste Framework Directive and the prevention of waste requirements under Article 9 of the Waste Framework Directive.

Extended producer responsibility

Firstly, the extended producer responsibility requirements are strengthened by the addition of minimum requirements for such schemes under Article 8a. This ensures that the schemes meet basic standards such as defining clear roles and responsibilities for those involved in the scheme, including producers.

Article 8(2) of the Waste Framework Directive provided for the possibility for Member State to take measures to encourage the design of products to reduce their environmental impacts and the generation of waste. It specified that such measures could include '*the development, production and marketing of products that are [..] are technically durable [..]*' The Directive has added '*and easily reparable'* to this provision.

The extended producer responsibility provision is, however, voluntary and, the option in relation to durability and reparability of products is an option within that scheme. Member States could choose not to establish extended producer responsibility schemes and, even if they did establish such schemes, they could choose not to encourage the design of products that are technically durable and easily reparable. However, for some products, such as packaging, the establishment of EPR schemes is mandatory. In addition, Art. 8 Waste Framework Directive provides that when such schemes are established, the minimum requirements of Art. 8a of the Waste Framework Directive must be respected.

Cost

Under the new provisions of Article 14 of the Waste Framework Directive, in accordance with the polluter-pays principle, the costs of waste management, including costs for the necessary infrastructure and its operation, shall be borne by the waste producer or by the current or previous waste holders.

However, Member States may also decide that the costs of waste management are to be borne partly or wholly by the producer of the product from which the waste came and that the distributors of such product may share these costs.

Prevention of waste

The Directive adds new requirements to the Waste Framework Directive in relation to the prevention of waste. It inserts a new Article 9 into the Waste Framework Directive which sets out the measures that Member States must take to prevent waste generation. One of the measures that Member States are required to take is to:

'*encourage the design, manufacturing, and use of products that are resource-efficient,* ***durable*** *(including in terms of life span and absence of* ***planned obsolescence****),* ***reparable****, re-usable and upgradable*[62]*'*

Other measures under Article 9(1) are to set up '*systems promoting repair*[63]*'* and to encourage *'the availability of spare parts*[64]*'*

Other measures Member States must take under Article 9(1) include to support sustainable production and consumption models; to reduce food-waste generation or to stop the generation of marine litter.

To which products/services does the legislation apply?

The Waste Framework Directive applies generally to waste with specified exceptions. In relation to extended producer responsibility and waste prevention, it applies to products with the potential to become waste within the meaning of the Directive. On waste

[62] Article 9(1)(b) of Directive 2008/98/EC

[63], Article 9(1)(d) of Directive 2008/98/EC

[64] Article 9(1)(e) of Directive 2008/98/EC

prevention Member States are required under Article 9(1)(d), to take measures which encourage the setting up of systems promoting repair, including a non-exhaustive list of product types such as:

- electrical and electronic equipment
- textiles and furniture
- packaging
- construction materials and products

How do the provisions promote durability/reparability

Article 8 promotes durability/reparability by suggesting that Member States may take measures to encourage the **production of 'technically durable and easily reparable'** products under extended producer responsibility schemes. This approach is voluntary.

While Article 9, requires Member States to take measures to encourage the **production of durable and reparable products**. Article 9 goes further than Article 8 in that it requires Member States to act. However, the action under both articles is limited to encouraging producers to act.

The new provisions regarding the responsibility on the waste producer to bear the cost of waste management might also promote durability and reparability. However, allocating the responsibility to the product producer might, which is optional for Member States, might have a greater impact on ensuring durability and reparability of products at their design level.

With whom does the responsibility lie?

Responsibility lies with the Member States.

Article 8 provides Member States with the possibility (not a mandatory requirement) to impose an extended producer responsibility by taking legislative or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products (producer of the product) has extended producer responsibility. Where such measures include the establishment of extended producer responsibility schemes, the general minimum requirements laid down in Article 8a shall apply[65].

The responsibility on preventing waste is mandatory on Member States but it is limited to encouraging action under Article 9 including the design, manufacturing and use of products that are resource-efficient, **durable** (including in terms of life span and absence of planned obsolescence), **reparable,** re-usable and upgradable and the setting up of **systems promoting repair[66]**.

Member States are required to monitor and assess the implementation of measure taken to prevent waste as part of the Waste Prevention Programme that they need to have in place[67].

[65] Article 8(1) of Directive 2008/98/EC

[66] Article 9(1) of Directive 2008/98/EC

[67] Article 9(3) of Directive 2008/98/EC

Is the current waste legislation insufficient in the promotion of durability/reparability?

The legislation does not set out requirements in relation to durability and reparability. It simply suggests that Member States may encourage the development, production and marketing of products and components of products that are technically durable and easily reparable (Article 8) and requires Member States to take measures that prevent waste generation by encouraging the design, manufacturing and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence) and reparable (Article 9).

In cases where the establishment of Extended Producer Responsibility is mandatory (e.g. packaging), Member States are required to apply minimum requirements under Article 8a and take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer responsibility obligations take into account the product's durability, reparability, re-usability and recyclability and the presence of hazardous substances, thereby taking a lifecycle approach and aligned with the requirements set by relevant Union law. Criteria for harmonising the modulation are currently not harmonised but guidance is being developed.

To what extent is the legislation open to variations at MS level? (max harmonisation/Regulation, etc.)

While under the Directive, Member States are required to take measures to prevent waste generation under Article 9, measures are open to a wide degree of variation but in relation to durability, the action to be taken is just to encourage the design, manufacturing and use of products that are durable (including in terms of life span and absence of planned obsolescence) and reparable. Furthermore Article 8 extended producer responsibility scheme is optional and therefore open to a wide range of variations at Member State level.

How is this monitored/enforced?

There is no monitoring or enforcement of Article 8. Member States are required to monitor and assess the implementation of waste prevention measures under Article 9. The Member State's waste prevention programmes are assessed by the Commission.

Prevention or banning of obsolescence

The Directive deters planned obsolescence through waste prevention measures under Article 9.

Prevention or banning of greenwashing

The Directive does not prohibit or deter greenwashing.

The Directive is not relevant to the monitoring and enforcement of consumer protection legislation. However, the requirements for extended producer responsibility include the definition clear roles and responsibilities of all relevant actors involved, including producers of products placing products on the market of the Member State, organisations implementing extended producer responsibility obligations on their behalf, private or public waste operators, local authorities and, where appropriate, re-use and preparing for re-use operators and social economy enterprises. It also requires the setting of waste management targets, quantitative targets and qualitative objectives relevant for the extended producer responsibility scheme. In order to ensure proper monitoring and implementation of these requirements it provides for a **reporting system** to gather data on the products placed on the market of the Member State by

the producers of products subject to extended producer responsibility and data on the collection and treatment of waste resulting from those products specifying, where appropriate, the waste material flows, as well as other data[68]. In addition, Member States are required to **monitor and assess** the implementation of measure taken to prevent waste[69].

A3.2.8 Energy Market Directive (Directive 2019/944/EU)

The Energy Market Directive amends the Energy Efficiency Directive (Directive 2012/27/EU). It repeals Directive 2009/72/EC as of 1 January 2021.

The Directive establishes a right for consumers to be informed, for example, about their rights as consumers via a checklist, about the benefits and potential risks of dynamic electricity price contracts. It also establishes a right for consumers to switch suppliers without disproportionate fees and to self-generate electricity and to participate in community energy initiatives. Disconnection safeguards are put in place to protect vulnerable consumers.

Regulation (EU) 2019/943 on the internal market for electricity, which was adopted at the same time, mainly contains rules on the wholesale market and network operation. It seeks to empower consumers in actively participating in the energy market, for example, through rights to information about their rights and rights to switch suppliers, enabling them to switch to less emissions-intensive energy sources.

A3.2.8.1 Description

Objective

Art 1 states the Directive "establishes common rules for the generation, transmission, distribution, energy storage and supply of electricity, together with consumer protection provisions, with a view to creating truly integrated competitive, consumer centred, flexible, fair and transparent electricity markets in the Union.

Priority areas

The Directive does not directly concern the priority areas of the study, however, the Directive has strong information elements, especially with regard to consumer rights, for example when choosing an energy supplier and ensures smaller suppliers (e.g. those supplying renewable energy) are fairly represented in comparison tools. Implicitly these provisions may also contribute to preventing greenwashing, as it ensures consumers are well informed.

The Directive does not concern durability, reparability, or obsolescence.

Comprehensive description of all aspects relevant of the Regulation/Directive to the study are presented below.

A3.2.8.2 Interplay with the areas covered in the study

The Directive does not specifically cover the aspects covered by the study, although there is potential that the provisions will facilitate the adoption of renewable energy (suppliers of which may well be smaller than conventional suppliers) – for example, the Directive gives consumers to right to produce, consume, store and sell electricity, individually or through an aggregator. Art 15 sets out the provisions for active customers (those that produce their own electricity), removing unnecessary burdens. Removing barriers could incentivise new active customers, especially in the renewable energy sector and therefore promoting their role in the Green transition. Provisions also allow consumers to switch energy provider without undue costs, which may also enable

[68] Article 8a(1) of Directive 2008/98/EC as amended

[69] Article 9(3) of Directive 2008/98/EC as amended

consumers to switch to renewable energy more easily. Furthermore, Art 33 ensures Member States provide the necessary regulatory framework to facilitate the connection of publicly accessible and private recharging points to the distribution networks, vis-à-vis electro-mobility.

The Directive also concerns consumer information. This includes, for example, the information displayed on energy bills (Art 18) and the existence of comparison tools (Art 14). These requirements do not specifically concern environmental/sustainability criteria, although Art 14(4) requires comparison tools include "comparative criteria relating to the nature of the services offered by the suppliers".

The Directive refers to low-carbon electricity (Art 1), and the information to be set out in the energy bills should include (or at least sign-post) the environmental impact, including the contribution of each energy source and information on the environmental impact, in at least terms of CO2 emissions and the radioactive waste resulting from the electricity produced by the overall energy mix of the supplier over the preceding year (Annex I). The regulatory authority or another competent national authority shall take the necessary steps to ensure that the information provided by suppliers to final customers pursuant to this point is reliable and is provided at a national level in a clearly comparable manner.

The provisions on the comparison tools do not mandate the environmental impact of the electricity is specifically stated, however it is an idea that could be included in the future. Member States are responsible for ensuring at least household customers have access to the comparison tools, and appointing a competent authority (independent of any market participants and comparison tool operators) to implement the provisions. The regulatory authority is responsible for ensuring the comparison tools comply with the provisions.

It requires bills to be clear, correct, concise and presented in a way that makes comparisons easy. The billing information should be provided at least every 6 months.

Monitoring & Enforcement

The enforcement system designed to ensure the implementation of the internal market on electricity is applicable. The regulatory authority has broad set of duties which include the responsibility to monitor performance, effectiveness and implementation of the Directive's rules and removal of unjustified obstacles and restrictions for the development of self-consumption or citizen energy communities; as well as to ensure, together with other relevant authorities, that the consumer protection measures are effective and enforced (Article 59).

A3.2.9 Renewable Energy Directive 2018 (Directive 2018/2001/EU)

Under the recast Renewable Energy Directive[70] (RED II), Member States must ensure consumers and/or the general public have access to certain energy information: support measures and the net benefits, costs and energy efficiency of heating and cooling equipment and electricity from renewable sources (Article 18), that the suppliers have a certified system to inform consumers on the origin of Renewable Energy (Article 19) and the energy performance and share of renewable energy in district heating and cooling systems (Article 24).

The Directive requires Member States to protect the consumer rights of renewables self-consumers (Article 2(14) and members or shareholders of renewable energy communities (Article 2(16) (i.e. households and communities engaging in renewables self-consumption),

[70] Recasting and repealing previous legislation (Directive 2009/28/EC, Directive (EU) 2015/1513 and Council Directive 2013/18/EU).

It provides a right to disconnect for final consumers in district heating and cooling systems, whereby consumers must be allowed to exit inefficient systems to produce renewable heating or cooling themselves (by 31 Dec 2025) (Article 24).

It provides consumers with rights to information and to generate renewable energy, enabling them to become actively engaged in the transition to a green energy system.

A3.2.9.1 Description

Aim

The Renewable Energy Directive establishes a common system to promote energy from renewable sources across the different sectors. It sets a binding EU target for its share in the energy mix in 2030; regulates self-consumption and renewable energy communities; and establish a common set of rules for the use and generation of renewables in electricity, heating and cooling, and transport in the EU,. It also establishes sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels.

Scope

The Directive defines in Art 2(1) renewable energy as "energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas".

Priority areas for this study

The Renewable Energy Directive is relevant under this study as it promotes the use and generation of renewable energy sources by consumers. It primarily concerns the sustainability of energy – both in terms of reducing the need for conventional energy by promoting and facilitating the use of renewable energy, but also ensures the sustainability of renewable energy itself, through the sustainability and GHG emissions saving criteria for bioenergy.

The Directive has a strong information requirement through the certification of the renewable energy produced via guarantees of origin, reducing the possibility for greenwashing. In addition, the system it puts in place to ensure the sustainability of bioenergy guarantees that suppliers have indeed sourced sustainable biomass, instead of unsustainably producing or harvesting crops, for example from virgin rainforest.

A3.2.9.2 Interplay with the areas covered in the study

The Renewable Energy Directive is relevant as it promotes a greener attitude by consumers through sustainability information objectives and the prevention of greenwashing. A key aspect of the Renewable Energy Directive is the information requirements which ensure consumers as well as other stakeholders are clearly and accurately informed, with regard to the energy options available to them as well as the origin of the energy. Another key option is the requirement to ensure that the production of renewable energy is taken into account only once[71] and that the mechanisms used for the guarantees of origin are accurate, reliable and fraud resistant[72] . It also facilitates self-consumption by clarifying the legal and regulatory framework and ensuring that justified, fair/and non-discriminatory rules are applied to final or household customers in all EU Member States (Art 22(1)).

[71] Article 19 (2) of the recast renewable energy directive

[72] Article 19 (6) of the recast renewable energy directive

Provision of information on durability (including aspects that can lead to early failures), reparability and /or sustainability (includes services)

Under the RED II, consumers should have access to information concerning various aspects of the energy, especially with regard to sustainability. Information is considered especially important as the lack of transparent rules and coordination between the different authorisation bodies has been shown to hinder the deployment of energy from renewable sources (Recital 50).

General information to citizens

Member States shall develop suitable information, awareness-raising, guidance or training programmes to inform citizens of how to exercise their rights as active customers, and of the benefits and practicalities, including technical and financial aspects, of developing and using energy from renewable sources, including by renewables self-consumption or in the framework of renewable energy communities. (Art 18(6)). Recital 28 specifies further, noting the information should cover performance of heating and cooling systems and on the lower running costs of electric vehicles, to allow them to make individual consumer choices with regard to renewable energy and avoid technology lock-in.

Furthermore, Recital 39 states that Member States should inform citizens about the benefits stemming from the use of cooperation mechanisms that should be in place to achieve the objectives of the Directive.

Heating and Cooling

The Directive highlights in particular the role of renewable energy in the heating and cooling sectors. Recital 52 singles out information and training gaps which should be removed in order to encourage the

deployment of energy from renewable sources. For example, Member States must ensure that information on the net benefits, cost and energy efficiency of equipment and systems for the use of heating, cooling and electricity from renewable sources is made available either by the supplier of the equipment or system or by the competent authorities (Art 18 (2)). Member States must also ensure that information on the energy performance and the share of renewable energy in their district heating and cooling systems is provided to final consumers in an easily accessible manner, such as on the suppliers' websites, on annual bills or upon request. (Art 24(1)).

Furthermore, Member States shall ensure that guidance is made available to all relevant actors so they can properly consider the optimal combination of energy from renewable sources, of high efficiency technologies (including heating and cooling) when planning, designing, building and renovating industrial, commercial or residential areas. (Art 18(5)).

Frameworks for self-consumption and energy communities

The RED II includes provisions for self-consumption (consumers that produce their own renewable energy they may or may not feed into the grid). Member States are required to put in place an enabling framework to promote and facilitate renewables self-consumption. This will include improving accessibility of self-consumption, removing barriers, add incentives, support schemes (if self-consumption also feeds into the grid), and cost-sharing (Art 21(6)).

Member States shall also provide an enabling framework to promote and facilitate the development of renewable energy communities. This will address (among others) tools to facilitate access to finance and information and regulatory and capacity-building support is provided to public authorities in enabling and setting up renewable energy communities (Art 22(4)).

According to Recital 50, guidance for applicants (including renewables self-consumers and renewable energy communities) during administrative permit application and

granting processes is also required, through a single contact point that will guide the applicant and facilitate the entire administrative process. The Directive also sets out provisions outlining what a contact point needs to look like (see Art. 16).

Information based on guarantees of origin

As detailed below, the Directive stresses the importance of guaranteeing the origin of renewable energy to ensure that information on the share of renewable energy can be demonstrated to final customers. Electricity suppliers are required to use GO to demonstrate the share of renewable energy (art 19 (8) of RED II)In order to improve the quality of that information to consumers, Member States should ensure that guarantees of origin are issued for all units of renewable energy produced (Recital 37).

Information to be provided to both the MS and the consumers is the responsibility of the producers, suppliers of equipment, or the competent authorities.

Prevention or banning of greenwashing

Greenwashing is indirectly addressed by the RED. One of the greatest criticisms of the previous RED was the lack of robust sustainability criteria. The recast RED extended sustainability criteria to cover all bioenergy uses, including solid biomass and biogas in heat and power, and included dedicated new sustainability criteria for forest biomass.

The Directive sets out several provisions which reduce ambiguity when it comes to where and how renewable energy is produced e.g. with RED II it is an obligation for suppliers to use guarantees of origin when demonstrating the share of renewable sources in the electricity mix[73]. Such requirements reduce the ability for producers or suppliers to mislead consumers (and MS) as well as provide standards which give something producers/suppliers to work towards – whether it is through improved technology or greater transparency.

Guarantee of origin

According to the Directive, 'guarantee of origin' means an electronic document which has the sole function of providing evidence to a final customer that a given share or quantity of energy was produced from renewable sources; (Art 2(11)). As such, Member States ensure that the origin of energy from renewable sources can be guaranteed in accordance with objective, transparent and non-discriminatory criteria. Art 19(7) sets out the information to be included in the Guarantee of origin, and includes (among other things):

- the energy source from which the energy was produced and the start and end dates of production;
- whether it relates to electricity, gas, or heating or cooling;
- the identity, location, type and capacity of the installation where the energy was produced;
- the country of issue and a unique identification number.

According to Art 19(6), Member States or the designated competent bodies shall put in place appropriate mechanisms to ensure that guarantees of origin are issued, transferred and cancelled electronically and are accurate, reliable and fraud-resistant. Member States and designated competent bodies shall ensure that the requirements they impose comply with the standard CEN - EN 16325.

Guarantees of origin are as well the core information carrier for the renewable power purchase agreements in article 15 (8) of RED II

Certification

[73] Article 19 (8) of RED II and mirrored in Annex I section 5 of Directive (EU) 2019/944 on the internal market for electricity

Art 18(3) requires Member States to ensure that certification schemes or equivalent qualification schemes are available for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps. Annex IV sets out the requirements for these certifications. Art 18(4) states the certification schemes are to be made public, and if Member States choose, certified installers can be listed on publicly available lists.

Annex IV paragraph 4 states training is to ensure installers can install the equipment and systems "to meet the performance and reliability needs of the customer, incorporate quality craftsmanship, and comply with all applicable codes and standards, including energy and eco-labelling". These provisions ensure the installations are properly installed and the environmental benefits are being reaped.

The accreditation provider shall be effected by Member States or by the administrative body that they appoint. The accrediting body shall ensure that the training programme offered by the training provider has continuity and regional or national coverage (Annex IV, section 3).

Furthermore, Member States shall require economic operators to show that the sustainability and greenhouse gas emissions saving criteria have been fulfilled. Member States shall take measures to ensure that economic operators submit reliable information regarding the compliance with the greenhouse gas emissions savings thresholds set in, and with the sustainability and greenhouse gas emissions saving criteria. Member States need to require economic operators to make available, upon request, the data used to develop the information and to arrange for an independent auditing of the information submitted.

Member States need to ensure that consumers have access to information on the geographic origin and feedstock type of biofuels, bioliquids and biomass fuels per fuel supplier via the websites of operators, suppliers or the relevant competent authorities and that the information is updated on an annual basis.

A3.2.10 Consumer Protection Cooperation Regulation (Regulation 2017/2394)

A3.2.10.1 Description

Regulation 2017/2394[74] on cooperation between national authorities responsible for the enforcement of consumer protection laws (Consumer protection cooperation – CPC Regulation) entered into application on 17 January 2020. It replaced the previous CPC Regulation introduced in 2006 (No 2006/2004). The CPC Regulation aims to improve enforcement of EU consumer protection legislation, in particular in cross border cases. The Regulation established a network of national competent authorities of EEA countries (CPC Network) to address with the steer of the European Commission, cross border and widespread infringements of EU consumer rules, and sets rules and principles for cooperation between Member States.

The Regulation applies to all intra-Union infringements, widespread infringements (involving at least three Member States) and widespread infringements with a Union dimension (involving at least two-thirds of the Member States, accounting, together, for at least two-thirds of the population of the Union). Infringements covered by the Regulation are any infringements to Union laws that protect consumers' interests (Regulations and Directives listed in Annex I to the Regulation).

[74] Regulation (EU) 2017/2394 of the European Parliament and of the Council of 12 December 2017 on cooperation between national authorities responsible for the enforcement of consumer protection laws and repealing Regulation (EC) No 2006/2004, OJ L 345, 27.12.2017, p. 1–26.

A3.2.10.2 Interplay with the areas covered in the study

The CPC Regulation is relevant for the study as it establishes mechanisms for Member States' cooperation in enforcing the EU consumer legislation.

Monitoring & Enforcement

The CPC establishes a network of national competent authorities responsible for consumer protection. Each Member State must designate one or more competent authorities and a single liaison office responsible for the application of the Regulation. The single liaison office is responsible for coordinating within a given Member State the investigation and enforcement activities of the competent authorities and, where relevant, other public authorities (Article 5). The Regulation ensures that national enforcement authorities have a minimum set of investigation and enforcement powers to enforce EU consumer laws, as defined in Articles 9 and 10, including, among others, requesting information from legal persons such as banks or internet service providers to establish whether an infringement is occurring and the identity of the trader (Article 9(3)(b)), using mystery shopping methods (purchasing goods or services under a cover identity) (Article 9(3)(d)), taking down or restricting access to websites or require hosting service providers to take down a website and domain registries or registrars to delete a domain name (Article 9(4)(g)), and imposing penalties, such as fines or periodic penalty payments, for infringements covered by the Regulation (Article 9(4)(h)).

The Regulation established a mutual assistance system, whereby competent authorities should provide necessary information to establish an intra-Union infringement at the request of another competent authority, and where necessary carry out necessary investigations. If the infringement is established, competent authorities are also required to take all necessary enforcement measures to bring about the cessation or prohibition of the intra-Union infringement.

The Regulation also establishes an alert system, whereby a competent authority is required to notify without delay the Commission, other competent authorities and single liaison offices if they suspect that an infringement covered by the Regulation that may affect other Member States is taking place on its territory (Article 6(1)). The Commission is also required to notify competent authorities and single liaison offices in case of reasonable suspicion of an infringement (Article 6(2)). In addition, organisations at Member States or EU level, such as designated bodies, European Consumer Centres, consumer organisations and associations, or trader associations, might also be given the power to issue a so-called external alert to the competent authorities of the relevant Member States and the Commission in case of suspected infringements (Article 27).

When widespread infringement or widespread infringement with a Union dimension are suspected, the Regulation allows for coordinated investigations and enforcement actions. A coordinated action in case of widespread infringements is led by one of the competent authorities of Member States affected by the infringement. In case of widespread infringement with a Union dimension, the Commission is coordinating the investigation and enforcement actions.

The measures included in this Regulation reinforce the rights of consumers towards sellers/producers in all matters in cases with a cross-border element. Better enforcement of rules enables consumers to secure its active participation in the green economy. It may also produce a deterrent effect.

A3.2.11 Directive (EU) 2020/1828 on representative actions for the protection of collective interests of consumers (repealing Directive 2009/22/EC)

A3.2.11.1 Description

Directive 2009/22/EC[75] on injunctions for the protection of consumers' interests aimed to defend collective interests of consumers by requiring all EU countries to have injunction procedures in place for stopping infringements of EU consumer rights such as those included in the CRD or the UCPD (the full list of legislation covered is available in Annex I to the Directive). The Directive also harmonised certain aspects of the injunction procedure. The injunction order issued by a court or an administrative body obliged the targeted person to perform or to refrain from performing against consumer rights. It enabled consumers across the EU to use representative actions to demand compensation from companies that infringe their rights.

In 2018, a proposal[76] for a Directive on representative actions for the protection of the collective interests of consumers, and repealing Directive 2009/22/EC, was issued as part of the New Deal for Consumers, with a view to improve the effectiveness of the injunction procedure. The Fitness Check of EU consumer and marketing law, published in May 2017, identified shortcomings in the injunction procedure, even more in cases of injunctions with a cross-border dimension, in particular its limited scope, the limited effects of injunction decisions on redress for harmed consumers and the difficulty of enforcing them, and the complexity, cost and length of the procedure. As a result of these difficulties, the procedure was underused, and its effectiveness was limited[77].

To respond to these challenges, the new 'Injunctions Directive', adopted in November 2020, provides for a procedural mechanism for representative actions for injunctive measures and for redress measures at national and EU level. The Directive has a broader scope than the previous Directive, as it includes horizontal consumer legislation and sector-specific laws in the field of financial services, energy, telecommunications, health and environment. It applies to domestic and cross-border infringements. More specifically, the Directive provides that:

- Member States designate consumer organisations or public bodies as qualified entities for the purpose of bringing domestic and/or cross-border representative actions;
- Member States ensure that representative actions can be brought before their courts or administrative authorities by qualified entities;
- Member States ensure that qualified entities are entitled to seek both injunctive and redress measures, such as compensation, repair, replacement, price reduction, contract termination or reimbursement of the price paid as appropriate;
- Member States establish rules ensuring the proper completion and transparency of the funding of representative actions;
- Member States ensure due expediency of procedures and avoid procedural costs becoming a financial obstacle to bringing representative action.

[75] Directive 2009/22/EC of the European Parliament and of the Council of 23 April 2009 on injunctions for the protection of consumers' interests, OJ L 110, 1.5.2009, p. 30–36.

[76] Proposal for a Directive of the European Parliament and of the Council on representative actions for the protection of the collective interests of consumers, and repealing Directive 2009/22/EC, COM(2018) 184 final.

[77] Proposal for a Directive of the European Parliament and of the Council on representative actions for the protection of the collective interests of consumers, and repealing Directive 2009/22/EC, COM(2018) 184 final, p. 2, p.8.

A3.2.11.2 Interplay with the areas covered in the study

The Directive on representative actions for the protection of the collective interests of consumers is relevant for the study as it introduces mechanisms for a more effective enforcement of EU consumer law.

Monitoring & Enforcement

The Directive lays down procedures for compensatory redress. Article 9 of the Directive requires Member States to ensure that qualified entities are entitled to bring representative actions seeking redress measures, which require a trader to provide consumers concerned with remedies such as compensation, repair, replacement, price reduction, contract termination or reimbursement of the price paid, as appropriate and as available under Union or national law.

Article 15 of the Directive requires Member States to ensure that the final decision of a court or administrative authority of any Member State concerning the existence of an infringement harming collective interests of consumers can be used by all parties as evidence in the context of any other action before their national courts or administrative authorities to seek redress measures against the same trader for the same practice.

These provisions make it possible for a group of consumers affected by the same issue to join forces through a non-profit entity (e.g. consumer association) to defend their rights, including, for instance, against misleading environmental claims and obtain compensation from infringing traders

A3.2.12 Directive (EU) 2019/2161 on the better enforcement and modernisation of Union consumer protection rules

A3.2.12.1 Description

Directive (EU) 2019/2161 on the better enforcement and modernisation of Union consumer protection rules, adopted in November 2019 and entering into force in May 2022, amends several EU consumer laws, including the Consumer Rights Directive and the UCPD to introduce new enforcement provisions, regarding penalties and remedies, and provisions aiming to modernise EU consumer rules in relation to e-commerce.

A3.2.12.2 Interplay with the areas covered in the study

Monitoring & Enforcement

Directive (EU) 2019/2161 is relevant for the study as it creates a tool to improve information to consumers on their rights.

Article 5 of the Directive requires that the single digital gateway, created by Regulation (EU) 2018/1724[78], to provide access to information on out-of-court dispute resolution, to procedures and to assistance and problem-solving services, provides to consumers up-to-date information about their Union consumer rights in a clear, understandable and easily accessible manner. The single digital gateway will cover all Union and national rules applicable to citizens and businesses in the field of the internal market. It should be active at the end of 2020 – at least the informational sections. Carrying administrative procedures through the single gateway should be possible from 2023.

Article 5 also requires that consumers are enabled to submit a complaint through the European online dispute resolution (ODR) platform[79], established under Regulation (EU)

[78] Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012, OJ L 295, 21.11.2018, p. 1–38.

[79] ODR platform: https://ec.europa.eu/consumers/odr/main/index.cfm?event=main.home2.show&lng=EN

No 524/2013[80] and to the competent centre of the European Consumer Centres Network, depending on the parties involved.

[80] Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC, OJ L 165, 18.6.2013, p. 1–12.

Annex 4. Briefing notes on specific topics

This annex compiles a series of briefing notes on three topics to provide a detail analysis of certain aspects indirectly related to the study.

A4.1 Use of digital means to provide product information

Mandatory labelling, in this context, is a market tool used for providing consumers with relevant information as required by law (this differs from is the meaning of 'label' in the context of 'sustainability label', i.e., quality mark or trust mark used to market a product). This information might refer to both the characteristics of the product (e.g., its nutritional values and regulatory compliance) and characteristics not related to its use (e.g. the environmental impact and sustainability of a product).

Traditionally, labels are physically present on the products, but they present several shortcomings. For instance, products can be prevented to enter a market if their label does not contain all the country-specific requirements, and it is often challenging for manufacturers to apply physical labels containing all the necessary information on a small product. Moreover, as they are not easily updated/replaceable, any changes to characteristics of the product can imply costs to companies and to the environment. Therefore, throughout recent years several physical labels have been replaced by digital means, like e-labels and internet websites, in 13 countries (Australia, Canada, China, Ghana, India, Japan, Malaysia, New Zealand, Singapore, South Africa, South Korea, Taiwan and United States).[81]

In 2014, the **United States** enacted the Enhance Labelling, Accessing, and Branding of Electronic Licenses Act (E-Label Act), which allows manufacturers of radiofrequency devices with an inbuilt screen the option of using electronic labels to display product information on the device's screen, rather than affixing a physical label to the product. The E-Label guidance specifies the type of devices authorised, the type of information to be displayed and additional requirements to be respected. The type of radiofrequency devices authorised are those with integrated (non-removable) screens, those without a display that can only operate with a device that has a display, and modular transmitters where – among other characteristics – the host has a display. The main information that has to be displayed are the Federal Communications Commission (FCC) ID for Certified devices, the logo for devices subject to Declaration of Conformity (DoC) and any information that the FCC requires to be on the device's screen. The E-Label guidance also specifies that users must be able to access the electronic label without any access code in maximum three steps from the device's menu, and access instruction must be provided to the consumer. Label information must also be secured and unmodifiable. Moreover, in 2008 the US Congress passed legislation requiring manufactures and distributors to label each medical device or its packaging with a unique number, usually a barcode, which can be read by both humans and machine. In this way, providers can access the FDA's Global UDI Database where data such as serial number, lot number, manufacturer and expiration date are stored.[82]

Australia has allowed the optional use of electronic labels for radiocommunications and telecommunications devices with an inbuilt screen since 2010. It does not specify how e-labels should be displayed but, provides specific examples of how the labels should appear during the power-up sequence, under the device's page on system information or under the device's help menu. It also requires providing accompanying documentation that explains how to view the electronic label. As regards the content,

[81] Cost-Benefits analysis on the introduction of an e-labelling scheme in the EU, https://www.digitaleurope.org/resources/cost-benefits-analysis-on-the-introduction-of-an-e-labelling-scheme-in-europe/

[82] Study for the introduction of e-labelling scheme in the EU, https://www.digitaleurope.org/wp/wp-content/uploads/2019/01/Study%20for%20the%20introduction%20of%20e-labelling%20scheme%20in%20EU%20-%20Case%20study%20-%20final%20report%2021062018.pdf

labels must comply with the Australian regulatory requirements, regardless of the type of labelling.[83]

In 2014, **Canada** has adopted rules which allow devices with an in-built display to present the product information electronically instead of it being affixed physically on the product. These devices can present the information via an audio message or a host device screen electronically connected with a physical connection, Wi-Fi, Bluetooth, etc. The information that has to be displayed is the following: The Industry Canada registration number for terminal equipment devices, a certification number for radio equipment, a model identification number, as well as all the required information for that specific device. As in the United States, manufacturers are required to inform consumers on how to accede the electronic label without any special or specific access code or accessories, such as a SIM card, or having to go through more than three steps. Furthermore, e-labels must be secure, unmodifiable, and unremovable.[84]

To date, the European Union has not adopted legislation on e-labelling. Nonetheless, as of May 2020, the **EU's Medical Device Regulation** allowed medical device manufacturer to provide information for users (IFUs) in an electronic forms (eIFUs). At the moment, manufacturers are only publishing the IFUs on their website in a PDF form, meaning in a static electronic version of the printed IFUs.[85] Furthermore, in 2018 the revised EU Waste Framework Directive introduced a database for information on substances of concern in articles as such or in complex products (SCIP). Companies producing, importing or supplying these substances of concerns are required to submit information on these articles in the SCIP database online, which is then available for waste operators and consumers.[86]

E-labels allows to display the same type of information of a physical one, but through digital means. There are three main types of e-labels (see examples in Figure A1):

1. A **label displayed electronically** on the devices with a built-in screen such as a laptop, or devices that can be connected to a screen such as a printer (see photo 1).

2. A **machine-readable code** (e.g. QR code or barcode) that can be printed or attached on the product and scanned through a digital device (e.g. smartphone) in order to access all relevant product information (see photo 2).

3. A **label accessible through an internet website** affixed to the product.

[83] Nigel Cory, How E-Labels Can Support Trade and Innovation in ICT, Information Technology & Innovation Foundation, 2017, http://www2.itif.org/2017-e-label-support-ict.pdf?_ga=2.83504854.1507184721.1552429978-381021246.1552429978

[84] Nigel Cory, How E-Labels Can Support Trade and Innovation in ICT, Information Technology & Innovation Foundation, 2017, http://www2.itif.org/2017-e-label-support-ict.pdf?_ga=2.83504854.1507184721.1552429978-381021246.1552429978

[85] Graham, F., E-labelling: Tips for the medical device industry, 2020, https://www.med-technews.com/features/e-labelling-tips-for-the-medical-device-industry/

[86] European Chemicals Agency, SCIP Database, https://echa.europa.eu/scip.

Figure A1. Examples of e-labels

Photo 1 – e-Label displayed electronically[87]

Photo 2 – QR code[88]

The use of digital means to provide product information presents a series of **advantages**, such as cost savings, reduced environmental impact, easier replacement/update, capacity to provide more detailed information (which can be easier to read/navigate) and the facility to affix it to small products.

Cost-benefit analyses showed that the EU adoption of digital labels would reduce 14.28% of the cost indicating compliance, which equals to €112 million per years, in the ICT sector alone. Moreover, the introduction of e-label would also reduce the administrative burdens and adaptation costs for complying with different national legislations, as well as the costs of updating mandatory compliance information.[89]

The introduction of an e-label would also allow manufacturers to reduce the materials used for producing and replacing labels. Hence, as mentioned above, e-labelling would not only ease the updating of product information but also improve its environmental impact.

In addition to mandatory compliance information, e-labels offer the possibility to provide information on the legal guarantee, manufacturer contact details, cleaning, repair and maintenance information, recycling, etc. Despite the increased amount of information provided, an e-label would still be more accessible and readable for consumers given the space and format constraints of physical labels.

Furthermore, by accessing product information online, consumers will be able to better compare products information and environmental impact. As a result, consumers will be able to make a more informed purchase decision.

Finally, in view of the exponential development of technology, companies are producing smaller products. Hence, it is becoming harder to find space for physical labels on the

[87] Nigel Cory, How E-Labels Can Support Trade and Innovation in ICT, Information Technology & Innovation Foundation, 2017, http://www2.itif.org/2017-e-label-support-ict.pdf?_ga=2.83504854.1507184721.1552429978-381021246.1552429978

[88] Nigel Cory, How E-Labels Can Support Trade and Innovation in ICT, Information Technology & Innovation Foundation, 2017, http://www2.itif.org/2017-e-label-support-ict.pdf?_ga=2.83504854.1507184721.1552429978-381021246.1552429978

[89] Study for the introduction of an e-labelling scheme in Europe – Cost Benefit Analysis, 2018, https://www.digitaleurope.org/wp/wp-content/uploads/2019/01/Study%20for%20the%20introduction%20of%20an%20e-labelling%20scheme%20in%20the%20EU%20-%20CBA%20-%20final%20report%2021062018.pdf

product's external surface. The use of electronic labels would help manufacturers in overcoming this hurdle.

E-labelling also comes with a couple of **shortcomings**. A common criticism is that an electronic label cannot be used in case of the customer has a broken scanning device or does not have it at all at sale's point and might prevent non-tech savvy customers from accessing a product's information when in the process of buying the product.

There are a series of measures to mitigate these issues depending on who needs to provide the information, what information needs to be provided and when the information is required. For instance, information can still be made available on the product's manuals (which if not always provided with the product can be requested by the costumer to the seller), on the manufacturer's website or on available flyers provided by the seller. For those customers that do not have working scanning device, one could be made available by the seller at the point of sale.

A4.2 Comparison of criteria for environmental claims

A comparative assessment of four key documents, namely the Guidelines for the implementation of the Unfair Commercial Practice Directive (UCPD), the Report on "Compliance Criteria on Environmental Claims", the International Chamber of Commerce (ICC) Framework for Irresponsible Environmental Marketing Communications and the Dutch Authority for Consumers & Markets' (ACM) Guidelines on Sustainability Claims, revealed differences between these instruments in terms of definition of "green claim", guidelines' structure, types of claims addressed and criteria/principles followed.

The ICC defines an environmental claim as a "a green or environmental/sustainability […] claim where explicit or implicit reference is made to the environmental or ecological aspects relating to the production, packaging, distribution, use/consumption or disposal of product". Instead, the ACM distinguishes between "environmental claims" and "ethical claims"[90], where "environmental claims" refers to a claim that gives "the impression that a product or activity of a company has few or no impact on the environment or is less harmful for the environment than similar products". Similarly, the UCPD Guidelines and the Report on Compliance Criteria on Environmental Claims use the term "environmental claims" to identify the practice of "suggesting or otherwise creating the impression" (in the context of a commercial communication, marketing or advertising) that a product or a service has a positive or no impact on the environment or is less damaging to the environment than competing goods or services". In this regard, the UCPD and the ACM guidelines appear to be similar as they both refer to a practice which has a precise impact (either negative or positive) on the environment. The UCPD also goes further specifying that when an impact cannot be verified, this practice is defined as "greenwashing".

The four guidance documents mentioned above have all the same aim to provide guidance to companies when claiming environmental attributes of products and services in order to protect consumers from misleading and unfounded environmental claims. Nonetheless, the structure as well as the type of guidance presented differ.

The ICC and the ACM guidelines appear to be quite straightforward and practical for companies to use. The **ICC Framework** addresses a series of environmental claims and explains how the principles of the ICC Advertising and Marketing Communication Code apply to each of them. The environmental claims addressed are the following: Carbon Footprint, Carbon offset, Carbon neutral: Compostable; Degradable; Designed for disassembly; "Free-of", "Non-toxic", "No", "Does not contain"; Extended life product;

[90] Ethical claims are defined as "claims that give the impression that the production of a product or activity of a company has been done in accordance with certain ethical standards, for example with respect to general working conditions, animal welfare and/or corporate social responsibility".

Recovered energy; Recyclable; Recyclable content, and recycled material; Recovered or reclaimed material; Reduced energy consumption, energy-efficient, energy-conserving, and energy-saving; Reduced resource use; Reduced water consumption, water-efficient, water-conserving, and water saving; Refillable; Renewable materials; Renewable energy; Reusable; Source reduction, Waste reduction. More specifically, the ICC Framework includes **a chart** that provides an easy reference to relevant ICC Code provisions as well as interpretations and comments, and a **clear checklist** for those developing marketing communications campaigns. The chart consists of a summary of the principles of the ICC Advertising and Marketing Communication Code, supplemented with additional commentary and guidance to apply these principles to environmental advertising. The checklist instead, consists of more than 25 practical and specific questions for self-assessment, such as:

- Do your proposed claims address the effect of the product, component or package on solid waste/on water/on air/on global warming/on energy usage/ on wildlife/on human health?'
- Are these benefits or effects expressed or implied?
- Are your proposed claims subject to any mandatory regulations or legislations?
- Are your proposed claims verifiable based on appropriate test methods or scientific data?
- Is the claim relevant?
- Does it state or imply that the product is unique when it is no?
- Have you conducted consumer perception research to assess how the claim will be perceived by consumers?
- Do you periodically reassess the claim, especially a comparative claim, based on changed circumstances and developments to assure that it remains accurate and not misleading?

Each question is then followed by a remark which provides the correct rules for environmental marketing in order to help companies conducting the self-assessment (e.g. Express or implied health claims must have a reasonable basis; Claims must be current). [91]

The **ACM draft guideline** instead, is composed of **5 straightforward rules** that companies have to take into account when making and assessing environmental claims: (1) Make clear what sustainability benefit the product offers; (2) Substantiate your sustainability claims with facts, and keep them up to date; (3) Compare with other products, services, or companies must be fair; (4) Be honest and specific about your company's efforts with regard to sustainability; (5) Ensure that visual claims and labels are useful to consumers, not confusing.[92]

As regards the **UCPD guidelines**, although they do not provide specific rules on environmental claims or a specific system to conduct a self-assessment, they clarify how the Directive can help traders from presenting misleading environmental claims. More specifically, these guidelines clarify how Articles 6, 7 and 12 of the UCPD can be applied to environmental claims. Furthermore, it provides specific examples of how

[91] International Chamber of Commerce, 2019. ICC Framework for Responsible Environmental Marketing Communications. Available at: https://iccwbo.org/publication/icc-framework-for-responsible-environmental-marketing-communications/

[92] Authority for Consumers & Markets, 2020. Draft Guidelines – Sustainability Claims. Available at: https://www.acm.nl/sites/default/files/documents/2020-09/acm-publishes-for-consultation-its-draft-guidelines-regarding-sustainability-claims.pdf

advertisement using environmental claims (e.g. eco-friendly, zero-impact) could be less misleading if they would follow the guidelines.[93]

Finally, the Report on "**Compliance Criteria on Environmental Claims**" lays down compliance criteria in order to improve the application of the existing legal provisions against misleading and unfounded information in relation to the environmental attributes of products and services. These criteria aim to support compliance with the legislation as regard the content of the claim, the presentation of the claim, as well as the substantiation and documentation of the claim. More specifically, in terms of the content of the claim, the criteria to take into account are the main environmental impact, the clarity of which aspects the claim relates to; the meaningfulness in the relevant market; the undue transfer of impacts; the comparative advertising and what it is required by law. Furthermore, the second group of criteria address the presentation of the product, the scope and boundaries of the claim, the avoidance of vague, ambiguous and broad claims, the labelling schemes and the black-list practices. In relation to claim substantiation and documentation, the Report assesses the competences of the national competent bodies, the type of evidence at the basis of environmental claims, environmental statements in company/product names, the evidence retention period and transparency to the public. Finally, it also specifies that companies should use claims based on their environmental achievement and efforts, rather than aspirations of future environmental performance.[94]

A4.3 Security concerns for reparability of energy products

The introduction of a **right to repair** in the European Union would allow consumers to repair and modify their own electronic devices, where otherwise manufacturers of such devices require consumers to only rely on their official repair services. Whereas repair can significantly extent the lifespan of product and provide benefits for both consumers and the environment, it may also raise significant **concerns about the safety of consumers**.

Product safety in the European Union is regulated by the **General Product Safety Regulation** (2001/95/EC), which ensures that only safe products are sold on the market. Businesses are required to inform consumers of any risks associated with the products they sell and make sure that any dangerous products present on the market can be traced so they can be removed to avoid any risks to consumers. This Regulation complements sector-specific legislation that applies to products such as toys, electrical and electronic goods, cosmetics and chemicals among others. [95]

As regards electrical and electronic equipment, there are two main European Directives that complement the General Product Safety Regulation, namely the **Low Voltage Directive** (LVD) and the **Electromagnetic Compatibility (EMC) Directive**. The LVD (2014/35/EU) ensures that electrical equipment operates with an input or output voltage of between 50 and 1000 V for alternating current and 75 and 1500 V for direct current, thus providing a high level of protection for European citizens. It applies to several electrical equipment, including but not only household appliances, cables, power supply units, laser equipment, certain components (e.g. fuses). The EMC Directive (2014/30/EU) instead, ensures that electrical and electronic equipment does not generate, or is not affected by, electromagnetic disturbance. Any of the current pieces

[93] European Commission, 2016. SWD Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices, Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0163&from=EN

[94] Multi-stakeholder Dialogue on Environmental Claims, 2016. Compliance Criteria on Environmental Claims. Available at: https://ec.europa.eu/info/sites/info/files/compliance_criteria_2016_en.pdf

[95] European Commission, General Product Safety Directive. Available at: https://ec.europa.eu/info/general-product-safety-directive_en.

of product safety legislation, however, address reparability and the risks associated therewith.

Whilst recognising the consumer's right to have access to high quality, safe and secure repair options, the right and the ability for consumers to repair electrical equipment themselves has raised several concerns. Especially for highly integrated and highly complex devices, improper handling and repairs of the device or some of its components, might significantly **impact the integrity of the product, lead to serious injuries to the person handling it and damaged properties**. Besides physical safety, additional aspects to take into consideration when assessing reparability's security are **cybersecurity concerns**, traceability of repair and liability implications. In a highly connected and digital world, unauthorised access can increase the risk of creating a gateway into the device's electronic network, thereby increasing vulnerability against hackers and potential loss of sensitive information.

Manufacturers usually have a system in place to track the repairs carried out by their service network. However, allowing third parties to repair devices hinders companies from tracing the source of the repairs and creates liability issues. Indeed, in the context of the right to repair one of the main implications to consider is the **warranty provided by the manufacturer and liability of failed repairs**. Failed repairs services can have potential warranty implications as the manufacturers are not liable for failed repairs resulting from an independent repair service. Allowing third parties to carry out repair services without a systematic mechanism for traceability, creates problems in determining liability if the source of reparability is not determined. This legal ambiguity creates issues for both the consumers who might have to face extra costs for the replacement or repair of products, and for the manufacturer who could be exposed to product safety claims by a third party.[96]

Proposed solutions to address some of the above-mentioned issues include the provision of detailed information to consumers. More specifically, physical safety issues can be largely prevented if consumers are provided with **very detailed information** on how to repair the electronic device, together with original spare parts and necessary tools. iFIX it for instance, has already developed more than 36,000 guides on 6,500 consumers products to support consumers in repairing the goods they own. The guides include a wide variety of information ranging from how to remove a stripped screw to how to choose the right tools and materials, together with general safety warnings. The section on general safety warnings covers several issues which can be often at the origin of accidents, such as information on tool and soldering safety. Hence, physical safety and security risk would significantly decrease if manufactures would allow access to documentation, diagnostic tools and replacement parts rather than keeping them in secret in the name of cybersecurity. As regards cybersecurity, several cybersecurity advocacy groups and experts, such as Securepairs.org, argue that keeping the functioning of electronic devices secret to prevent third parties' repairs does nothing to **reduce the threats from hackers and cyber criminals[97]**. On the contrary, the experts reject the argument that concealing the functioning of a product in the name of security would undermine security and the rights of owners or repair agents. Finally, one of the proposed solutions to address security concerns is to **improve the design of the products** to increase their durability and reduce the need to repair them.[98]

[96] Digital Europe, 2020. DIGITALEUROPE's vision for sustainable consumers: consumer information, repair and products lifetimes. Available at: https://www.digitaleurope.org/wp/wp-content/uploads/2020/07/DIGITALEUROPE%E2%80%99s-vision-for-sustainable-consumers.-Consumer-information-repair-and-product-lifetimes.pdf

[97] The Center for Internet and Society, May 2019. Prominent Security Prof enter the 'Right to Repair' Debate. Available at: http://cyberlaw.stanford.edu/blog/2019/05/prominent-security-pros-enter-right-repair-debate

[98] Securepairs.org. Statement of principles. Available at: https://securepairs.org/statement-of-principles/#security

A4.4 Overview of key guidelines and standards for labelling and information schemes

The proliferation of labelling and information schemes is generally considered to lead to consumer confusion[99, 100,101,102]and even to reduce the trust of consumers on such schemes and therefore also to reducing their effectiveness.[103] On the supply side, the multiplicity of schemes also means that companies often have to adhere to more than one scheme and incur in additional costs. In addition, the lack of harmonisation of schemes can also become a barrier for companies to sell their products and services in other markets.[104]

With these issues in mind, private and public organisations have developed 'codes of good practice' or standards for these schemes and Table A3 provides an overview of three supranational 'codes of good practice' or standards. At national level, the EC Study Environmental claims for non-food products[105] identified a large number of other general and sectorial guidelines/codes of conduct.

Table A3. Guidelines and standards for labelling and information schemes

Designation	Sub-types	Description
ISO standard[106]	Type I - Ecolabels (ISO 14024)	Seal or logo based on a set of multi-attribute criteria Third-party certified, Voluntary schemes Focusing on non-food products
	Type II – Self-declared environmental claims (ISO 14021)	Claims made privately by companies describing a product based on characteristics following general guiding principles Not third-party certified, but expected to be verifiable and accurate
	Type III – Environmental declarations (ISO 14025)	Quantitative indicators of environmental performance based on LCA for objective comparisons between products fulfilling the same function
ISEAL[107]	The ISEAL Standard-setting Code	Defines how a standard should be developed, structured and revised. It requires multi-stakeholder consultation and decision-making,

[99] https://ec.europa.eu/environment/eussd/smgp/pdf/annexes_ia.pdf

[100] https://ec.europa.eu/info/sites/info/files/green-claims-report_en.pdf

[101] https://ec.europa.eu/info/sites/info/files/environmental-claims-report-ecs-2013_en_0.pdf

[102] Brécard, D., 2014. Consumer confusion over the profusion of eco-labels: Lessons from a double differentiation model. *Resource and energy economics*, *37*, pp.64-84.

[103] European Commission, 2014.Consumer market study on environmental claims for non-food products; Brussel, Belgium.

[104] Commission Communication — EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs. OJ C 341, 16.12.2010, p. 5–11

[105] European Commission, 2014. Consumer market study on environmental claims for non-food products. Appendix 4; European Commission: Brussel, Belgium.

[106] https://www.iso.org/news/ref2273.html

[107] http://www.isealalliance.org/credible-sustainability-standards/iseal-codes-good-practice

Designation	Sub-types	Description
		and clear and auditable conditions in the standard itself.
	The ISEAL Assurance Code	Provides a clear framework for assessing compliance with standards.
	The ISEAL Impacts Code	It provides standards with a roadmap to measure progress against sustainability goals and to improve practices over time.
EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs[108]	Recommendations regarding scheme participation and development Recommendations regarding scheme requirements and corresponding claims Clarity and transparency of scheme requirements and claims made Evidence base of scheme claims and requirements Recommendations regarding certification and inspections Impartiality and independence of certification Inspections Costs Provisions for small-scale producers Recommendations regarding mutual recognition and benchmarking/overlap with other schemes	
The Global Ecolabelling Network (GEN)[109]	non-profit association of ecolabelling organisations worldwide. 33 members from countries across the globe GEN itself does not develop criteria or certify products, but supports members' development of environmental leadership standards, and ecolabelling of products and services. promotes co-operation, information exchange and standards harmonisation among members, associates, and other ecolabelling programmes.	
International Federation of Organic Agriculture Movements (IFOAM)[110]	800 affiliates in more than 100 countries provides advice to policymakers, national organic movements, NGOs and others, on strategies to develop sustainable and credible organic sectors.	

[108] Commission Communication — EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs. OJ C 341, 16.12.2010, p. 5–11.

[109] See https://globalecolabelling.net/about/gen-the-global-ecolabelling-network/

[110] See https://www.ifoam.bio/

Designation	Sub-types	Description
		created Organic Guarantee System, a global non-profit independent evaluation program that helps consumers understand which organic labels can be trusted. guarantee systems that facilitate market access for small producers such as Participatory Guarantee Systems (PGS) and Group certification.

Annex 5. Summary of the assessment of sustainability labels and digital information tools

The study team has carried out a review of a selection of sustainability labels (not only ecolabels) and digital information tools in order to have an overview of the robustness of the approaches those labels and tools are based on.

A5.1 Approach

The assessment of the robustness of the sustainability labels and digital information tools was carried out by means of two sets of qualitative criteria, one for the coverage of sustainability aspects (e.g., breadth and depth of coverage) and one for the credibility of the certification process (e.g., independence of auditing, frequency of assessment, transparency of methods used, availability of information).

Respectively, no specific quantitative criteria with specific thresholds have been developed. This assessment was based on the availability of information provided by the label/ digital tool providers. The lack of publicly available information was considered as part of the criteria for credibility.

Due to the scope of this exercise, the aim of assessing the robustness was not to provide a thorough evaluation of labels (for instance by scoring them), but rather to have an orientation about their relevance by answering a set of guiding questions, allowing for a general comparison between labels. The methodology has been based on an adapted in a simplified manner from the principles used by Siegelklarheit[111], which are in turn strongly aligned with the ISEAL alliance credibility principles[112].

Coverage of environmental sustainability aspects

The assessment of the coverage of environmental aspects was centred around the variety of topics that a given label requires to be reviewed for awarding that label, as well as the thoroughness with which the considered environmental aspects are treated.

- Variety of environmental criteria covered: Here it was observed whether the available documents pointed to a variety of environmental criteria for awarding the label. Following were guiding questions that were used while reviewing the available information:
  - Does it contain criteria for a variety of environmental topics (for instance, chemicals, water use, waste generation, use of materials, soil and/or air pollution) or does it cover only few/a narrow scope?
  - Is there a particular focus on certain topics? Which topics?
- Depth of the treatment of environmental aspects: In this step, it was assessed how much and how specific information is required by the label in the different considered topics of environmental sustainability to grant the certification. For instance, a label may express a commitment to saving water in their guidelines but require only very basic information on water reduction measures from the applying companies. While the coverage of a variety of topics is relevant, some labels might present a very specific scope in which they conduct a thorough analysis. In order to evaluate that, following guiding questions were used:

[111] Siegelklarheit is initiative of the German Federal Government that evaluates a variety of labels for the credibility in their certification system and their coverage of environmental and social standards. The methodology included 86 criteria for the credibility, grouped under following categories: system management, standard setting, control system, product identification and traceability. Regarding the coverage of environment topics, it included 40 criteria grouped under the categories chemicals, water, material use, energy, waste, air pollution, environmental management, quality. For a complete list of evaluation criteria visit (german only) https://www.siegelklarheit.de/assets/pdfs/alle_anforderungen.pdf

[112] ISEAL is the global membership association for credible sustainability standards. Their credibility principles can be found here: http://www.isealalliance.org/sites/default/files/resource/2017-11/ISEAL_Credibility_Principles.pdf

- Are the aspects to be considered in each criterion, as well as the assumptions made, clearly described? Or is that the case only for selected criteria?
- Are concrete indicators and thresholds defined for assessing the compliance of the criteria?

Credibility of the verification/validation system

The assessment of the credibility of the verification/validation system was carried out mainly with regards the independence between the involved stakeholders, the thoroughness of the verification process and the transparency.

- Independence of institutions: it regards those that develop the criteria for the labels, the auditors and the companies that apply for the labels. The following guiding questions were used:
  - Are independent audits carried out?
  - Are auditing institutions directly dependent from the institution issuing the label or the institutions themselves?
  - Do the institutions that issue the label have direct links to or funding from the companies that acquire the labels?
- Thoroughness of the verification: this related to the verification of the validity of provided information and thus verification of compliance with the criteria by means of the following questions:
  - Does the certification work on the basis of self-declarations? If yes, are these verified though on-site auditor visits?
  - Does the process have a series of stages to verify provided information?
  - Is the whole process assisted by an auditor?
  - Does an audit have to be repeated periodically to keep the certification?
- Transparency, access to information and update: this regards how much information is readily available (online) and how complete it is regarding the organisations behind the label, their links to involved stakeholders, as well as the used criteria themselves and how often these are updated. The following guiding questions have been used:
  - Is it clear who manages the label?
  - Is there a clear separation between the organisations that develop the criteria and the organisations that review/audit compliance?
  - Is it possible to understand the distributions of responsibilities, also of companies applying for the label?
  - Is detailed information about the criteria used for assessment available?
  - Have the criteria reviewed recently? How often are they reviewed?

By answering these guiding questions, it was possible to group the different labels into three categories of robustness according to how well they performed in terms of coverage of environment and credibility – these were colour-coded as shown below:

- LOW: The label's coverage of sustainability was either very narrow in scope (few topics covered) and/or very unspecific or superficial in terms of depths. Moreover, the majority of criteria for a credible process such as independence of involved institutions and thoroughness of assessment are either not fulfilled or there is no consistent information about it (lack of transparency)
- MEDIUM: There were considerable shortcomings either in the coverage of sustainability or the credibility of the label. Alternatively, the label did have some shortcomings in *both* aspects, for example labels with a very narrow but deep enough coverage of environment and transparent and independent certification

process, but that does not have many verification stages or does not require periodic audits to keep the certification.

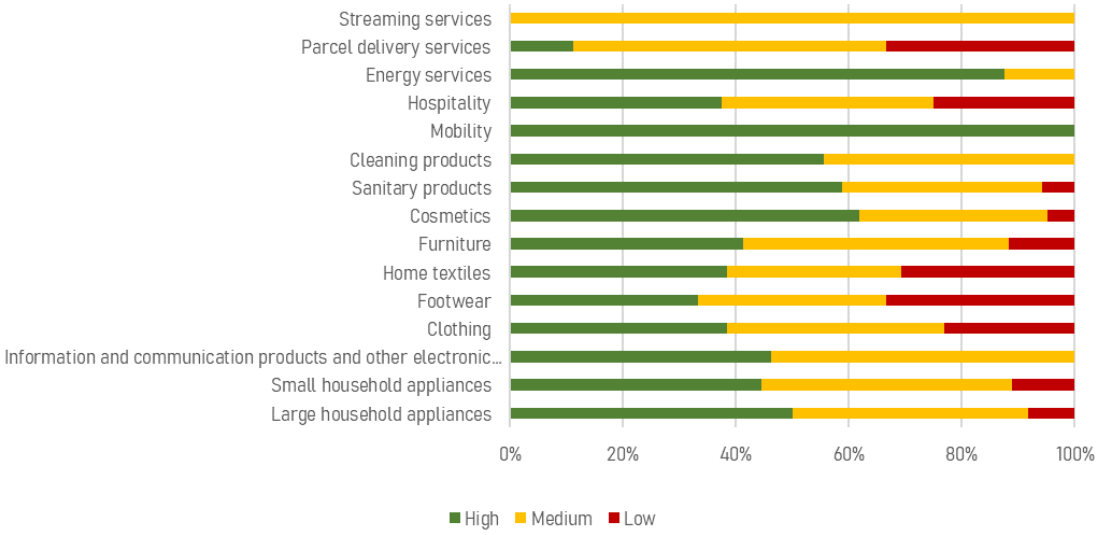
- HIGH: The label had no, or only minimal, shortcomings regarding the coverage of sustainability *or* the credibility of the process. These labels have a wide and deep coverage of relevant environmental aspects and have independent, thorough and transparent processes of certification.

While we also analysed digital tools for environmental footprints, it was not possible to apply this methodology for those tools due to the considerable differences in purpose and scope as compared to labels. Thus, their robustness in terms of coverage of environmental aspects and credibility was not assessed.

A5.2 Summary of Findings

Figure A2 presents the summary of the assessment per product group and service type. The full assessment refers to specific labels and digital information tools and was delivered in a separate file.

Figure A2. Robustness of screened labels



Source: ICF and partners

Annex 6. Overview of the consumer market

This annex presents an overview of the consumer products markets in general and a detailed description of selected product categories: Household appliances (Large and Small appliances), ICT and other electronics, Furniture, Mobility equipment, Clothes and footwear.

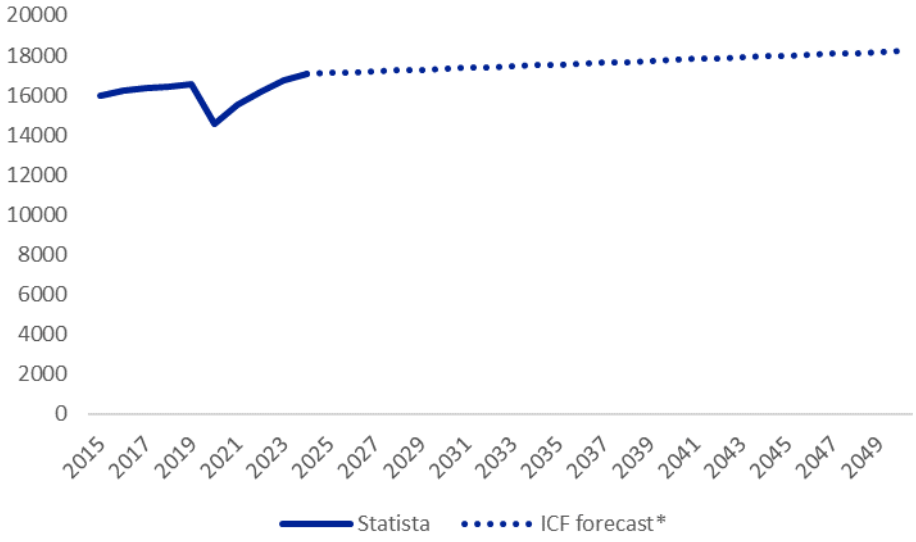
A6.1 Overview of the Consumer Product Market

The EU single market for goods is comprised of approximately 450 million consumers and 22.5 million small and medium-sized enterprises (SMEs).[113] Production and consumption patterns reflected in the numbers of products being made, bought and used, illustrate the evolution of the consumer market over time and the changes that occurred in consumer demand and behaviour.

One aspect that is also reflected in the evolution of the consumer product market is that Europe's economy has been deeply affected by the COVID-19 crisis. Different sectors are, however, expected to be affected differently, due to the varying sector characteristics or to the rapidly changing consumer demand.

Figure 3 and 4 show the past and forecasted expenditure, per capita and as a total for the EU27.

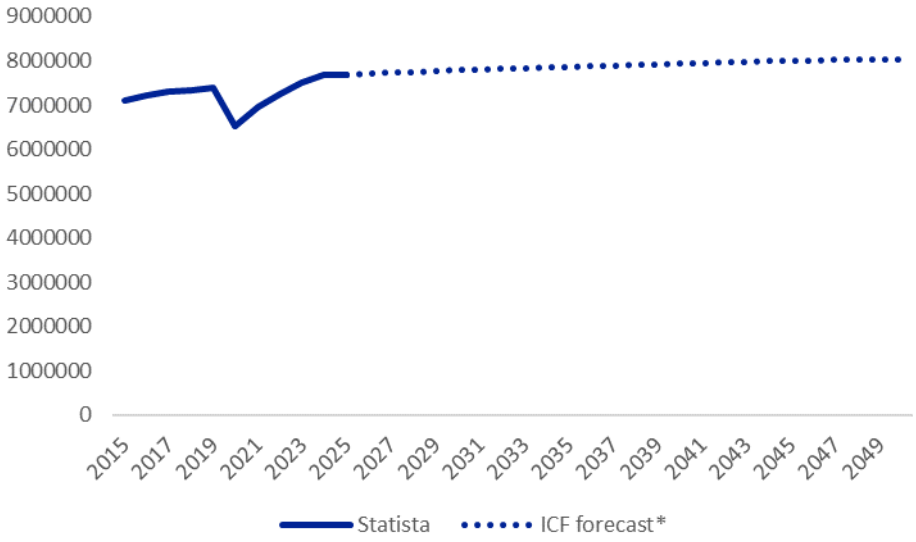
Figure A3. Expenditure per capita (euros, prices 2019)



Source: Statista (Forecast adjusted for expected impact of COVID-19) and ICF forecast done using linear regression

[113] https://ec.europa.eu/growth/single-market/goods_en

Figure A4. Total Consumer Expenditure (2019 prices, million euros)

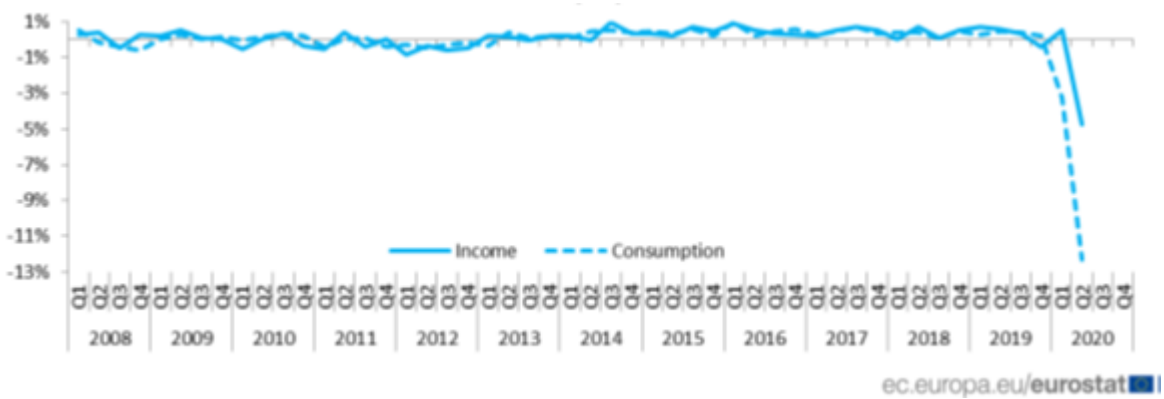


Source: Statista (Forecast adjusted for expected impact of COVID-19) and ICF forecast done using linear regression

Household consumption expenditure reflects the total spending of EU resident households on individual goods and services to satisfy their needs and wants. In 2018, EU-28 total household expenditure amounted to 54.3% of GDP. Since 2000, when it peaked at 57% of GDP, household expenditure showed an overall downward trend, except for the years 2008, 2009 and 2012.[114]

In 2020, when Member States implemented Covid-19 containment measures that affected, among others, the travel, hospitality or retail sectors, EU household real consumption per capita plummeted by 12.3%. According to Eurostat, the decline is the highest since the beginning of the time series for this indicator in 1999.[115]

Figure A5. EU real growth of household income and consumption per capita, seasonally adjusted



Source: Eurostat, capture from Eurostat, 2020, News release – Euro indicators

However, recovery is expected to occur soon, as some of the most restrictive measures taken by governments were abandoned or reduced in severity during the summer

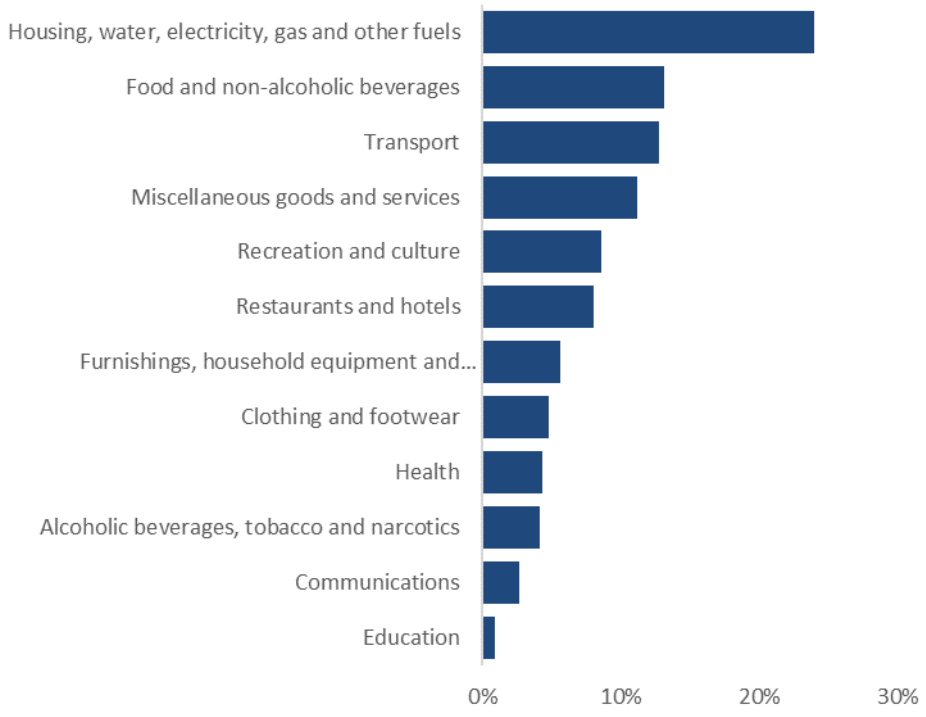
[114] Eurostat, 2019, Household consumption by purpose – Statistics explained, available at https://ec.europa.eu/eurostat/statistics-explained/pdfscache/49480.pdf

[115] Eurostat, 2020, News release - Euro indicators, available at https://ec.europa.eu/eurostat/documents/2995521/11469181/2-29102020-AP-EN.pdf/acf4533a-a345-53dd-108a-c9dea9a28898

months of 2020 as countries have started to cope with the crisis. As a result, many shops could re-open and retail activities picked up. Statistics show that in May and June, sales for all non-food product groups picked up after the plummeting levels of March and April and the February levels of sales were regained or in some cases even surpassed for some product groups. In September, data showed that the level of sales of electrical goods and furniture was more than 6 % higher than in February, however the sales of textiles, clothing and footwear was more than 10% lower.[116]

Over the years, the overall share of consumption purposes in the total consumption expenditure fluctuated marginally. In 2018, almost a quarter (23.5%) of total consumption expenditure of households was generated by housing, water, electricity, gas and other fuels. Food and non-alcoholic beverages were the second biggest source of expenditure (13.1%), while miscellaneous goods and services (11.1%), furnishings, household equipment and routine household maintenance (5.6%) and clothing and footwear (4.6%) represented together 21.3% of the total. Figure A6 shows the composition of the final consumption expenditure of households by consumption purpose during the years 2011 to 2018.

Figure A6. Final consumption expenditure of households, by consumption purpose (% of total, average for 2011-2018)

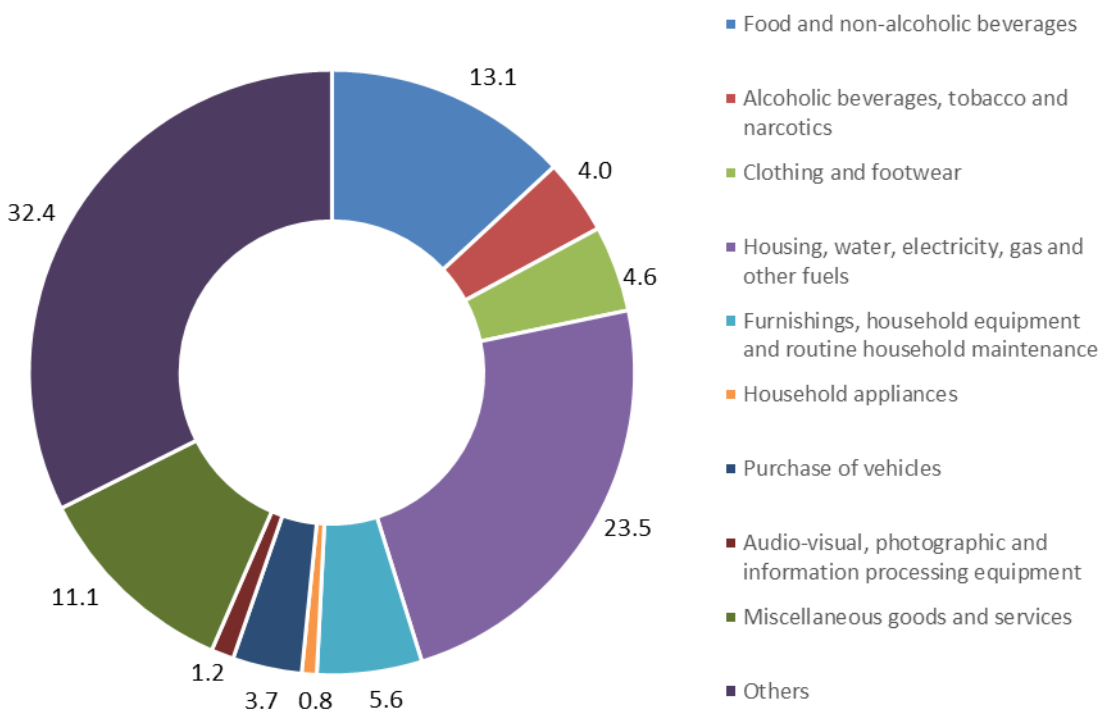


Source: Eurostat

Figure A7 shows that in 2018, in the EU-27, housing, water, electricity, gas and other fuels represented the biggest share of total house consumption expenditure (23.5%). Food and non-alcoholic beverages together with miscellaneous goods and services also form almost a quarter of the total consumption expenditure.

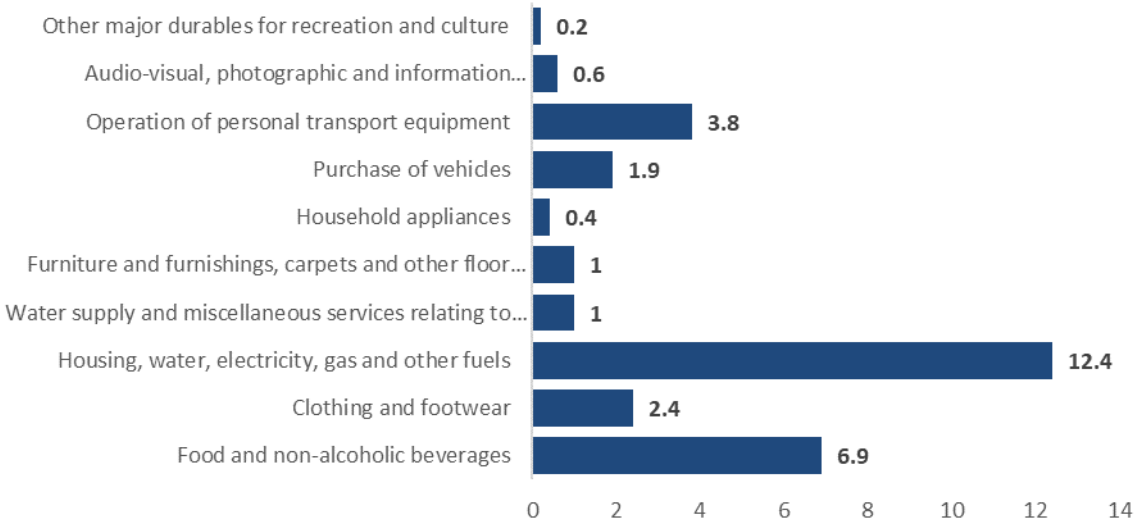
[116] Eurostat, 2020, Statistics Explained - Impact of Covid-19 crisis on retail trade, available at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Impact_of_Covid-19_crisis_on_retail_trade

Figure A7. Final consumption expenditure of households by consumption purpose as a percentage of total (EU27-202



Source: Eurostat, data for 2018

Figure A8. Final consumption expenditure of households by consumption purpose, percentage of gross domestic product (GDP) (EU27 2020)



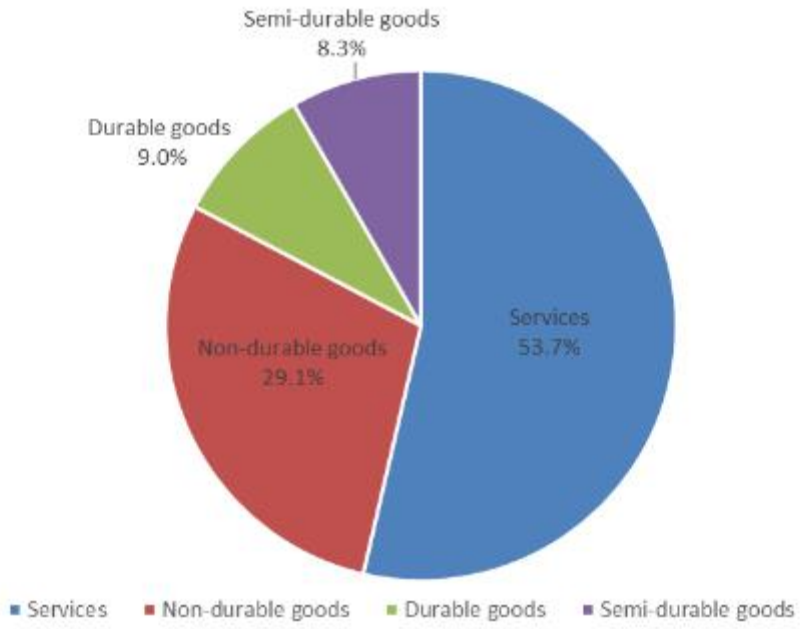
Source: Eurostat

The composition and evolution of household consumption can also be observed by looking at the share of services and goods. Consumer goods can additionally be divided into non-durable, semi-durable and durable goods.

The difference between non-durable goods and durable goods is based on the expected life of the products, whether they can provide utility over multiple periods of time. Durable goods are products that are commonly used for more than one year such as electric household appliances or furniture, while semi-durable products are considered to have shorter life and their purchase price is lower (e.g. clothing and shoes).[117] As regards non-durable goods, they are products such as pharmaceuticals, cosmetics and toilet articles that usually last for only a short amount of time.

Figure A9 shows that more than half of households' final consumption expenditure relates to services (53.7%). This is followed by the consumption of non-durable goods (29.1%). While durable goods account for about 9% of households' final consumption expenditure. Figure A10 shows that the main durable goods purchased by consumers in terms of their relative consumption share within this group are personal transport equipment (42.8%), followed by furniture and household appliances (28.3%) and recreational and entertainment goods (17.4%).

Figure A9. Euro area households' final consumption by consumer goods and services, in 2018



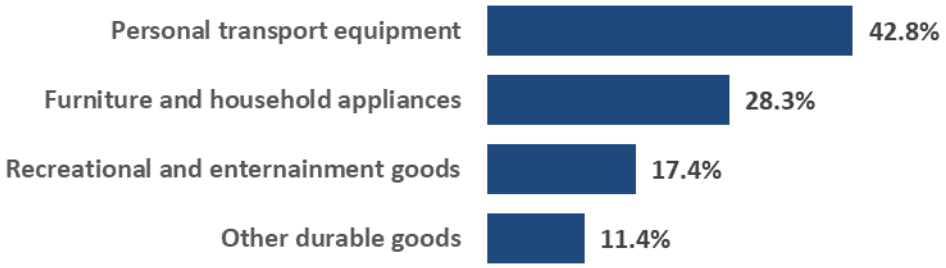
Source: Eurostat and ECB calculations.

Despite representing a modest share in aggregate household spending, expenditure on durable goods is a key component of consumption dynamics.[118] The biggest share of durable goods is represented by personal transport equipment (42.8%), followed by furniture and household appliances (28.3%) and recreational and entertainment goods (17.4%) as shown in Figure A10.

[117] ECB (2020) Consumption of durable goods in the euro area. Published as part of the ECB Economic Bulletin, Issue 5/2020. Available at https://www.ecb.europa.eu/pub/economic-bulletin/articles/2020/html/ecb.ebart202005_01~7749d3224d.en.html#toc1

[118] Ibid.

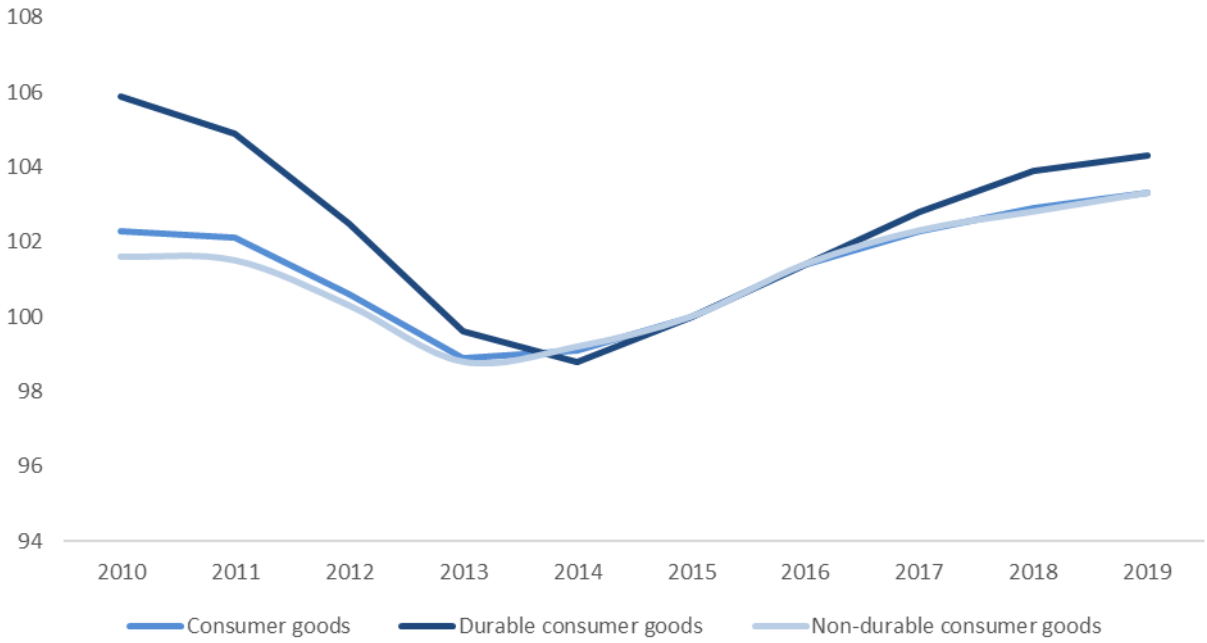
Figure A10. Euro area percentage of households' final consumption of durable goods in 2018



Source: Eurostat and ECB calculations

Overall, in 2017, the manufacturing sector employed 28.5 million persons and generated EUR 1820 billion of value added.[119] Figure A11 shows that the number of person employed in the manufacturing of consumer goods, both durable and non-durable is following an upward trend.

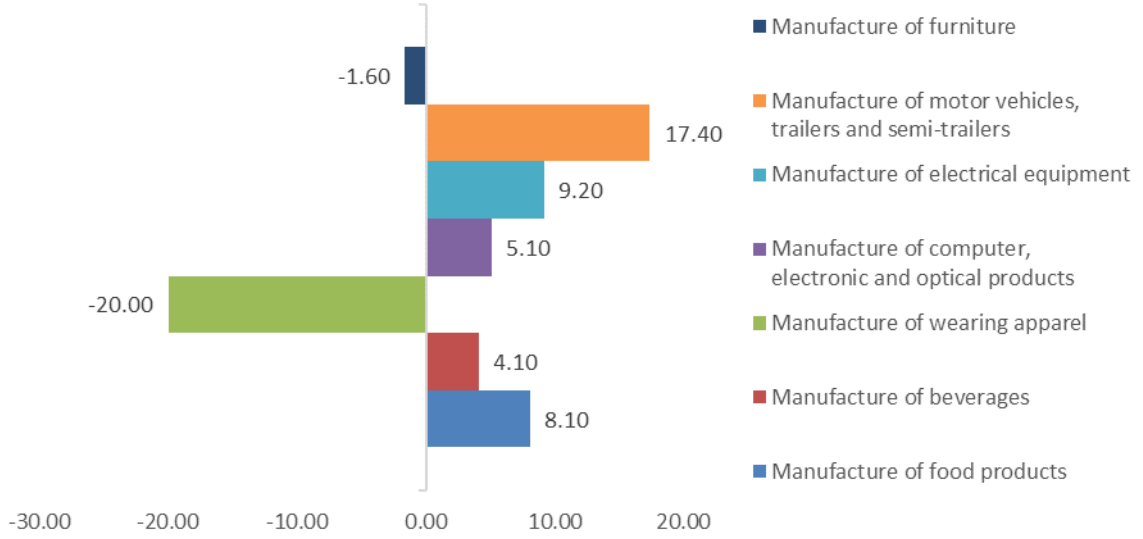
Figure A11. Employment (number of persons employed) (EU27 2020)



Source: Eurostat, Index 2015=100, Unadjusted data (i.e. neither seasonally adjusted nor calendar adjusted data)

[119] Eurostat, 2020, Statistics explained - Manufacturing statistics - NACE Rev. 2. Available at https://ec.europa.eu/eurostat/statistics-explained/pdfscache/10086.pdf

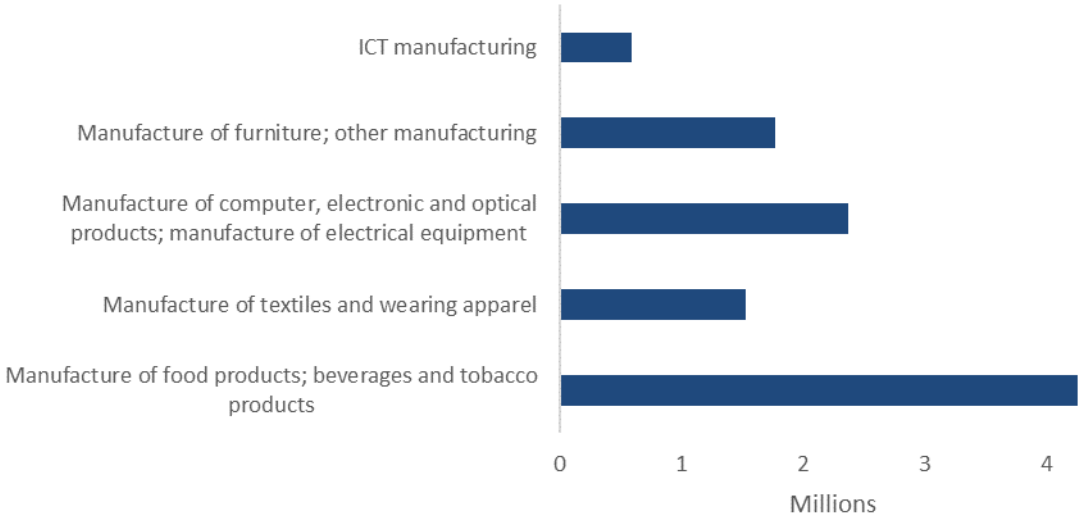
Figure A12. Evolution of employment (number of persons employed) between 2011-2019 as percentage increase/decrease selected industries (EU27 2020)



Source: Eurostat, Index 2015=100, Unadjusted data (i.e. neither seasonally adjusted nor calendar adjusted data)

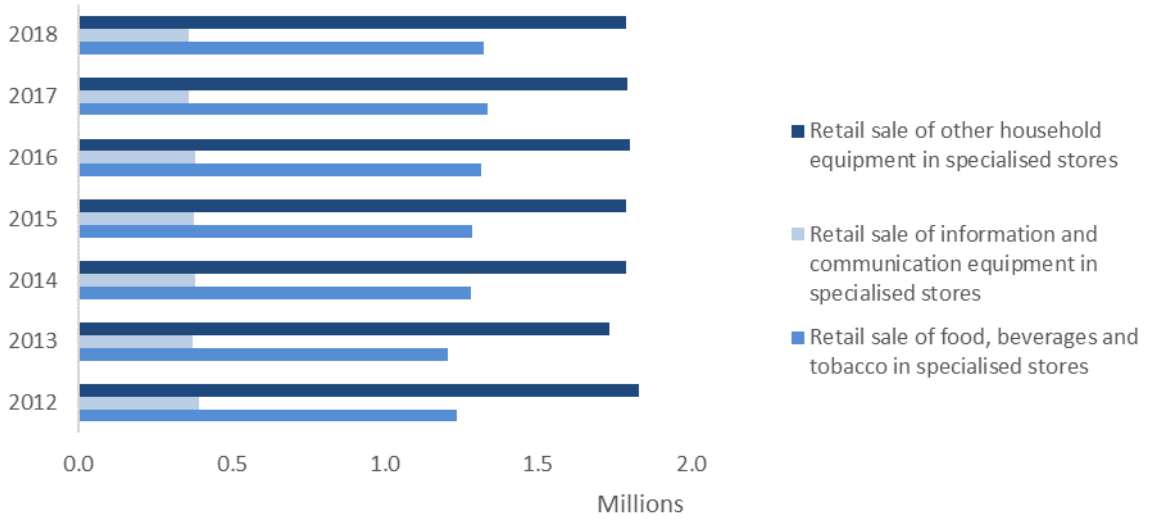
Figure A13 shows that, when looking at the various product manufacturing industries, the majority of them have increased their number of persons employed compared to the year 2011, with the exception of the wearing apparel and furniture manufacturing industries.

Figure A13. Number of persons employed in the population of active enterprises in selected manufacturing industries, average value for 2012-2018 (EU27 2020)



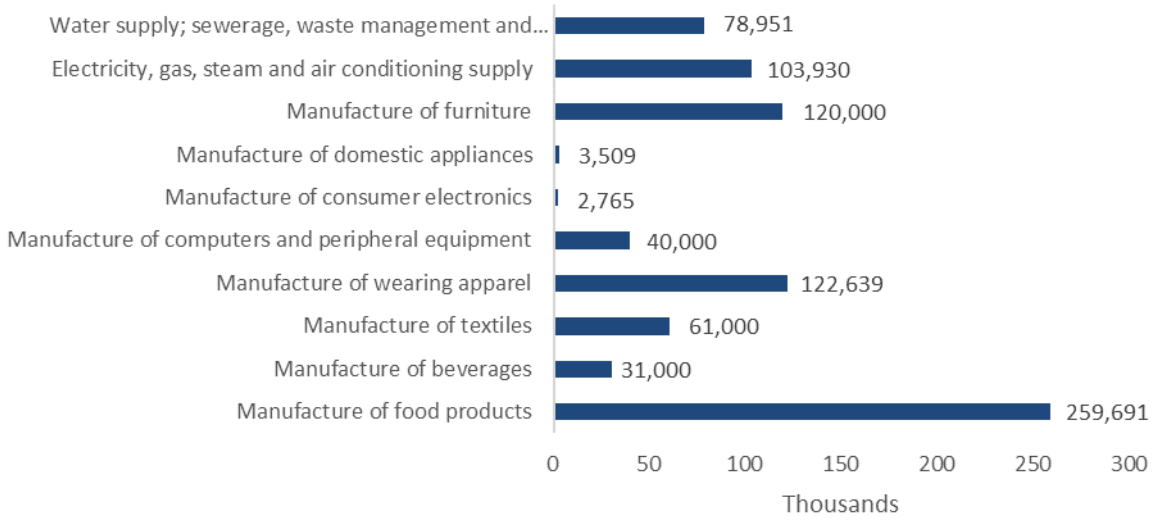
Source: Eurostat, data for ICT manufacturing is for EU28

Figure A14. Number of persons employed in the population of active enterprises in selected retail industries



Overall, the evolution of the different economic sectors of the consumer goods industry has remained steady in the past few years. In terms of the number of enterprises, Figure A15 shows that the food sector is the largest, followed by the wearing apparel and furniture sector.

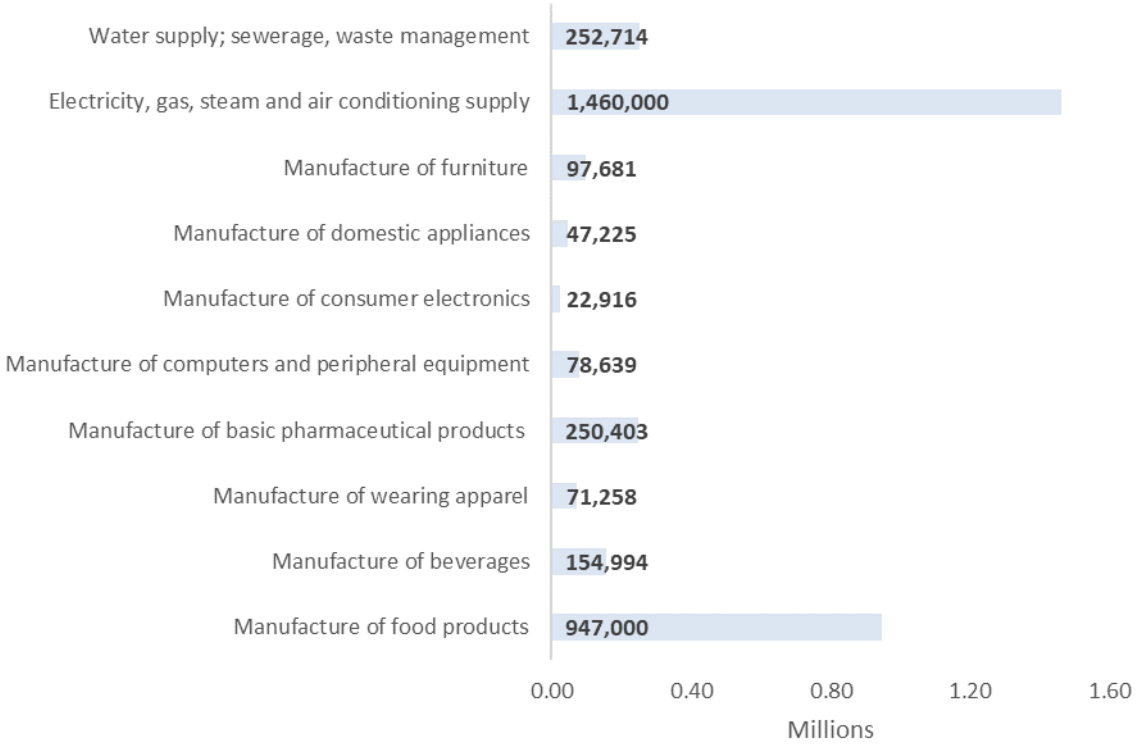
Figure A15. Number of enterprises per sector in 2017



Source: Eurostat

By comparing the average annual turnover value of the different consumer goods between 2011 to 2017, the electricity, gas, steam and air conditioning industry is the leader, followed by the manufacturing industries of food, basic pharmaceutical products and the water supply industry. This is shown in Figure A16.

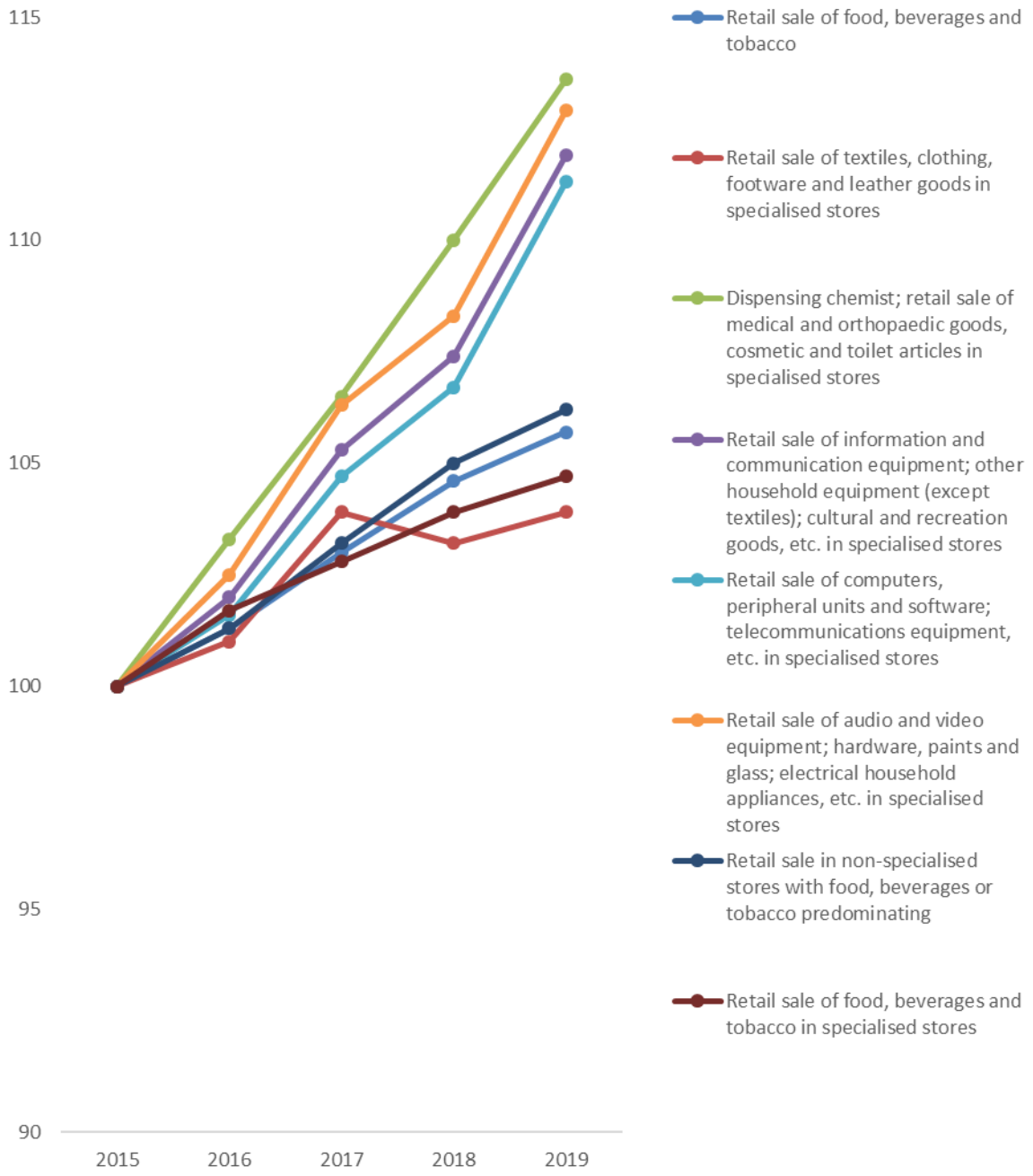
Figure A16. Average annual turnover per sector 2011-2017 (million euro)



Source: Eurostat

The evolution of the retail trade sector can also be illustrated with the help of the index of deflated turnover, which shows the annual activity in terms of volume and value. Figure A17 shows that for all major categories of consumer good, the retail activity is on an upward trend and that the steepest growth can be observed for the retail sale of medical goods, cosmetic and toilet articles in specialised store.

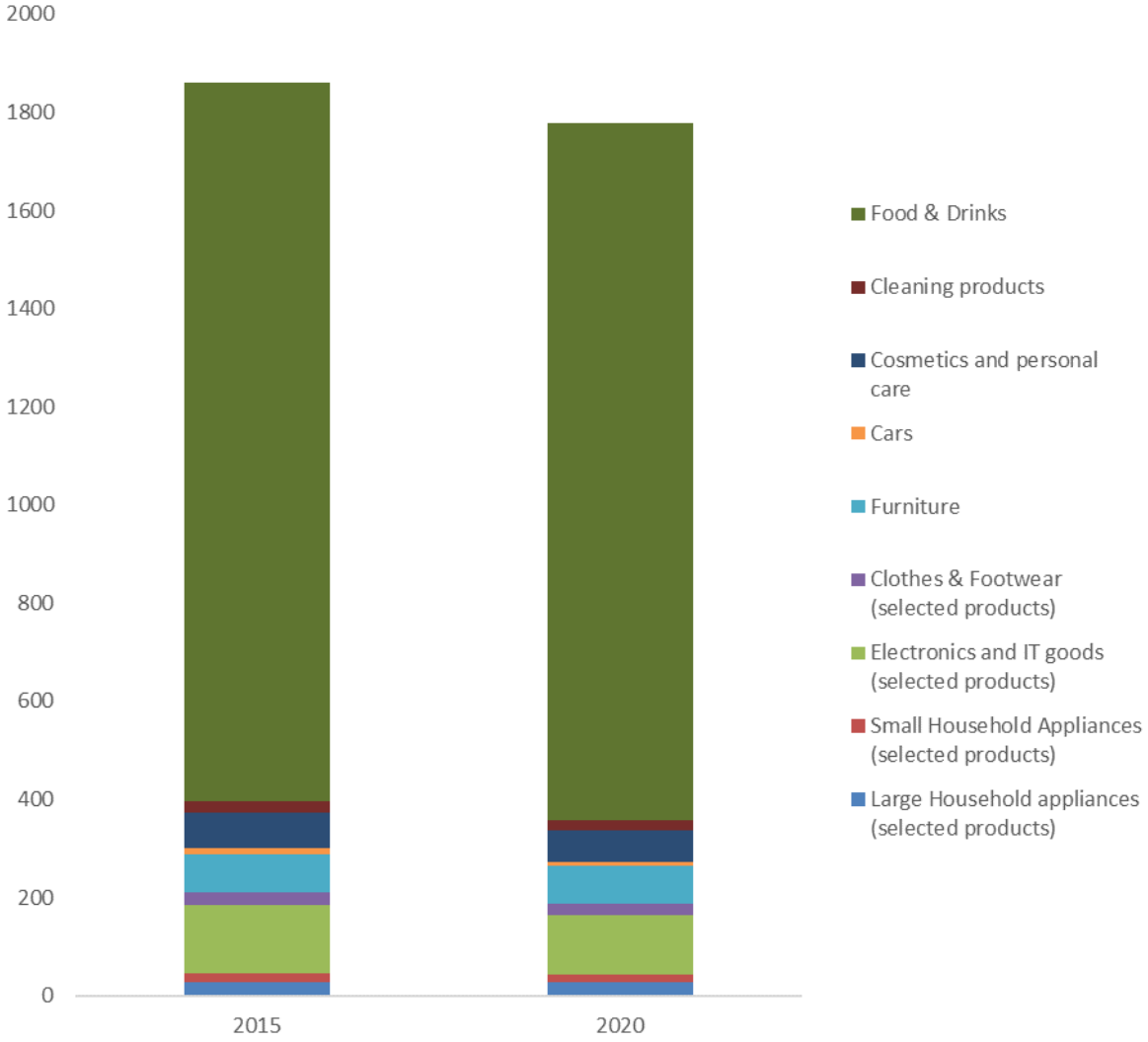
Figure A17. Index of deflated turnover in retail trade



Source: Eurostat, index 2015=100, calendar adjusted data

As regards the comparative sales of the various product groups that form the consumer goods market in the EU27, Figure A18 shows that the largest revenue is created by the Food & Drinks industry, which amounted to 1,420 billion euros in 2020.

Figure A18. Revenue in billion euros, prices 2019



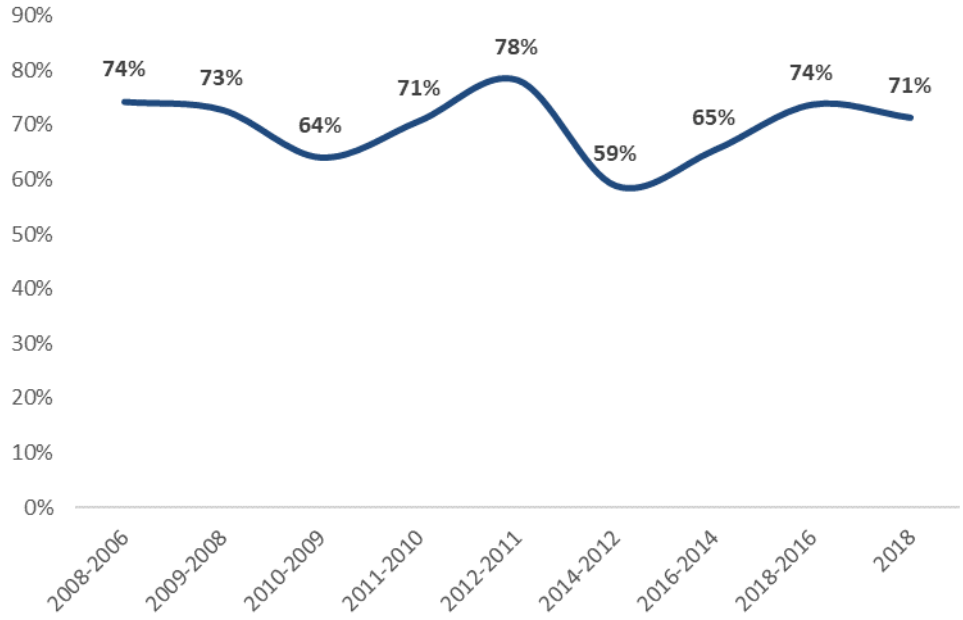
Source: Statista, ICF calculations

A6.1.1 Experience of consumers

In 2018, the overall level of consumers' trust in retailers and service providers was 71.3% in the EU27. However, this level of trust has decreased compared with the previous similar survey in 2016, but it has increased significantly compared to the trust levels of 2012 to 2014.[120] This is shown in Figure A19.

[120] European Commission, Consumers' attitudes towards cross-border trade and consumer protection 2018 available at https://ec.europa.eu/info/sites/info/files/consumer-survey-2018-main-report_en.pdf

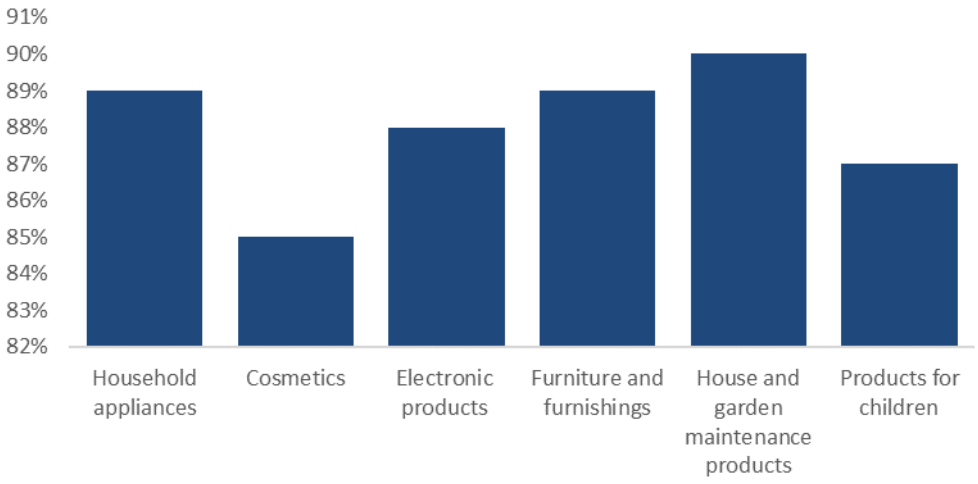
Figure A19. Trust in retailers and service providers



Source: European Commission, based on rate of agreement ("Strongly agree" and "Agree") with Q3, option 2 (How strongly do you agree or disagree with each of the following statements? In (our country) … In general, retailers and service providers respect your rights as a consumer). Base: all respondents (N=28,037).

When it comes to differences between markets, consumers' trust in retail providers and operators is highest in the market for "house and garden maintenance products" (90%) and lowest in the "cosmetics" market (85%).[121]

Figure A20. Trust in retailers, providers and operators on selected goods markets



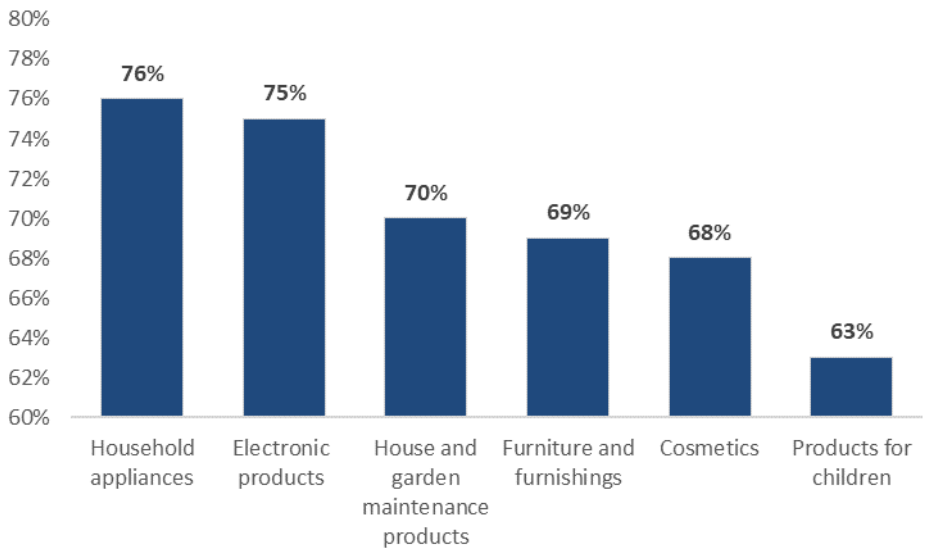
Source: European Commission, Market monitoring survey 2019, based on EU27 responses to the question "How much do you trust the providers/retailers/operators overall?" and ratings of purchasing products/services in the respective markets.

In terms of comparability, the highest level of comparability is perceived in the "household appliances" market, where 76% of consumers find it easy to compare goods

[121] European Commission, 2020, Consumer Market Monitoring Survey 2019 edition, Factsheets by Market

or services. The lowest level of comparability is reflected in the "products for children" market (63%).[122]

Figure A21. Perceived comparability of selected goods markets



Source: European Commission. Market monitoring survey 2019

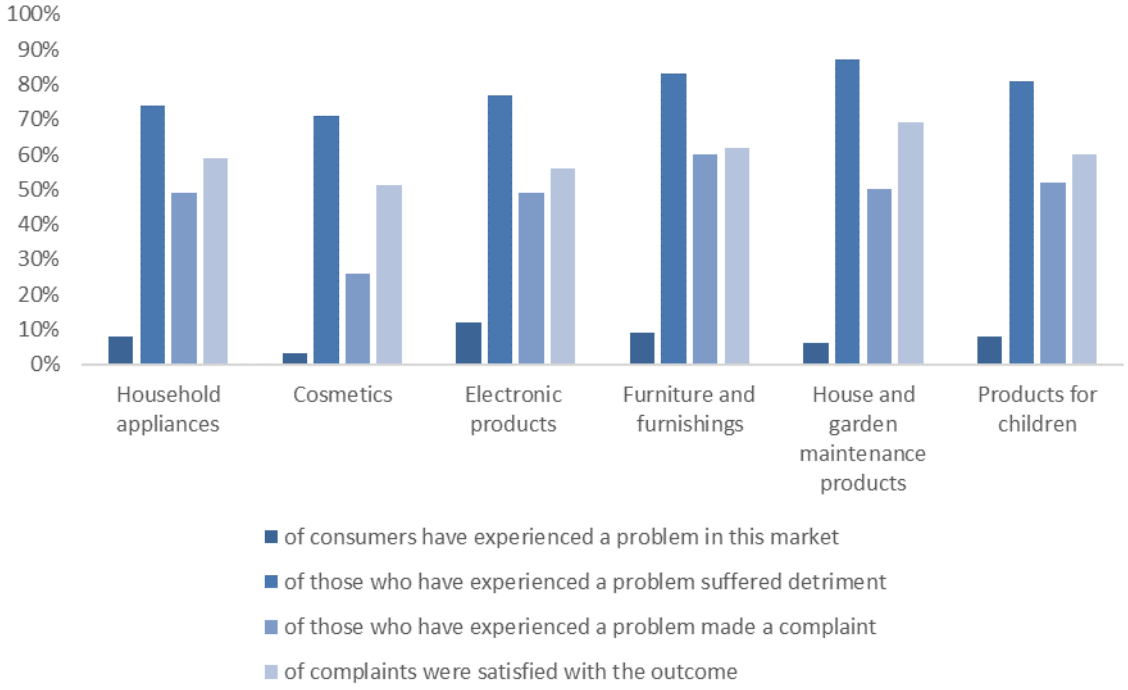
In addition, the 2017 Consumer Market monitoring showed that across the goods markets, consumers are most satisfied with their choice in the "alcoholic drinks" and "dairy products" markets, while the poorest performing market was "second-hand cars". Overall, satisfaction with the choice component was reported as higher in goods markets than in services markets.[123]

The overall level of problems reported by consumers does not vary significantly across the selected markets for consumer goods. Figure A22 shows that the market where consumers reported the most problems is the "electronic products" market, where 12% of surveyed consumers experienced a problem, while only 3% of consumers reported they experienced problems in the "cosmetics" market.

[122] Ibid.

[123] European Commission, 2018, Monitoring Consumer Markets in the European Union 2017, Final Report – part 1. Available at https://ec.europa.eu/info/sites/info/files/mms2017_final_report_-_part_i.pdf

Figure A22. In-market consumers' experience in consumer goods markets (EU27)



Source: European Commission. Market monitoring survey 2019

Overall, the proportion of people who reported having experienced problems with consumer goods revealed a downward trend over the years. Between 2013 and 2017, out of the fifteen goods markets surveyed within the European Commission Market Monitoring surveys, the incidence of problems experienced decreased in ten goods markets, increased in one and showed no statistically significant differences in the other four goods markets. The market in which the number of consumer reporting problems has actually increased from 2013 to 2017 is the "Electronic products market" (+3.0pp).[124]

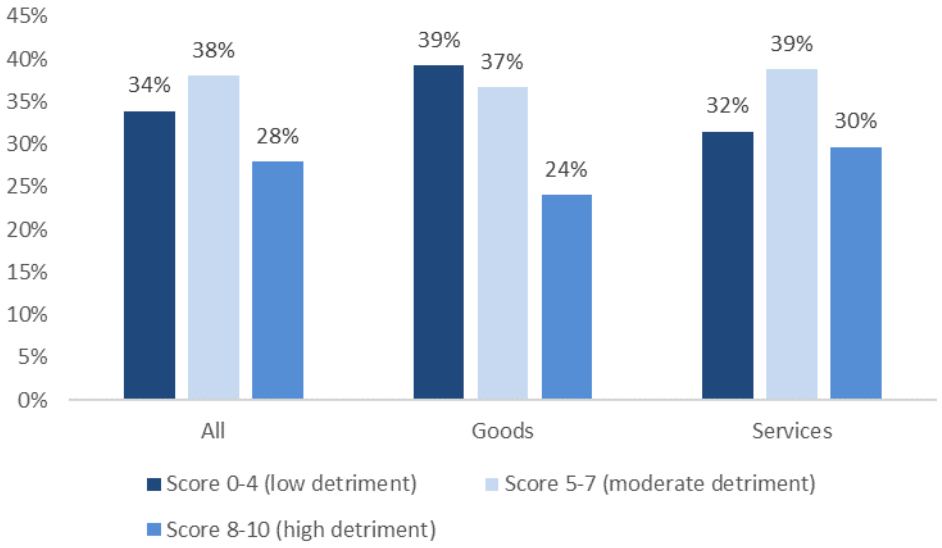
In 2017, the markets with the highest proportion of consumers experiencing problems were "Second-hand cars" (13.6%), "ICT products" (11.4%), "Electronic products" (11.0%) and "New cars" (10.2%).

The extent to which people suffered financial loss or other detriment as a result of experiencing a problem slightly decreased from 2015 to 2017 in the goods market. Figure A23 shows that more consumers reported a higher detriment in the services market (29.7%) than in the goods market (24.1%). For both goods and services market, compared to 2015, the proportion of people who reported high levels of detriment (score 8-10) decreased (-3.1pp), whereas the proportion of people who reported a low level of detriment (score 0-4) increased (+3.2pp). The markets that received the highest average score in terms of detriment were "Fuel for vehicles", "Second-hand cars" and "ICT products", whereas the ones that received the lowest score for detriment were the "Personal care products" and "Dairy products" markets.[125]

[124] Ibid.

[125] Ibid.

Figure A23. Consumer detriment scoring (EU28)



Source: European Commission, Score based on answers to the question "On a scale from 0 to 10, within the past year(s), to what extent have you suffered detriment as a result of problems experienced either with the <product/service> or the <supplier/retailer> ?"

In terms of consumers' expectations of markets, in 2017, the markets that received the highest expectations scores from consumers were the "spectacles and lenses", "small household appliances" and "alcoholic drinks" markets. The markets that scored the lowest in consumers' opinions related to their expectations were the markets for "new cars" and "second-hand cars". Compared to 2013, all but one goods market (i.e. the "new cars" market) showed a statistically significant increase in their expectation score.[126]

A6.2 Overview of the Household appliance market

The production of domestic appliances is a sector in which Europe is strong in the global landscape. With 17% of the global production, Europe is second only to China (37%), topping the production of USA (11%) and Japan (9.5%). Moreover, four European domestic appliances companies are among the top ten in the world.[127]

It is projected that the evolution of the household appliances market continues its growing trend in the next few years, as the number of users is expected to increase from 143m in 2019 to 241.1m by 2024. According to Applia, in 2017, the household appliances sector in the EU generated an estimated EUR 50.000 m in terms of turnover[128].

Evidence shows that the number of enterprises in the sector has experienced a slight decline from 3,601 in 2011 to 3,408 in 2017 (Figure A15), while annual turnover has increased (from 45368 million euro in 2011 to 53734 million euro in 2018).[129] The

[126] Ibid.

[127] European Commission, 2020, Study on the electronics ecosystem. Overview, developments and Europe's position in the world: annex 8 "Domestic appliances"

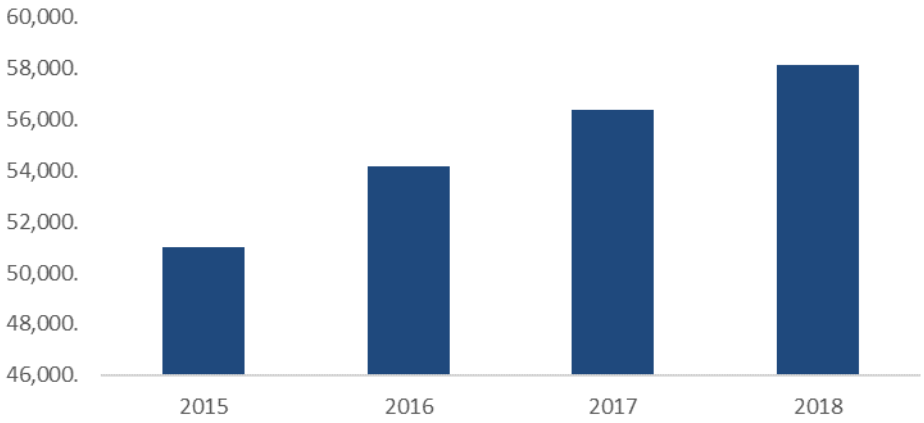
[128] Applia, The Home Appliance Industry in Europe, 2017-2018. Available at http://applia-europe.eu/statistical-report-2017-2018/documents/APPLiA_SR19.pdf

[129] Eurostat

increased demand of household appliances in Europe is driven by product innovation and portfolio extension leading to product premiumization.[130]

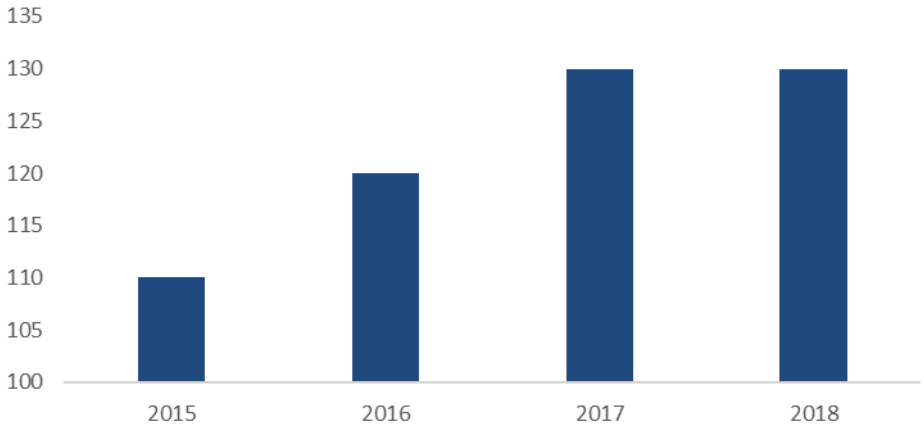
Figure A24 shows that European households' spending on household appliances has increased considerably since 2015, reaching more than 58 billion euro in 2018. Nevertheless, the consumption expenditure per capita seems to have levelled off towards 2018 at EUR 130. (Figure A25)

Figure A24. Final consumption expenditure of households by consumption purpose - household appliances in million euro (EU27 2020)



Source: Eurostat based on current prices

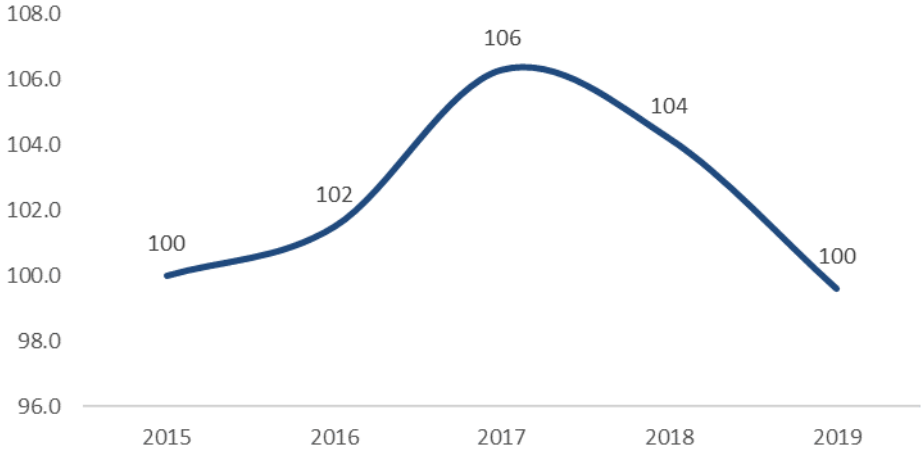
Figure A25. Household appliances final consumption expenditure of households, euro per capita, current prices (EU27 2020)



Source: Eurostat

[130] Mordor Intelligence. Europe Home Appliances Market - Growth, Trends, And Forecasts (2020 - 2025). Available at https://www.mordorintelligence.com/industry-reports/europe-home-appliances-market-industry

Figure A26. Volume index of production – manufacture of domestic appliances EU28



Source: Eurostat, Calendar adjusted data, Index, 2015=100

A large majority of EU27 consumers trust the household appliances market (84%) and reported positive experiences of making purchases in the market (95%). While 89% of consumers see price as a very important aspect in their decision to buy household appliances, 96% of consumers also consider durability is important in their choice. For 78% of consumers, the environmental impact of the product is important when buying a household appliance, while 84% also mentioned the importance of reparability.[131]

The most common problem reported by consumers who experienced issues with household appliances is that of a product breaking shortly after the legal guarantee or commercial warrantee period (experienced by 15% of consumers).[132]

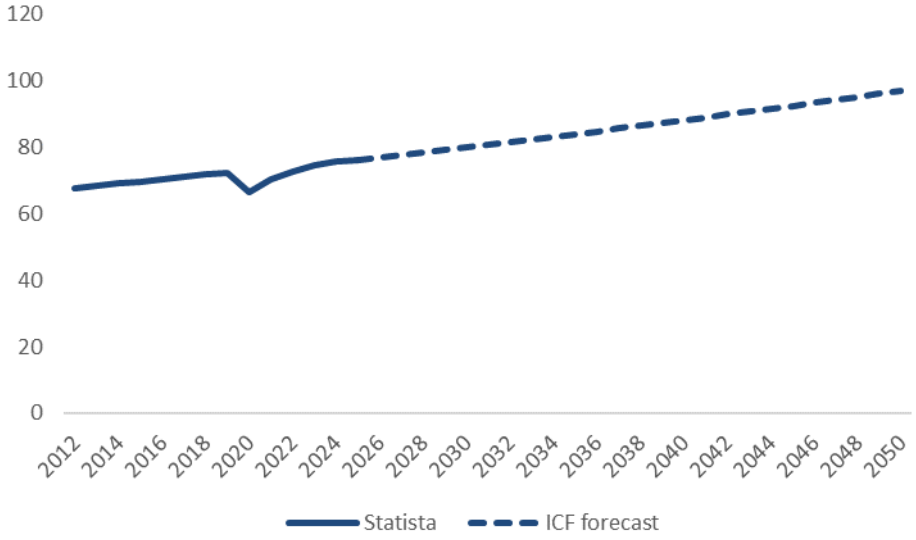
A6.2.1 Large Household appliances

The large household appliances sector follows an upward trend in terms of revenues produced but also based on the volume of products sold. Figure A27 shows that volumes sold in the large household appliances sector are estimated to reach 96 million pieces by 2050. Similarly, Figure A28 reveals that the sales of large household appliances are projected to reach 38000 million euro in revenue by 2050.

[131] Market Monitoring Survey 2019: Household appliances. Available at https://ec.europa.eu/info/sites/info/files/household-appliances-mms19_en_2.pdf

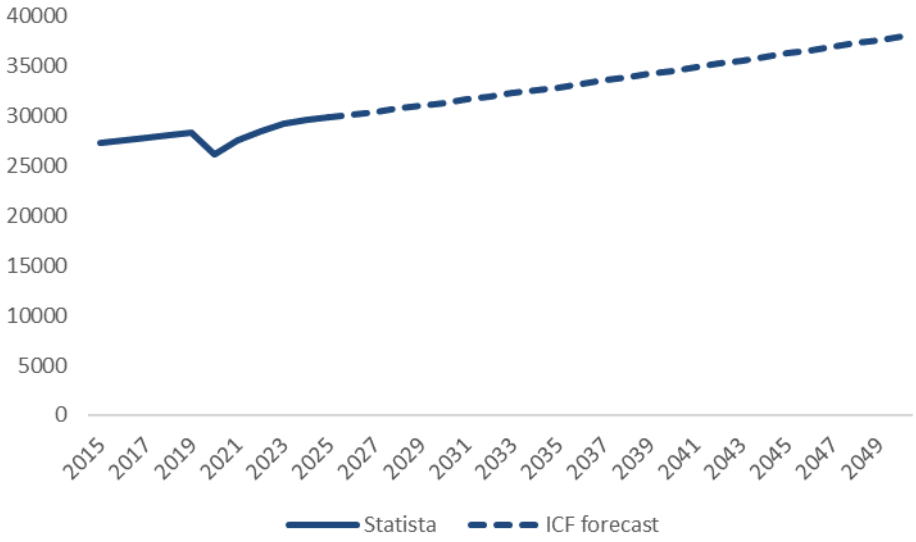
[132] Ibid.

Figure A27. Volume in million pieces, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF Forecast based on linear regression, selected products: cookers and ovens, dishwashers, refrigerators, washing machines, microwaves and other products

Figure A28. Revenue in million euros – prices 2019, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF Forecast based on linear regression, selected products: cookers and ovens, dishwashers, refrigerators, washing machines, microwaves and other products

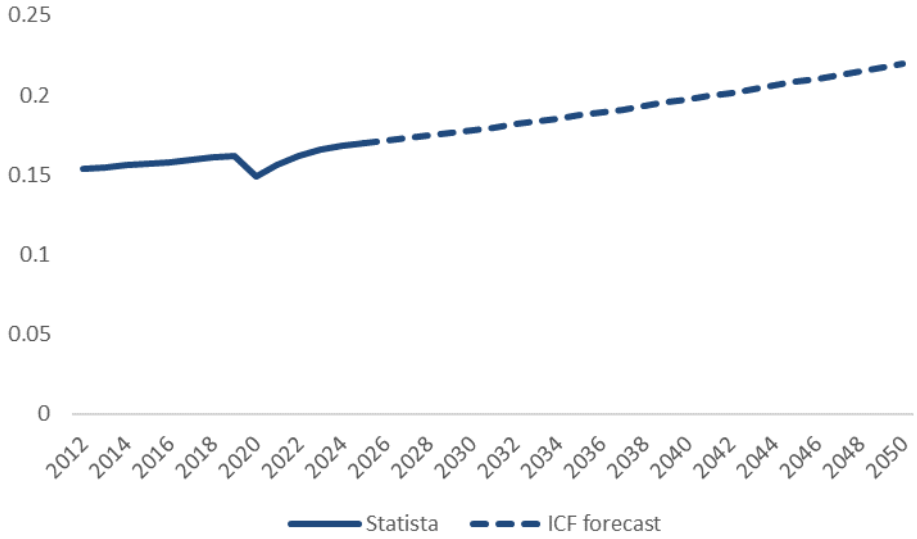
In terms of exported and imported quantities of products in the EU27, Figure A29 shows that from 2015 to 2019, the volume of imported household appliances has followed a steady upward trend, while the total quantities of exported products have increased overall since 2015, but with a rather marginal growth. Among the top export destinations for large appliances are Russia, the United States, Norway, Switzerland, Australia, China or Turkey.[133]

[133] The Home Appliance Industry in Europe 2017-2019, APPLIA Report

Figure A29. Exports and imports quantities, selected products

Source: Eurostat, ICF calculations. Selected products: Combined refrigerators-freezers, Household-type refrigerators, Household dishwashing machines, Vacuum cleaners, Domestic microwave ovens, Domestic electric cookers with at least an oven and a hob (including combined gas-electric appliances), Domestic electric ovens for building-in.

Figure A30. Refrigerators volume per capita



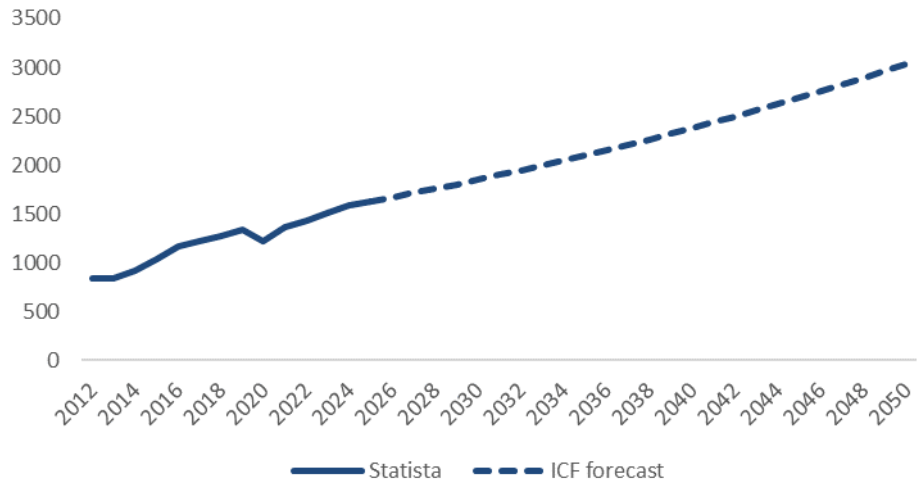
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF Forecast based on linear regression

Washing machines

Washing Machines includes all washers and dryers for domestic use such as fully automatic washing machines, front and top load washing machines and dryers. The washing machines industry has seen a sustained growth in revenue (Figure A31) despite a stagnation of volume sales (Figure A32).

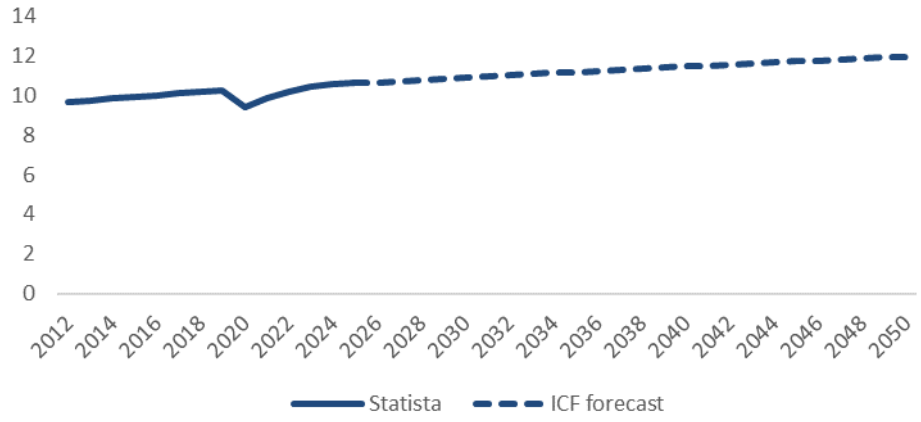
This growth is attributed, in part, to the accelerated replacement of products due to the new incentive to buy energy efficient or 'smart' appliances.[134] Data from APPLIA shows that in 2018, 68% of the washing machines sold were A+++, compared to only 2% in 2008.[135]

Figure A31. Washing machines revenue in million euros, prices 2019



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A32. Washing machines volume in million units

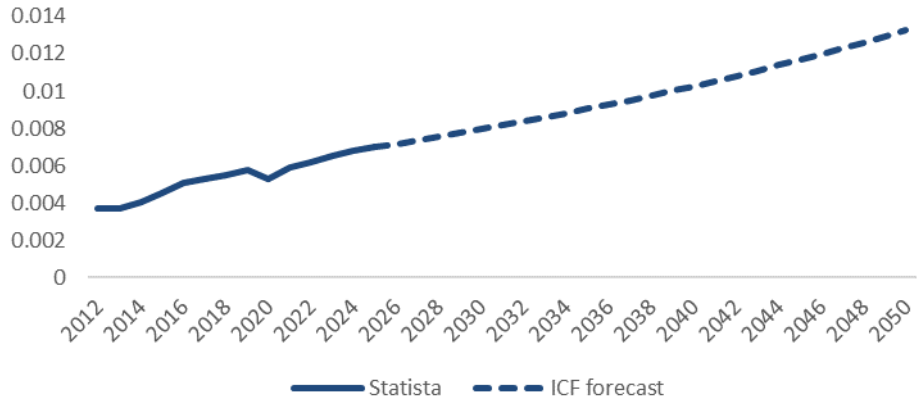


Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

[134]European Commission, 2020, Study on the Electronics Ecosystem - Overview, developments and Europe's position in the world - Annex 8 "Domestic appliances"

[135] APPLIA Statistical Report, The Home Appliance Industry in Europe 2018-2019, available at https://www.applia-europe.eu/statistical-report-2018-2019/files/applia-statistical-report-2019.pdf

Figure A33. Washing machines volume per capita



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

As regards the values of export and import of washing machines to EU, imports have increased over the years, whereas the exports have decreased (Figure A34). This shows that an increasingly large share of washing machines used by EU consumers is not produced in the EU.

Figure A34. Value of exports and imports in million euro

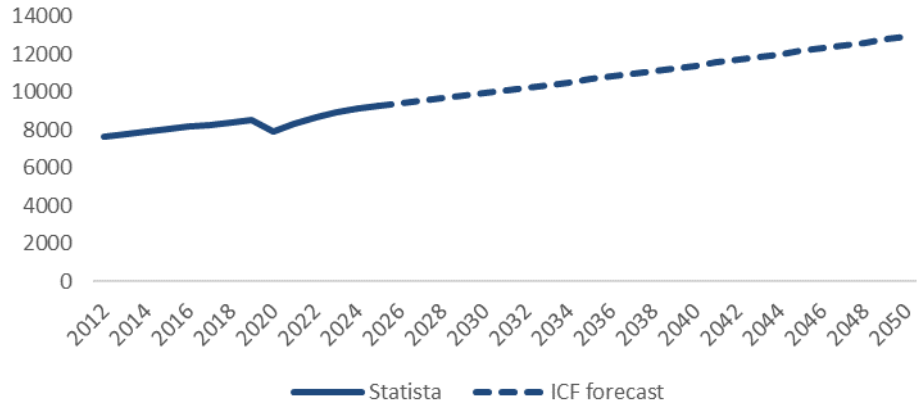
Source: Eurostat, data for 'cloth washing and drying machines of the household type'

Refrigerators

Refrigerators are generally cupboard-like electric appliances with one or more compartments that are controlled at specific temperatures, which are used by households to cool food or to keep it fresh. Fridge freezers as well as vapor compressor refrigerators and integrated vapor compressor refrigerators for domestic use are also included in this category.

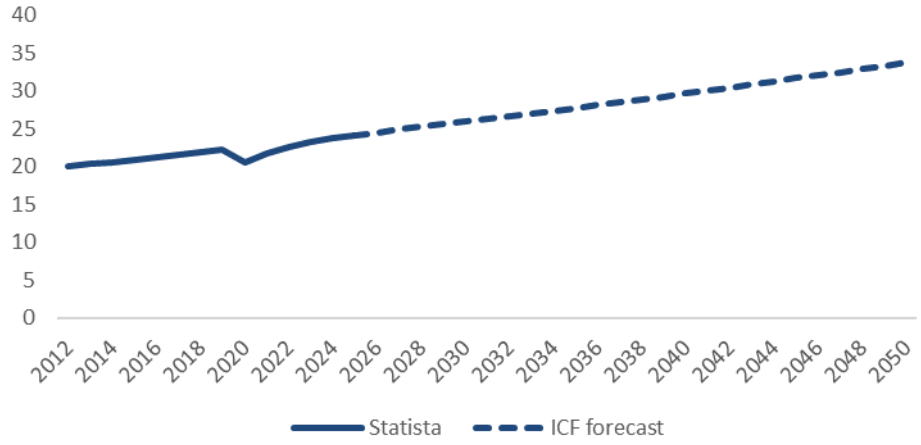
Similar to other large household appliances, the refrigerators market is expected to sustain a growth trend and to reach a value worth of EUR 13 000 million by 2050 (Figure A35). Volume of units on the market is also expected to grow and reach 33 million units in total and 0.07 units per capita by 2050 (Figure A36 and Figure A37)

Figure A35. Refrigerators revenue in million euros, prices 2019



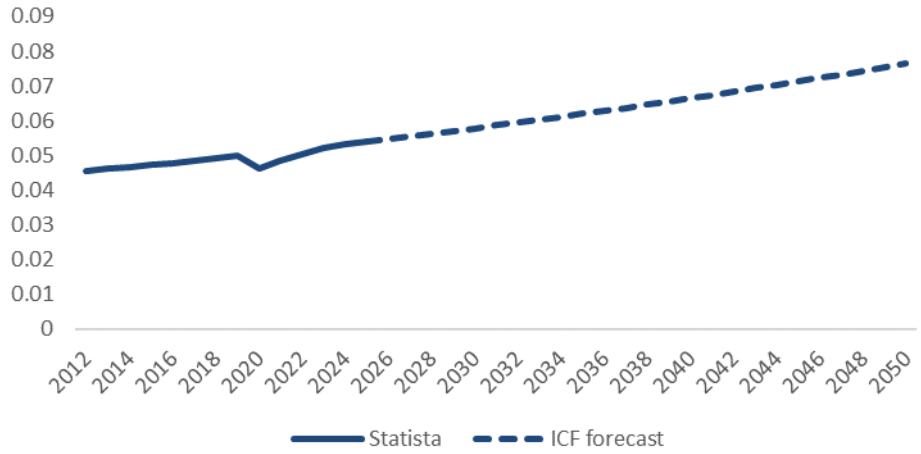
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A36. Refrigerators volume in million pieces



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

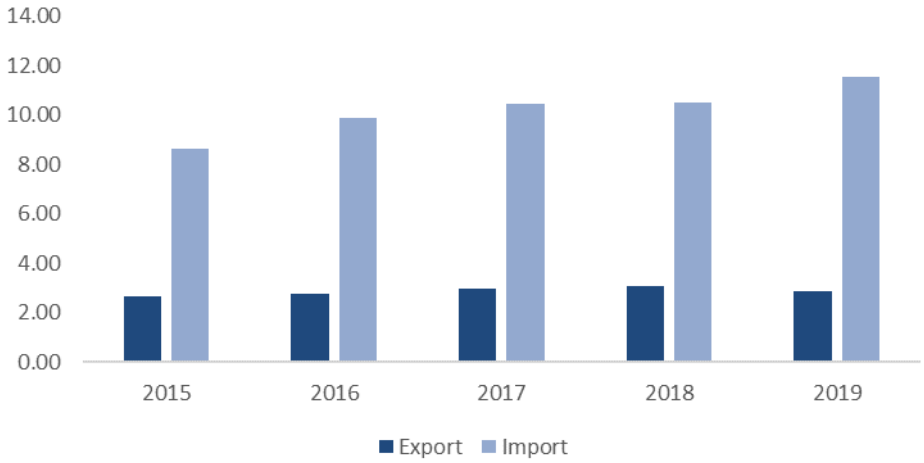
Figure A37. Refrigerators volume per capita



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

The volume of imports and exports in the refrigerators market has not significantly fluctuated over the years but an increase is observed in both import and export volumes. The volume of imports has increased from 8.64 million units in 2015 to 11.57 in 2019, while exports volume marginally fluctuated around 3 million units (Figure A38).

Figure A38. Refrigerators export and import in million units (EU27 2020)



Source: Eurostat, data for 'combined refrigerators-freezers' and 'household-type refrigerator'

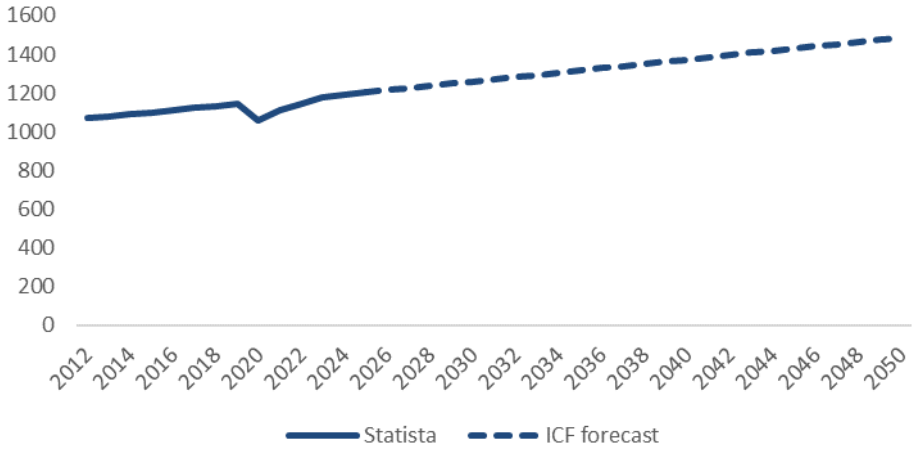
Microwave ovens

A microwave oven is generally described as an electric oven that heats and cooks food by exposing it to electromagnetic radiation in the microwave frequency range. Microwave ovens can be categorized by installation method into freestanding and built-in models[136]

Revenue from the microwave ovens market is following an upward trend and it is expected to reach a value of €1485 million by 2050 (Figure A39).

Volume in the market is following the same trend and is projected to increase by 39% until 2050 reaching 1485 million units and to increase by almost 50% in terms of units per capita (Figure A40 and Figure A41).

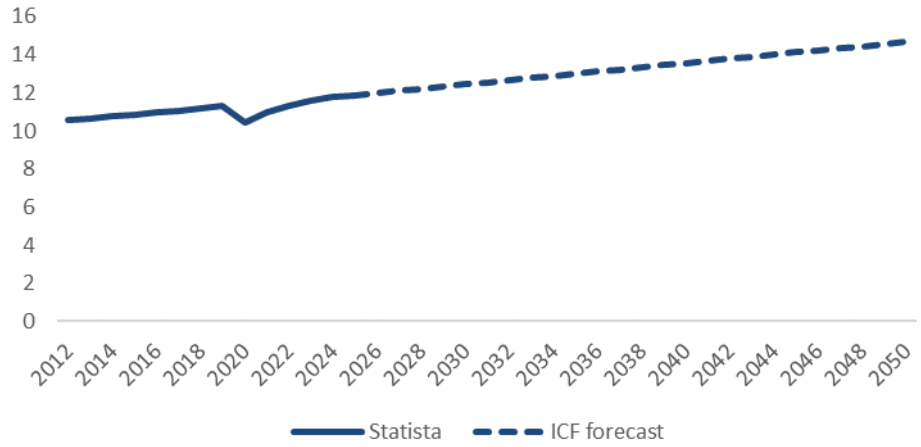
Figure A39. Microwave ovens revenue in million euros, prices 2019



[136] Statista, Consumer Market Outlook

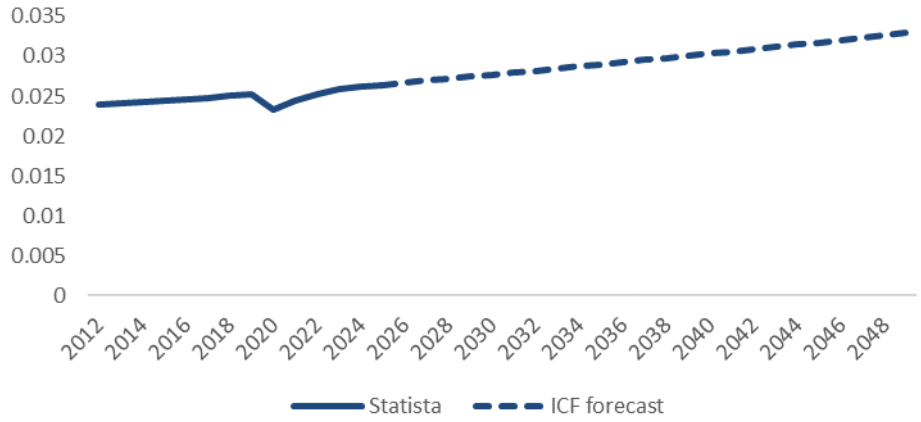
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A40. Microwave ovens volume in million pieces



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

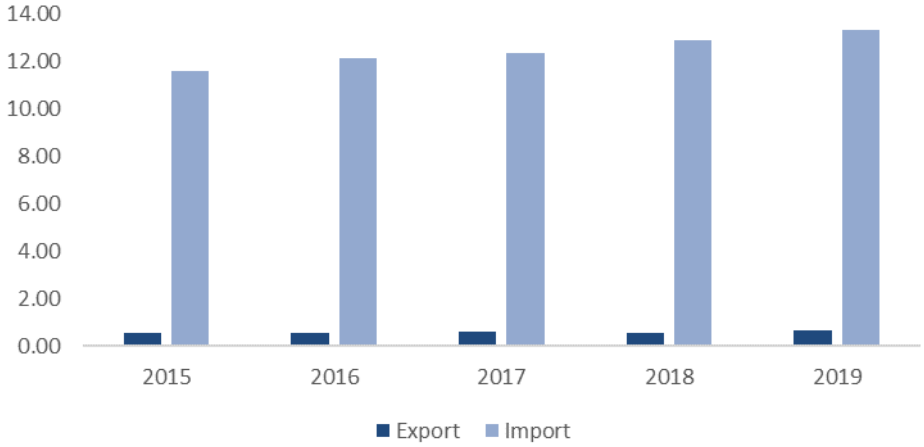
Figure A41. Microwave ovens volume per capita



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

In terms of the import and export volumes, a huge discrepancy can be observed between the amount of imports and exports. Whereas export volume has reached 13.32 million units in 2019, the import volume has remained relatively steady below 0.7 million units between 2015 and 2019 (Figure A42).

Figure A42. Microwave ovens export and import in million units (EU27 2020)



Source: Eurostat, data on 'domestic microwave ovens'

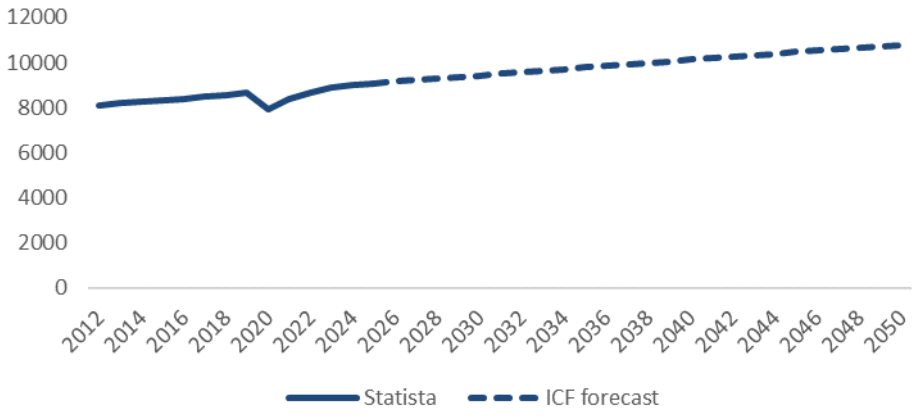
Electric ovens

The cookers and ovens product category is comprised of electric cookers, portable electric cooktops (with one or more hotplates), electric built-in ovens, ovens, and cooktops for domestic use.

Revenue in this market is expected to increase by 32% until 2050, as opposed to the revenue of 2012 (Figure A43). The market is projected to drop by 8% from 2019 to 2020 as an effect of the global crisis of 2020, after which revenue from cookers and ovens is projected to sustain a constant growth.

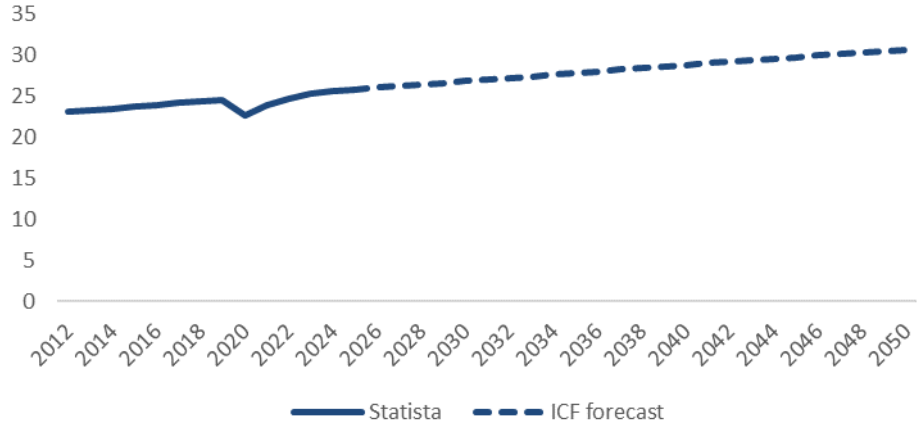
The amount of cookers and ovens units is also expected to grow and is projected to amount to more than 30 million units by 2050 (Figure A44). Similarly, by 2050 the market will reflect 0.069 units per capita (Figure A45).

Figure A43. Cookers and ovens revenue in million euros, prices 2019



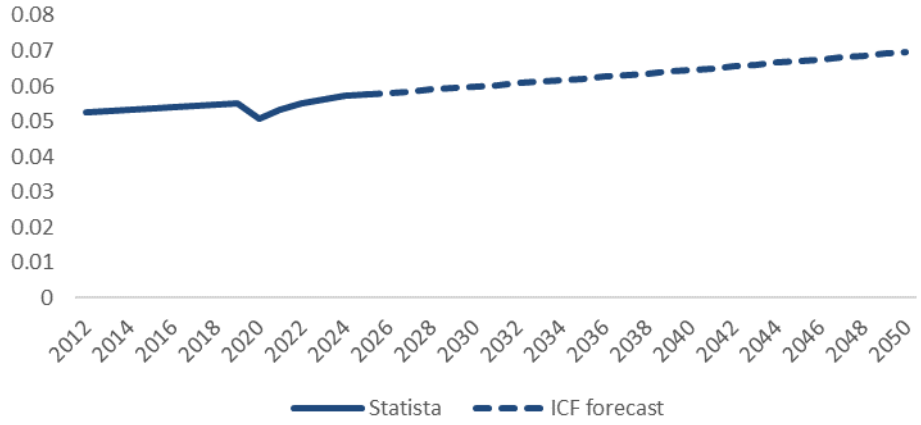
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A44. Cookers and ovens volume in million pieces (EU27 2020)



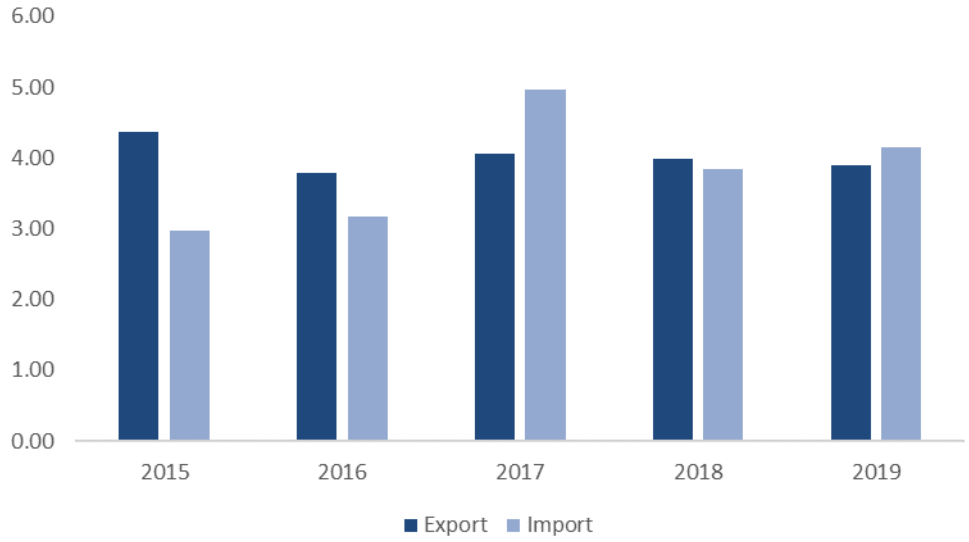
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A45. Cookers and ovens units per capita (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A46. Cookers and ovens export and import in million units (EU27 2020)



Source: Eurostat, data for 'Domestic electric cookers with at least an oven and a hob (including combined gas-electric appliances)' and 'Domestic electric ovens for building-in'

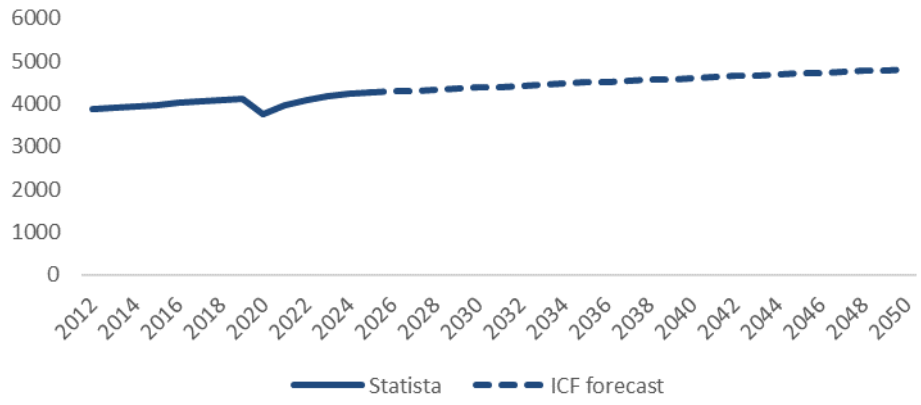
As regards the volume of export and import for domestic cookers, the market has fluctuated during recent years (Figure A46). While import volume has reached its highest number during 2017 when it reached 4.97 million units, the export volume was highest in 2015 at 4.36 million units and it remained steady at around 4 million units between 2017 and 2019.

Dishwashers

Dishwashing machines for domestic use became more affordable and popular over time, although their penetration rate has been slower than that of other large household appliances. In 2015, it was estimated that the percentage of European households having a dishwasher at home reached 45%.[137]

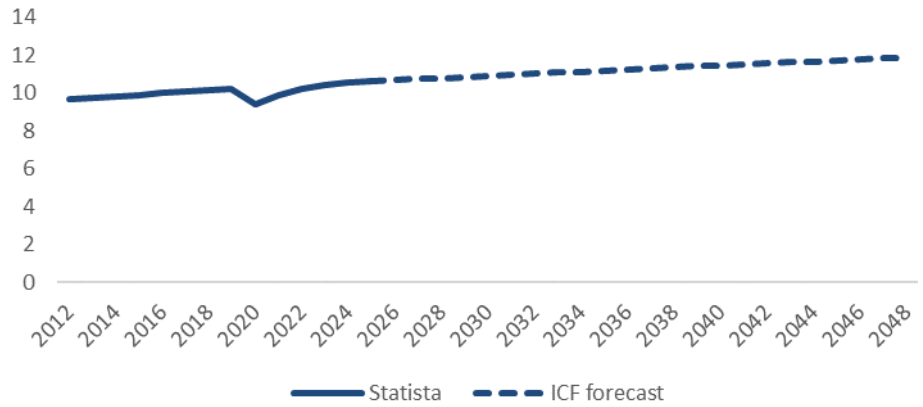
Revenue in the dishwashers market is expected to sustain a steady growth and to reach a value of €4808 million by 2050 (Figure A47). The market's volume is also expected to grow over the years, and it is estimated that it will reach 11.8 million units by 2050 (Figure A48). As regards the volume of units per capita, by 2050 the market would reach 0.02 units per capita (Figure A49).

Figure A47. Dishwashers revenue in million euros, prices 2019 (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

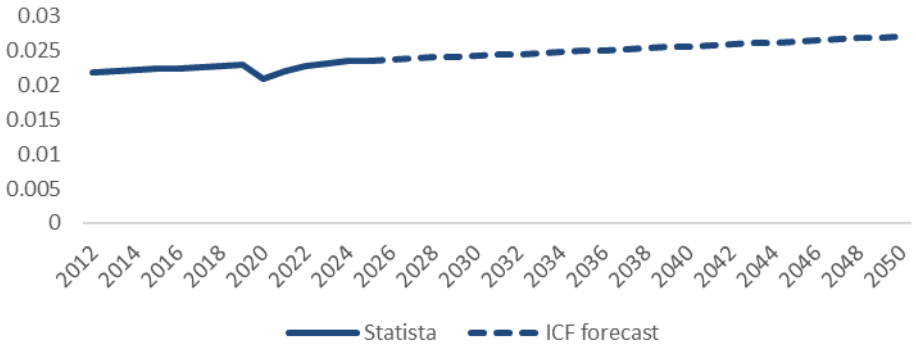
Figure A48. Dishwashers volume in million units (EU27 2020)



[137] CECED Europe, 2017, What if all Europeans had a dishwasher?

Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

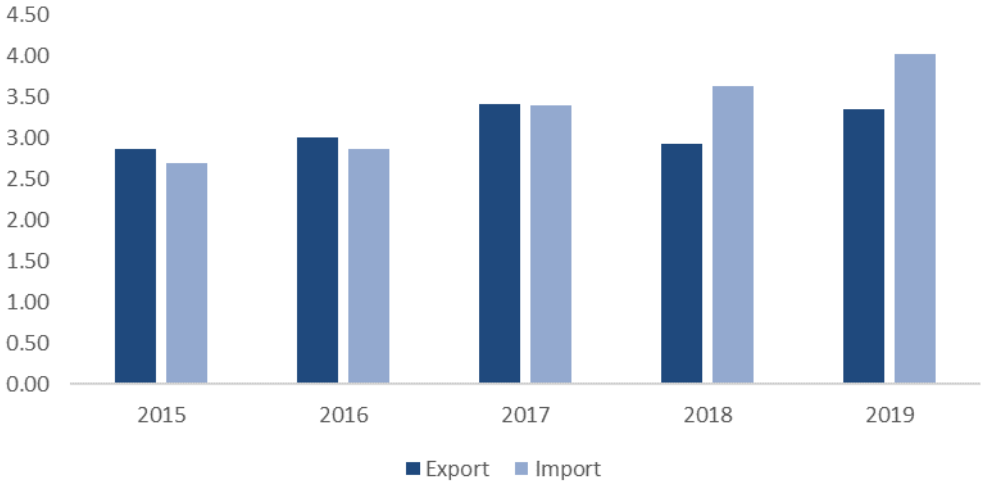
Figure A49. Dishwashers volume in units per capita (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

The difference between the number or imported and exported dishwashers has been small over the years. While numbers have grown from 2.87 to 3.36 million units between 2015 and 2019 in terms of dishwashers export, the numbers have increased from 2.70 to 4.02 million units in the case of import (Figure A50).

Figure A50. Dishwashers import and export in million units (EU27 2020)



Source: Eurostat, data for 'Household dishwashing machines'

A6.2.2 Small Household appliances market

The small household appliances category is comprised by vacuum cleaners, small kitchen appliances, irons, hair clippers, hair dryers, electric kettles, coffee machines and other small household appliances.

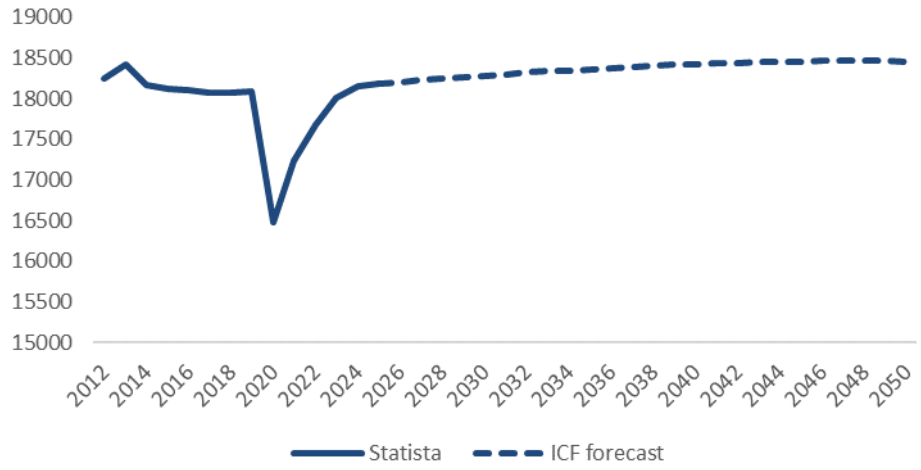
In the 2017 Market monitoring survey, the small household appliances market has been deemed as one of the highest performing markets of that year in terms of MPI score.[138] In terms of comparability, trust the small household appliances market was placed

[138] The Market Performance Indicator (MPI) is a composite index which indicates how well a given market performs, according to consumers.

among the highest scoring markets, however, it ranked lower in terms of detriment (high level of detriment suffered) compared to their average market performance.[139]

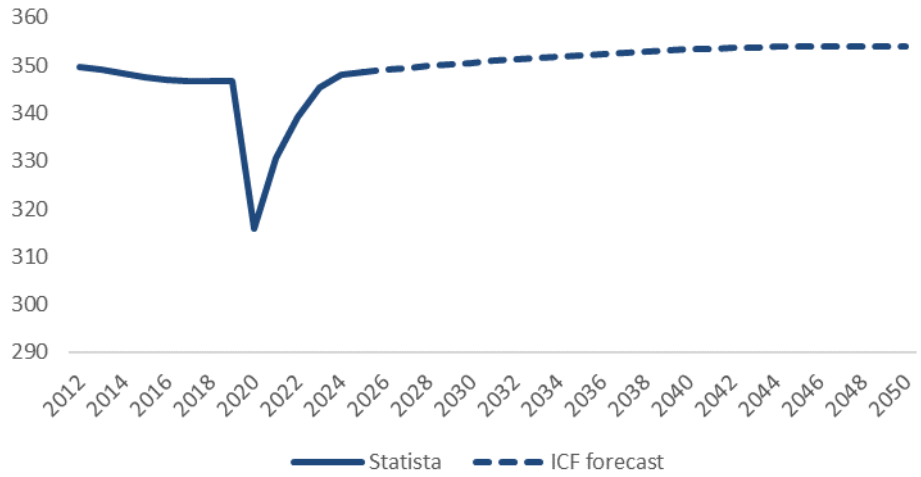
Overall, the small appliances market is projected to be severely affected by the COVID-19 pandemic effects after which the market is expected to level off towards a constant minor increase that would eventually reach a value of approximately EUR 18000 million by 2050 (Figure A51). In terms of volume, Figure A52 and Figure A53 both show a similar trend and the market is expected to reach 353 million units in total and 0.80 units per capita by 2050.

Figure A51. Small household appliances revenue in million euros, prices 2019, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression, Selected products: vacuum cleaners, small kitchen appliances, irons, hair clippers, hair dryers, electric kettles, coffee machines and other small household appliances

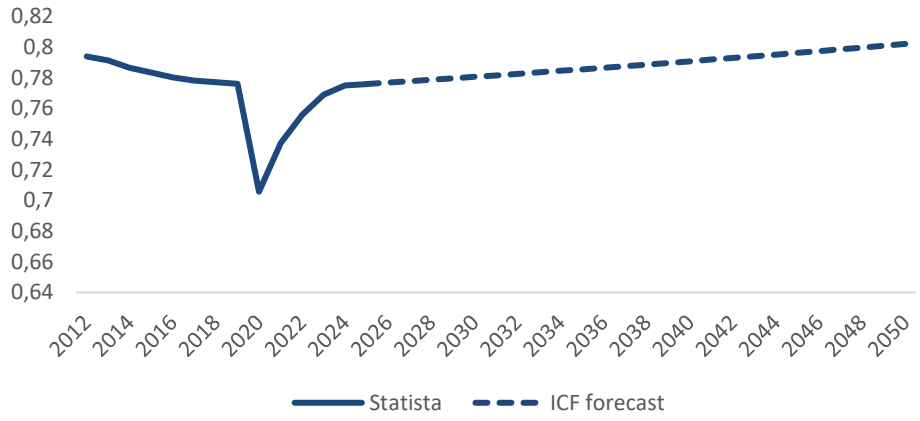
Figure A52. Small household appliances volume in million units, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression, Selected products: vacuum cleaners, small kitchen appliances, irons, hair clippers, hair dryers, electric kettles, coffee machines and other small household appliances

[139] European Commission, Consumers' attitudes towards cross-border trade and consumer protection 2018 available at https://ec.europa.eu/info/sites/info/files/consumer-survey-2018-main-report_en.pdf

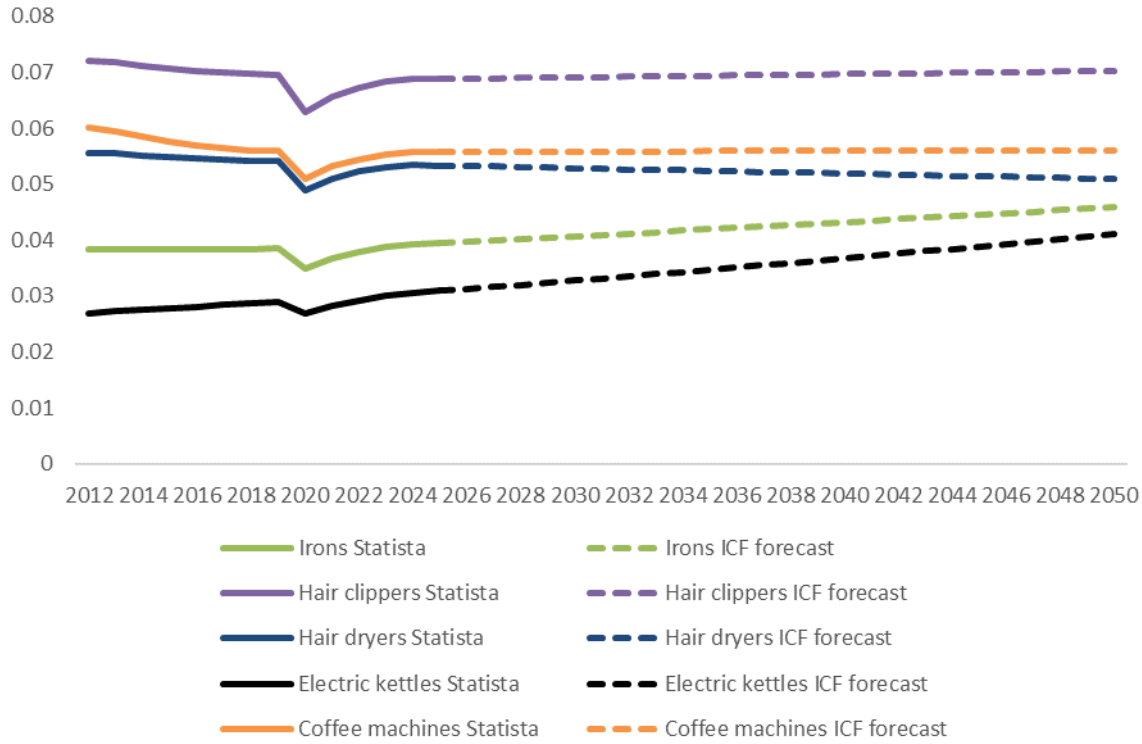
Figure A53. Small household appliances volume per capita in units, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression, Selected products: vacuum cleaners, small kitchen appliances, irons, hair clippers, hair dryers, electric kettles, coffee machines and other small household appliances

When looking at the groups of products that are included in the small household appliances category, Figure A54 shows that, whereas irons and electric kettles markets are projected to grow in terms of volume until 2050, the markets for coffee machines, hair dryers and hair clippers are projected to remain constant or slightly decrease towards 2050.

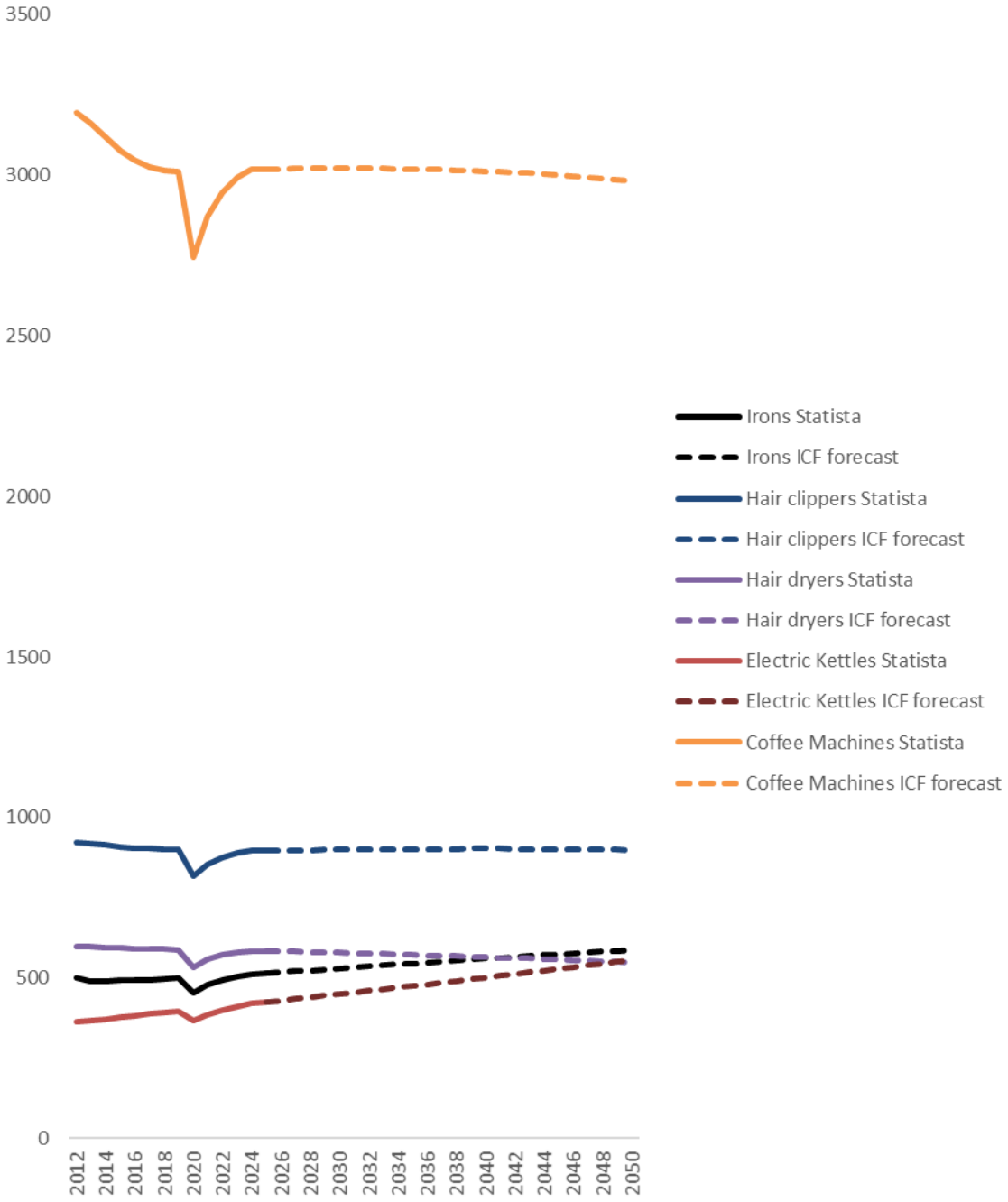
Figure A54. Small household appliance volume per capita, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

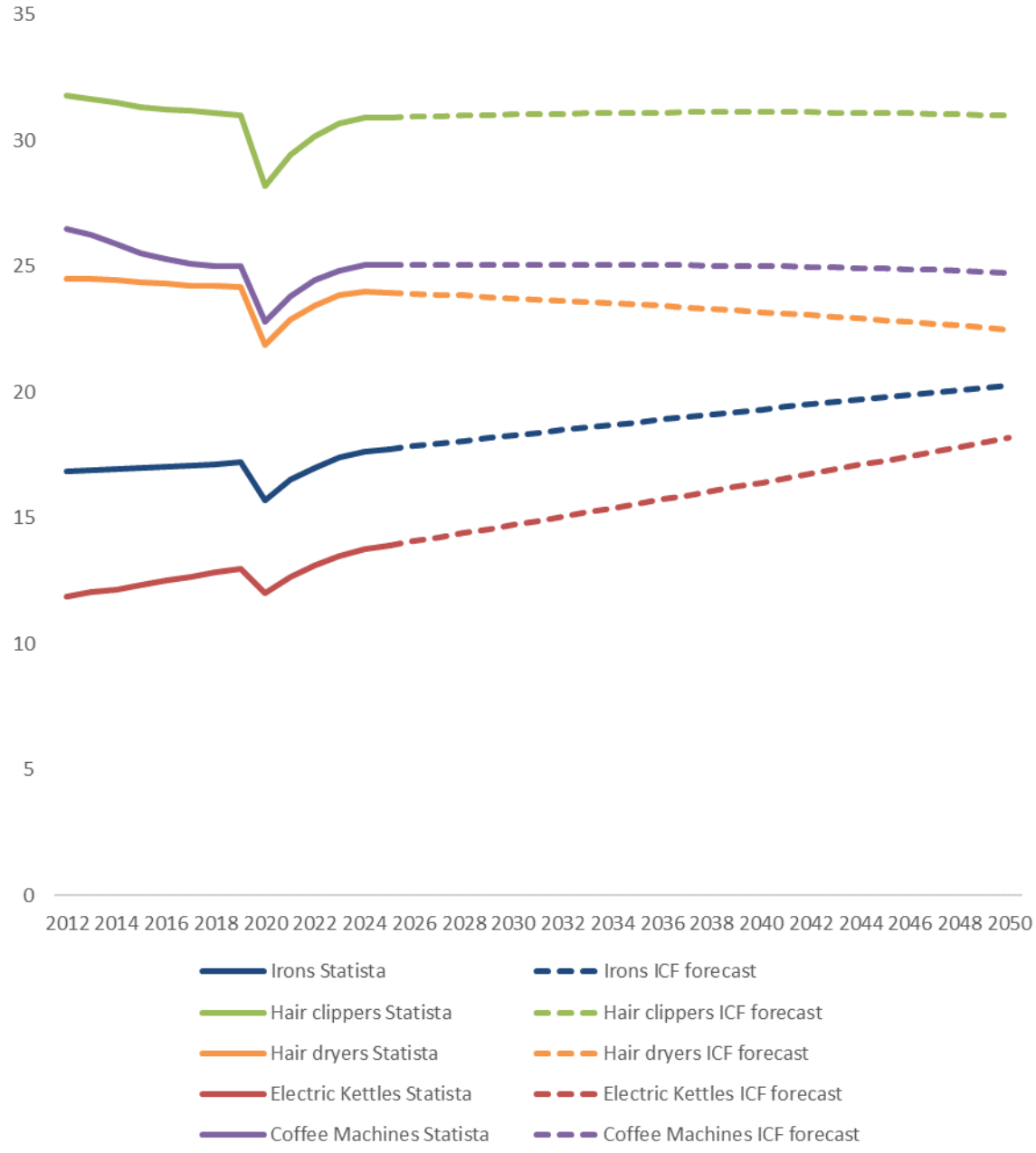
Similar trends are also observed in terms of markets' revenue and in terms of market volume in units. While irons and electric kettles markets are project to grow by 2050 as compared to 2015, the markets for hair clippers, hair dryers and coffee machines are projected to experience a marginal decrease in the same timeframe (Figure A55 and Figure A56).

Figure A55. Small household appliances revenue in million euro, prices 2019 (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A56. Small household appliances volume in million units, selected products (EU27 2020)

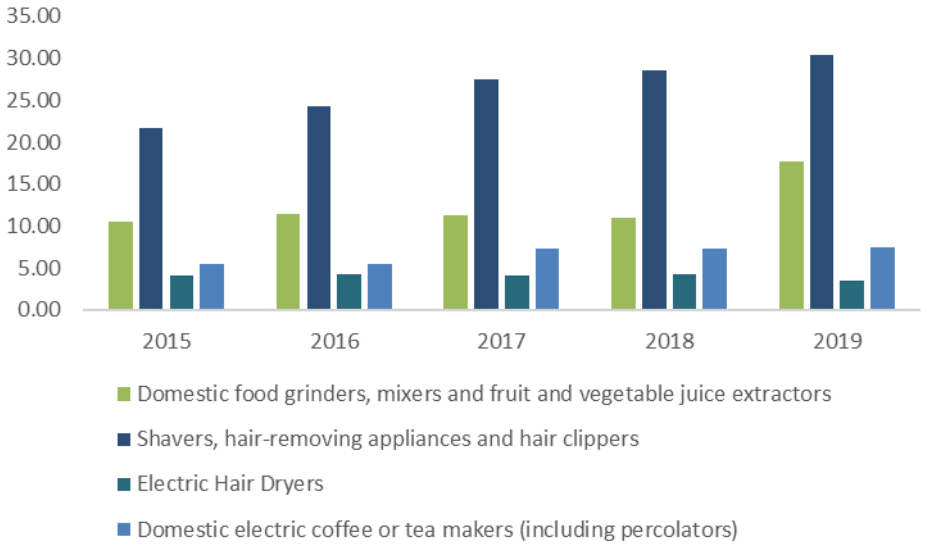


Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

As regards the volume of export and import of small household appliances, it appears that import values are significantly higher than export values.

In terms of export, between 2015 and 2019, exported quantities have increased for all selected product groups with the exception of the hair dryers' market, where export quantities have actually diminished by 2019, amounting to only 3.44 million units per year. The top exporting market in this group was the shavers, hair removing appliances and hair clippers market, which exported in 2019 more than 30 million units.

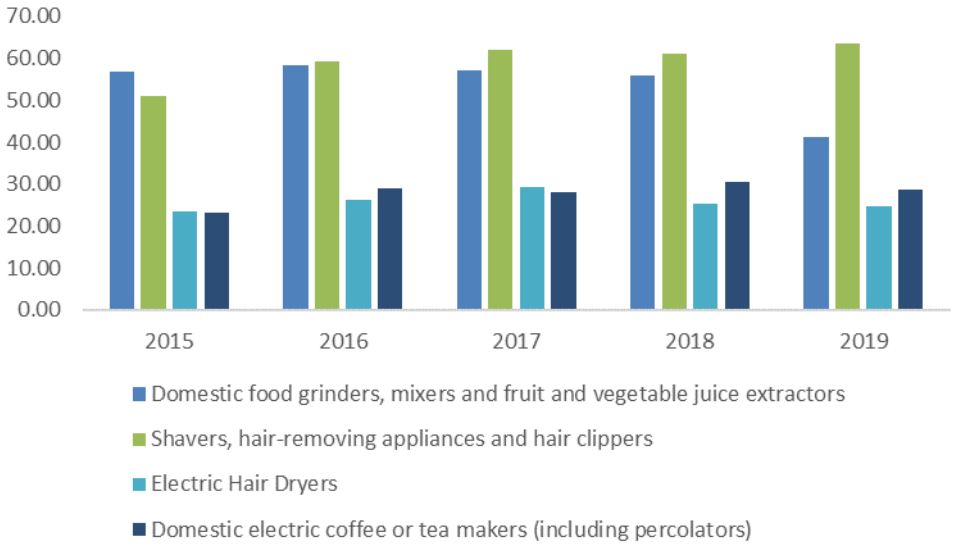
Figure A57. Small Household appliances export quantities in million units, selected products (EU27 2020)



Source: Eurostat

In what concerns the import, shavers, hair removing appliances and hair clippers are also the most imported products in terms of quantity, amounting to 63 million imported units in 2019, whereas the least imported products in the group were electric hair dryers, amounting to 24 million units in 2019.

Figure A58. Small household appliances import quantities in million units, selected products (EU27 2020)



Source: Eurostat

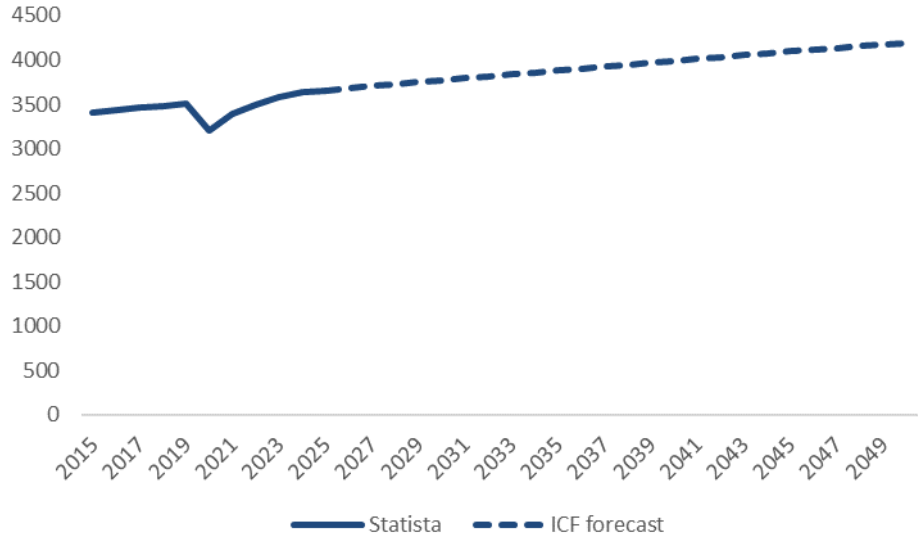
Vacuum cleaners

The vacuum cleaners product category includes both dry and wet vacuum cleaners with and without self-contained electric motor with a maximum dust capacity of 20l.

The vacuum cleaners market has seen a major increase in revenue in the years 2015-2015 and is projected to sustain a steady growth trend and to reach a value of €4192 million by 2050 (Figure A59).

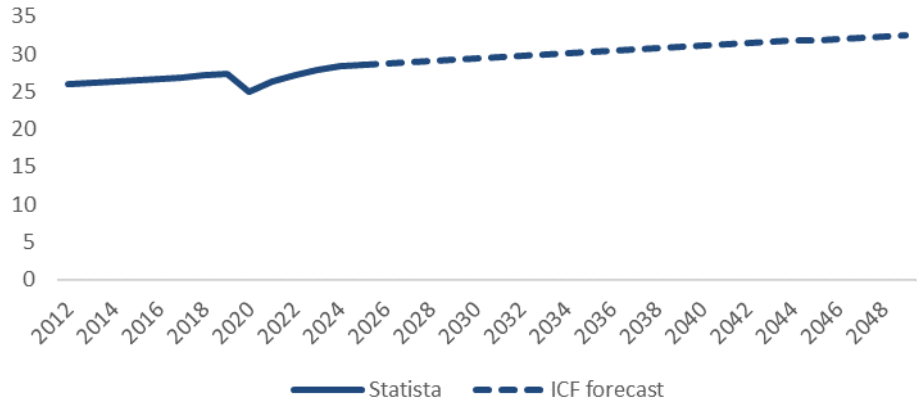
As regards the volume of products in the market, by 2050, it is estimated that the EU27 market will be comprised of more than 32 million units (Figure A60) and that vacuums will be owned in proportion of 0.07 units per capita (Figure A61).

Figure A59. Vacuum cleaners revenue in million euros, prices 2019 (EU27 2020)



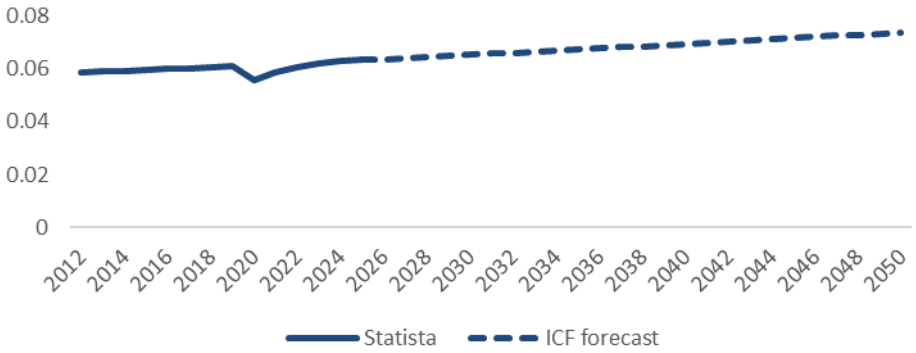
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A60. Vacuum cleaners volume in million units (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

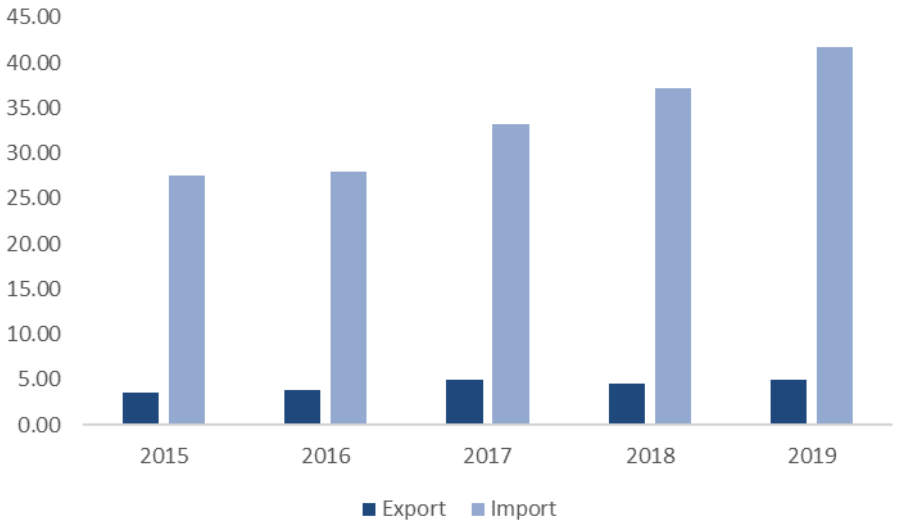
Figure A61. Vacuum cleaners volume per capita (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

During the past few years, export of vacuum cleaners represented less than 15% percent of imports. While exports reached 4.98 million units in 2019, imports accounted for 41.73 million units in the same year. However, both import and export of vacuum cleaners follow a growth trend since 2015 (Figure A62).

Figure A62. Vacuum cleaners export and import in million units (EU27 2020)



Source: Eurostat, data for 'Vacuum cleaners with a self-contained electric motor of a power <= 1 500 W and having a dust bag or other receptable capacity <= 20 l'

Coffee machines

The coffee machines market is expected to remain more or less static after its rebound following the 2020 market disruptions in terms of revenue and volume (Figure A55 and Figure A56).

Irons

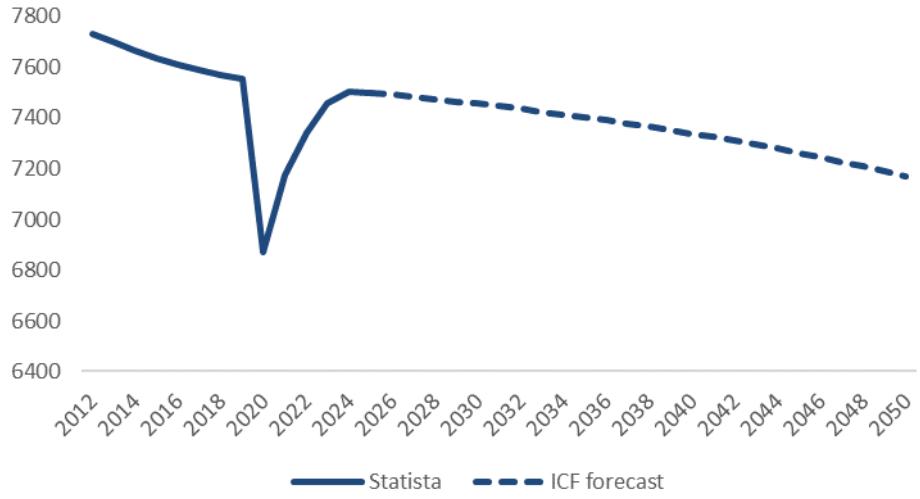
Similarly, the market for irons is expected to increase in revenue and volume by 2050 (Figure A55 and Figure A56).

Mixers

Mixers are part of the small kitchen appliances product group. Apart from mixers, the small kitchen appliances product group incorporates goods such as blenders, food processors, electric juicers, electric deep fryers, waffle irons and egg cookers.

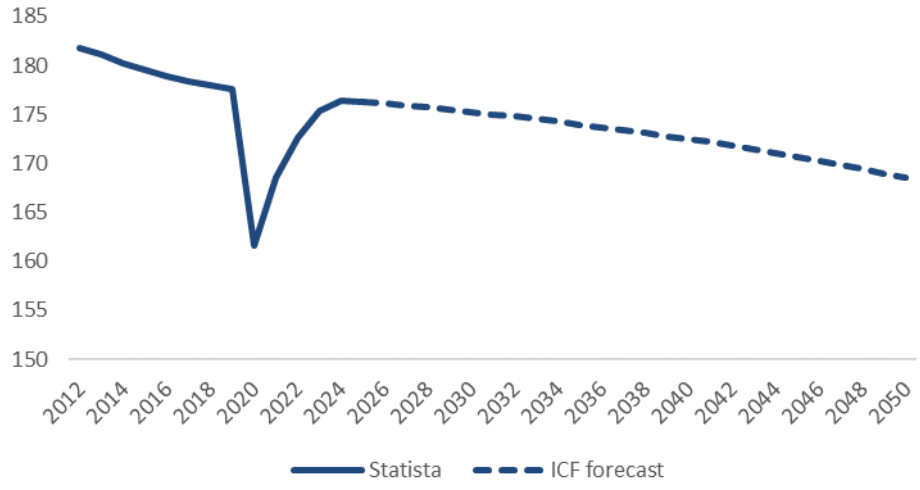
Overall, the small kitchen appliances market is projected to be severely affected by the COVID-19 disruptions and it is actually expected to slightly decrease in both revenue and volume towards 2050 (Figure A63 and Figure A64).

Figure A63. Revenue small kitchen appliances in million euro, prices 2019 (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A64. Volume small kitchen appliances in millions (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Electric Kettles

Electric kettles are appliances with a self-contained heating element used for boiling water without the necessity of a stove top. They became widely popular due to the expansion of the use of tea and coffee in the workplace and at home and their market is expected to grow both in terms of revenue and volume (Figure A55 and Figure A56). The revenue in the market is expected to reach €554 million by 2050, while volume is expected to reach 18 million units by the same year.

Electric shavers/razors/trimmers

Hair clippers are generally defined as electric devices such as shavers or hair-removing appliances and epilators. Their market is expected to remain more or less static after recovering from the COVID-19 crisis and to reach an amount of €898 million in terms of revenue by 2050 (Figure A55). As regards the volume of the market in terms of units, the market is projected to decrease a little after 2020 and to amount to 30 million units by 2050 Figure A56).

Hair dryers

The hair dryers market is expected to sustain a minor decline over the following years and to reach €548 million by 2050 in terms of revenue (Figure A55). The same trend can also be observed as regards the volume of the market, which by 2050 should amount to 22 million units, as Figure A56 shows.

A6.3 Overview of the ICT and other electronics market

The number of companies in the manufacturing sector of computers and peripheral equipment has significantly decreased from 42,900 enterprises in 2011 to 40,000 in 2017 (Figure A65). Overall, both revenue and volume of the market are projected to be less than the market's levels existent back in 2012, although the market is projected to follow a minor growth trend after the estimated negative effects of the COVID-19 pandemic effects in 2020.

Among the causes of this overall decreasing trend observed in the industry are economies of scale, value chain restructuring and massive localisation in low manufacturing cost and expanding market areas, such as Asia.[140] Other commonly discussed market trends relate to technological developments and EU regulations focused on environmental concerns, which have increased the demand for smart and energy-efficient devices.[141]

The smartphone production market in expected to increase in value due to the launch of the 5G cellular networks in 2020, however the mobile phone market of Europe is expected to reach a steady state level of growth in term of volume.[142]

A large majority of EU27 consumers trust the electronic products market (82%) and reported positive experiences of making purchases in the market (94%). In terms of comparability, 75% of consumers report finding it easy to compare the offers of different retailers in the electronic products market.[143]

Although 90% who attach importance to price, 94% of consumers also say that durability is important in shaping their choice of electronic products, while 79% say reparability is important, and 70% the likely environmental impact of the product. Twelve per cent of EU27 consumers have experienced a problem with an electronic product they have purchased and the most common problem experienced is that of a product breaking shortly after the legal guarantee or commercial warrantee period (reported by 17 of consumers).[144]

More than half of EU27 consumers surveyed have also stated that they bought or used an internet-connected product in the last two years. Among these consumers, the most popular products that were bought were internet-connected entertainment devices and

[140] European Commission, 2020, Study on the Electronics Ecosystem - Overview, developments and Europe's position in the world - Annex 6 "PC and Data processing"

[141] Goldstein Market Intelligence. Europe Consumer Electronics Market Research Available at https://www.goldsteinresearch.com/report/europe-consumer-electronics-market-trends-industry-analysis

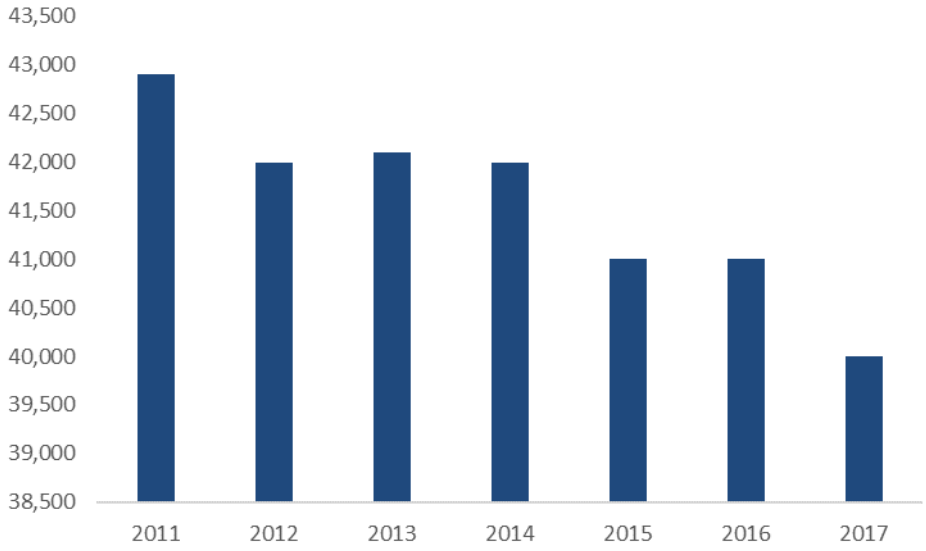
[142] European Commission, 2020, Study on the Electronics Ecosystem - Overview, developments and Europe's position in the world - Annex 5 "Telecommunications"

[143] Market Monitoring Survey 2019: Electronic products. Available at https://ec.europa.eu/info/sites/info/files/electronic-products-mms19_en.pptx_.pdf

[144] Ibid.

smart wearable devices (bought or used by 58% and 41% respectively). As regards the problems encountered with the internet connected products, 18% of surveyed consumers described having received a software update that negatively affected a product's functioning, while 12% reported having not received a required software update at all.[145]

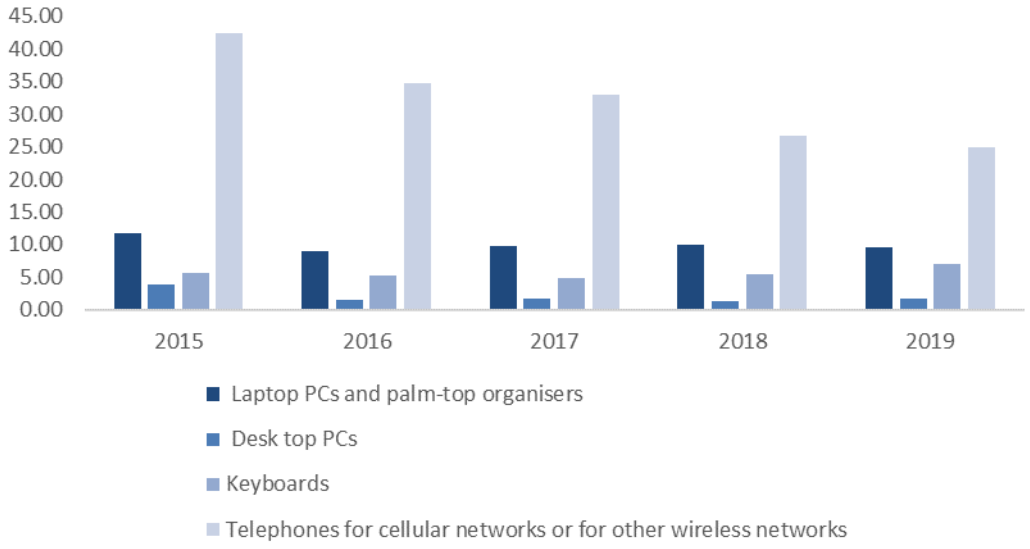
Figure A65. Number of enterprises in the manufacturing sector of computers and peripheral equipment



Source: Eurostat

Figure A66 and Figure A67 show that both export and import volumes have decreased over the years for ICT products.

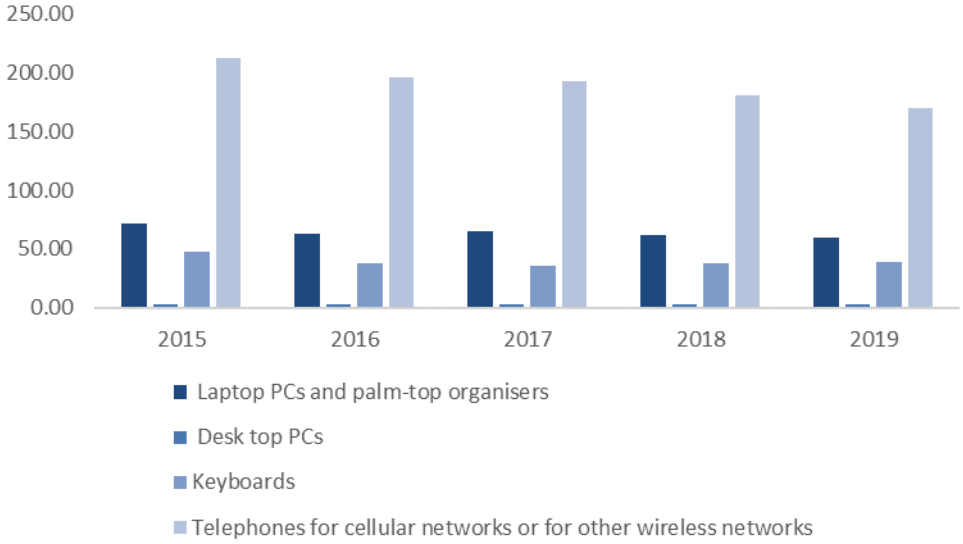
Figure A66. Volume of export in million units (EU27 2020)



Source: Eurostat

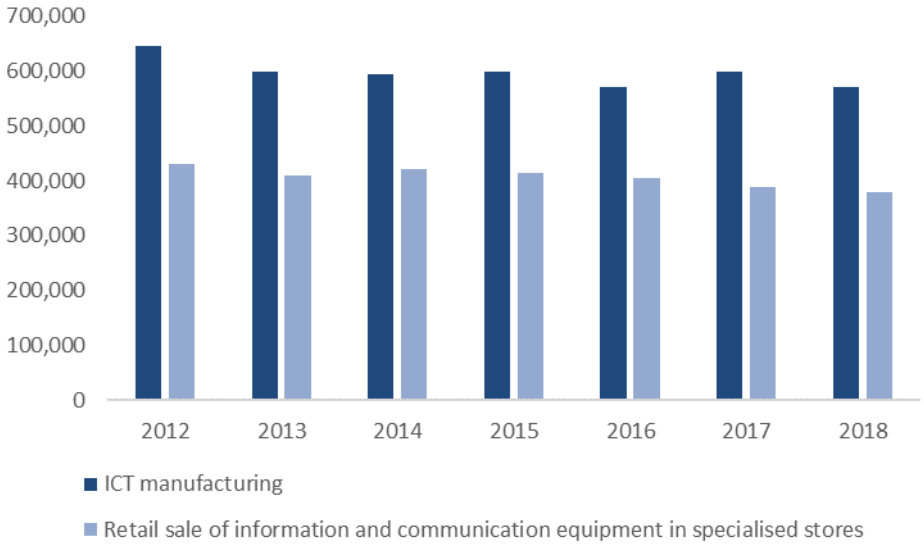
[145] Market Monitoring Survey 2019, Specific module on internet-connected products, available at https://ec.europa.eu/info/sites/info/files/internet-connected-products-mms19_en.pdf

Figure A67. Volume of import in million units (EU27 2020)



Source: Eurostat

Figure A68. Persons employed in the population of active enterprises

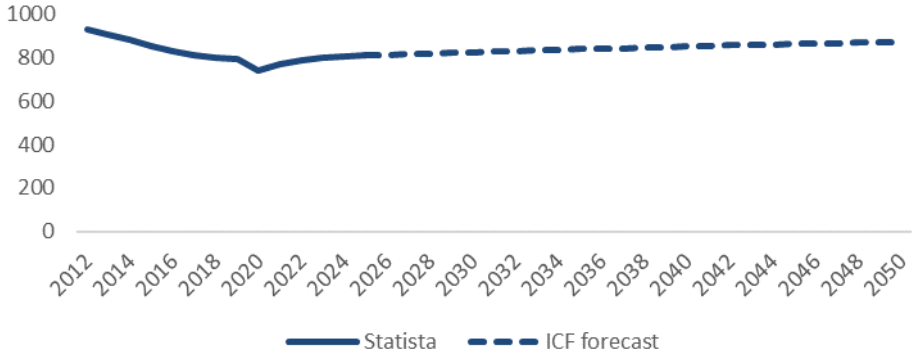


Source: Eurostat, data is for EU28

Figure A68 shows that in 2018, the ICT market employed more than 950,000 employees in the active manufacturing enterprises and the retail sale enterprises that sold through specialised stores.

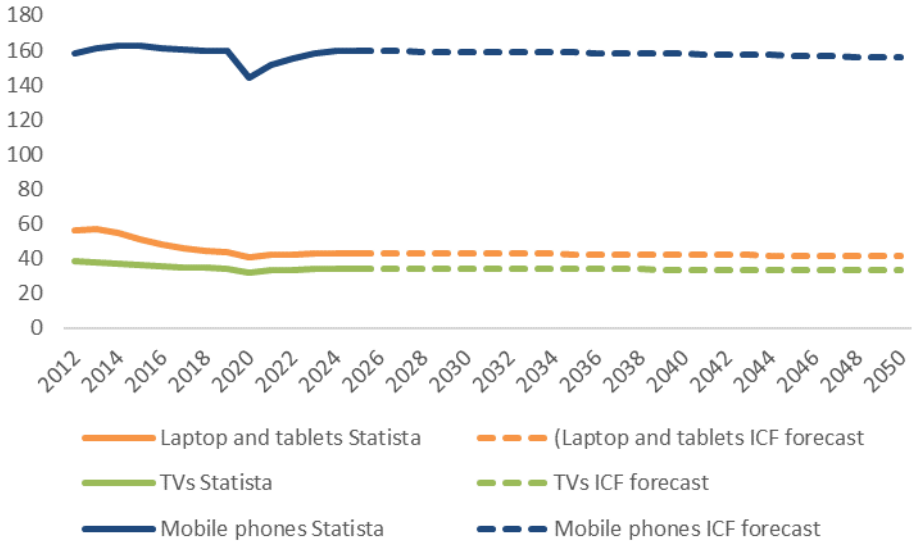
In terms of volume, the market for Electronic and IT products is expected to decline overall compared with 2012, reaching an estimated 873 million units by 2050. Figure A70 shows that a similar trend can also be observed when looking at the expected evolution of the markets for Laptops and tablets, TVs or mobile phones.

Figure A69. Electronic and IT volume in million units, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression. Selected products: Laptops and tablets, TVs, mobile phones and others.

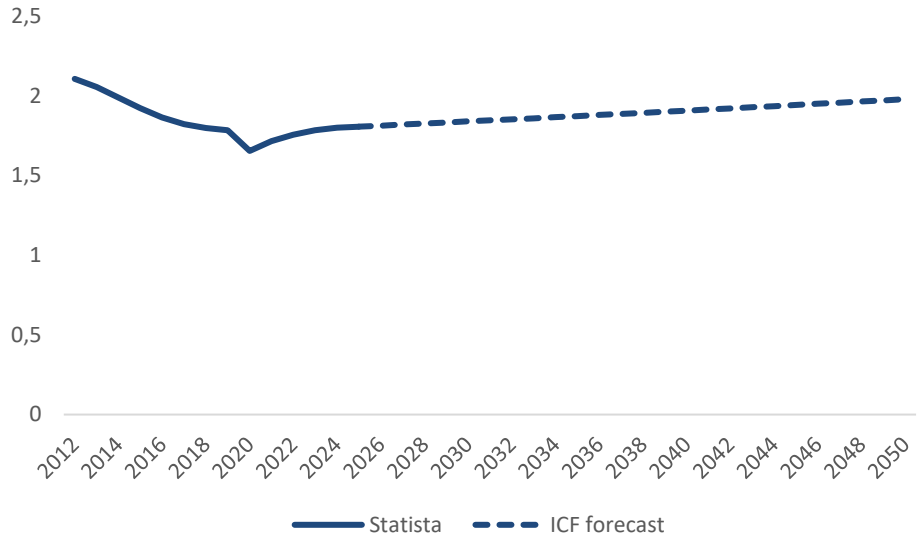
Figure A70. Electronic and IT volume in million units, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression.

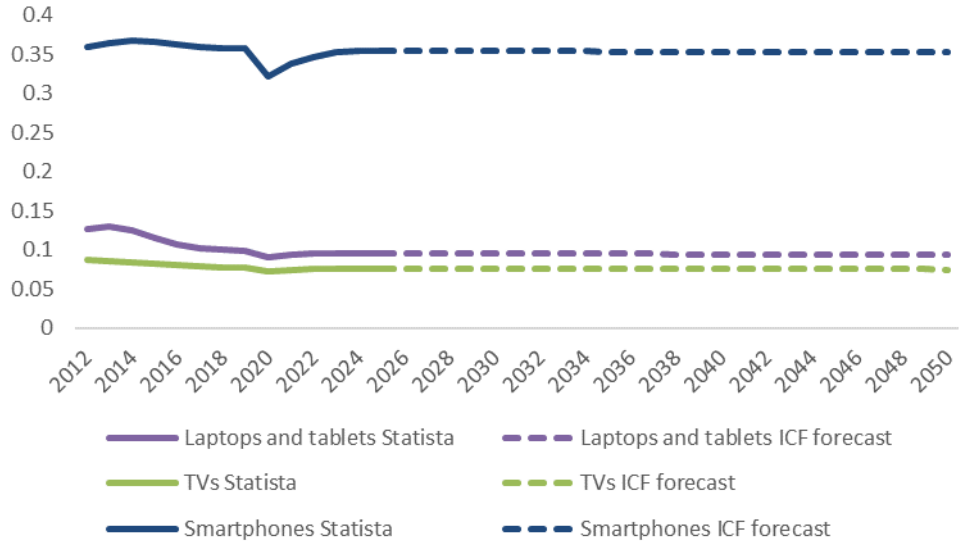
As regards the volume of products per capita, the consumer electronics market seems to follow a slim upward trend in recovering after the sudden expected drop after the year 2020. However, it is expected that volume will amount to 1.9 units per capita, which is less than the volume of 2.1 units per capita in 2012 (Figure A71). Figure A72 shows a similar trend in what concerns the evolution of the volume per capita of the selected consumer electronics.

Figure A71. Electronic and IT volume in units per capita, selected products (EU27 2020)



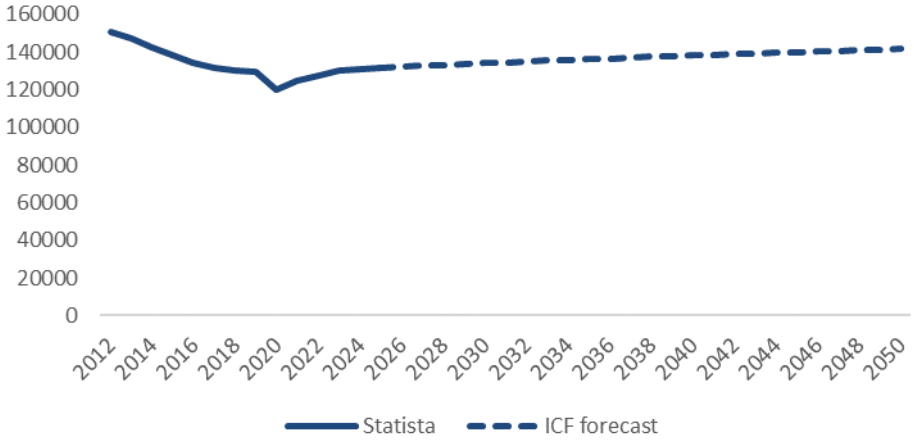
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression. Selected products: Laptops and tablets, TVs, mobile phones and others.

Figure A72. Electronic and IT volume in units per capita (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

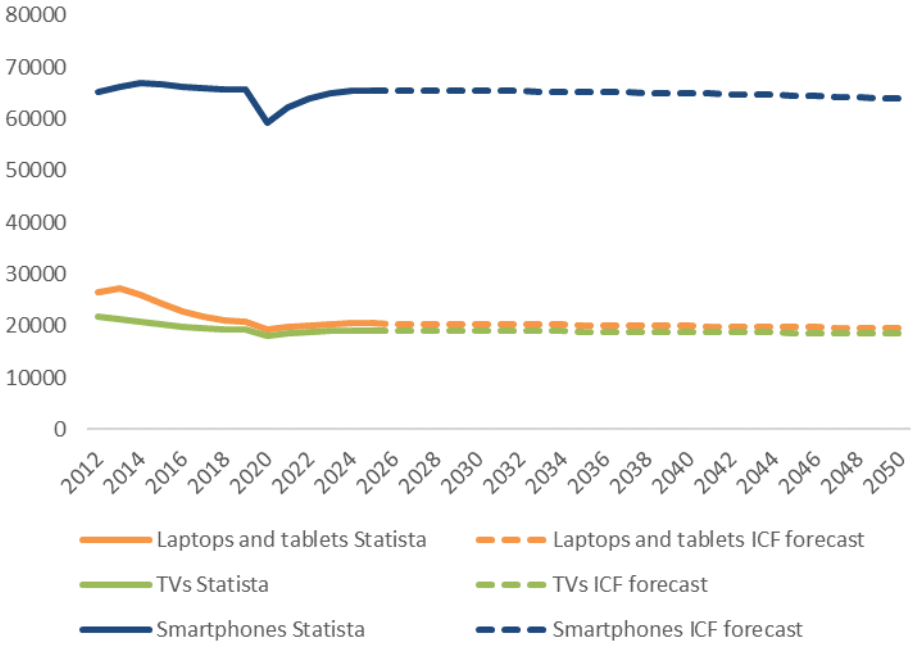
Figure A73. Electronic and IT revenue in million euro, prices 2019 (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression. Selected products: Laptops and tablets, TVs, mobile phones and others.

Revenue of the consumer electronic and ICT products is projected to amount to 141 billion euro by 2050 in the EU27 (Figure A73). While revenue produced by sales of laptops and tablets is expected to reach 63 billion euro by the same year, sales of TVs and smartphones are both projected to get to 18 billion euro by 2050 (Figure A74).

Figure A74. Electronic and IT revenue in million euro, prices 2019 (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

A6.4 Overview of the Furniture market

The EU furniture market accounts for roughly one quarter of the global world furniture market[146] Revenue in the furniture market is estimated at €174,286m in 2020 in the EU27 and is expected to decrease by 2050 to an estimated €156186m (Figure A75).

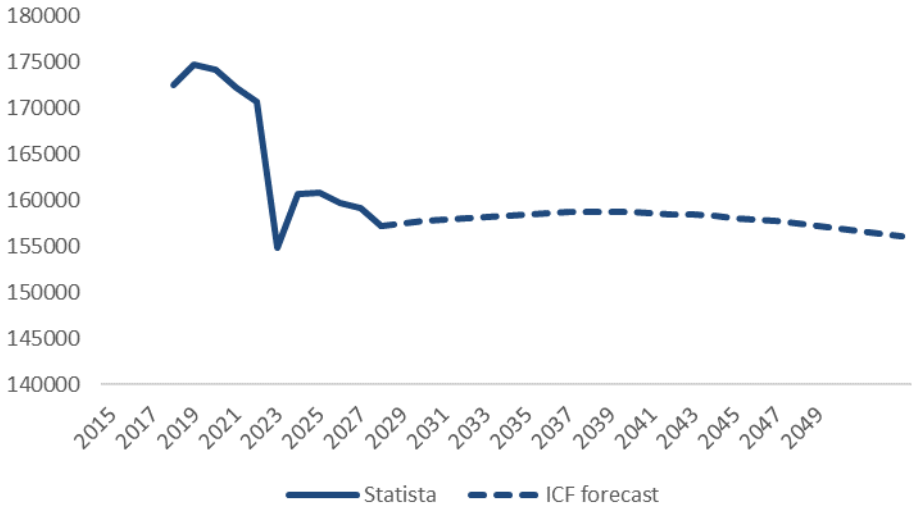
Factors contributing to the demand in the furniture sector are aesthetic reasons coupled with consumers replacing furniture more frequently than in the past. Reports show that 10 million tonnes of furniture are discarded by businesses and consumers in EU Member States each year, the majority of which is destined for either landfill or incineration.[147]

However, the EU furniture sector was severely hit by the past crises which led to a significant drop in the number of companies, jobs and turnover.[148] The sector has lost 6,887 companies between in the period 2011-2017, amounting to 120,000 furniture enterprises in 2017, while annual turnover has moderately raised from 94,323 million euro in 2011 to 108,453 million euro in 2017 (see Figure A15 and Figure A16).

The 2019 Market Monitoring survey showed that a large majority of EU27 consumers trust the furniture market (84%) and reported positive experiences of making purchases in the market (94%). In terms of comparability, over 69% of consumers consider they find it easy to compare the offers of different retailers in the furniture and furnishings market. Nine percent of EU27 consumers have experienced a problem with furniture or furnishings they have purchased that they felt gave grounds for complaint.[149]

The furniture market is expected to be severely hit by the 2020 pandemic's effects, as the market's revenue is expected to drop by 11% between 2020 and 2023, after which the market's revenue is projected to recover and remain relatively stable towards 2050 (Figure A75).

Figure A75. Furniture revenue from sales in million euro, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression. Selected products: Living-Room & Dining-Room Furniture, Bedroom Furniture, Kitchen Furniture, Plastic & Other Furniture, Office Furniture, Lamps & Lighting, Floor Covering

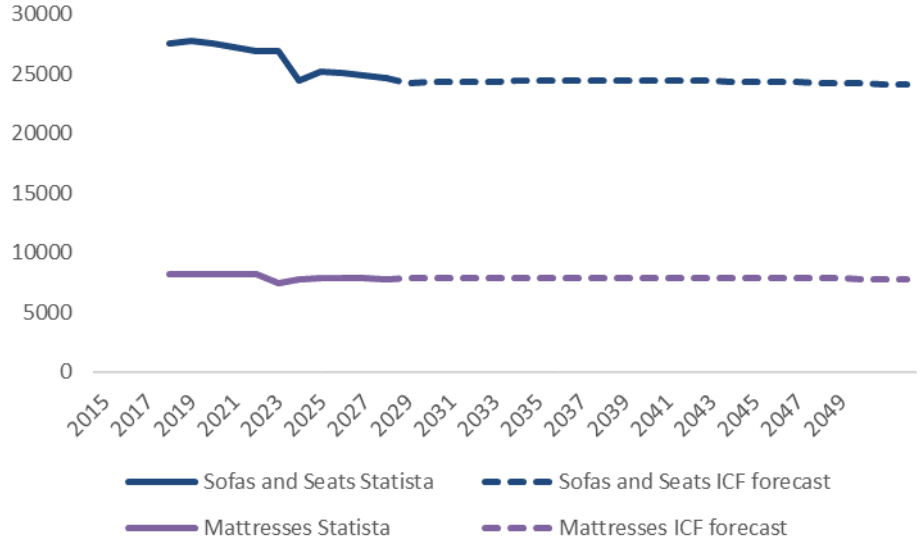
[146] CEPS, 2014, The EU Furniture Market Situation and a Possible Furniture Products Initiative

[147] EEB, 2017, Report on the circular economy in the furniture sector

[148] https://ec.europa.eu/growth/sectors/raw-materials/industries/forest-based/furniture_en

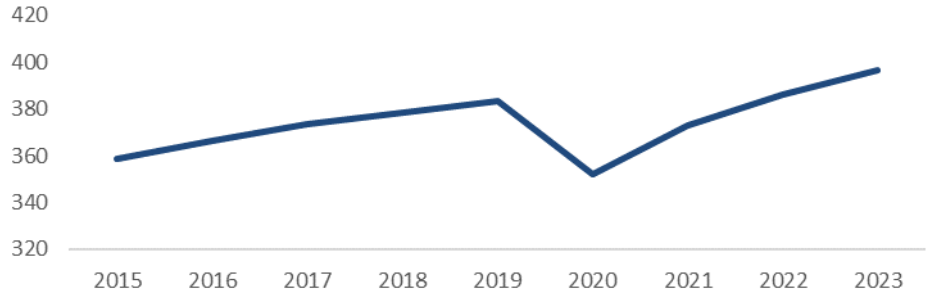
[149] Market Monitoring Survey 2019: Furniture and furnishing. Available at https://ec.europa.eu/info/sites/info/files/furniture-and-furnishings-mms19_en_1.pdf

Figure A76. Furniture revenue from sales in million euro (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A77. Furniture revenue per capita, selected products (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), Selected products: Living-Room & Dining-Room Furniture, Bedroom Furniture, Kitchen Furniture, Plastic & Other Furniture, Office Furniture, Lamps & Lighting, Floor Covering.

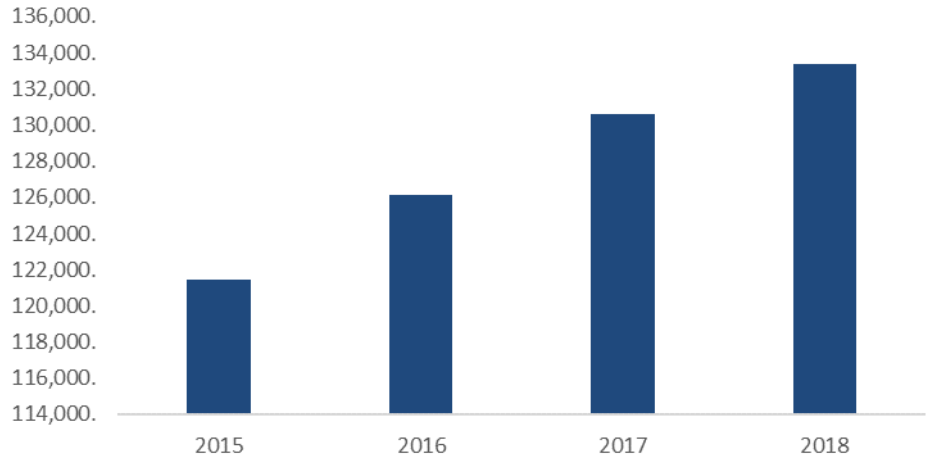
Export and import values show that the EU's domestic manufacturers are maintaining their domination of the European wood furniture market, although the EU furniture sector faces enormous competition from countries having low production costs. (Figure A78). According to a recent report, in 2016, domestic manufacturers accounted for around 87% for the total value of wood furniture supplied into the EU market.[150] Over the past years the market share of imported furniture has remained more or less static, however a slight increase can be observed towards 2019, when import value of furniture amounted to €3,256 million.

[150] International Tropical Timber Organisation / FLEGT Independent Market Monitor, 2018, European Union furniture sector scoping study

Figure A78. Furniture export and import value in million euro, selected products (EU27 2020)

Source: Eurostat. Selected products: Kitchen furniture, Mattresses with spring interiors (excluding of cellular rubber or plastics), Wooden bedroom furniture (excluding builders, fittings for cupboards to be built into walls, mattress supports, lamps and lighting fittings, floor standing mirrors, seats), Wooden furniture for the dining-room and living-room (excluding floor standing mirrors, seats), Other wooden furniture (excluding bedroom, dining-, living-room, kitchen, office, shop, medical, surgical, dental/veterinary furniture, cases and cabinets designed for hi-fi, videos and televisions), Furniture of plastics (excluding medical, surgical, dental or veterinary furniture - cases and cabinets specially designed for hi-fi systems, videos and televisions), Furniture of materials other than metal, wood or plastic (excluding seats, cases and cabinets specially designed for hi-fi systems, videos and televisions).

Figure A79. Final consumption expenditure of households on furniture in million euro (EU27 2020)

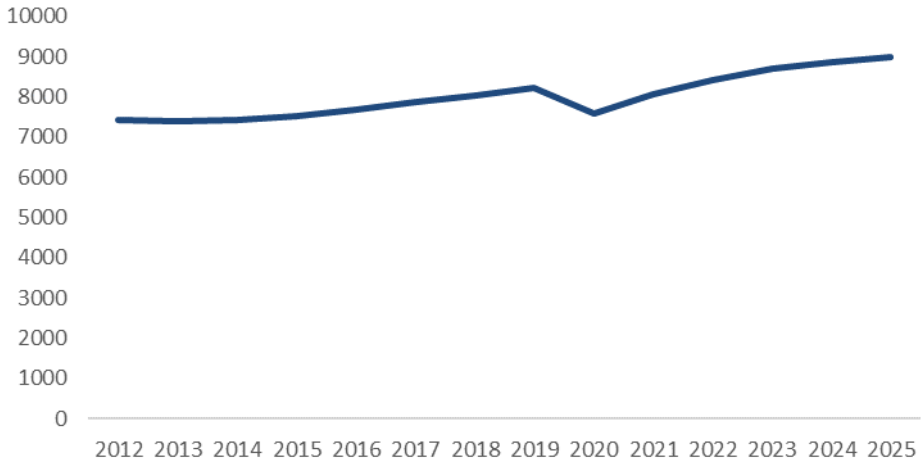


Source: Eurostat. Data for 'Furniture and furnishings, carpets and other floor coverings'

In 2018, household consumption expenditure on furniture, furnishings, carpets and other floor coverings amounted to more than €133 billion (Figure A79). This represents 1.9 of the total GDP of 2018 (Figure A8).

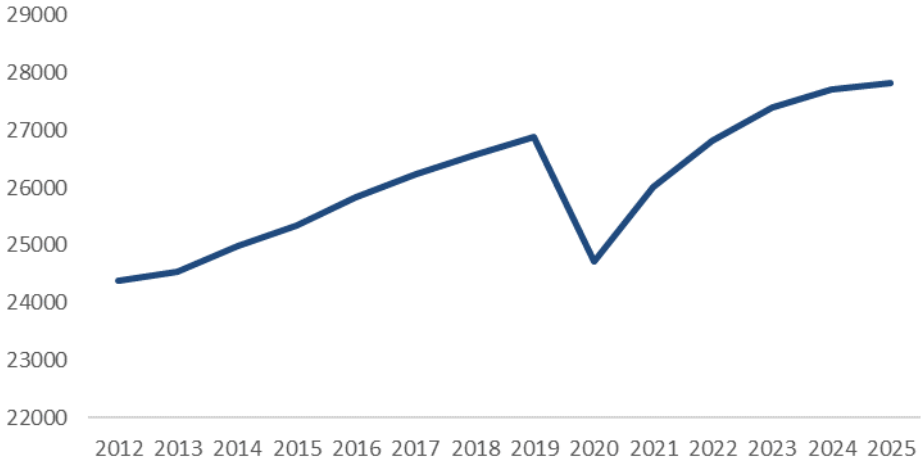
Revenue in the market for mattresses is expected to increase marginally and to reach €8,995 million by 2025 (Figure A80), whereas revenue for sofa and seats is likely to see a steeper increase by reaching €27,816 million by 2015, which is a 14% increase from the 2012 revenue.

Figure A80. Mattresses sales revenue in million euro (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), November 2020

Figure A81. Sofa and seats revenue in million euro (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), November 2020

A6.5 Overview of the Mobility equipment market

Despite a contraction of the market due to rising global tensions, the European Union has remained the world's second-largest producer of passenger cars, increasing its global market share from 20.5% in 2018 to 21.3% in 2019. In 2019, the car industry contributed €71 billion to the EU's trade surplus. However, the outlook for the years following 2020, has changed dramatically, as the COVID-19 crisis forced governments to take extreme preventive measures, which prompted the shutting down of large areas of the economy.[151]

The reduction in new car sales volumes following the economic recession is estimated to be a short-term driver of aftermarket sales, as consumers will most probably hold on to their vehicles for longer but older cars will require more repair and maintenance, which will prompt the development of the aftermarket services.[152]

Reports show that, in terms of trends that will influence the evolution of the automotive industry, it is expected that autonomous and shared mobility will expand greatly by 2030. Moreover, new car sales may rise globally, and it is estimated that 55% of all new car sales in Europe may be fully electrified by 2030. Personal mileage is estimated to rise by 23% by 2030 to 5.88 trillion kilometres in Europe and the usage intensity and service life of vehicles is likely to shift dramatically as a result of electrification and sharing.[153]

As regards consumers' opinion, the 'automotive goods' markets were among the poorest performing goods market in the EU 2018 consumer market scoreboard. Their overall score on 'trust', 'expectations', 'choice' and 'comparability' is poor and the reported detriment in the 'automotive goods' cluster was also considerable. The market for second-hand cars in particular was by far the lowest ranked goods market.[154] A study shows that in 2014 two-fifths (41%) of consumers reported experiencing at least one problem within a year of buying their second hand car and the overall consumer detriment for problems that occurred within 1 year of purchase was estimated between 1.9 and 4.1€ billion.[155]

Although sales in passenger cars were on an upward trend since 2013, they are expected to drop in the years following the 2020 disruptions in the market, however, sales are expected to start rising again beginning with years 2022-2023 (Figure A82).

[151] ACEA, 2020, Economic and Market Report EU Automotive Industry Full-year 2019, available at https://www.acea.be/statistics/article/economic-and-market-report-state-of-the-eu-auto-industry-full-year-2019

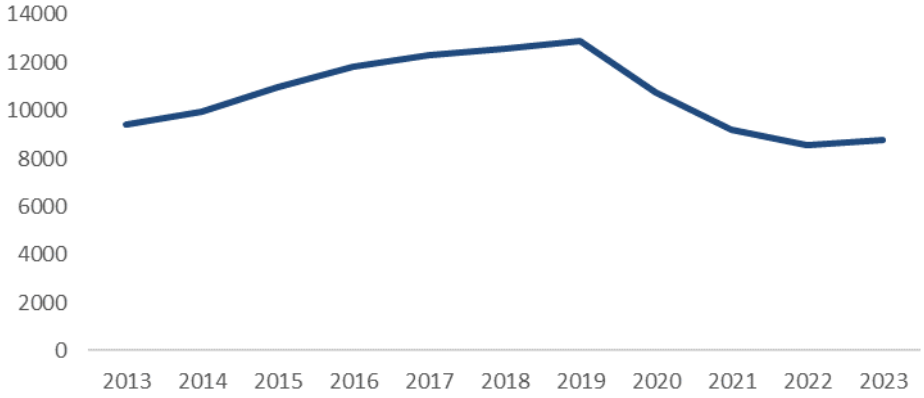
[152] European Commission, 2014, Study on the operation of the system of access to vehicle repair and maintenance information

[153] PwC, 2018, Five trends transforming the Automotive industry, available at https://eu-smartcities.eu/sites/default/files/2018-03/pwc-five-trends-transforming-the-automotive-industry.compressed.pdf

[154] European Commission, 2018, Consumer Markets Scoreboard: making markets work for consumers - 2018 edition

[155] European Commission, 2014, Study on the second-hand cars market

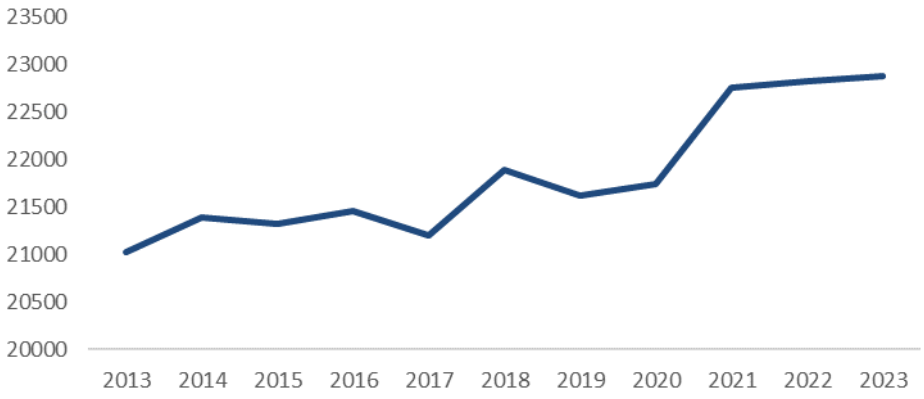
Figure A82. Passenger cars sales in thousands of units (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), September 2020

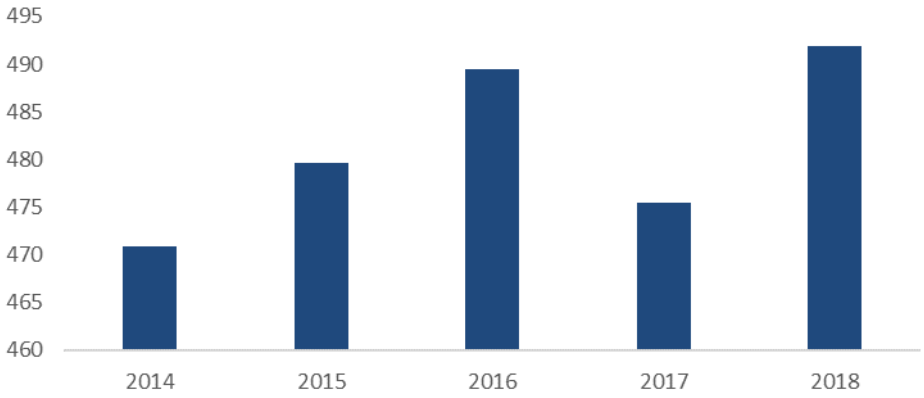
Figure A83 shows that the average price of a passenger car has been increasing over the years and is expected to amount to more than €22,000 by 2023. The number of passenger cars per 1,000 EU inhabitants is also on the rise, amounting to an average of 492 passenger cars in 2018 (Figure A84).

Figure A83. Passenger cars average price per unit (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), September 2020

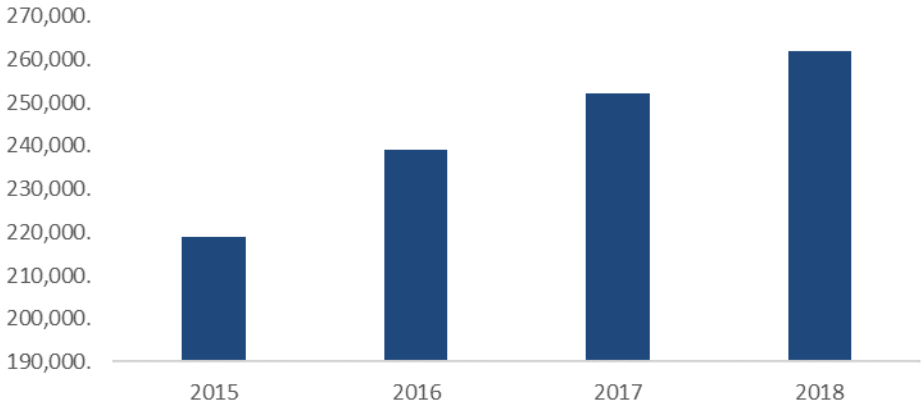
Figure A84. Passenger cars per 1 000 inhabitants (EU27 2020)



Source: Eurostat, ICF calculations

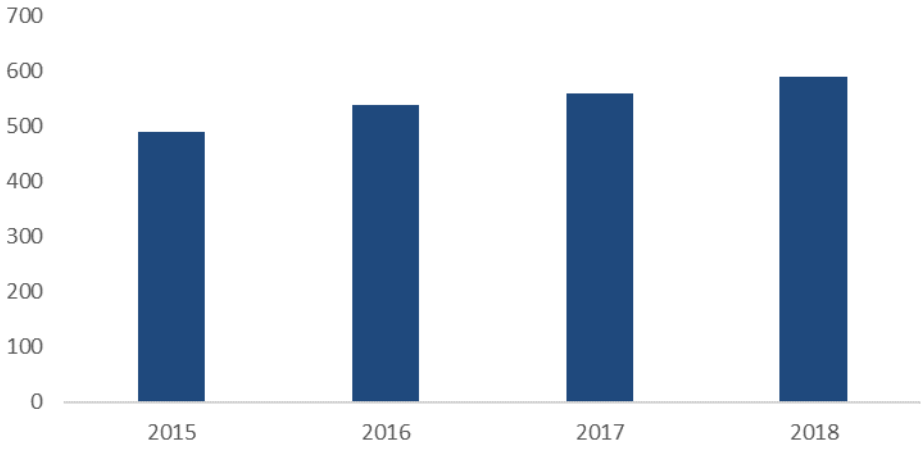
Both the total consumption expenditure of household and its value per capita have been constantly increasing from 2015 to 2018. The final consumption expenditure of households on the purchase of vehicles has increased with 19% between 2015 and 2018, reaching 262 billion euro in 2018 and a value of €590 per capita (Figure A85 and Figure A86).

Figure A85. Final consumption expenditure of household on purchase of vehicles in million euro, current prices (EU27 2020)



Source: Eurostat

Figure A86. Final consumption expenditure of household on purchase of vehicles in euro per capita, current prices (EU27 2020)

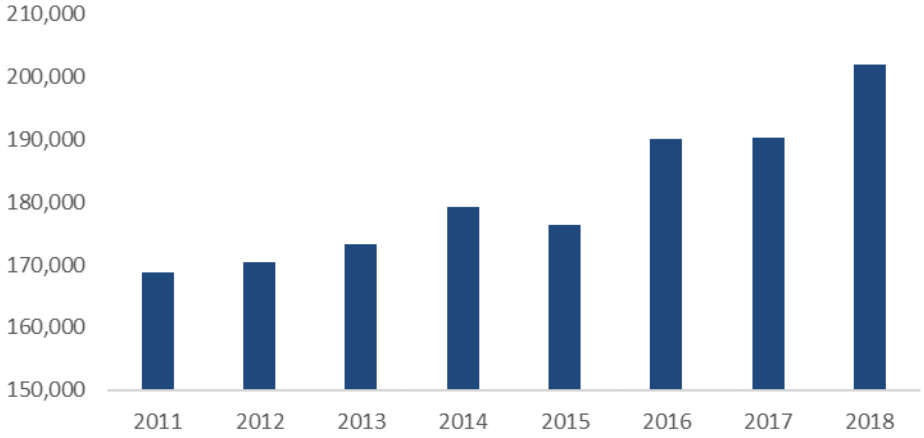


Source: Eurostat

The number of enterprises involved in the sale of cars and light motor vehicles has increased by 19% between 2011 and 2018 (Figure A87). The same rising trend can also be observed in the production sector, where the production value has reached more than €146 billion in 2018 (Figure A88).

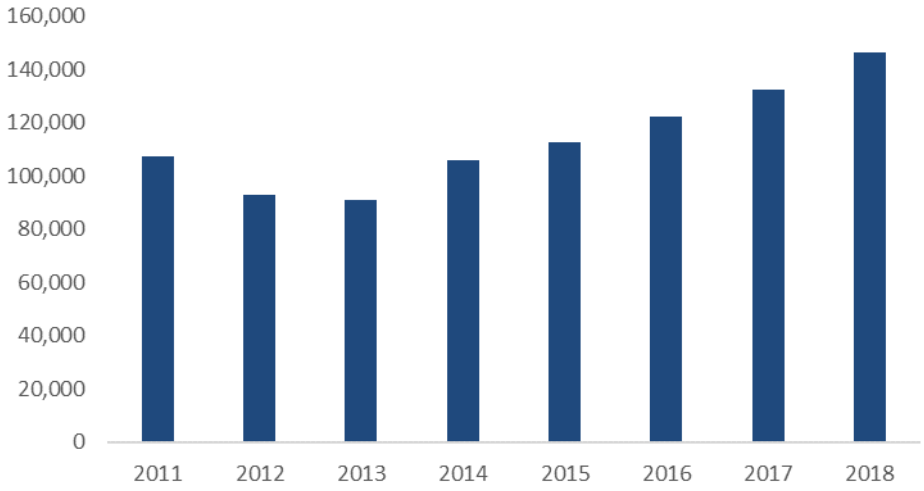
Employment in the sale of cars and light motor vehicles is considerably rising. In 2018, this sector employed more than 1,301,000 in the EU27 (Figure A89).

Figure A87. Number of enterprises in the sale of cars and light motor vehicles



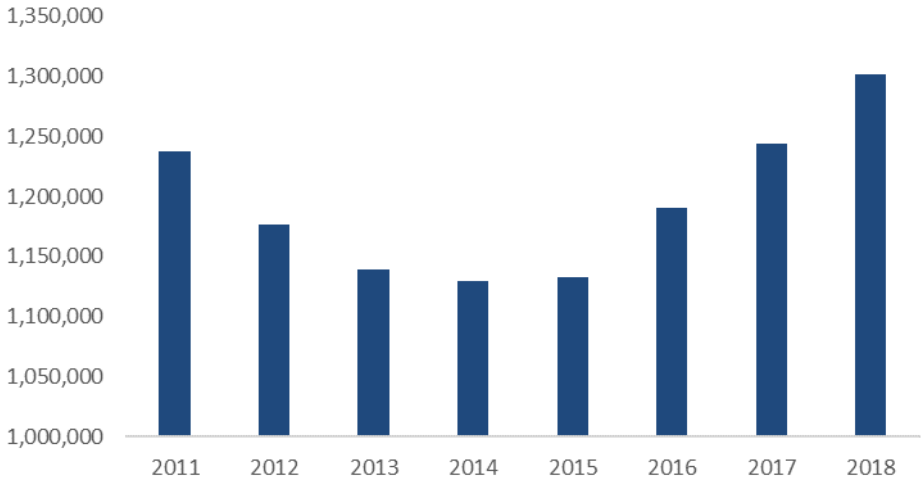
Source: Eurostat

Figure A88. Production value in million euro for sale of cars and light motor vehicles



Source: Eurostat

Figure A89. Persons employed in the sale of cars and light motor vehicles



Source: Eurostat

A6.6 Overview of the Clothes and footwear market

Textiles and clothing is a diverse sector that plays an important role in the European manufacturing industry. According to EURATEX (the European Apparel and Textile Confederation), the overall European textiles and clothing market employs 1.5 million people and the existing 160,000 companies generate a turnover of €162 billion.[156]

The textile and clothing sector is an important industry in Europe, accounting for a 3% share of value added and a 6% share of employment in total manufacturing in Europe. The largest producers in the industry are Italy, France, Germany, and Spain. Together, they account for about 3 quarters of EU production.[157]

Imports of clothing in the EU are significant, as a large part of the global production in the fashion industry is located in Asian countries. The EU Member States imported clothes worth €154 billion in 2019, of which 52% came from non-EU Member States and amounted to €80 billion. Over the last decade, imports of clothing to the EU Member States increased in value by 62%. As regards export, out of the €115 billion worth of clothes that were exported by the EU Member States, 69% (€79 billion) of them went to other EU Member States.[158]

Consumption expenditure of households in clothing and footwear has experienced a slight decrease from 4.9% of total final expenditure in 2011 to 4.6% in 2018 (Figure A7).

In the past years, the sector has experienced increased competitiveness, technological changes or the evolution of production costs.[159] Due to the impact of the COVID-19 pandemic, it is expected apparel consumption in the EU drops by 45% in 2020.[160]

Volume in the market of clothes and footwear is expected to slightly increase and reach more than 28 billion units by 2050. However, the footwear market is estimated to remain relatively static, even through years 2020-2021 (Figure A90).

As regards the volume of clothes and footwear per capita, it is expected that by 2050, clothes will amount to 60 units per capita while footwear will represent approximately 5 units per capita (Figure A91).

[156] EURATEX, https://euratex.eu/

[157] Textiles and clothing in the EU, https://ec.europa.eu/growth/sectors/fashion/textiles-clothing/eu_en

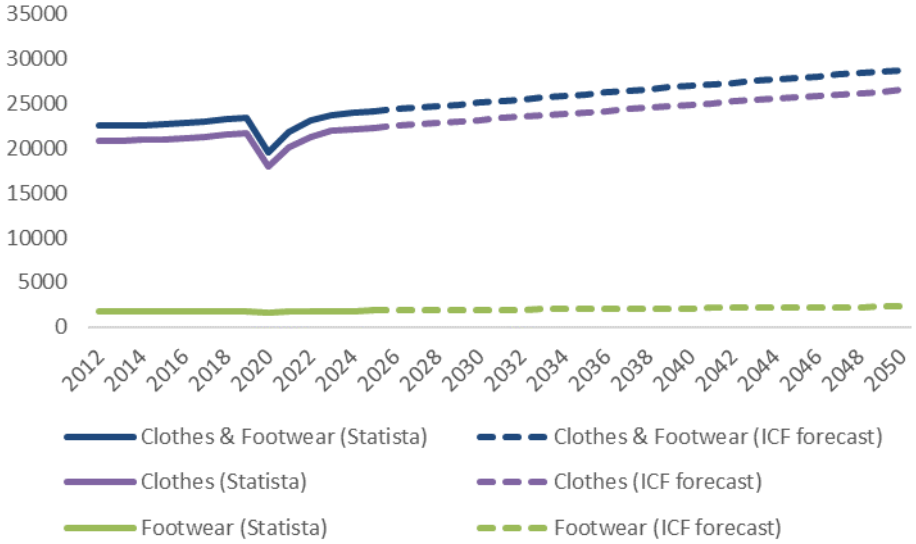
[158] Eurostat, 2020, Where do our clothes come from?, available at https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/EDN-20200424-1

[159] Apparel Retail in Europe https://www.researchandmarkets.com/reports/2093809/apparel_retail_in_europe

[160] Wazir advisors, The Big Fall: EU and the US Apparel Consumption to Reduce

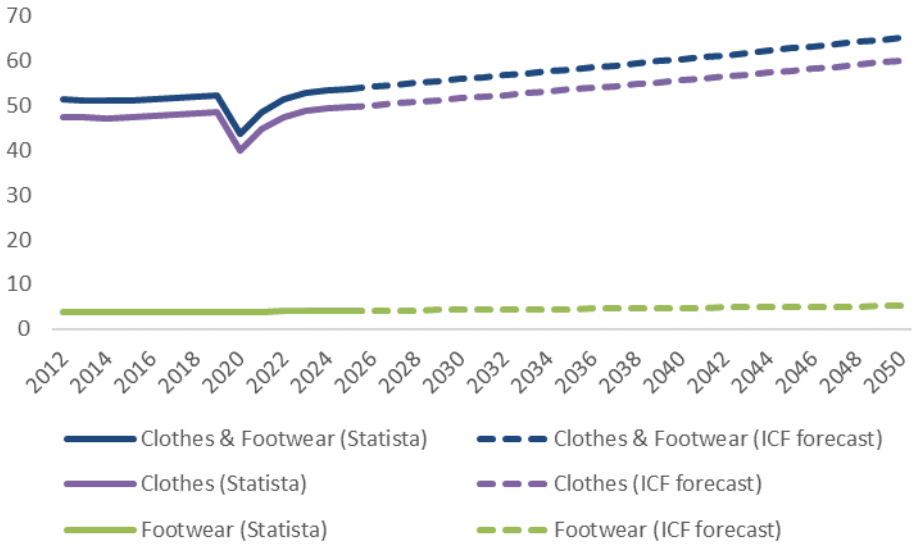
by US$ 300 bn. Available at https://wazir.in/pdf/Wazir%20Report%20-%20The%20Big%20Fall%20-%20Impact%20of%20COVID-19%20on%20EU%20and%20US%20Apparel%20Market.pdf

Figure A90. Clothes and footwear volume in million units (EU27 2020)



Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression. Footwear is comprised of sneakers, athletic footwear, leather footwear and textile & other footwear.

Figure A91. Clothes and footwear volume per capita in units (EU27 2020)

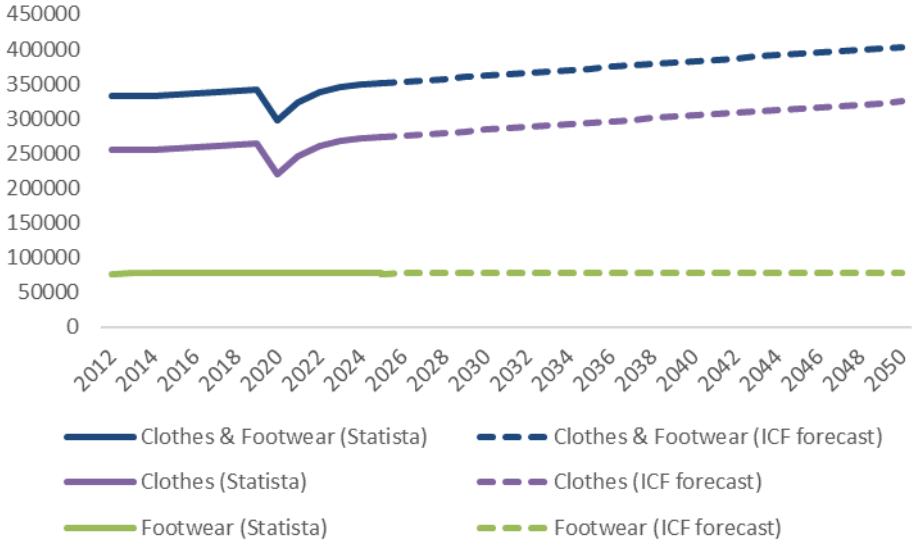


Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Revenue in the market of clothes and footwear in expected to slightly but constantly increase up to 2050 when it will amount to more than €403 billion (Figure A92).

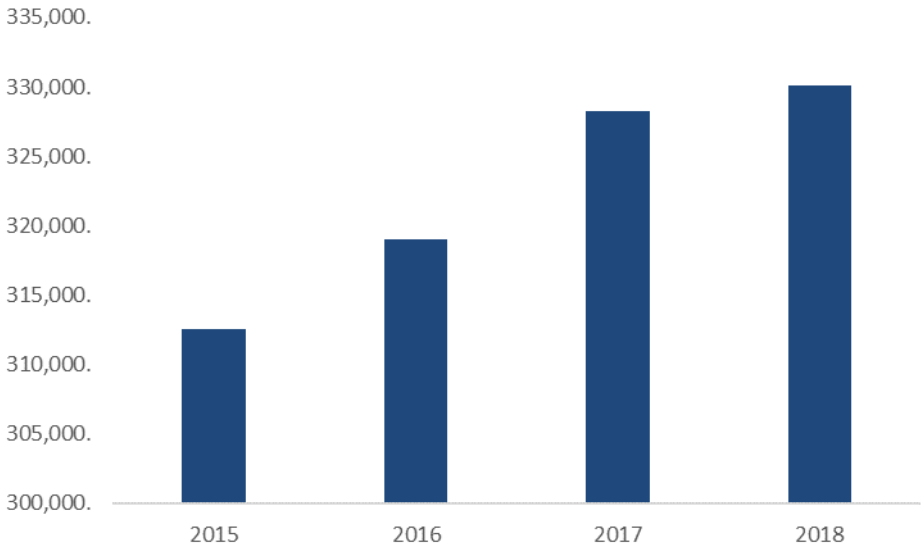
The final consumption expenditure of households has also been increasing between 2015 to 2018 with more than 5.5% (Figure A93). In 2018, the average cost per capita for clothes and footwear amounted to €740 per capita (Figure A94).

Figure A92. Clothes and footwear revenue in million euro (EU27 2020)



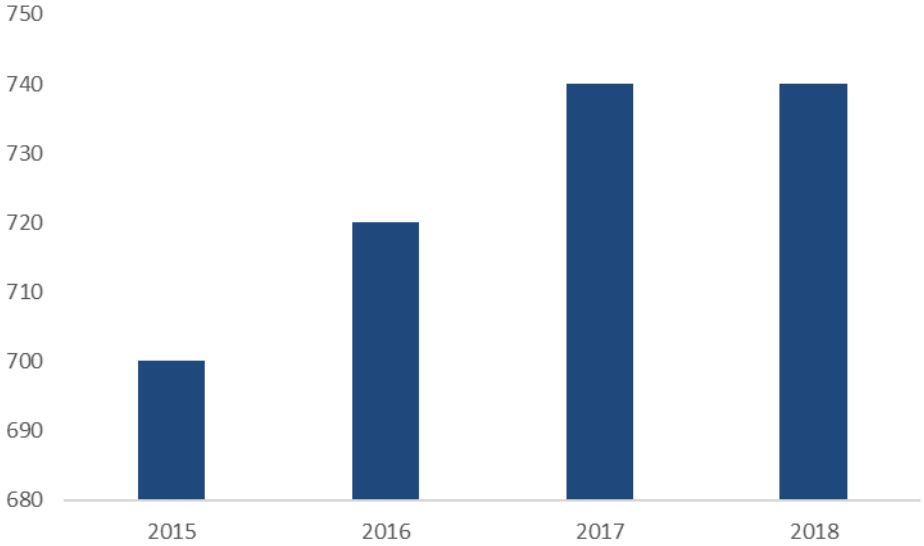
Source: Statista (Forecast adjusted for expected impact of COVID-19), ICF forecast based on linear regression

Figure A93. Final consumption expenditure of household in million euro (EU27 2020)



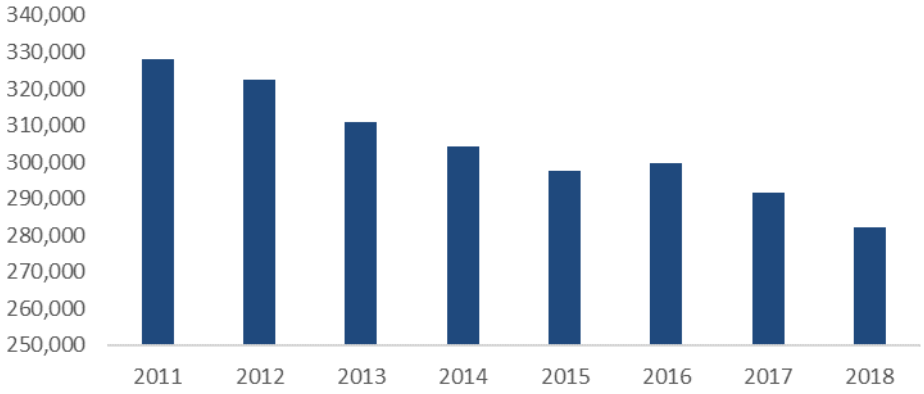
Source: Eurostat, data for clothing and footwear

Figure A94. Final consumption expenditure, euro per capita, current prices



Source: Eurostat, data for clothing and footwear

Figure A95. Number of enterprises in the retail sale of clothing in specialised stores (EU27 2020)

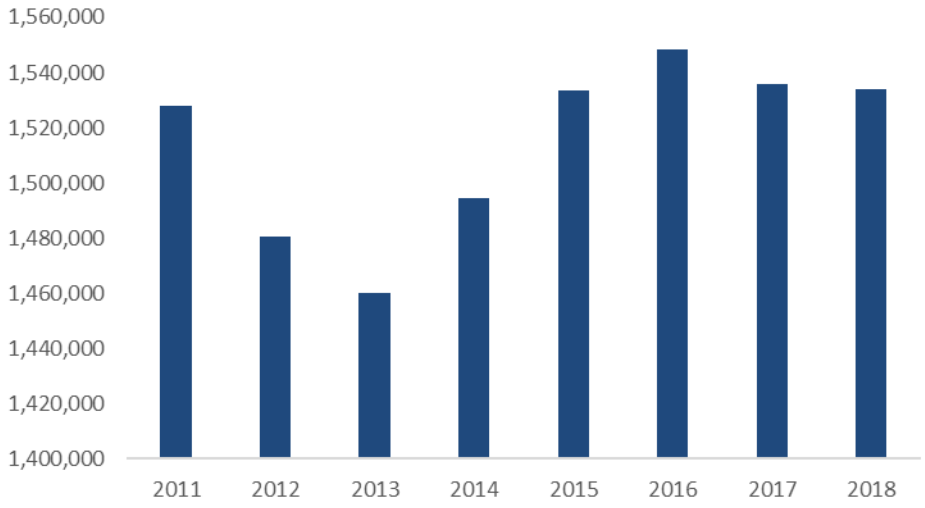


Source: Eurostat

The retail sector for clothing is a very important part of the clothing and footwear industry, as it was comprised of more than 282,000 of enterprises in 2018. However, the number of enterprises has significantly decreased over the years from 327,961 in 2011 (Figure A95). The same retail sector employed more than 1,5 million people in 2018 (Figure A96).

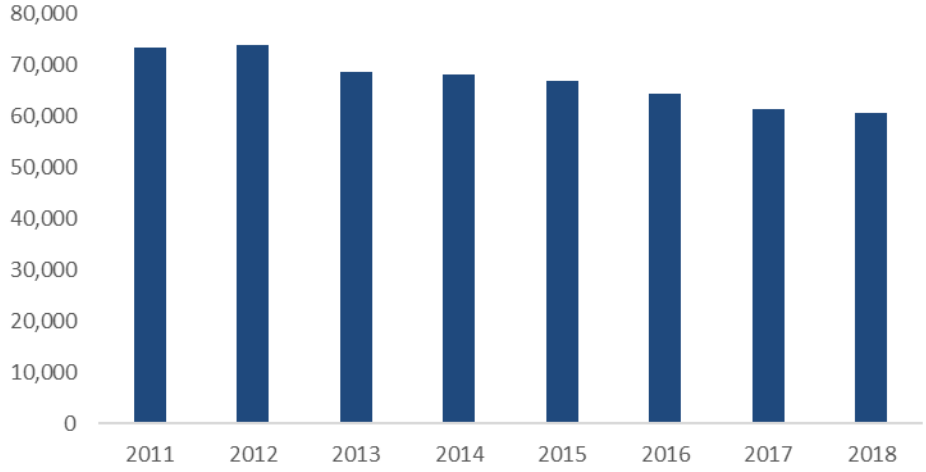
The retail sector for footwear and leather goods is considerably smaller, but in 2018 it was comprised of 60,782 enterprises (Figure A97) and employed more than 350,725 people (Figure A98).

Figure A96. Number of persons employed in the retail sale of clothing in specialised stores (EU27 2020)



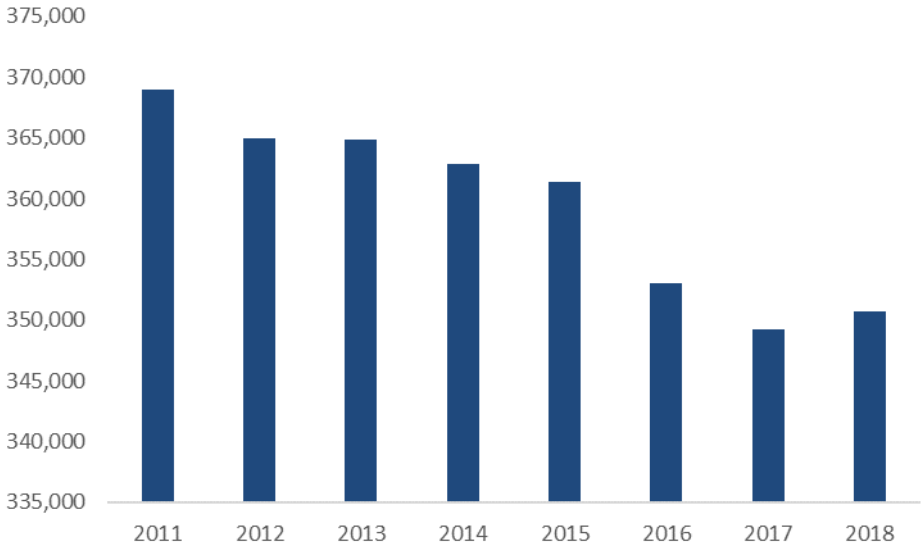
Source: Eurostat

Figure A97. Number of enterprises in the retail sale of footwear and leather goods in specialised stores (EU27 2020)



Source: Eurostat

Figure A98. Number of persons employed in the retail sale of footwear and leather goods in specialised stores (EU27 2020)



Source: Eurostat

Annex 7. Stakeholder Synopsis Report

A7.1 Introduction and overview of the consultation strategy

The goal of the consultation strategy was to ensure that, across a series of consultation activities, all relevant stakeholders were given an opportunity to express their views on the initiative aimed at empowering consumers in the green transition. The primary stakeholders of this initiative are consumers and businesses (producers and retailers) across the EU. However, besides these two, other stakeholders are indirectly or potentially impacted. As such, the following stakeholder categories were targeted as part of the consultation strategy:

- Consumers (including vulnerable ones);
- Producers (both large companies and SMEs);
- Retailers (both large companies and SMEs);
- Trade, business, and professional associations representing producers and retailers and also repair sector;
- Consumer organisations and groups, organisations of persons with disabilities and older persons;
- Non-governmental organisations (including representing social, environment and other interests), platforms and networks;
- Certification and labelling schemes;
- Local, national, and international public authorities;
- Researchers and academics;
- Other public or mixed entities;
- Commission expert groups.

The consultation employed a mix of methods and tools to ensure a comprehensive and representative collection of views and experiences were gathered in relation to the problems aimed to be addressed by the initiative and the possible policy measures.

A7.2 Consultation activities and tools

The table on the following page summarises the types and numbers of stakeholders consulted as part of the study, in line with the consultation strategy.

Table A4. Summary of consultation activities and response rates

Stakeholder type	Feedback on the Inception Impact Assessment	Open Public Consultation	Targeted stakeholder consultations (Interviews and surveys)	Industry survey (Long-survey/interviews)	Industry survey (CATI survey)	Consumer survey
Business associations	23	85	21	-	-	-
Companies/business organisations	17	48	-	10	164	-
Consumer organisations	3	20	21	-	-	-
Public authorities	5	37	47	-	-	-
EU citizens/consumers	3	74	-	-	-	11,805
Academic/research institutions	2	9	-	-	-	-
NGOs	19	28	12	-	-	-
Environmental organisations	2	-	-	-	-	-
Other[161]	3	14	18	-	-	-
Total	**77**	**315**	**119**	**10**	**164**	**11,805**

[161] Includes non-EU citizens

The main consultation activities that were conducted were as follows:

- A **consultation on the inception IA**, which was carried out by the Commission between 23 June 2020 and 1 September 2020. The purpose of this exercise was to collect views from stakeholders on the Commission's initially intended direction of the impact assessment. In all, 77 entities submitted their feedback.
- An Open Public **Consultation (OPC)** that was open to all stakeholders and which included six main questions on the main obstacles and problems faced by consumers in the EU that prevents them from having a more active role in the green transition. The OPC was conducted by the Commission between 30 June 2020 and 6 October 2020. It received 315 responses.[162] .
- **Targeted stakeholder consultations**, consisting of interviews and surveys, which were conducted with relevant EU and Member State level stakeholders between June and October 2020. Five targeted questionnaires[163] and targeted interviews gathered feedback on the relevant aspects of the initiative and elements of the impact assessment. In all, 119 stakeholders participated.
- An **industry survey** consisting of (i) **a long online survey** that was distributed to more than 500 companies but which, despite all efforts, only yielded 10 responses (seven from manufacturers and three from retailers) and (ii) **a CATI survey** which was conducted to complement the online survey in view of the low response rate. The CATI survey was conducted in August/September 2020 and gathered responses from 164 companies. The CATI survey focussed on the impact and cost on industry of the different possible policy measures.
- A **consumer survey** that ran between 6 and 30 August 2020 and which was targeted at consumers across all EU27 Member States plus the UK. A total of 11,805 consumers participated. The survey consisted of 45 questions covering respondents views on the problems and measures covered by the initiative; experiences related to failures of goods from various categories; experiences with goods that did not last as long as expected; willingness to pay for information on durability and reparability and for goods that will last longer or that are easier to repair; behaviour related to and willingness to pay for sustainable products.
- A series of **four workshops**, including (i) **an expert workshop** with 10 independent experts, held on 9 July 2020; (ii) a workshop with 39 industry representatives to discuss the use of **digital means** to provide product information to consumers, held on 14 September 2020; (iii) a **stakeholder workshop** open to all stakeholders which involved 72 participants (from consumer associations, NGOs, industry associations and others) on 6 October 2020; and (iv) a **workshop with CPC authorities** on 14 October 2020 to delve into their experience in enforcement relating to green issues under EU consumer law, in particular greenwashing and premature obsolescence practices as well as on possible improvements.

A7.3 Evidence, sources and quality

A7.3.1 Inception Impact Assessment

An Inception Impact Assessment (IA) for an initiative 'Empowering the consumer for the green transition' was published on the Commission's website on 23 June 2020 and feedback from consumers, industry and other stakeholders was invited until 1 September 2020. In total, 77 responses were received, the majority from business associations (30%), NGOs (25%) and companies/business organisations (22%). Limited

[162] A summary is available via the European Commission's 'Have Your Say' website: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12467-Empowering-the-consumer-for-the-green-transition

[163] Consumer associations, NGOs and other entities; Business associations; Logos/labels, digital information tools and certification schemes; Public bodies; EU and international entities.

feedback was also received from public authorities (6%), consumer organisations (4%), EU citizens (4%), academic/research institutions (3%), environmental organisations (3%) and others (4%). The responses are publicly available.[164]

A7.3.2 Methodology and tools used to process the data

The industry survey was originally intended to be a long online survey with follow-up interviews. Over 500 companies were contacted through various means, but despite significant effort, only ten replied. In view of the low response rate, a CATI survey was launched. This yielded a higher level of participation, with 164 replies from: retailers (50%), manufacturers (40%) and service providers (14%). To ensure maximum coverage and geographical balance, the survey was conducted across five markets: Italy (24%), Poland (22%), France (20%), Germany (18%) and Sweden (16%). The industry CATI survey was carried out on an anonymous basis and results were processed and comprehensively analysed.

The targeted consultation was based on (i) a semi-structured questionnaires (interviews) and (ii) an online questionnaire (survey). Stakeholders were selected based on their role and relevance to the study as per the consultation strategy. Careful attention was given to ensure a balanced representation between Member States and stakeholder categories. There were 119 respondents; over a third (37%) represented national authorities/bodies, 18% EU and national consumer organisations, 18% EU and national industry/business associations, 15% other stakeholders involved with labels, digital information tools and other certification schemes, 10% other NGOs and research organisations and 3% EU and international authorities. The number of stakeholders initially contacted was significantly higher than the final numbers surveyed and interviewed, which may be the result of some 'stakeholder fatigue' and unavailability due to challenges related to Covid-19 and the timing of the consultation which ran during the summer period. The targeted consultation was supposed to end by mid-August 2020 but the deadline was gradually extended (to October 2020) to allow more stakeholders to respond.

The OPC yielded a relatively high response rate (315 replies). Nearly three quarters (73%) of the company/business organisations that responded were SMEs. 25% of the respondents were from Belgium, 15% from Germany, 9% from France and 6% from Italy. 5% of the respondents from outside the EU27. The consumer survey, with 1,805 participants, also yielded a good result. The survey sample was representative of the EU27+UK population with a confidence level of 99%. The composition of the survey sample reflects the population in terms of share, age group and gender. The consumer survey was also undertaken on an anonymous basis and the results have been comprehensively processed and analysed.

The workshops provided an opportunity to validate the findings from the earlier consultation activities and to ensure the robustness of the results.

A7.3.3 Main stakeholder feedback per consultation activity

The results from the consultation have been fed into the wider study, both to substantiate the assessment of the problems and for the assessment of possible solutions. The main feedback, per strand of consultation, is described concisely below. The main results per problem and per possible measure/policy intervention are presented in more detail in Section 5.

A7.3.3.1 Inception Impact Assessment

Feedback on the proposed EU initiative was generally very positive and most respondents believed it would help, over the longer term, to foster more sustainable behaviours. There was particularly strong support for EU action capable of (i) bringing

[164] See: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12467-Empowering-the-consumer-for-the-green-transition

about a common/harmonised approach to the provision of consumer information and (ii) removing unsustainable products from EU markets by, for example, making it easy for consumers to recognise such products. There was support for limiting the proliferation of environmental labels and claims to build credibility and limit confusion among consumers. Opinions were divided on the various options presented, with stakeholders showing a slight preference for Option 2 ("a new stand-alone consumer protection instrument") over Option 1 ("amend existing consumer protection legislation") and over a combination of both Options 1 and 2.

A7.3.3.2 Open Public Consultation

'Difficulty to verify the reliability of environmental claims (including climate related) on products' was identified as the biggest obstacle to enhanced consumer participation in the circular economy and towards a more sustainable consumption behaviour, though the extent to which this poses a barrier was perceived differently among stakeholder groups (58% of consumer organisations agreed, versus 23% of company/business organisations). The perception that environmentally-friendly products are more expensive was also identified as an important obstacle.

A large share of respondents (44%) had found it too expensive to repair (or cheaper to replace) products; thought there was a significant divergence in views among stakeholder groups. 76% of consumer organisations identified cost as a main barrier to repair, but only 12% of business associations agreed. Common problems that stakeholders had encountered when trying to repair products themselves included the price of spare parts being too high (23%), lack of user-friendly repair manuals (22%) and components being impossible to repair due to their product design (22%).

Most respondents had experienced the unexpected failure of a product in the last three years (24% had not). ICT products were identified as most problematic (47%), followed by small household appliances (20%) and clothing and footwear (19%).

'Information about the reparability of the product' was identified as the measure most useful to enable consumers to choose more sustainable products and participate in the circular economy (selected by 41%). This was strongly favoured by public authorities (57%) and citizens (54%), but not by companies/business organisations (21%), who instead favoured the provision of 'Information on the product's life-cycle environmental and climate footprint' (56%). This was also rated as the second-best measure overall (39%).

Providing better information on products' durability/lifespan was identified as the best measure to empower consumers for the green transition (33% agreed). This was strongly favoured by consumer organisations (75%) and citizens (52%), but not by company/business organisations (16%) or business associations (14%), who favoured 'Raising awareness about the role of consumers on circular economy and green transition'.

Providing 'Detailed EU guidance for enforcement bodies against greenwashing and obsolescence practices and on enforcing consumer information rules' was identified as the most effective measure to improve enforcement of EU consumer laws to enhance participation of consumers in the green transition (selected by 36%).

A7.3.3.3 Targeted stakeholder consultations

There was a clear split in views between industry representatives on the one hand and consumer organisations, public authorities and 'other' organisations on the other in relation to many of the topics discussed in the targeted consultation.

In relation to Problem 1[165], almost all stakeholders (except those representing industry) concurred with the view that consumers are not given, or do not have access to,

[165] Problem 1: Consumers lack reliable information to make environmentally sustainable purchases.

information on products' environmental impact; on the lifespan of goods and product-specific features that may lead to early failure; and on the availability of repair services spare parts and software updates/upgrades.

When quizzed on the likely effectiveness of the various possible policy interventions to address these problems, the following four measures were identified as being particularly effective across all stakeholder groups:[166] Measure I (which would involve the introduction of a minimum period within which companies must make updates available to keep products secure and functional after sale and as an extension of the existing requirement for sellers under the Sale of Goods Directive); Measure J (to reduce barriers to third-party repair services); Measure K (which would ensure products are designed in a way that they can easily be repaired); and Measure L (which would ensure that all key components of a product are easily accessible). When asked about the possible impact on costs, most business associations rated the impact of the measures as moderate to high (depending on the measure).

In relation to Problem 2[167], most consumer organisations and 'other' organisations considered that consumers' are subjected to 'greenwashing' and that 'premature obsolescence' occurs to some extent; however, representatives from industry tended to disagree. The proliferation of sustainability labels was also identified as a problem by stakeholders from most stakeholder groups, and again most industry representatives disagreed.

When asked about possible solutions to Problem 2, the general consensus among respondents (weighed up across all groups) was that Measure P (which would involve the introduction of a ban on broad/vague/general environmental claims in commercial communications unless they are verified/certified by an independent body and/or based on a recognised methodology) would be the most effective. Consumer organisations thought that Measure N would be most effective, while business associations generally seemed to favour Measure T (which would involve setting minimum requirements for digital information tools) and Measure R (which would introduce EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint)).

A7.3.3.4 Industry survey

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact and cost on their organisation of the introduction of various legal requirements. Respondents were asked to provide a score on a scale of 0 to 5, where 0 represents 'no impact' and 5 indicates 'very high impact'. Overall, it was indicated that an obligation to 'Provide information on aspects in the product's design that can cause its early failure' would have the biggest impact (mean score of 2.61) and would be most costly (mean cost score of 2.25). In contrast, respondents indicated that 'Stronger consumer protection against planned (intentional) obsolescence practices' would have the lowest impact (scored 2.37) and that an 'Obligation to provide information on the duration of the commercial guarantee for all products' and an 'Obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product' would be least costly (both with a mean cost score of 2.44).

A7.3.3.5 Consumer survey

Consumers are seemingly open to participating in the green transition. Almost half (49%) said they would be happy to have a product repaired, rather than replaced, if it breaks down within the legal guarantee period; mainly 'To reduce my environmental impact' (selected by 63%) or because 'It is the fair thing to do (44%). Respondents who

[166] A larger share of participants identified them as 'Highly effective' versus 'Somewhat effective', or 'Not effective'

[167] Problem 2: Consumers face misleading practices in relation to sustainable purchases.

preferred a replacement were concerned that the product may not be properly repaired (54%) or that a new product would last longer (46%).

Most respondents were unwilling to pay for information (e.g. via an app) on the durability and reparability of 'durable goods'[168]. Around half (47% to 51% depending on the product type) were willing to pay extra on top of the initial price for a product that lasts longer without having to be repaired; and a similar proportion (41% to 47%) were willing to pay extra for an identical product that lasts longer with minor/reasonable repairs (paid by the consumer). An even larger share (61% to 68%) were willing to pay extra for an identical product covered by a commercial guarantee that would cover the cost of repairs. For clothing and footwear, respondents were willing to pay on average 8.49% extra for a commitment from the seller to repair the product without charge for a set number of years after purchase.

The 'Perceived higher price of environmentally-friendly products' was identified as the main obstacle that prevents consumers from adopting more sustainable behaviours (39%) and 'Providing better information on products' durability/lifespan' (26%) and 'Providing better consumer information on the life-cycle environmental and climate footprint of the product' (23%) were identified as the most effective measures to help consumers choose more environmentally sustainable products.

Results indicate that consumers are willing to pay extra for environmentally sustainable products/services, and even more so for products with claims validated by a trustworthy independent body.

A7.3.3.5 Workshops

The expert workshop (held 9 July 2020) validated many of the findings from the other strands of consultation. It was largely agreed that green washing occurs and that information on product durability can be difficult to obtain. Doubts were raised that products are intentionally designed to fail early. Various barriers to reparability were identified including speed of repair, cultural factors and availability of spare parts.

The industry workshop on digital means (held 14 September 2020) highlighted some of the opportunities that digital tools (e.g. QR codes, e-labels) offer for conveying mandatory product information and simplifying product labels. It also highlighted some of the challenges, particularly for SMEs who may need financial support to implement these tools and for vulnerable consumers who do not have access to, or who cannot use, them.

The stakeholder workshop (held 6 October 2020) again reiterated many of the same points that were raised in the previous consultation activities.

Participants at the CPC workshop (14 October 2020) highlighted the difficulty of proving intent with regard to planned obsolescence. Public authorities noted that they lack the technical expertise to be able to enforce green claims, but were divided on whether enforcement of the current general EU consumer rules (UCPD) is effective.

[168] In this context, durable goods include products such as large household appliances (e.g. washing machines, refrigerators, etc.), small household appliances and tools (e.g. coffee machines, irons, hair dryers, etc), electronic and IT products (e.g. smartphones, laptops) and furniture (e.g. sofas).

A7.4 Feeding the consultation results into the Impact Assessment

A7.4.1 Extent of the problems

A7.4.1.1 Problem 1: Consumers lack reliable information to make environmentally sustainable purchases

A7.4.1.1.1 Sub-problem 1.1. Lack of reliable information about products' environmental characteristics

Feedback received across the various strands of consultation strongly indicates that consumers lack information on the environmental characteristics and impacts of products, though this view was more strongly supported among consumers and their representatives than by industry.

In the consultation on the inception IA, 20 respondents (26%) commented on this problem and all acknowledged that the quality of information provided to consumers on the environmental characteristics of products is not optimal. A notable share (27%) of respondents in the OPC similarly indicated that it is difficult to check if products are environmentally friendly; though a much larger share of consumers (31%) and consumer organisations (42%) identified this as a problem versus companies (32%) and business associations (13%).

About a quarter of consumers that participated in the consumer survey identified "*difficulty to check if products are environmentally-friendly*" (29%) and "*difficulty to verify the reliability of environmental claims (including climate related) on products*" (25%) as key obstacles that prevent them from adopting more sustainable consumption behaviours. Only "*perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives*" was identified as a greater obstacle (39%). The OPC yielded a similar result, with "*difficulty to verify the reliability of environmental claims (including climate related) on products"* ranked first (33% respondents) and "*perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives*" ranked second (30%), though "*difficulty to check if products are environmentally-friendly*" was ranked fifth (27%).

The feedback from the targeted consultation also concurs. In the targeted consultation, most (76%) respondents indicated that consumers lack awareness of the environmental impacts of products because the information is not provided, or not available. Only 14% (all industry associations) indicated that such information is generally provided. Results from the CATI survey, however, paint a somewhat different picture. In the CATI survey, only 19% of respondents reporting providing information on the environmental impacts of their products/services for all products/services (48% for some or most). In the food and drink sector, which was the worst performing overall, 64% said that they do not provide this information at all.

A7.4.1.1.2 Sub-problem 1.2. Lack of reliable information on products' lifespan

A lack of information on the lifespan of goods was consistently identified as a problem across all strands of consultation. The problem was identified across most stakeholder groups; only stakeholders from industry tended to disagree.

In the consultation for the inception IA, all eight of the respondents who commented on sub-problem 1.2 acknowledged that information pertaining to products' durability is either lacking or, where provided, is often unclear, unreliable and/or misleading. Similarly, in the OPC, over a quarter (27%) of respondents indicated that a lack of information on how long products will function without repair creates an obstacle to enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour. There was, however, a strong divergence in views among the different stakeholder groups that participated in the OPC. Consumer associations (53%), academic/research institutions (44%), public authorities (39%), NGOs (37%) and citizens (33%) on the one hand all thought that the lack of information on the lifespan

of goods poses an important barrier to the green transition, but this was not the case for companies/businesses (15%) or business associations (8%).

Consumers believe that information on the lifespan of products is important for empowering their participation. In the consumer survey, "*information on a 'guaranteed' product's lifespan*" was identified by nearly a third (30%) of respondents as being one of the most useful pieces of information to enable them to choose more sustainable products.[169] However, when asked in detail whether they had received information on products' lifespans, a large proportion of respondents said 'no'. When buying large household appliances (49%), small household appliances (45%), electronic and IT products (55%), and furniture (51%), around half of consumers were not told the estimated lifespan of the product before being repaired and a substantial proportion (17% to 25% depending on the product group) were not told the length of the commercial guarantee. Furniture was consistently the product category where the least information was provided to purchasers.

The CATI survey sought to explore in more depth whether manufacturers provide information on the expected lifespan of their products. Less than a quarter (23%) said that they provide this information for 'all products' and only 6% said yes 'for most'. In contrast, nearly a third (32%) of manufacturers did not know the expected lifespan of their products and a further 17% said that they do not provide this information. The results from the CATI survey indicate that this information deficit is not being met by retailers either. Only 15% of retailers always provide information on the expected lifespan of products, where this information is not provided by the manufacturer. Just over half (59%) of retailers provide this information for some products.

The results from the targeted consultation support the findings from the consultation for the inception IA, consumer survey, OPC and CATI survey. In the targeted consultation, most stakeholders considered that consumers are not provided with information on either the lifespan of goods (without and with minor repairs) or any known product-specific features that may lead to early product failure.

A8.4.1.1.3 Sub-problem 1.3. Lack of reliable information about products' reparability

A lack of information to support the repair, update and upgrade of products was consistently identified as problematic by consumers, their representatives and most other groups of stakeholders during the consultation. Contrary to this, representatives from industry mostly indicated that information on reparability is widely available.

In the consumer survey, around half of consumers said that they were not told how long spare parts would remain available (48% to 55% depending on the product group) and a similar proportion (49% to 55%) were not told how long software updates and upgrades would be provided. Results from the targeted consultation coincide with this finding. Almost all consumer associations and other organisations consulted during the targeted consultation considered that information on the availability of repair services, on the availability of spare parts and on relevant software update/upgrades is not widely available to consumers. This finding also corroborates the information gathered in the earlier consultation for the inception IA, where most respondents acknowledged that consumers are not sufficiently made aware of products' extent of reparability. Similarly, in the OPC, 33% of citizens, 53% of consumer organisations and 39% of public authorities ranked '*difficulty to know how long products will function without repair*' as an important obstacle to enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour.

The view from industry was somewhat different, however. In the OPC, only 8% of business associations and 15% of company/business organisations thought that a '*difficulty to know how long products will function without repair*' creates an obstacle to

[169] Respondents could select up to 3 out of 15 options.

enhanced consumer participation in the green transition. Similarly, during the targeted consultation, most industry associations felt that information relating to reparability is widely available. Nearly half (45%) of manufacturers in the CATI survey claimed to provide information on the '*period in which spare parts will be available*', 40% said that they provide information on the '*period in which repair services will be available*' and nearly a third (30%) said that they provide information on '*software updates/upgrade policy and period*'.

A7.4.1.2 Problem 2: Consumers face misleading practices preventing them from contributing to the green transition.

A7.4.1.2.1 Sub-problem 2.1. Consumers are sold products that do not last as long as they should or as long as consumers expect

Across the different strands of consultation, most stakeholder groups (including consumers and their representatives, but not those representing industry) considered that premature obsolescence occurs to some extent; though most also believed that product failure is not necessarily planned. Based on feedback in the consultation for the inception IA, planned obsolescence is a practice that has become more commonly discussed over time. However, enforcement authorities were unable to provide any information on how often it occurs.

Product failure appears to be a common problem. In the OPC, most respondents indicated that they had experienced the unexpected failure of one or more products in the past 3 years; with ICT products identified as being most problematic. Nearly half the participants (47%) said that they had experienced the unexpected failure of an ICT product in the last 3 years. All (100%) consumer associations, 73% of public authorities and 66% of companies/businesses said that they had experienced an unexpected product failure in the last 3 years.

Independent experts consulted during the targeted consultation indicated that while products may be failing earlier than they should, this may not be linked to an intention of companies to increase their replacement rate. In the long industry survey, two participants who commented on intentional obsolescence claimed not to apply such practices; though this may not be representative of industry practice as a whole. Industry representatives also questioned whether shorter lifespans are linked solely to the choices of manufacturers, rather than to consumer behaviour, such as poor maintenance and increased use.

1. While most stakeholders were convinced of the existence of obsolescence practices, most also considered them difficult to verify.
2. When asked whether they were told by the seller about known weaknesses that might cause a product to fail prematurely, consumers indicated that sellers generally do not provide this information. Results from the consumer survey indicate that information about potential weaknesses is provided only a quarter of the time (20%) for large household appliances, 30% of the time for small household appliances, 17% of the time for electronics, and 26% of the time in the case of furniture.

A7.4.1.2.2 Sub-problem 2.2. Consumers are faced with the practice of making unclear or poorly substantiated green claims

The view of most respondents across all the different strands of consultation was that greenwashing is a problem; only industry representatives tended to disagree.

In the consultation for the inception IA and the targeted consultation, the majority of participants (except those representing industry) recognised that greenwashing has become an important and persistent problem that is impeding consumers' ability to choose more sustainable products. This coincides with the results from the OPC, in which 33% of respondents selected "*difficulties to verify the reliability of environmental claims (including climate related) on products*" as a relevant obstacle to enhanced consumer

participation in the circular economy and towards more sustainable consumption behaviour. Over half (58%) of consumer organisations and 36% of citizens selected this as a relevant obstacle.

Unfounded or unsubstantiated environmental labels and claims were also identified by various stakeholders (including consumer organisations and public authorities) as misleading consumers. Their feedback indicates that information is deliberately manipulated (e.g. using general and vague terms) rather than being completely false. Industry associations however tended to disagree that the practice of 'greenwashing' is prevalent. Public authorities noted (at the CPC workshop) that they often find it difficult to prove that environmental claims are unfounded or unsubstantiated because they lack the technical knowledge to analyse the evidence provided by traders.

In the consumer survey, 70% of respondents indicated that they would report a misleading or false claim about how environmentally friendly a product or service is. The most common reason cited for not reporting a misleading or false claim was a belief that complaining would not have an impact.

In contrast, most industry representatives disagreed with the assertion that greenwashing is problematic. In the OPC, less than a quarter (24% of business associations and 23% of companies/businesses) selected "*difficulties to verify the reliability of environmental claims (including climate related) on products*" as a relevant obstacle to enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour.

A8.4.1.2.3 Sub-problem 2.3. Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

In the consultation for the inception IA and the targeted consultation, most respondents identified the proliferation of sustainability labels and other claims as an important and persistent problem across the EU. Similarly, in the OPC, over a quarter (27%) of participants selected "*the proliferation and/or lack of transparency/understanding/reliability of sustainability logos/labels on products and services*" as a relevant obstacle to empowering consumers for the green transition. Interestingly though, it was industry representatives that were more likely to identify this as a problem than consumers and their representatives. Moreover, 34% of businesses identified the "*the proliferation and/or lack of transparency / understanding / reliability of sustainability logos / labels*" as an obstacle versus only 27% of citizens and 16% of consumer organisations. In the consumer survey, only 16% of consumers identified this as an obstacle to adopting more sustainable consumption behaviours.[170]

This issue has been amplified by the rapid emergence of a number of (private) labelling schemes at national / Member State level, making comparability across products increasingly difficult for consumers. In addition, there are concerns that *not* all labels are certified or validated (by a recognised institution), which may thus be driving consumers to choose products that are not necessarily "green."

In comparison to issues around labels, far fewer stakeholders identified '*the proliferation and/or lack of transparency/understanding/reliability of IT tools*' as being problematic. In the OPC, only 8% of respondents identified this as an important obstacle and a similar percentage of respondents in the consumer survey (9%) identified the '*Proliferation and/or lack of transparency/understanding/reliability of IT tools (e.g. consumer apps) that provide advice for a more sustainable consumer behaviour*' as an obstacle that prevents them from adopting more sustainable consumption behaviours.

[170] Consumers were limited to selecting up to 3 out of 14 options.

A7.4.2 Views on possible measures/policy interventions

A7.4.2.1 Problem 1: Consumers lack reliable information to make environmentally sustainable purchases

A7.4.2.1.1 Sub-problem 1.1. Lack of reliable information about products' environmental characteristics

In the consultation for the inception IA, most of the 38 respondents who commented on potential solutions to sub-problem 1.1 seemed to favour the idea of making changes to the information requirements surrounding the environmental characteristics of consumer products, though respondents held different views on potential ways to improve consumer information.

In the OPC, 39% of respondents indicated that it would be useful to have information on the product's life-cycle environmental and climate footprint (in contrast, only 5% thought it would be useful to have information on product's environmental and climate footprint only during use). This reflects the results from the targeted consultation, in which most respondents (across all stakeholder categories) indicated that requiring an indication of the overall environmental performance of products would be most effective.

In the targeted consultation, most business associations (four out of five) thought that a measure to mandate the indication of the overall excellent environmental performance of products would be at least somewhat feasible, though three thought that the measure would entail high costs and two moderate costs. Various challenges were also identified, including a risk that the measure may unfairly impact certain product categories. There was a view from industry that current information requirements (especially those stemming from the CRD) are already appropriate and sufficient. A majority (five out of six) of the public authorities that provided a view believed that the measure would be at least somewhat effective. However, one questioned the appropriateness of regrouping all sustainability aspects (e.g. durability, reparability) under one measure/indicator of environmental performance.

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact[171] on their organisation of the introduction of a legal '*obligation to provide information on environmental characteristics of products*'. The average (mean) score given was 2.55. Although this represents only a moderate impact, it is of note that, of all the possible legal requirements proposed, this was given the highest impact score. Manufacturers and retailers were also asked about the costs of introducing a legal requirement to provide information on the environmental characteristics of products. This measure was also estimated to be the costliest, with a score of 2.75 (out of 5).

A7.4.2.1.2 Sub-problem 1.2. Lack of reliable information on products' lifespan

In the consultation for the inception IA, stakeholders (except those representing industry) generally indicated that information on durability can help consumers adopt more sustainable behaviours. However, it was also recognised that the nature and extent of information to be provided on durability ought to be carefully thought out.

In the OPC, '*providing better consumer information on products' durability (lifespan)*' was selected as the most effective measure to empower consumers for the green transition (33% respondents). Further, when asked what information would be most useful for consumers to choose sustainable products and enhance participation in the circular economy, over half said 'information on products' lifespan', either as a guaranteed lifespan (28%), expected lifespan (19%) and/or lifespan with minor reasonable repairs (11%). Citizens were most likely to select this measure and company/business organisations were least likely. A similar finding was reflected in the consumer survey, in which '*information on the 'guaranteed' product lifespan*' was

[171] Respondents were asked to provide a score on a scale of 0 to 5, where 0 represents 'no impact' and 5 indicates 'very high impact'.

selected by consumers (30% of respondents) as one of the two most useful pieces of information to help them choose sustainable products (the other being '*information on the products' life-cycle environmental and climate footprint*'). In the targeted consultation, 15 out of 17 public authorities considered that a requirement to provide an '*indication of the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee)*' would be an effective measure, 14 out of 17 thought it would be easy to enforce, and 11 out of 16 thought it would be easy to monitor.[172]

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact on their organisation of the introduction of a legal '*obligation to provide information on the expected lifespan of products without repair for all products*'. The mean score given was 2.53. In comparison, the average score given for a legal '*obligation to provide information on the lifespan of products including (minor/reasonable) repairs for all products'* was 2.49. In terms of costs, the former measure was given a score of 2.30, while the latter was scored 2.33. Manufacturers and retailers were also asked to indicate the scale of impact and costs on their organisation of a legal '*obligation to provide information on the duration of the commercial guarantee for all products*'. This was given a mean impact score of 2.12 and cost score of 2.04, making it the lowest impact and one of the least costly measures proposed.

A7.4.2.1.3 Sub-problem 1.3. Lack of reliable information about products' reparability

There was general acceptance across all stakeholder groups that environmental information provided to consumers should cover reparability.

In the OPC, just under a quarter (22%) of participants selected '*providing better consumer information on products' reparability*' as an effective measure, though there were big differences between the views of different stakeholder groups. Two thirds (65%) of consumer associations and 35% of citizens thought that this measure would be effective, but only 3% of business associations and 5% of companies agreed. Nearly half the respondents in the OPC (48%) said that '*information about the reparability of the product (e.g. availability of repair services, spare parts, repair manuals, repair scoring…)*' would be an effective measure. The results from the targeted consultation support these findings. In the targeted consultation, all stakeholders thought that a measure to inform consumers about the availability of spare parts would be at least somewhat effective.

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact on their organisation of the introduction of an '*obligation to provide information on availability of repair services'* and '*availability of user-friendly repair manuals*'. These measures were given a mean impact score of 2.41 and 2.44 respectively (out of 5). In terms of cost, respondents in the CATI survey gave both these measures a mean score of 2.14.

In the targeted consultation, some respondents also discussed potential challenges associated with the proposed measures. Among business associations, there were concerns that misleading information would be provided to consumers from retailers, notably about reparability. These respondents felt that manufacturers would be better placed to provide that information as opposed to sellers or retailers. Furthermore, some business associations warned against the potential information overload that may result from additional information requirements. Finally, some public authorities highlighted that information on reparability may not prove effective in encouraging repairs / reuse if buying a new product is much cheaper to consumers.

[172] 'Highly effective' or 'Somewhat effective', 'Mostly' or 'Somewhat' easy to enforce, 'Mostly' or 'Somewhat' easy to monitor

A7.4.2.2 Problem 2: Consumers face misleading practices in relation to sustainable purchases

A7.4.2.2.1 Sub-problem 2.1. Consumers are sold products that do not last as long as they should or as long as consumers expect

In the consultation for the inception IA, there was a general acceptance that planned obsolescence should be more formally addressed by law. However, results from the OPC indicate a divergence in views across stakeholder groups. Two thirds (65%) of consumer associations identified '*providing a stronger protection against practices that cause products to fail earlier than can normally be expected (so called "early and planned obsolescence")*' as an effective measure to empower consumers to play their role in the green transition and 35% of citizens and 28% of public authorities agreed. However only 3% of business associations and 5% of companies/businesses thought that this measure would achieve the desired goal. The prevailing view among business associations was that the costs entailed by the proposed measure would be high. Business associations were also concerned about the time and resources necessary to determine the actual service life of each product.

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact on their organisation of the introduction of '*stronger consumer protection against premature obsolescence practices*' and '*stronger consumer protection against planned (intentional) obsolescence practices*'. These measures were given a mean impact score of 2.55 and 2.37 respectively (out of 5). The highest score was given for '*small household appliances*'. In terms of cost, respondents in the CATI survey gave '*stronger consumer protection against premature obsolescence practices*' a mean score of 2.13. The highest cost score was for 'large household appliances'.

However, public authorities raised concerns about enforcement of measures aimed at curtailing the practice of planned/premature obsolescence. They noted that it may not be possible to prove planned or premature obsolescence, and that they lack the required in-depth product knowledge.

A7.4.2.2.2 Sub-problem 2.2. Consumers are faced with the practice of making unclear or poorly substantiated green claims

The consultation has highlighted an interesting divergence in views between citizens/consumers on the one hand, who do not feel they are being 'green washed', and consumer organisations on the other who are concerned that consumers need stronger protection against unclear or unsubstantiated claims. Nearly two thirds (62%) of the participants in the consumer survey believed that 'most' or 'some' sustainability labels are trustworthy[173] and similarly only 17% of citizens in the consumer survey identified '*providing a stronger protection against greenwashing (i.e. claims on environmental qualities of products or services that are exaggerated, too vague, false or impossible to prove'* as an effective measure to empower consumers to the green transition.[174] In contrast, 45% of consumer organisations in the OPC thought that this measure would be effective.

When asked which information is most useful for consumers to choose sustainable products and participate in the circular economy around 17% of respondents indicated that "*recommendations about the sustainability (i.e. environmental, social aspects included) of the product by a trusted public or private source (e.g. a public authority, expert, celebrity, friend)*" are useful for consumers. Citizens (24%) and company/business organisations (23%) indicated most strongly that such

[173] In contrast, only 6% said they 'do not trust sustainability labels/logos', 6% that 'almost no sustainability labels/logos are trustworthy' and 25% that 'some sustainability labels/logos are trustworthy.

[174] Respondents were able to select up to 3 out of a possible 16 measures. This was the third most commonly chosen option.

recommendations are useful for consumers, but only 10% of consumer organisation and 11% of public authorities and 'other' organisations agreed.

In the consultation for the inception IA, most respondents stressed the need for a common or harmonised methodology for calculating or estimating products' environmental impacts. Stakeholders believed that this would facilitate certification or validation and prevent unsubstantiated environmental claims and labels being advertised.

In the targeted consultation, stakeholders were asked their views on a '*requirement to set EU specific requirements for green claims*'. Most thought that the proposed measure would be effective, and most business associations also thought the measure would be 'somewhat feasible'. However, industry representatives were also concerned that the measure would entail high costs. Most public authorities thought that it would be 'somewhat easy' to enforce. However, some could foresee various challenges with enforcement and monitoring, including inter alia: (1) too broad or too narrow a definition set out in regulations to define greenwashing; and (2) the lack of adequate metrics against which to test whether a green label or claim is unfounded / unsubstantiated.

Some of the other challenges commonly discussed, notably by business associations, related to the need for developing sector-specific approaches to testing and validating green claims across industries and sectors (owing to product differences). There would also be a need to engage with all relevant stakeholders within an industry. It was noted that, where views diverge, this could slow down the process of developing the necessary measurement criteria for validating environmental claims.

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact and cost on their organisation of '*banning some practices related to greenwashing*'. This measure was given a mean impact score of 1.91 and cost score of 2.08 (both out of 5, with 5 representing the highest impact/cost). Interestingly, a measure '*banning vague environmental claims unless they are verified/certified by independent authority/or based on recognised assessment methodology*' was deemed to be less effective (score of 1.83) and more costly (score of 2.17). In contrast, a measure '*setting in EU consumer law specific requirements for green claims*' was indicated to be more effective (2.09) but also more costly (2.38).

A7.4.2.2.3 Sub-problem 2.3. Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

In the consultation for the inception IA, most respondents generally favoured the introduction of tighter rules for the verification and validation of sustainability labels. However, there was less support for a single EU environmental label that would capture all sustainability aspects pertaining to a product.

Nearly a quarter of respondents (23%) in the OPC similarly identified '*providing a greater transparency and reliability for sustainability labels (i.e. covering environmental and social aspects)'* as an effective measure to enable consumers to play their role in the circular economy. In contrast, only 7% selected "*providing a greater transparency and reliability for IT tools (e.g. consumer apps) providing advice for a more sustainable consumer behaviour*". Companies/businesses were the stakeholder types most likely to identify both these measures as effective.

In the targeted consultation, stakeholders were asked their views on a measure '*setting minimum requirements (on transparency, reliability, etc.) for, and possibly certify, sustainability labels/logos*'. Most consumer associations thought that the proposed measure would be 'somewhat effective' and other stakeholder groups were even more positive. Most business associations, public authorities and other stakeholders indicated that the measure would be 'highly effective'. Most business associations also indicated that the proposed measure would be 'feasible'. However, there was also some concern that it could entail high costs.

Eight out of fifteen public authorities believed that the measure would be 'somewhat easy to enforce'[175] and seven out of 13 thought it would be 'easy to monitor'[176]. One public authority noted that there can be many criteria for third-party certification schemes and that this creates a challenge for enforcement. Another noted that enforcement and monitoring may require in-depth technical knowledge of each specific product/sector, which enforcement authorities often lack.

In the CATI survey, manufacturers and retailers were asked to indicate the scale of impact on their organisation of the introduction of a measure '*setting minimum criteria for sustainability labels/logos to ensure that consumers can trust and rely on them*'. This measure was given a mean impact score of 2.37 (out of 5), indicating a moderate expected impact. In terms of cost, respondents in the CATI survey gave a mean score of 2.61, indicating a moderate expected cost.

[175] 3 replied "Easy to enforce", 5 "somewhat easy to enforce", 2 "Neither easy nor difficult to enforce", 4 "Somewhat difficult to enforce" and 1 "Difficult to enforce".

[176] 4 replied "Easy to monitor", 3 "Somewhat easy to monitor", 2 "Neither easy nor difficult to enforce", 3 "Somewhat difficult to monitor", 1 "Difficult to monitor".

Annex 8. Detailed results of the consultations

This annex presents the results of all activity conducted with stakeholders as part of the "Study to gather evidence on ways to empower consumers for the green transition". These results were used to inform the decision-making process.

The stakeholder consultation for the Legal initiative and the Study started in March 2020 and continued to mid-October 2020.

A8.1 Introduction

Aim of the consultations

The stakeholder consultation sought to collect information and feedback on all elements of an impact assessment from all key stakeholder groups. The specific objectives of the stakeholder consultations were to obtain feedback on:

- The extent of the problem(s) preventing consumers from having a more active role in the green transition;
- Possible policy interventions aimed at empowering consumers for active participation in the green transition, including views on which information is most demanded by consumers;
- Feasibility and impacts (e.g., costs, benefits) of those policy interventions, including which information stands to have the most relevant effect.

Stakeholder groups covered by the consultations

In line with the consultation strategy, input from a wide range of stakeholders was collected:

- Consumers (including vulnerable ones);
- Producers (both large companies and SMEs);
- Retailers (both large companies and SMEs);
- Trade, business, and professional associations representing producers and retailers and also repair sector;
- Consumer organisations and groups, organisations of persons with disabilities and older persons;
- Non-governmental organisations (including representing social, environment and other interests), platforms and networks;
- Certification and labelling schemes;
- Local, national, and international public authorities;
- Researchers and academics;
- Other public or mixed entities;
- Commission expert groups.

All relevant stakeholders, particularly key stakeholders — consumers, producers, Member State authorities, consumer's organisations, producer's organisations, and organisations covering environmental issues — provided relevant input for the review exercise.

Consultation activities and other information sources

Following the consultation strategy, the consultations relied on a mix of methods and tools to ensure a comprehensive, representative, and balanced coverage of stakeholder views and experiences. The tools and methods used were complementary in that they allowed to reach out to all concerned stakeholders while avoiding overlaps, and included:

- A feedback on the Inception Impact Assessment;
- A dedicated section with questions on empowering consumers for the green transition in a standard Public Consultation that covered the different initiatives

of the New Consumer Agenda. The public consultation questionnaire was made available on the Commission's central public consultation webpage. This consultation activity focused on the general public to assess main obstacles and problems faced by consumers in the EU that prevents them to have a more active role in the green transition. It was made accessible for persons with disabilities.

- Target consultation with stakeholder representatives, which took the form of surveys, interviews and workshops[177] with a variety of stakeholders, namely EU and national authorities, EU and national consumer associations, EU and national business associations, companies, NGOs and other organisations (including managers of sustainability labels and digital information tools and research institutes).
- An industry survey (long version and short version in a few cases complemented by interviews) to collect the views of EU retailers, manufacturers and service providers about their current practices, and the obstacles and impacts (benefits and costs) that different policy interventions may impose on them.
- A consumer survey to collect the views of 11,805 consumers from all countries of the EU27 and the UK about their preferences and experiences related to the various aspects of the initiative.

Table A5. Stakeholder group and data collection method

Stakeholder group	Feedback on Inception Impact Assessment (IIA)	Public Consultation of the New Consumer Agenda	Targeted stakeholder consultation	Industry survey	Consumer survey
	23 June 2020 - 01 September 2020	30 June 2020 - 06 October 2020	June – October 2020	June – October 2020	August 2020
Consumers	■	■			■
EU and national consumer organisations	■	■	■		
EU and national industry /business associations	■	■	■		
Producers	■	■	■	■	
Retailers			■	■	
EU and international authorities	■	■	■		
National authorities/bodies	■	■	■		
Other (NGOs, research organisations, etc.)	■	■	■		

[177] Three thematic workshops were organised to collect the views of stakeholders: one with independent experts in July 2020, one with industry representatives in September 2020 and one with all stakeholder groups in October 2020.

A8.2 Overview of the consultation activities

This section provides an overview of the five key consultation activities mentioned above: consultation on the inception impact assessment, open public consultation (OPC), targeted interviews and surveys and consumer survey.

A8.2.1 Feedback on the Inception Impact Assessment

The consultation on the Inception Impact Assessment carried out by the Commission aimed to compile the opinions of all stakeholder groups on the Inception Impact Assessment[178]. Feedback could be made in all EU languages. To ensure publicity around the launch of the consultation, it was advertised through DG Justice and Consumers' social network accounts. An email was also sent to the relevant expert groups and Member States' national authorities to inform them of the launch of the Inception Impact Assessment and invite them to disseminate the information to their respective audience.

The feedback period ran between 23 June 2020 and 1 September 2020. 77 entities submitted their feedback, the majority of which were business associations (30%) followed by NGOs (25%) and Company/Business organisation (22%). See profile of the entities that submitted feedback to the Inception Impact Assessment in Figure A99.

Figure A99. Feedback to Inception Impact Assessment – Type of entity

A8.2.2 Open public consultation

The OPC carried out by the Commission aimed to compile the opinions of all stakeholder groups on the main obstacles and problems faced by consumers in the EU that prevents them to have a more active role in the green transition.

The OPC questionnaire consisted of a total of 6 main questions (and one sub-question). Replies could be made in all EU languages. To ensure publicity around the launch of the consultation, it was advertised through DG Justice and Consumers' social network accounts. An email was also sent to the relevant expert groups and Member States' national authorities to inform them of the launch of the OPC and invite them to disseminate the information to their respective audience.

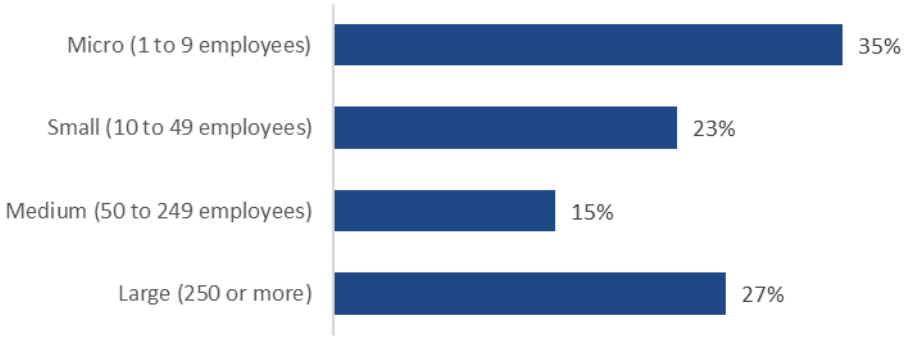
The OPC ran between 30 June 2020 and 6 October 2020. The public consultation had received 122 responses on the 15th of September, the majority of which came from Business Associations (27%) followed by Citizens (23%), Company/Business

[178] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12467-Consumer-policy-strengthening-the-role-of-consumers-in-the-green-transition

organisations (15%, of which 43% were SMEs) and Public Authorities (12%). See profile of the respondents in Figure A100. and in Figure A101. 25% of the respondents were from Belgium, 15% from Germany, 9% from France and 6% from Italy. 5% of the respondents were not from the EU27.

Figure A100. Responses to the OPC – Type of entity

Figure A101. Responses to the OPC – Size of organisation



A8.2.3 Target stakeholder consultations

Interviews and surveys with a range of relevant stakeholders at EU level and across Member States were carried out (see Table A6). Five questionnaires[179] were developed adapted to collect the view of each stakeholder group on the relevant aspects of the initiative and elements of the impact assessment.

Table A6. Overview of the target interviews and surveys carried out

Stakeholder category	Consultations carried out
EU and national consumer organisations	*21*

[179] Consumer associations, NGOs and other entities; Business associations; Logos/labels, digital information tools and certification schemes; Public bodies; EU and international entities.

EU and national industry /business associations	*21*
EU and international authorities	*3*
National authorities/bodies	*44*
Other: label, digital information tools and other certification schemes	*18*
Other: NGOs, research organisations, etc.	*12*

The number of stakeholders contacted was significantly higher than the final number of stakeholders interviewed and surveyed, which may be the result of some "stakeholder fatigue" and unavailability (possibly because of challenges related to the Covid-19 emergency and the fact that these consultations took place during the summer period).

The interviews and surveys were originally supposed to stay open only until mid-August but the deadline was gradually extended to allow more stakeholders to respond. The final deadline was the 11st of September.

In addition to the targeted interviews and surveys, the views of stakeholders were collected during three thematic workshops. The first workshop was attended by 12 independent experts and focused on the extent of problems and possible solutions. The second workshop was attended by 34 participants from 25 industry associations and focused on the use of digital means to provide product information to consumers. The third and last workshop will be open to all stakeholder groups and will focus on collecting feedback on the pre-selected policy interventions.

A8.2.4 Industry survey

The survey to EU retailers and producers was done by combining two approaches: an online survey disseminated through several means complemented by targeted interviews and a CATI survey to 100 companies from the five countries with the highest number of companies (SMEs and Large enterprises) in the four EU regions: Germany[180], France[181], Italy[182], Poland[183] and Sweden[184]. The choice of the countries was made to ensure a maximum coverage[185], while ensuring a geographically balanced list of countries.

A8.2.5 Consumer survey

The consumer survey run between 6 August and 30 August. The survey, which lasted approximately 20 minutes, was carried out online and targeted consumers in all EU Member States plus the UK. A total of 11.805 consumers answered the survey in their own language, which gathered first-hand information on their experience in searching and buying financial services at distance. Effort was taken to ensure that the

[180] Germany has 11.3% of EU companies and 29% of the EU large companies.

[181] France has 12.5% of EU companies and 13% of EU SMEs. It is the country with the most advanced measures linked to the initiative.

[182] Italy, a Southern European country, is the EU country with the highest number of companies (16.7%) and the highest number of SMEs (17%).

[183] Poland is the Central/Eastern European country with the highest number of companies (7.8% of EU companies).

[184] Sweden has 3% of EU companies and it is the Northern European country with the highest number of companies.

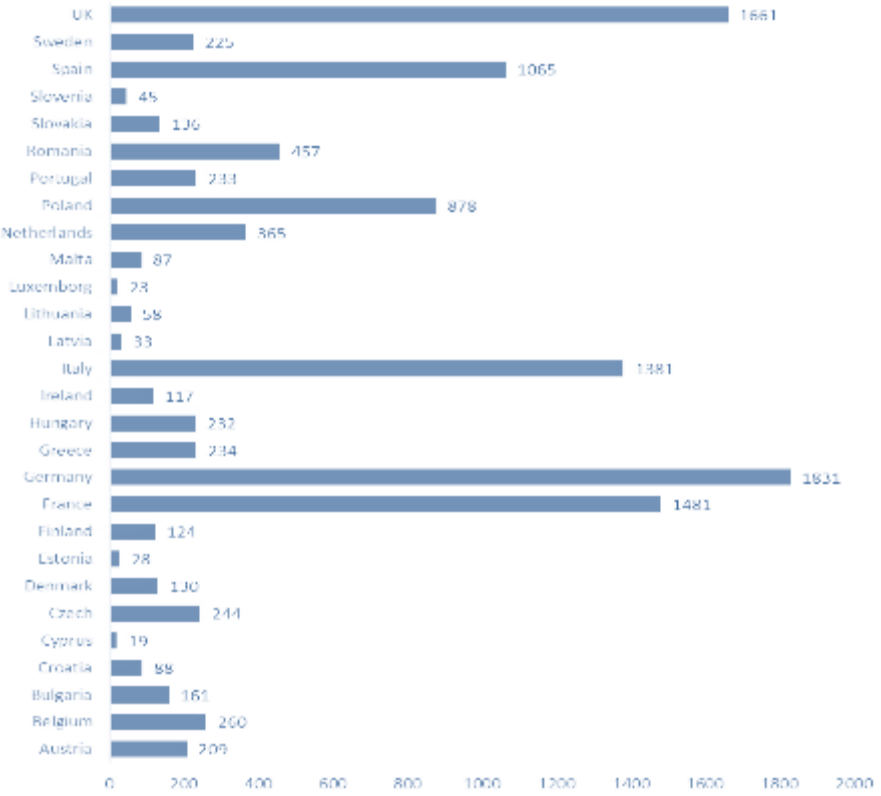
[185] Representativeness was not possible given existing budget and time constraints.

composition of the survey sample reflected the population of the EU27 plus UK in terms of share, age group and gender. The composition of the sample is shown in

The consumer survey questionnaire consisted of a total of 45 questions structured in 6 parts:

- Profile section (2 questions);
- General section: the respondents' views/preferences regarding the problems and measures covered by the initiative (5 questions, of which 3 from the OPC questionnaire);
- Incidence of problems: the respondents' experience related to failures of goods from various categories (3 questions);
- Consumer experience with goods that do not last as long as they expected section: detriment experienced due to the failure of products not covered by a legal or commercial guarantee and their practices regarding repairing/replacing of broken (16);
- Willingness to pay section: respondents' willingness to pay for information on durability and reparability and for goods that last longer or are easier to repair (5 questions);
- Behaviour related to and willingness to pay for sustainable products: respondents' current practices, preferences, and willingness to pay in the context of information on the sustainability of products and of purchasing products that are more sustainable (14 questions).

Figure A102.In which country do you live? (N=11805)



A8.3 Results of stakeholder consultations per activity

A8.3.1 Feedback to the Inception Impact Assessment

A total of 75 contributions have been reviewed and fed into the analysis provided below.

The overall feedback provided by respondents in relation to the Commission's upcoming initiative was generally very positive as they believe it will help, over the longer term, fostering more sustainable behaviours. There is particularly strong support for EU action capable of:

- Bringing about a common / harmonised approach to the provision of consumer information. The aim should be to provide "trustworthy, comparable and reliable information to consumers." In addition to information content, dissemination should be effective. There is strong support for exploring new, more innovative dissemination channels, such as digital tools.
- Removing unsustainable products from EU markets by, for example, making it easy for consumers to recognise such products, which could be facilitated by "appropriate product labelling." In that regard, there is support for limiting the proliferation of environmental labels and claims to build credibility and limit confusion among consumers.

The opinions were divided regarding the options, with a slight preference for Option 2. Based on the feedback of the 21 stakeholders that indicated their preference:

- Option 1 ("amend existing consumer protection legislation") was selected by six stakeholders
- Option 2 ("a new stand-alone consumer protection instrument") was selected by 10 stakeholders
- Both Option 0 and Option 1 were selected by one stakeholder;
- Both Option 1 and Option 2 were selected by four stakeholders.

A8.3.1.1 Views on current problems

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on the environmental characteristics of products

Key findings:

A total of 20 respondents commented on Sub-problem 1.1, while **55 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Seven business associations
- Four companies / business organisations
- Four NGOs
- Three public authorities
- One academic institution
- One other organisation
- Among those who provided a response, **all respondents** acknowledged that the **quality of information** provided to consumers on the **environmental characteristics** of products is ***not* optimal**. Respondents nonetheless had different views as regards the factors contributing to poor information. This is discussed further below.

Detailed findings:

- Among business associations who responded (n=7):
  - Three of them shared the view that consumers are *not* currently receiving relevant, reliable, and consistent information about the environmental characteristics of the products they buy.

  - Another respondent evoked the challenges associated with "information dumping" or "information overload." The respondent believed this to be the result of intentional obfuscation, whereby manufacturers offer large amounts of information to consumers, often with varying terminology and via different means or channels, even though the essence of the message conveyed to consumers is *not* substantively different from one source to the other.
  - Three respondents were critical of the lack of a common approach at EU level when it comes to: (1) product environmental (certification and) labelling; and (2) the enforcement of information requirements.
  - All of the barriers discussed were reported to have contributed to consumers' persistent inability to make more informed purchase decisions and/or to adopt more sustainable consumption behaviours.

- Evidence gathered from companies / business organisations (n=4) was generally in line with that gathered from business associations:

  - Two respondents felt that the lack of a harmonised approach to the provision of information to consumers on the environmental performance of products constitutes a key impediment.
  - Two other respondents were critical of the quality of environmental information provided to consumers, which they deemed to be "misleading," "unreliable," and "un-trustworthy."

- Of the four NGOs that responded:

  - Two respondents felt that consumers are *not* currently receiving information that is sufficiently tailored to the products they intend to buy. For example, one respondent remarked that, in the food sector, vegan and vegetarian products generally "outperform" animal-based products, in that they are less harmful to the environment. It is therefore necessary to inform consumers of these important differences in environmental performance to allow them to consider / buy more vegetarian and/or vegan options.
  - One other respondent expressed concerns as regards the information overload faced by consumers.
  - One respondent was critical of the actual content of information provided to consumers, which they found to be generally unclear and not easily accessible.

- Among public authorities (n=3):

  - Two respondents expressed doubts as regards the reliability and validity / credibility of environmental information provided to consumers. In that respect, one of the respondents felt that the current Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF) methodologies do *not* lead to robust information as they are *not* tailored to specific product groups.

- Two other respondents, one academic institution and one professional association, both agreed that consumers are *not* sufficiently informed, which they believed to be the result of: (1) a lack of explicit provisions in EU legislation, such as the UCPD, requiring traders to provide information on products' environmental characteristics; and (2) differences in the extent of information provided to consumers across product groups or sectors. For example, information relating to product characteristics or specifications is reported to be "standardised […] and well-documented" for cars and appliances. However, the same cannot be said as regards other products, such as clothing, where information provided to consumers is deemed "insufficient and often misleading.

Sub-problem 1.2: Lack of reliable information on products' lifespan

Key findings:

A total of eight respondents commented on Sub-problem 1.2, while **67 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Three NGOs
- One business association
- One company / business organisation
- One public authority
- One other organisation
- One anonymous source
- Among those who provided a response, **most respondents** acknowledged that **information pertaining to products' durability** is either **lacking** or, where provided, **often unclear, unreliable and/or misleading**. Respondents had fairly different views as regards the factors contributing to poor information on durability. This is discussed further below.

Detailed findings:

- Among the NGOs that responded (n=3):
  - One respondent felt that the lack of information on products' lifespans has been fuelled by a lack of guidance on or the inexistence of a common methodology for testing and certifying a products' expected duration. The respondent explained that a product's lifespan may depend on a number of factors. Without clear guidance on which factors or parameters to consider during product testing, manufacturers' assessment of their product's expected duration will likely vary substantially, and the information provided to consumers will therefore *not* be comparable and reliable.
  - Another respondent offered a different take on the issue, questioning whether the onus of choosing more durable products ought to be on consumers and, hence, whether legislation should be focused on information requirements as opposed to rules mandating that manufacturers produce and sell products with longer lifespans. In the respondent's opinion, the aim is to allow for sustainable products to "become the norm," thereby reducing the need for consumers to having to search and/or access a breadth of information on product characteristics, including durability.
  - Another NGO expressed concerns about the growing problem of misinformation and / or lack of information, which they believed to have contributed to difficulties experienced by consumers in "evaluating products' durability and reparability at the point of sale." The respondent remarked that at least 82 per cent of consumers in the EU are affected.
- One business association was particularly critical of the multitude of environmental labels and sustainability claims that have emerged in recent years, many of which they believed to be misleading, notably in relation to product's durability, owing to differences in the parameters considered by manufacturers as part of product testing and/or their calculations of their products' expected duration.
- One company / business organisation believed that the lack of interest from consumers may *not* have previously incentivised manufacturers to offer information on their products' expected lifespan. The respondent however recognised that this has changed over time and that consumers are increasingly eager to receive information, such as duration, about the products they intend to buy.

- Other views gathered from respondents were as follows:
  - One professional association in the legal sector noted differences in the level and quality of information provided to consumers on products' durability across product categories. For example, information relating to durability is reported to be "standardised […] and well-documented" for cars and appliances. However, the same cannot be said as regards other products, such as clothing.
  - An anonymous source attributed the lack of information on durability to a lack of explicit provisions in EU legislation, such as the UCPD and the CRD, requiring traders to provide information on products' expected duration.
  - One public authority acknowledged that consumers are *not* sufficiently informed about products' expected lifespan, which may be preventing them from buying more durable or sustainable products.

Sub-problem 1.3: Lack of reliable information about products' reparability

Key findings:

A total of eight respondents commented on Sub-problem 1.3, while **67 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Three business associations
- Two NGOs
- One public authority
- One academic institution
- One other organisation
- Among those who provided a response, **most respondents** acknowledged that consumers are not sufficiently made aware of **products' extent of reparability**. This lack of information is explained by several factors. These are discussed further below.

Detailed findings:

- Among the business associations that responded (n=3), the main issues discussed in relation to information provided to consumers on product reparability were as follows:
  - a lack of a guidance around reparability aspects that ought to be considered by manufacturers or sellers of specific products. In that regard, one respondent remarked that information on reparability must be tailored to the product type. This is because product reparability may be, to some extent, determined by products' inherent characteristics or expected use. For example, information pertaining to the availability of spare parts of software updates may only be relevant in the context of products that are expected to be used "repeatedly and over a long period of time," but *not* so relevant for other products.
  - deliberate actions to prevent reparability. One respondent explained that additional information provision on reparability may *not* be helpful if manufacturers continue to find ways to limit repairs and re-use. For example, in the health sector, medical devices cannot always be easily repaired as original equipment manufacturers (OEMs) make use of specific "software updates or upgrades" to prevent "remanufactured versions." In this way,

OEMs are able to drive potential competitors out of the market by increasing hospitals' reliance on their products.

- Of the two NGOs that responded:
  - both respondents deplored the level and quality of information provided to consumers on products' reparability at the point of sale. One respondent explained that most consumers do *not* receive sufficient (reparability) information, such as: access to repair/maintenance, spare parts, tools, etc. They further remarked that independent professional repairers were also generally being deprived of such information. The other respondent felt that, in the absence of a reparability score, consumers would *not* be able to compare products' reparability and make informed purchase decisions.
- Other views gathered from respondents were as follows:
  - One professional association in the legal sector attributed the lack of information on reparability to a lack of explicit provisions in EU legislation, such as the UCPD and the CRD.
  - One public authority acknowledged that consumers are *not* sufficiently informed about products' reparability, especially at the point of sale, which may be preventing them from buying more sustainable products.
  - One academic institution highlighted the most common information gaps in the context of product reparability, including: (1) the availability of repair services, spare parts, and repair manuals; and (2) the availability of software updates or upgrades.

Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

Key findings:

A total of seven respondents commented on Sub-problem 2.1, while **68 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Two NGOs
- One public authority
- One consumer organisation
- One academic institution
- One EU citizen
- One other organisation
- Among those who provided a response, **most respondents were of the opinion that practices, such as planned obsolescence, have gained popularity over time**. Manufacturers are increasingly producing and offering shorter-lasting products. The respondents evoked several reasons for this upward trend in planned obsolescence. These are discussed in further detail below.

Detailed findings:

- Among the two NGOs that responded:
  - One respondent's view was that existing EU regulations are *not* designed for tackling practices, such as planned obsolescence, effectively.

  - Another respondent felt that manufacturers should be allowed to decide on how to design their products, including offering products with varying levels of quality and prices.

- One public authority acknowledged that planned obsolescence constitutes a commercial practice that is commonly adopted by manufacturers. In their view, this is causing much confusion, generating distrust, and reducing consumers' interest in buying sustainable products, given that they anticipate early product defects or failures.
- One consumer organisation pointed out the lack of coherence / alignment and interdependence across EU legislations. The respondent touched on the lack of an "effective link" between consumer contract laws and the Ecodesign regulations, which could have otherwise helped promote longer-lasting products.
- One academic institution believed that consumer education is lacking. If properly educated, consumers could become more "quality-conscious," which in turn could help generate wider interest and greater demand for greener and more sustainable products. The respondent stressed the need for "a shift in consumers' mindset" in order to drive producers towards more sustainable production practices.
- One EU citizen deplored the fact that "everyday items […] are being fundamentally designed to be short-lasting." They believed that manufacturers purposely design products so that they fail prematurely, thereby driving consumers to replace defective products with new products.
- One other organisation's view was that commercial practices, such as planned / premature obsolescence, have become increasingly popular as such practices are *not* explicitly covered by existing EU legislation.

Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

Key findings:

A total of 10 respondents commented on Sub-problem 2.2, while **65 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Four NGOs
- Two companies / business organisations
- Two public authorities
- One business association
- One other organisation
- Among those who provided a response, **the majority recognised that greenwashing has become an important and persistent problem**. This is impeding consumers' ability to choose more sustainable products, given that they are being **misled by unfounded or unsubstantiated environmental labels or claims**. Some respondents have also stressed the **link between the proliferation of labels and the potential for greenwashing**.

Detailed findings:

- One professional association shared the view that current EU legislation is not effective in deterring fraudulent behaviour on the part of manufacturers, especially when it comes to advertising their products as environment-friendly.
- Both companies / business organisations that responded, acknowledged the rapid proliferation of unfounded or unsubstantiated labels and claims in recent years. They stressed the need for the Commission to intervene / take appropriate action

to ensure that labels and claims are "genuine" and that consumers "are not misled but instead reliably informed."

- Of the two public authorities that responded:
  - One respondent explained that traders are under increasing pressure to market their products as environmentally-friendly. This may have contributed to a higher proportion of unfounded or unsubstantiated environmental claims observed in recent years as manufacturers attempt to capture a larger share of the market they operate in.
  - Another respondent shared a similar view, though they believed that the proliferation of environmental claims has contributed to or amplified the issue of greenwashing,
- Among the NGOs that responded (n=4), all respondents generally expressed concerns about the rapid and persistent proliferation of labels, not only at EU level but also at Member State level. This view was shared by one business association. This issue is discussed in more detail in the next section.

Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

Key findings:

A total of 17 respondents commented on Sub-problem 2.3, while **58 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Seven NGOs
- Six business associations
- Three companies / business organisations
- One public authority

Among those who provided a response, **the majority recognised that the proliferation of sustainability labels and other claims is an important and persistent problem**. This issue has been amplified by the **rapid emergence of a number of (private/voluntary) labelling schemes at national / Member State level**, **making comparability across products increasingly difficult** for consumers. In addition, there are concerns that ***not* all labels and/or claims are certified or validated** (by a recognised institution), which may thus be **driving consumers to choose products that are not necessarily "green."**

Detailed findings:

- Most business associations (n=5) felt that, in the absence of more stringent, harmonised legislation at EU level, there is a risk of additional labelling schemes emerging in Europe, leading to a further fragmentation of the Single Market and creating more confusion and distrust among consumers. Furthermore, as discussed in the previous section, one business association expressed concerns about the impact of the rapid and persistent proliferation of labels on the risk of / potential for misleading advertising and other unfair practices, such as greenwashing. While the respondent believed that most manufacturers have invested in the development of a credible and robust methodology for ascertaining / certifying the "environmental-friendliness" of their products, others have *not* followed suit. They continue to attract consumers on the basis of unfounded environmental labels and/or claims.
- The views held by companies / business organisations (n=3) and NGOs (n=7) were generally similar to those provided by business associations. The consensus was that there is an "excessive proliferation of non-credible environmental labels

and claims," which is compromising the overall effectiveness of environmental labelling. Some NGOs (n=4) questioned the relevance and effectiveness of voluntary labelling initiatives specifically. One respondent explained that such initiatives are ever-growing and have led to the emergence of a number of "local labels" in some Member States (e.g. France, Germany, etc.). These are *not* comparable as methodologies or tools used for awarding labels are considerably different from Member State to Member State.

- Among the NGOs that responded most have attributed this trend to fragmented laws on product labelling. The relevance and effectiveness of voluntary labelling initiatives has also been questioned. One respondent believes that these have led to the emergence of a number of "local labels" in some Member States (e.g. France, Germany, etc.). These are not comparable as methodologies or tools used for awarding labels are considerably different from Member State to Member State
- One public authority acknowledged the proliferation of environmental labels and claims. They believed that this is causing much confusion among consumers as well as breeding distrust and reducing their interest in buying sustainable products.

Ineffective enforcement of existing consumer protection rules related to imperfect information and obsolescence and greenwashing

Key findings:

A total of seven respondents commented on aspects related to enforcement, while **68 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Two companies / business organisations
- Two NGOs
- One business association
- One public authority
- One academic institution

Among those who provided a response, **the majority recognised that greenwashing has become an important and persistent problem**. This is impeding consumers' ability to choose more sustainable products, given that they are *not* being reliably informed and are purposely being driven to

Detailed findings:

- Of the two companies / business organisations that responded:
  - One respondent expressed concerns in relation to EU authorities' (and national authorities') policy focus, which is disproportionately centred on energy consumption. There should be other environmental attributes considered. These should be decided on a product-by-product basis.
  - Another respondent felt that the lack of uniformity in rules across Member States have led to different practices across the EU. The respondent called for greater clarity and further harmonisation.
- Among the NGOs that responded (n=2):
  - One respondent felt that consumers are *not* being sufficiently protected in the context of repairs. With little knowledge of how and where to seek repairs, consumers may *not* be able to identify professional repairers. They may be driven to choose and pay for sub-optimal repair services and face the risk of their product breaking down again.

  - Another respondent was critical of the lack of harmonised regulations at EU level. They explained that the lack of uniform rules across Member States was particularly problematic for manufacturers / sellers operating in two or more Member States, given that they must comply with different requirements.

- One business association, operating in the health sector, specifically alluded to problematic areas within Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). At present, the Directive exempts electronic medical devices if they are "expected to be infective prior to end of life." The respondent called for the exemption to be discontinued as such a "broad-based exclusion" is in effect discouraging sustainable practices, such as remanufacturing and reuse.
- One public authority explained that enforcement cannot be effectively carried out at present as current EU legislation does *not* sufficiently cover or regulate: (1) the nature of information to be provided to consumers at the time of purchase; and (2) specific commercial strategies or practices that ought to be avoided, such as planned obsolescence.
- One academic institution's views were on par with those provided by the aforementioned public authority. The respondent was critical of the lack of legal certainty and called for strengthening regulation around environmental communications to ensure that consumers are *not* being misinformed about the environmental characteristics, impacts and/or performance of the products they intend to buy. In addition, the respondent suggested that the provision of financial information, i.e. the cost of owning, operating, and maintaining a product, be mandated. Calculations of financial costs could, at a minimum, consider the expected lifespan of a product, yearly costs of energy and water use, and yearly costs of "consumable parts" (e.g. ink for printers).

A8.3.1.2 Views on possible interventions

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on the environmental characteristics of products

Key findings:

A total of 38 respondents commented on potential solutions to Sub-problem 1.1, while **37 respondents** did *not* provide specific views on this. Responses were gathered from:

- 15 business associations
- 11 companies / business organisations
- 9 NGOs
- Two public authorities
- One EU citizen
- One consumer organisation

Among those who provided a response, **a majority were in favour of changes to be brought to information requirements surrounding the environmental characteristics of consumer products**. The respondents however held different views on potential ways to improve consumer information. These are discussed in detail below.

Detailed findings:

- Of the 15 business associations that responded:

- One respondent commented on the timing of information provision, calling for the Commission to clarify and improve information requirements "at the point of sale only."
- Another respondent felt that the Commission ought to streamline the "multitude of information requirements stemming from different regulations." This would help ensure that information requirements are "feasible, proportionate and cost-effective," thus avoiding any undue burden on traders. The respondent also felt that information requirements ought to be tailored to their target audience(s). As such, in their view, not every information is relevant or useful to all consumers, the reason for which the Commission ought to consider "audience-specific information disclosures." Finally, the respondent called for greater consideration to be given to new forms of information-sharing, such as electronic labels (or e-labels).
- Two respondents shared the view that a new, stand-alone consumer protection instrument could help pave the way for a uniform regulatory framework at EU level and help promote sustainable consumption (and production) practices more widely.
- Eight respondents called for a standardised or common approach to be implemented at EU level, stating clearly "what information" is to be provided to consumers at the point of sale. These respondents generally shared the view that the PEF should be considered as the starting point to establishing a harmonised policy framework on what environmental information should be made available to consumers. Of these respondents, two respondents also pondered over the possibility of alternative information dissemination channels and called for alternative means of communication, such as digital tools, to be clearly stipulated in EU legislation. The respondents believed that digital channels would constitute a better way to share "easily-accessible, complete, comparable, trustworthy, and easy-to-correct information" with consumers. In addition, an electronic label, for instance, would offer greater flexibility to manufacturers, allowing them to provide more detailed information. Digitalised information would also help prevent additional waste which would otherwise be created from additional packaging.
- Only one respondent was of the opinion that current EU legislation, such as the CRD, is "appropriate and sufficient." The respondent explained that, in the context of Germany specifically, consumers can gather information from a number of sources, in addition to the information provided by manufacturers / sellers. They cited the German consumer organisation, Stiftung Warentest as an example. Furthermore, the respondent felt that a common approach to the provision of environmental information may *not* prove effective. This is because environmental information can be conveyed through numerous indicators, some of which are more relevant to certain product types than others. Finally, the respondent did *not* share the Commission's view that additional requirements are needed in the context of security updates. The respondent alluded to existing legislation that already mandates sellers to "provide updates within a reasonable period of time."

- Of the 11 companies / business organisations that responded:

  - Six respondents stressed the need for potential EU action to focus on measures that can improve the quality of environmental information provided to consumers. The aim should be for consumers to be able to access relevant, clear, easy-to-understand, reliable and comparable information in order to make more sustainable consumption choices. In the context of food products, one respondent suggested that information on "absolute carbon emissions" (as opposed to "comparative emissions") be made available to consumers. The respondent believed that absolute emissions values, if communicated in a clear and comprehensive manner, could help consumers in identifying foods

that with the lowest versus highest emission levels and better educate them as regards the climate impact of their purchase decisions. In the context of fashion, one respondent stressed that equal consideration ought to be given to "what information" to provide and "how the information" should be provided. The respondent alluded to two priority areas for action: (1) the need to consider a larger number of sustainability attributes as part of the information provided to consumers (e.g. the full range of social and environmental impacts occurring at each stage of the supply chain); and (2) the need to provide / share this information in an easy and flexible manner (e.g. some information provided on labels / tags, while other information provided via other channels).

- Four respondents specifically discussed new and more innovative channels for information-sharing. Three out of the four respondents offered support for information provision to be digitalised. In their view, digital tools are likely to be the "most effective and efficient way to provide and maintain information as well as for consumers or users to find it." One respondent proposed the wider use of Environmental Product Declarations (EPDs), which they believed could serve as a useful medium via which to provide consumers with "verifiable and accurate information about the environmental impacts of products.
- One respondent suggested the wider application of certification as a means of instilling trust and confidence and allowing consumers to make more informed purchase decisions. The respondent therefore called for mandatory certification, which, in their view, could deter "rogue traders" from making unfounded environmental claims about their products and/or marketing their products.

- Of the 11 NGOs that responded:
  - One respondent recommended building on existing initiatives, such as those already in place at national level (e.g. Siegelklarheit in Germany, Keurmerkenwijzer in the Netherlands), and furthering the provision of clear and reliable information to consumers.
  - Another respondent suggested that information requirements be made mandatory to ensure that "clear, reliable and comparable" information is available to consumers across all product categories as well as across Member States, thereby allowing them to make more informed purchase decisions.
  - In the context of food products, one respondent explained that information that would allow consumers to differentiate between the environmental impacts of vegan and/or vegetarian products versus animal products is imperative. Many consumers are not fully aware of the fact the vegan/vegetarian products outperform" animal-based products, in that they are less harmful to the environment.
  - Two respondents called for more reliable / credible environmental product labelling, which would not only inform consumers but give them the confidence they need to identify and buy more sustainable products.
  - Four respondents supported the implementation of a new, stand-alone consumer protection instrument.
- The two public authorities that responded both agreed that EU action is required to ensure that information requirements are clarified and harmonised at EU level. The respondents stressed that legislation should allow for information to be accurate, relevant, easy-to-understand, and comparable.
- One EU citizen asked for the Commission to initiate information / sensitisation campaigns that would be focused on explaining to the general public the changes to their daily lives of adopting more sustainable consumption behaviours. In their

view, it should be up to the consumer to decide, based on the information received, whether to switch to more environmentally-friendly products.

- One consumer organisation favoured targeted amendments of existing EU consumer legislations (the CRD and the UCPD) over the implementation of a new, stand-alone consumer protection instrument to improve information requirements. Akin to other respondents, the consumer organisation reiterated that any information provided to consumers on the environmental characteristics of products ought to be "clear, comparable and credible."

Sub-problem 1.2: Lack of reliable information on products' lifespan

Key findings:

A total of nine respondents commented on potential solutions to Sub-problem 1.2, while **66 respondents** did *not* provide specific views on this*. Responses were gathered from:

- Three NGOs
- Two business associations
- One public authority
- One company / business organisation
- One consumer organisation
- One environmental organisation

Among those who provided a response, **a majority agreed that information on durability can help consumers adopt more sustainable behaviours**. However, the nature and extent of information to be provided on durability ought to be carefully thought out. This is discussed further below.

[*]: It is important to note that many respondents addressed durability aspects as part of their response on potential solutions to improve the provision of information on the overall environmental characteristics or performance of products. These responses are not discussed again. This sub-section is based on responses that contain explicit references to durability.

Detailed findings:

- Among business associations that responded (n=2):
  - One respondent expressed concerns about the possible mandatory provision of durability information. Specifically, they warned about the impacts that could be entailed by the imposition of mandatory information requirements. Having to report on products' lifespan could mean that manufacturers would have to bear additional costs to undertake appropriate product testing. Such costs may fall disproportionately on small and medium enterprises. The respondent also warned that "using certain products for as long as possible" may *not* always be environmentally desirable. For instance, old but still functioning white goods are relatively inefficient in terms of the energy they consume or their CO2 emissions. It therefore makes sense to replace these products at some point with more efficient versions.
  - Both respondents disagreed with the prospect of imposing longer product guarantees. They felt that extended warranties or guarantees through legislation could stifle competition and lead to an increase in prices for all consumers. One respondent referred to evidence from recent consumer

research, which posits that an extension of the guarantee period to five years would increase, on average, the cost of products by 29.4 per cent.

- One company / business organisation warned that specific requirements for the provision of information on durability may *not* be relevant for certain types of products (e.g. industrial products). The respondent therefore recommended that information requirements on durability be voluntary.
- One consumer organisation suggested the creation of a durability / reparability index for key product categories. They suggested that the design of an appropriate index could be based on provisions contained in the French "Loi anti-gaspillage pour une économie circulaire" of 30 January 2020 and / or conclusions stemming from the BENELUX-commissioned study "Reparability criteria for energy-related products."
- One environmental organisation called for the creation of a new, uniform environmental label at EU level that would include the expected lifespan and reparability of products. This would allow consumers to compare products and choose more sustainable options.
- Among the NGOs that responded (n=3):
  - One respondent argued that information on product sustainability, such as information relating to durability and reparability, ought to go hand-in-hand with information on the impacts of new ownership versus repair or reuse.
  - Another respondent suggested a wider use of existing initiatives to inform consumers about what different environmental labels and claims entail, for example in relation to a product's durability. The respondent cited several examples of initiatives, including: Siegelklarheit in Germany, Keurmerkenwijzer in the Netherlands, and the ITC Standards Map at international level.
  - One respondent called for greater synergies among existing EU legislations to ensure that they all address all relevant aspects that consumers need to take into consideration at the time of purchase, including durability, i.e. information on the guaranteed lifespan of a product, reparability / upgradeability / reusability (for example, through the communication of an easily-understandable aggregate A-G reparability score), content of recycled materials and broader environmental and climate impacts.
- One public authority suggested that lifetime energy costs be factored into durability information provided to consumers. The respondent cited a yet to be published study by the Danish Competition and Consumer Authority which indicates that, "if consumers have to buy heavy energy-consuming machines, such as dryers, they would choose more energy-efficient machines, if informed about the total cost of ownership including lifetime energy costs."

Sub-problem 1.3: Lack of reliable information about products' reparability

Key findings:

A total of five respondents commented on potential solutions to Sub-problem 1.3, while **66 respondents** did *not* provide specific views on this*. Responses were gathered from:

- One business association
- One company / business organisation
- One environmental organisation
- One public authority
- One anonymous response

Among those who provided a response, there was **a general acceptance for environmental information provided to consumers to cover reparability**. Respondents offered relatively similar views as regards the actual content of the information to be provided on reparability. This is discussed further below.

[*]: It is important to note that many respondents addressed reparability aspects as part of their response on potential solutions to improve the provision of information on the overall environmental characteristics or performance of products and/or the durability of products. These responses are thus not discussed again. This sub-section is based on responses that contain explicit references to reparability.

Detailed findings:

- One business association agreed that consumers should be entitled to a "right to repair." Consumers should therefore be informed at the point of sale of their access to maintenance and troubleshooting information, access to repair services and the availability of spare parts, including the timeframe during which these spare parts will be available.
- One company / business organisation indicated that information on reparability would be more useful to consumers if it were to include a reparability score. The development of a reparability scoring mechanism could be based on the JRC's repair index as well as the French index currently under development. The respondent explained that a reparability score ought to take into account the extent to which products exceed mandatory provisions with respect to consumers' access to repair information, ease of disassembly, and availability of spare parts, including their price.
- An anonymous source welcomed the Commission's proposition to increase / enhance reparability information. Specifically, the respondent believed that any amendments to legislation or any new legislative measures ought to: (1) create a common methodology for scoring products, in terms of their reparability (this could take the form of an A-G reparability scoring system); (2) allow for unrestricted and free access to repair and maintenance information as well as diagnostic tools for consumers as well as independent repairers and community repair groups; (3) prohibit the use of software locks; (4) mandate the availability of spare parts for a minimum period of time as well as a "maximum time limit" for the delivery of spare parts; (4) mandate the availability of software updates over the entire (expected) lifetime of a product; and (5) mandate transparency around repair costs versus costs likely to be incurred as a result of buying a new product.
- One environmental organisation agreed with the provision of reparability information. However, they explained that this information could prove even more effective if mandatory product-specific provisions were introduced alongside general reparability information requirements.
- One public authority was *not* convinced about the relevance and purpose of a "right to repair" for consumers. They questioned whether the Commission had gathered sufficient evidence as regards "whether and to what extent a "right to repair" could have a green impact and a waste-reducing effect and thus contribute to a more circular economy."

Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1:Consumers are sold products that do not last as long as they should or as long as consumers expect

Key findings:

A total of 11 respondents commented on potential solutions to Sub-problem 2.1, while **64 respondents** did *not* provide specific views on this*. Responses were gathered from:

- Four business associations
- Three NGOs
- Two consumer organisations
- One company / business organisation
- One environmental organisation

Among those who provided a response, there was **a general acceptance for planned obsolescence to be more formally recognised by law**. Respondents provided several examples of possible remedial actions to reduce the practice of planned or premature obsolescence. These are discussed further below.

[*]: It is important to note that many respondents addressed planned obsolescence aspects as part of their response on potential solutions to improve the provision of information on reparability. These responses are thus not discussed again. This sub-section is based on responses that contain explicit references to planned obsolescence.

Detailed findings:

- Among the business associations that responded (n=4), two respondents shared the view that new, stricter rules ought to be implemented to formally recognise and regulate planned / premature obsolescence. The other two respondents supported the general idea to limit planned obsolescence, though they warned that sectoral differences / specificities ought to be taken into consideration. For example, one respondent deplored the fact that the "digital sector is often unfairly accused of implementing engineering solutions that result in planned or premature obsolescence of devices." The respondent argued that design and technological improvements, an important characteristic of the digital sector, ought not to be associated with planned obsolescence. Innovation constitutes the main driver of the sector and could be severely undermined if rules around planned obsolescence are not carefully thought out.
- The two consumer organisations that responded both agreed to the implementation of targeted amendments to the EU Sales Law (Directive 2019/771),[186] including: (1) expanded legal guarantees for longer lasting products (which would raise consumers' confidence in the market and their willingness to pay more for better quality products); (2) further expansion of the reversal of the burden of proof (which would allow consumers to make an effective use of their legal guarantee rights); (3) a direct producer liability (which would impose the liability on the party that is responsible for the product defect and therefore create an incentive to produce better quality products). They also suggested targeted amendments to the Annex of the UCPD, which would explicitly ban practices that deliberately cause the premature obsolescence of products.

[186] Directive 2019/771 on certain aspects concerning contracts for the sale of goods.

- One company / business organisation indicated that an area for priority action is the practice of "software obsolescence." The respondent felt that the Commission ought to focus on measures that can ensure that software updates are available throughout the lifetime of concerned products.
- One environmental organisation proposed several remedial actions to prevent early product failure or discourage planned obsolescence. These include: (1) prohibiting software locks (that serve the purpose of preventing repairs and the continued use of a product); (2) ensuring that software updates are available over the expected lifetime of a product (to avoid software obsolescence); and (3) allowing access to software updates to consumers, repairers and refurbishers.
- Views held by some NGOs (n=2) were on a par with those provided by the aforementioned environmental organisation. Another NGO proposed other remedial actions, such as:
    - the provision of information on software updates, including "whether an update is corrective or evolutive," the consequences of the proposed updates on their device (e.g. their smartphone), and whether software updates are "reversible;"
    - the inclusion of planned obsolescence in the European 'blacklist' of unfair commercial practices (i.e. Annex I of the UCPD);
    - the strict prohibition of "intentional irreparability," including greater clarity around sanctions that could be applied where intentional irreparability has been proven (e.g. gluing batteries in electronic devices);
    - the launch of information or sensitisation campaigns about reparability, which could also take the form of a "map of professional repairers," so that consumers have all the tools they need to seek repairs.

Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

Key findings:

A total of 22 respondents commented on potential solutions to Sub-problem 2.2, while **53 respondents** did *not* provide specific views on this. Responses were gathered from:

- Eight business associations
- Seven companies / business organisations
- Four NGOs
- One consumer organisation
- One public authority
- One other organisation

Among those who provided a response, **most respondents stressed the need for a common or harmonised methodology for calculating or estimating products' environmental impacts**, which would facilitate certification or validation and prevent unsubstantiated environmental claims or labels to be advertised. There were nonetheless **other propositions** put forward by respondents for limiting the practice of greenwashing. These are discussed in detail below.

Detailed findings:

- The most reported (potential) solutions to the issue of greenwashing from business associations (n= 8) were:
    - the use of common methodologies for substantiating green claims (n=5). The PEF/OEF methodologies could serve as a starting point, especially for claims

made in relation to specific products. If such methods cannot be developed across some or most product categories, alternative methodologies could be considered, such as the Higg Product Module and a detailed description of the methodology added to the accompanying guidance document to the UCPD (n=1). Other proposed methodologies include: the use of ISO standards or digital tools (such as blockchain digital ledgers) (n=1). On the other hand, in the context of claims made in relation to a specific brand, methodologies for verifying / certifying environmental claims (e.g. a claim stating company-wide improvement of carbon footprint by 20 per cent) could draw on existing EU initiatives, such as Directive 2014/95/EU – also called the non-financial reporting directive (NFRD);

- the development and communication of a clearer and more formal definition of "greenwashing" (n=2) as well as a set of harmonised criteria that should be used to measure and verify the environmental labelling of products in EU legislation.
- the development of a uniform "green claim" (n=1) that will be awarded if specific, pre-defined, ecological criteria (e.g. the amount of recycled content in a product) are met by manufacturers / traders;

- Some business associations (n=2) were however against additional legislative measures and/or other EU actions to further regulate the practice of greenwashing. One respondent, operating in the cosmetics sector, argued that the "existing European regulatory framework for claims and advertising of cosmetic products is already very comprehensive and ensures a high level of consumer protection." It also already includes a legal requirement for environmental claims to be supported by evidence. Another respondent felt that the UCPD already sufficiently addresses the issue of greenwashing. The respondent specifically alluded to recent changes brought about in 2016 to the UCPD's guidance document, notably: (1) the introduction of specific guidelines to identify and avoid greenwashing; and (2) the increase in financial sanctions of 4 per cent in the event of breaches.
- Among companies / business organisations that responded (n=7):

  - one respondent recommended that the issue of greenwashing be further explained and regulated via the UCPD;
  - other respondents (n=5) called for greater harmonisation in how environmental claims and environmental impact labels are certified and awarded. This would not only limit the extent of false or misleading claims in circulation but would also make it easier for consumers to compare products. In that regard, some companies (n=2) recommended that the PEF methodology be developed further and used more widely for substantiating environmental claims / labels. Another company proposed the use of the "guarantees of origin system" for the purpose of validating environmental claims or labels.
  - one respondent was in favour of a new, standalone consumer protection instrument, which would include specific requirements in relation to labelling and aim to minimise the risk of greenwashing, such as the establishment of a mandatory third-party conformity assessment for product labelling, based on transparent and measurable ecological criteria.

- NGOs (n=4) proposed various remedial actions against greenwashing, including:

  - the development of a white list of environmental labels that would identify, validate, and certify Type 1 ISO ecolabels (e.g. EU Ecolabel, Nordic Swan) and a small number of credible independently-verified labels (e.g. the EU Organic Label). According to one respondent, this should be coupled with other actions at EU level, such as: (1) blacklisting misleading claims and labels; (2) engaging in rigorous market surveillance and initiating investigations in the

context of private labels (such as those for seafood, aquaculture and forestry products) that have become increasingly widespread; (3) setting clear standards / principles for approving claims and labels and ensuring that independent bodies set those standards (n=2); thereby limiting any potential conflict of interest from certifiers and auditors; (4) actively engaging with relevant stakeholders (e.g. civil society organisations, businesses, etc.) to gather their input on appropriate standards for certifying environmental claims / labels; and (5) setting up appropriate grievance mechanisms to allow for reports of abuse and for access to remedies, where necessary;
- the implementation of appropriate legislative measures (n=2) to address disproportionate and misleading claims (such as a new, standalone consumer protection instrument)

- One public authority called for "a broad communication and education strategy" by EU / national authorities in order to better equip consumers and enable them to identify misleading labels and environmental statements and make better purchase decisions.
- One consumer organisation proposed an EU-wide scheme that would require the pre-authorisation of green claims and labels before any product bearing such claims / labels can be marketed. The respondent suggested a verification process similar to the one used in the context of health / nutritive claims for food products (as set out in Regulation 1924/2006).
- One other organisation proposed the use of self-regulatory approaches, which they believed could prove effective in addressing greenwashing. This is relevant in the context of advertising, for example. Voluntary codes of practice currently exist in relation to advertising. These national codes are, in most Member States, in line with best practices set out in the "International Chamber of Commerce Advertising and Marketing Communications Code" (or ICC code), which covers the issue of misleading environmental claims.

Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

Key findings:

Most respondents commented on the recent proliferation of labels and claims as part of their response on the practice of greenwashing. Their views are therefore not repeated in this sub-section, which instead focuses on additional / other views on potential solutions that can help address the problem under consideration. Responses from one academic institution and two business associations are reviewed in this sub-section.

Among those who provided a response, **tighter rules around the verification and validation of labels, claims, etc. were generally favoured by respondents**. However, there was **less support for a single EU environmental label** that would capture all sustainability aspects pertaining to a product.

Detailed findings:

- One academic institution believed that additional standards ought to be considered before labels can be used on products. With tighter rules, the respondent indicated that manufacturers would be less tempted to make (unfounded) environmental claims about their products, in turn helping to reduce the number of labels in circulation. The standards proposed by the respondent are non-exhaustive, but include (at a minimum): (1) origin of the product; (2) whether the product is manufactured or assembled in a county that openly respects sustainability standards; (3) whether the product is made of recycled / reused raw materials; (4) the level of CO2 emissions during production and

transportation, i.e. whether they are below an agreed threshold; (5) durability; (6) reparability; (6) recyclability; etc. The respondent proposed that all these standards be regrouped into a single metric to signify the extent of "sustainability compliance" by a manufacturer. This could then be communicated to consumers via a simple EU label or QR code, thereby reducing the need for a multitude of labels.

- Unlike the aforementioned academic institution, one business association advised against the use of a single score / metric (and, hence, a single EU label) as it would *not* convey to consumers information on specific environmental characteristics of the products they are buying (e.g. durability). A single label could therefore prove misleading.
- Another business association believed that privately-owned or voluntary labels ought to be allowed on EU markets. However, in order to prevent misleading and unfounded labels and claims from emerging, certification ought to be mandatory. Verification and validation ought to be guided by science-based criteria.

Ineffective enforcement of existing consumer protection rules related to imperfect information and obsolescence and greenwashing

Key findings:

A total of 15 respondents commented on potential solutions to enhance enforcement, while **60 respondents** did *not* provide specific views on the issue. Responses were gathered from:

- Eight business associations
- Five NGOs
- One environmental organisation
- One public authority

Among those who provided a response, **most respondents called for new or updated legislative measures** to improve the **enforcement of consumer rights** and **help consumers** to **make more informed and more sustainable purchase decisions**. Respondents held different views on what those changes ought to be. These are discussed further below.

Detailed findings:

- Among business associations that responded (n=8):
  - Five respondents felt that a more unified approach to enforcement would help limit differences in legal interpretation across Member States and limit the creation of different sets of information requirements for traders. Two of the respondents however remarked that the Commission has been implementing new consumer protection legislative measures in recent years, most of which have *not* yet been transposed into national legislation and are therefore potentially unknown to most consumers. The respondents therefore called for better and wider communication of recently-introduced changes to consumer rights as opposed to rolling out further legislative proposals. They also recommended that the Commission "assess the effectiveness of the new rules before implementing additional measures."
  - Another business association, while supporting greater harmonisation of EU requirements, warned that new or additional legislative measures will have to factor in potential compliance costs for traders as well as distributional effects, i.e. cost implications for small businesses.

  - Two respondents called for additional guidance from the Commission, specifically in relation to existing legislation, such as the UCPD. They felt that this would help increase clarity around the provisions contained in the UCPD and enable traders to comply better. In terms of enhanced clarity, one other respondent called for the provision of more harmonised definitions of key concepts, especially those that tend to be used interchangeably, such as "product durability" and "product lifetime", or "reparability", "reusability", and "recyclability".

- In relation to greenwashing, one public authority recommended that the Commission update existing regulations, as opposed to banning or blacklisting specific green claims.
- Among NGOs that responded (n=5):
  - One respondent called for more effective methodologies to be introduced for substantiating environmental claims, thereby preventing false and misleading claims, and reducing confusion arising from the proliferation of environmental labels.
  - Two respondents remarked that *no* specific consumer protection legislation currently exists in relation to product repairs. One respondent suggested that information requirements around reparability ought to focus on the possibilities available to consumers for repairs so as to encourage more consumers to have their products repaired as opposed to replacing them. The other respondent called for "new horizontal rights on the mandatory minimum period of time set for the availability of spare parts […] as well as the maximum time-limit for the delivery of spare parts." The respondent also felt that new legislation ought to mandate software and security updates over the entire expected lifetime of a device.
  - One other respondent called for greater clarity as regards consumers' prerogatives / rights within legal and commercial warranties, especially during the time when the burden of proof lies with the manufacturer.
  - One respondent, operating in the food and drinks sector, recommended that legally-binding definitions for the terms "vegan" and "vegetarian" be clearly set out in updated or new EU legislation. This would allow consumers to make more informed purchase decisions and possibly switch to more sustainable plant-based alternatives, where possible.
- One environmental organisation called for legal guarantees to be extended beyond the two-year threshold for certain products, notably products with a significantly longer expected lifespan, such as washing machines.

A8.3.1.3 Other feedback

Some respondents shared their views on other factors hindering consumers' participation to the green transition. These are described below.

Reuse of whole products or parts / components of products

- One academic institution pointed out to the lack of consumer education. In their view, a wider promotion of reusability would encourage consumers to include sustainability considerations as part of their purchase decisions. Consumers may thus be more likely to opt for repairs, reuse or recycling as opposed to replacement.

Other practices

- One public authority drew attention to the growing popularity of social media influencers, especially the role they play in recommending "the purchase of […] green goods and services" to consumers. The respondent was particularly concerned about influencers discussing on their social networks what they believe

to be the sustainability attributes / qualities of different products as a result of having tried or tested the products themselves, most of the time in exchange for a payment from manufacturers. However, the respondent cast doubts on the genuineness or authenticity of the claims made by influencers, given that such claims are not based on scientific data but rather subjective opinions. The respondent therefore called for greater regulation of such practices, for example via Annex I of the UCPD.

- Some respondents proposed additional considerations to be taken into account as part of future amendments to information requirements.

Provision of other relevant information

- Two NGOs believed that information provision ought to go beyond a product's environmental characteristics. They suggested that other "attributes" be considered, such as impacts on human rights and biodiversity, a company's work-life balance policies.

A8.4 Open Public Consultation

The section starts with an overview of the results of the OPC and then provides details on the results related to the extent of the problems and possible solutions/policy interventions.

A8.4.1 Views on current problems

In this section we present the results of the Open Public Consultation (see overview of responses in Table A7, Figure A103) regarding the views of stakeholders about the extent of the three problems addressed by the initiative.

Table A7. OPC Question 1: Amidst an ever-growing interest in environmental performance and climate neutrality, studies show that consumers increasingly look for more sustainable consumption patterns and choices but face obstacles. Which of the obstacles in the list below would you consider as most relevant for enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour?

	Citizens (N=75)	Consumer Organisation	Company/Business	Business Association	Public authority	Other (N=48)	Total (N=304)
Difficulty to verify the reliability of environmental claims (including climate related) on products [2]	36%	58%	23%	24%	36%	42%	**33%**
Perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives	23%	37%	34%	22%	39%	40%	**30%**
Lack of knowledge of how to adopt more sustainable consumption behaviour	19%	16%	38%	33%	36%	25%	**28%**
Proliferation and/or lack of transparency/understanding/reliability of sustainability labels on products and services	27%	16%	34%	28%	28%	23%	**27%**
Difficulty to know how long products will function without repair	33%	53%	15%	8%	39%	40%	**27%**
Difficulty to check if products are environmentally-friendly	31%	42%	32%	13%	31%	29%	**27%**

	Citizens (N=75)	Consumer Organisation	Company/Business	Business Association	Public authority	Other (N=48)	Total (N=304)
Other	4%	16%	26%	46%	14%	23%	**23%**
Difficulty to know if products can be repaired easily by professional repair services	28%	11%	6%	20%	22%	21%	**20%**
Difficulty to know if products can be repaired easily by consumers themselves	20%	5%	6%	6%	8%	17%	**12%**
General disinterest in adopting more sustainable consumption behaviour	15%	5%	9%	8%	14%	4%	**10%**
Unavailability of environmentally-friendly products	21%	11%	4%	1%	0%	15%	**9%**
Lack of means to easily track consumer's personal environmental footprint	13%	5%	6%	6%	14%	2%	**8%**
Proliferation and/or lack of transparency/understanding/reliability of IT tools (e.g. consumer apps) that provide advice for a more sustainable consumer behaviour	11%	11%	9%	10%	0%	2%	**8%**
None of the above	0%	0%	9%	11%	0%	2%	**5%**
Perceived lower quality and performance of environmentally-friendly products compared to less environmentally-friendly alternatives	5%	11%	0%	6%	3%	2%	**4%**

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on products' environmental characteristics

Overall, 27% of respondents to the OPC indicated having difficulties when checking if products are environmentally-friendly as a relevant obstacle for enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour. In particular, this was indicated as an obstacle by:

- Citizens: this is the third most relevant obstacle according to citizens (31%), just behind the difficulty to verify the reliability of environmental claims;
- Companies/businesses: in the opinion of this stakeholder group this is the fourth most relevant obstacle to empowering consumers for the green transition (32%);
- Consumer Associations: this is the third most relevant obstacle (42%) for this stakeholder group.
- Business Associations: 13% of the respondents considered this as an important obstacle.
- Public authorities: 31% of the respondents from this stakeholder group considered this as an important obstacle.
- Other: 29% of other organisations considered this a relevant obstacle (11% of the academic/research institutions and 41% of the NGO).

Sub-problem 1.2: Lack of reliable information on products' lifespan

27% of the respondents to the OPC indicated that "difficulty to know how long products will function without repair" is a relevant obstacle to empowering consumers for the green transition. While this is a highly important obstacle in the opinion of the majority of stakeholder groups – citizens, consumer associations, public authorities and other respondents – business and company/business associations ranked this obstacle as less important.

- Citizens: this is the second most relevant obstacle according to citizens (33%), just behind "Difficulty to verify the reliability of environmental claims".
- Companies/businesses: 15% of the respondents selected this as a relevant obstacle;
- Consumer Associations: this is the second most relevant obstacles (53%) in the opinion of the respondents from this stakeholder group.
- Business Associations: only 8% indicated that this is a relevant obstacle.
- Public authorities: this stakeholder group consider this (together with "Perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives") as the main obstacle to empowering consumers (39%).
- Other: 40% of other organisations considered this a relevant obstacle (44% academic/research institutions and 37% of the NGOs).

Sub-problem 1.3: Lack of reliable information about products' reparability

Overall, stakeholders considered that "Difficulty to know if products can be repaired easily by professional repair services" (20% selected this obstacle) is a more relevant obstacle than "Difficulty to know if products can be repaired easily by consumers themselves" (12% selected this obstacle). The views per stakeholder group were:

- Citizens: difficulties to know if products can be repaired easily by professional repair services or by consumers themselves were selected as relevant obstacles by 28% and 20% respectively.
- Companies/businesses: each obstacle was selected by 6% of the respondents of this stakeholder group
- Consumer Associations: 11% selected "Difficulty to know if products can be repaired easily by professional repair services" as a relevant obstacle, while only 5% considered "Difficulty to know if products can be repaired easily by consumers themselves" as a relevant obstacle.
- Business Associations: the responses were the opposite of the ones from consumer associations as 20% selected "Difficulty to know if products can be repaired easily by professional repair services" as a relevant obstacle, while only 6% indicated "Difficulty to know if products can be repaired easily by consumers themselves" as a relevant obstacle.
- Public authorities: 22% of the respondents from this stakeholder group consider "Difficulty to know if products can be repaired easily by professional repair services" as a relevant obstacle while only 8% indicated that "Difficulty to know if products can be repaired easily by consumers themselves" is a relevant obstacle.
- Other: 21% of the respondents selected "Difficulty to know if products can be repaired easily by professional repair services" and 17% selected "Difficulty to know if products can be repaired easily by consumers themselves" (by 33% of the academic/research institutions, and by 29% of the NGOs).

In line with the above, 28% and 19% of respondents from the citizens group, indicated "No (user-friendly) repair manual available" and "Not knowing where or how to get spare parts" respectively, as reasons for the lack of success of their attempts to repair recently purchased products themselves; and 22% indicated difficulties in finding out if and where a broken product could be repaired as a reason for the lack of success of their attempts to have recently purchased products repaired by professional repair services.

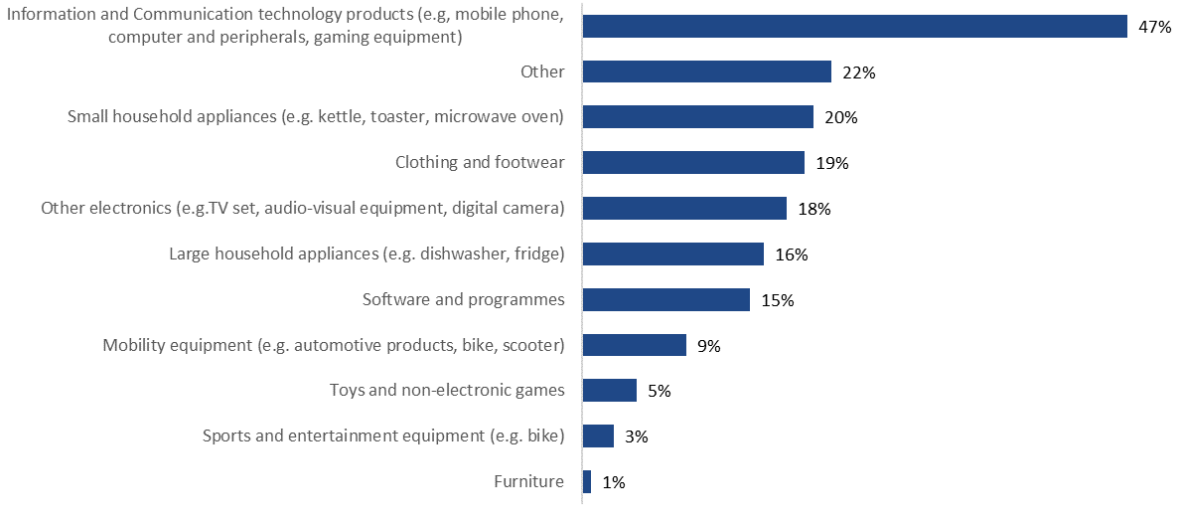
Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

Overall, 24% of the respondents (but only 11% of the citizens) indicated not having experienced an unexpected failure of one or more products in the past 3 years. Those that had experienced this, selected the following product categories to be the most problematic:

- Information and Communication technology products (e.g., mobile phone, computer and peripherals, gaming equipment) (47%)
- Small household appliances (e.g. kettle, toaster, microwave oven, hobby machinery) (20%),
- Clothing and footwear (19%), and
- Other electronics (e.g.TV set, audio-visual equipment, digital camera) (18%).

Figure A103. OPC Question 3: Faster obsolescence of products is a growing concern for consumers and consumer protection authorities. In 2016 the Commission issued guidance on so-called planned (intentional) obsolescence. However, other forms of obsolescence exist where the product loses the full functionality at an earlier than expected moment without there being any proof of intentional obsolescence. If you (or your customers, if you are seller/producer) experienced an unexpected failure of products in the past 3 years, please indicate for which product category/categories this happened:



The 22% that selected "other" indicated the following:

Many respondents highlighted here that various initiatives such as the PROMPT project, Test Achat Trop vite usé and the Open Repair dataset show that consumers experience unexpected failure under all the listed categories. Among other products that were mentioned were lawnmowers, LED light bulbs, cell phone chargers or batteries. A few respondents also mentioned that some parts or entire vehicle systems/components can become obsolete if software updates are not possible.

There are some differences between stakeholder groups. Among most, a majority of respondents had experienced this phenomenon:

- Citizens (75): 11% indicated never having experienced early product failure; the product categories for which this experience is more common were: Information and Communication technology (69%), Small household appliances (35%), and Clothing and footwear (32%). Only 5% experienced problems with other type of goods.
- Consumer Associations (18): all respondents from this category had such experience. The products for which those experiences were most common were: Information and Communication technology products (78%), Software and programmes (44%), and Large household appliances (39%). No consumer association selected the product categories: Furniture and Sports and entertainment equipment. 39% experienced problems with other type of goods.
- Public authorities (30): 73% respondents from this category had such experience. Like the business associations, most of the reported problems were with Information and Communication technology products (47%) and Other electronics (27%). Public authorities did not select Furniture. 23% experienced problems with other type of goods.

- Other (44): 14% never had such experience and those that had selected the following product categories: Information and Communication technology (55%), Clothing and footwear (30%), and Other electronics (25%). 27% experienced problems with other type of goods.

The stakeholder groups that had the least experience with this phenomenon were:

- Companies/businesses (32): 66% had such experience, of which most were with Information and Communication technology products (by 22%) and Large household appliances (16%). No company selected the product category "Furniture". 28% experienced problems with other type of goods.
- Business Associations (56): almost half of the respondents (48%) did not have such experience. Information and Communication technology products and Software and programmes were the categories with the highest number of incidents (16% and 14% respectively).

Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

33% of the respondents selected "difficulties to verify the reliability of environmental claims (including climate related) on products" as a relevant obstacle to enhanced consumer participation in the circular economy and towards more sustainable consumption behaviour. This was the obstacle selected by most of the respondents listed, although there were a few differences between stakeholder groups:

- Citizens: 36% indicated this as a relevant obstacle making it the most selected by this stakeholder group.
- Companies/businesses: 23% selected this obstacle as relevant.

- Consumer Associations: this obstacle was the one most selected by the respondents of this group (58%).
- Business Associations: this obstacle was selected as relevant by 24% of the respondents.
- Public authorities: 36% indicated this obstacle as one of the most relevant obstacles to empowering consumers for the green transition.
- Other: this was also the obstacle most selected by respondents form this group (42%). For the respondents from the Academic/Research Institutions stakeholder group, this is the second most relevant obstacle (following "Perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives") and 37% of NGOs selected this obstacle.

Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

27% of the respondents selected "the proliferation and/or lack of transparency/understanding/reliability of sustainability labels on products and services" as a relevant obstacle to empowering consumers for the green transition, while only 8% selected the obstacle "Proliferation and/or lack of transparency/understanding/reliability of IT tools (e.g. consumer apps) that provide advice for a more sustainable consumer behaviour" making it the second least selected of the listed obstacles. In this case also, answers slightly differ across stakeholder groups:

- Citizens: 27% selected "the proliferation and/or lack of transparency / understanding / reliability of sustainability logos/labels" as an obstacle, while only 11% selected as a relevant obstacle "the proliferation and/or lack of transparency/understanding/reliability of IT tools".
- Companies/businesses: 34% selected "the proliferation and/or lack of transparency / understanding / reliability of sustainability logos / labels", while 9% selected as a relevant obstacle "the proliferation and/or lack of transparency/understanding/reliability of IT tools".
- Consumer Associations: 16% selected "the proliferation and/or lack of transparency / understanding / reliability of sustainability logos / labels" as an obstacle, and 11% selected "the proliferation and/or lack of transparency / understanding / reliability of IT tools".
- Business Associations: their responses were very similar to the ones of the Companies / businesses, with 28% selecting "the proliferation and/or lack of transparency / understanding / reliability of sustainability logos / labels", and none selecting "the proliferation and/or lack of transparency / understanding/reliability of IT tools".
- Public authorities: their responses were identical to the ones given by the Business Associations.
- Other: 23% selected "the proliferation and/or lack of transparency / understanding / reliability of sustainability logos / labels", while only 2% selected as a relevant obstacle "the proliferation and/or lack of transparency/understanding/reliability of IT tools".

Drivers and other related problems

The second most selected obstacle to empowering consumers to be active in the green transition was "Perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives" (by 30% of the respondents).

Other obstacles were also selected by some respondents, namely:

- Lack of knowledge of how to adopt more sustainable consumption behaviour (28%, third most selected obstacle);
- General disinterest in adopting more sustainable consumption behaviour (10%);
- Unavailability of environmentally-friendly products (9%);
- Lack of means to easily track consumer's personal environmental footprint (8%);
- Perceived lower quality and performance of environmentally-friendly products compared to less environmentally-friendly alternatives (4%).

The other obstacles mentioned by respondents were:

Most respondents indicated that consumers' lack of trust in environmental claims is also one major obstacle that prevents consumers from adopting a more sustainable consumption behaviour. Many respondents also argued that this is exacerbated by existing levels of greenwashing and proliferation of green labels and certifications that ultimately lack standardisation. Other obstacles mentioned were information overload, confusing advertising and sometimes even disinformation.

Regarding unsuccessful experiences with repairing products, Table A8 provides the results regarding reasons behind the lack of success of attempts of respondents to repair the products themselves. The four main obstacles selected by respondents were:

- The price of spare parts was too high (selected by 23% of all respondents and by 28% of citizens)
- No (user-friendly) repair manual available (selected by 22% of all respondents and by 28% of citizens)
- The failed component was impossible to repair due to its product design (selected by 22% of all respondents and by 17% of citizens)
- I did not have the possibility to open the product (selected by 21% of all respondents and by 37% of citizens).

28% of the OPC respondents (and 19% of respondents from the citizen group) indicated that they did not have such experience.

17% (but only 4% of the citizens) indicated other problems:

Many respondents indicated that often repair activities need to be carried by professionals or with the help of specialist tools that are not always easily accessible nor cheap. In the case of electronic products in particular, safety and liability issues were also underlined as problematic when consumers decide to repair the products themselves as these products.

Table A8. OPC Question 4a. While reparability is highly relevant to help European businesses and consumers to make the transition to a stronger and more Circular Economy, studies show that the high cost of repair and spare parts appears to be a barrier to higher repair rates across the EU. a) If you tried unsuccessfully to repair recently purchased products yourself, what were the reasons for the lack of success?

	Citizens (N=75)	Consumer Organisation (N=18)	Company/Business organisation (N=33)	Business Association (N=54)	Public authority (N=30)	Other (N=44)	Total (N=254)
The price of spare parts was too high	28%	33%	12%	4%	30%	39%	**23%**
No (user-friendly) repair manual available	28%	11%	18%	15%	30%	23%	**22%**
The failed component was impossible to repair due to its product design	17%	39%	15%	15%	20%	36%	**22%**
I did not have the possibility to open the product (e.g. it was glued, special tools are needed…)	37%	11%	15%	0%	27%	25%	**21%**
The repair was too difficult for me	21%	17%	9%	7%	23%	34%	**19%**
The necessary spare parts were not available	16%	39%	15%	6%	27%	20%	**17%**
The software/firmware was no longer supported	16%	22%	6%	9%	17%	11%	**13%**
I did not know where or how to get spare parts	19%	17%	12%	6%	3%	9%	**11%**
Other	4%	22%	30%	30%	13%	14%	**17%**
None - no such experience	19%	22%	30%	52%	20%	18%	**28%**

Table A9 provides the results regarding reasons behind the lack of success in the attempts of respondents to have the products repaired by professional repair services. The main obstacle selected by almost half of the respondents (44% and 52% of citizens) was that the repair was too expensive/it was cheaper to replace the product.

32% of the OPC respondents (and 23% of respondents from the citizen group) indicted that they did not have such experience.

Table A9. OPC Question 4b. If you tried to have recently purchased products repaired by professional repair services, what were the reasons for the lack of success?

	Citizens (N=73)	Consumer Organisation	Company/Business	Business Association	Public authority (N=31)	Other (N=45)	Total (N=247)
It was too expensive/it was cheaper to replace it	52%	76%	40%	12%	48%	56%	**44%**
It was not easy to find out if and where it could be repaired	22%	53%	13%	8%	13%	22%	**19%**
The retailer proposed to replace it instead of repairing it	23%	12%	17%	4%	26%	24%	**18%**
The repair would have taken too long and I needed a replacement sooner	16%	53%	10%	6%	19%	22%	**17%**
The repair was not locally available	18%	29%	7%	4%	19%	18%	**15%**
Other	3%	0%	20%	24%	19%	16%	**13%**
None - no such experience	23%	12%	37%	61%	23%	22%	**32%**

A8.4.2 Possible policy interventions and their assessment

In this section we present the preliminary results of the Open Public Consultation (see Table A10, Table A11) regarding the views of stakeholders about possible solutions for the three problems addressed by the initiative.

Table A10. OPC Question 2. Research shows that the price-quality ratio is the most important driver and simultaneously barrier for consumer engagement in the circular economy, followed by convenience. This also applies on purchasing durable consumer goods (such as household appliances, ICT, electronics, and other items that have no expiration date). In your opinion, which of the following information could be most useful for consumers to choose sustainable products and to enhance consumers' participation in the circular economy?

	Citizens (N=76)	Consumer Organisation	Company/Business	Business Association	Public authority	Other (N=47)	Total (N=300)
Information about the reparability of the product (e.g. availability of repair services, spare parts, repair manuals, repair scoring…)	54%	35%	21%	30%	57%	47%	**41%**
Information on the product's life-cycle environmental and climate footprint (including resource extraction, manufacturing, transport, use and end of life / recycling) [3]	39%	30%	56%	34%	32%	43%	**39%**
Information on "guaranteed" products lifespan (should repairs be necessary, they would be at no cost to the consumer)	39%	25%	16%	6%	46%	45%	**28%**
Information (e.g. a label / logo) vouching for the sustainability (i.e. environmental, social aspects included) of the product	18%	20%	42%	34%	22%	19%	**26%**
Information on "expected" products lifespan without repair (should repairs be necessary after the legal guarantee period, they would be at consumer's expense in this case)	21%	50%	0%	12%	27%	23%	**19%**
Information about software updates or upgradability of hardware and software of the product	22%	55%	2%	14%	11%	17%	**17%**
Recommendation about the sustainability (i.e. environmental, social aspects included) of the product by a trusted public or private source (e.g. a public authority, expert, celebrity, friend)	24%	10%	23%	16%	11%	11%	**17%**
Information on products social aspects of sustainability, such as respect of human rights and workers' rights	16%	0%	12%	5%	16%	32%	**14%**
Information on products lifespan subject to possible minor reasonable repairs at consumer's expense after the legal guarantee period	22%	5%	2%	6%	11%	9%	**11%**
Information on the (average) cost of repairs	13%	5%	2%	0%	11%	19%	**8%**
Information on product's environmental and climate footprint only during use	5%	5%	2%	4%	5%	6%	**5%**
Other	3%	25%	26%	51%	16%	17%	**24%**
None of the above	0%	0%	9%	6%	3%	0%	**3%**

Table A11. OPC Question 5. Many consumers want to be empowered with rights and access to reliable information to be able to play their role in the green transition to the full extent. Which measures in the list below would you consider as most effective to achieve this goal?

	Citizens (N=75)	Consumer Organisation	Company/Business organisation	Business Association	Public authority (N=36)	Other (N=47)	Total (N=300)
Providing better consumer information on products' durability (lifespan)	52%	75%	16%	14%	39%	28%	**33%**
Providing better consumer information on the life-cycle environmental and climate footprint of the product or service (including resource extraction, manufacturing, transport, use and end of life/ recycling)	39%	30%	30%	23%	36%	34%	**32%**
Providing a stronger protection against greenwashing (i.e. claims on environmental qualities of products or services that are exaggerated, too vague, false or impossible to prove)	17%	45%	27%	26%	22%	40%	**27%**
Providing a stronger protection against practices that cause products to fail earlier than can normally be expected (so called "early and planned obsolescence")	35%	65%	5%	3%	28%	34%	**23%**
Raising awareness about the role of consumers on circular economy and green transition	12%	0%	36%	35%	31%	13%	**23%**
Providing a greater transparency and reliability for sustainability logos/labels (i.e. covering environmental and social aspects)	12%	5%	34%	28%	19%	30%	**23%**
Providing better consumer information on products' reparability	29%	5%	11%	22%	33%	17%	**22%**
Establish new consumer rights to repair products (including e.g. critical software updates)	24%	25%	5%	0%	11%	30%	**14%**
Strengthening the enforcement of EU consumer law in these matters	15%	15%	0%	8%	14%	21%	**12%**
Providing better consumer information on social aspects of sustainability, such as respect of human rights and workers' rights	15%	0%	16%	6%	6%	15%	**11%**
Providing better consumer information on software updates/upgrades	19%	5%	2%	4%	6%	11%	**9%**
Providing a greater transparency and reliability for IT tools (e.g. consumer apps) providing advice for a more sustainable consumer behaviour	5%	0%	11%	10%	6%	2%	**7%**
Information on product's environmental and climate footprint only during use	4%	5%	2%	5%	6%	0%	**4%**
Providing better consumer information on how to operate under extreme climate conditions products destined to be exposed to the elements and used outside	3%	0%	5%	1%	3%	0%	**2%**
Other	1%	10%	25%	37%	17%	6%	**17%**
None of the above	0%	0%	9%	6%	0%	4%	**4%**

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on products' environmental characteristics

39% of the respondents indicated that it would be useful to have information on the product's life-cycle environmental and climate footprint while only 5% considered most useful having information on product's environmental and climate footprint only during use. These results are in line with the view of stakeholders regarding the most effective measures to empower consumers. Overall, the respondents (32%) indicated that "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" would be the second most effective measures. Only 4% of the respondents considered as most effective the measure of providing "Information on product's environmental and climate footprint only during use".

The results per stakeholder group:

- Citizens: considered the "information on the product's life-cycle environmental and climate footprint" this has the third most useful to empower consumers (selected by 39%). Providing "information on product's environmental and climate footprint only" was considered useful by 5% of the respondents form this group. "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" was considered the second most effective measure (39%).
- Companies/businesses: selected "information on the product's life-cycle environmental and climate footprint" as the most useful to empower consumers (by 56%) and only 2% considered useful to have "information on product's environmental and climate footprint only". "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" was considered the most effective measure (30%).
- Consumer Associations: 30% selected "information on the product's life-cycle environmental and climate footprint" as the most useful to empower consumers and only 5% considered useful to have "information on product's environmental and climate footprint only". Similarly, 30% selected "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" as an effective measure.
- Business Associations: 34% indicated that it would be useful to provide information on the product's life-cycle environmental and climate footprint while 4% considered most useful having "information on product's environmental and climate footprint only" during use. 23% selected "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" as an effective measure.
- Public authorities: 32% selected "information on the product's life-cycle environmental and climate footprint" as most useful and only 5% selected "information on product's environmental and climate footprint only". 36% selected "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" as an effective measure.
- Other: information on the product's life-cycle environmental and climate footprint was considered the third most useful piece of information by this stakeholder group (43%), while only 6% selected "information on product's environmental and climate footprint only" as most useful. 34% indicated that one of the most effective measures to empower consumers would be "Providing better consumer

information on the life-cycle environmental and climate footprint of the product or service".

26% of the respondents (18% of the citizens) indicated "Information (e.g. a label) vouching for the sustainability (i.e. environmental, social aspects included) of the product" would be useful to empower consumers for the green transition.

Sub-problem 1.2: Lack of reliable information on products' lifespan

"Providing better consumer information on products' durability (lifespan)" was selected as the most effective measure to empower consumers for the green transition (selected by 33% of the respondents). Respondents (50%) considered having information on the lifespan (guaranteed, expected and/or with minor repairs) as the most useful piece of information to empower consumers for the green transition. 28% selected information on guaranteed lifespan as most useful, 19% selected information on "expected" lifespan as most useful and 11% selected as most useful "information on products lifespan subject to possible minor reasonable repairs at consumer's expense after the legal guarantee period".

There are some differences across stakeholder groups:

- Citizens: more than half (52%) indicated that "Providing better consumer information on products' durability (lifespan)" would be the most effective measure (making it the most selected measure). 39% selected information on guaranteed lifespan as most useful. Information on expected lifespan and lifespan with minor repairs were selected as most useful by a similar number of respondents (21% and 22% respectively).
- Companies/businesses: 16% selected "Providing better consumer information on products' durability (lifespan)" as one of the most effective measures. Similarly, 16% selected information on guaranteed lifespan as most useful. None selected Information on expected lifespan and only 2% selected lifespan with minor repairs as most useful pieces of information.
- Consumer Associations: "Providing better consumer information on products' durability (lifespan)" was selected as the most effective measures by consumer organisations (75%). 50% selected information on expected lifespan as most useful. 25% selected Information on guaranteed lifespan and only 5% selected lifespan with minor repairs as most useful pieces of information.
- Business Associations: "Providing better consumer information on products' durability (lifespan)" was selected by only 14% as an effective measure. 6% considered providing information on guaranteed lifespan most useful, while 12% and 6% considered providing information on expected lifespan and lifespan with minor repairs as most useful pieces of information, respectively.
- Public authorities: "Providing better consumer information on products' durability (lifespan)" was the most selected measure by this stakeholder group (39%). 46% selected information on guaranteed lifespan as most useful. 27% selected Information on expected lifespan and 11% selected lifespan with minor repairs as most useful pieces of information.
- Other: 28% selected "Providing better consumer information on products' durability (lifespan)" as one of the most effective measures. 45% considered information on guaranteed lifespan as most useful. 23% selected Information on expected lifespan and 9% selected lifespan with minor repairs as most useful pieces of information.

Sub-problem 1.3: Lack of reliable information about products' reparability

"Providing better consumer information on products' reparability" was selected by 22%, while only 9% selected as effective measure "Providing better consumer information on

software updates/upgrades". In terms of useful information to empower consumers, 48% selected "Information about the reparability of the product (e.g. availability of repair services, spare parts, repair manuals, repair scoring…)", 20% selected "Information about software updates or upgradability of hardware and software of the product" and 13% selected "Information on the (average) cost of repairs".

The views of each stakeholder group were the following:

- Citizens: 29% considered that "Providing better consumer information on products' reparability" would be an effective measure, and 19% selected "Providing better consumer information on software updates/upgrades" as effective measure. Regarding the most useful pieces of information, 54% indicated that information about the reparability of the product would be most useful, 22% considered that information about software updates or upgradability of hardware and software of the product would be useful, while 13% selected as most useful "Information on the (average) cost of repairs".
- Companies/businesses: 11% selected "Providing better consumer information on products' reparability" as an effective measure and only 2% selected the measure "Providing better consumer information on software updates/upgrades". 21% of the respondents of this stakeholder group considered having information about the reparability of the product as most useful, while only 2% selected "Information about software updates or upgradability of hardware and software of the product" and "Information on the (average) cost of repairs".
- Consumer Associations: The measures related to reparability and software update/upgrades were selected as most effective only by 5% of the respondents from this group. However, 35% indicated that it would be most useful to have "Information about the reparability of the products" and 55% considered most useful to have Information about software updates or upgradability of hardware and software of the product. Only 5% considered useful to provide information on the "(average) cost of repairs".
- Business Associations: "Providing better consumer information on products' reparability" was selected by 22% respondents of this group and only 4% selected "Providing better consumer information on software updates/upgrades" as an effective measure. Respondents of this stakeholder group only considered most useful having information about the reparability of the product (30%) and on "software updates or upgradability of hardware and software of the product" (selected by 14%). The information on repair costs was not selected.
- Public authorities: 33% considered "Providing better consumer information on products' reparability" as an effective measure, while only 6% selected the measure "Providing better consumer information on software updates/upgrades". 57% considered most useful having information about the reparability of the product, while 11% selected as useful to provide information on "software updates or upgradability of hardware and software of the product" and "on repair costs".
- Other: The two measures ("Providing better consumer information on products' reparability" and "Providing better consumer information on software updates/upgrades") were considered effective by 17% and 11% of the respondents from this groups respectively. Regarding the most useful pieces of information, 47% indicated that information about the reparability of the product would be most useful, 19% considered that information about software updates or upgradability of hardware and software of the product would be useful, while 17% selected as most useful "Information on the (average) cost of repairs".

Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

A measure "Providing a stronger protection against practices that cause products to fail earlier than can normally be expected (so called "early and planned obsolescence")" was the selected by 23% respondents. There are significant differences across stakeholder groups:

- Citizens: 35% considered the measure as most effective, making it the third most selected measure.
- Companies/businesses: 5% considered the measure most effective.
- Consumer Associations: 65% considered the measure as most effective (second most selected after information on durability of goods).
- Business Associations: only 3% of the respondents in this group selected this measure as effective.
- Public authorities: 28% considered the measure as most effective.
- Other: 34% considered the measure most effective.

Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

A measure "Providing a stronger protection against greenwashing (i.e. claims on environmental qualities of products or services that are exaggerated, too vague, false or impossible to prove)" was the third most selected by respondents (27%).

There are some differences across stakeholder groups:

- Citizens: 17% considered the measure as most effective.
- Companies/businesses: 27% considered the measure most effective.
- Consumer Associations: 45% considered the measure as most effective.
- Business Associations: 26% considered this measure as effective.
- Public authorities: 22% considered the measure as most effective.
- Other: 40% considered the measure most effective.

In addition, around 17% of respondents indicated that "Recommendations about the sustainability (i.e. environmental, social aspects included) of the product by a trusted public or private source (e.g. a public authority, expert, celebrity, friend)" are useful information to empower consumers for the green transition.

Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

Overall, 23% of respondents selected as most effective the measure of "Providing a greater transparency and reliability for sustainability logos/labels (i.e. covering environmental and social aspects)", while only 7% indicated "Providing a greater transparency and reliability for IT tools (e.g. consumer apps) providing advice for a more sustainable consumer behaviour" as an effective measure.

- Citizens: only 12% indicated "the provision of a greater transparency and reliability for sustainability logos/labels" as an effective measure and less than 5% selected as an effective measure "the provision of a greater transparency and reliability for IT tools".

- Companies/businesses: "Providing a greater transparency and reliability for sustainability logos/labels" was selected as effective by 34% respondents, and 11% selected the measure "Providing a greater transparency and reliability for IT tools".
- Consumer Associations: only 5% selected "the provision of a greater transparency and reliability for sustainability logos/labels" as an effective measure and none selected the measure "Providing a greater transparency and reliability for IT tools".
- Business Associations: "Providing a greater transparency and reliability for sustainability logos/labels" was selected as effective by 28% respondents, and 10% selected the measure "Providing a greater transparency and reliability for IT tools".
- Public authorities: "Providing a greater transparency and reliability for sustainability logos/labels" was considered most effective by 19% and "Providing a greater transparency and reliability for IT tools" as most effective by 6%.
- Other: 30% indicated "the provision of a greater transparency and reliability for sustainability logos/labels" as an effective measure and only 2% selected as an effective measure "the provision of a greater transparency and reliability for IT tools".

Ineffective enforcement of existing consumer protection rules related to imperfect information and obsolescence and greenwashing

Strengthening the enforcement of EU consumer law in these matters was the ninth most selected measure by OPC respondents (12%). There are some differences across stakeholder groups:

- Citizens: 15% considered the measure as most effective.
- Companies/businesses: none considered the measure most effective.
- Consumer Associations: 15% considered the measure as most effective.
- Business Associations: 8% considered this measure as effective.
- Public authorities: 14% considered the measure as most effective.
- Other: 21% considered the measure most effective.

Regarding the most effective solutions to improve the enforcement of EU consumer laws in the interest of enhanced participation of consumers in the green transition, the three most selected solutions were:

- Detailed EU guidance for enforcement bodies against greenwashing and obsolescence practices and on enforcing consumer information rules (selected by 36%)
- Strengthen cooperation between public authorities and businesses allowing for swift removal/correction of misleading claims/information and ensuring that consumers are informed and/or proposed adequate remedies (selected by 35%).
- Introducing at EU level deterrent penalties for providing misleading information to consumers in these matters (selected 32%)

Table A12 presents the results per stakeholder groups. Public authorities indicated as most effective a) "Detailed EU guidance for enforcement bodies against greenwashing and obsolescence practices and on enforcing consumer information rules (selected by 56%) and b) "Assisting national enforcement bodies in tracing the whole value chain to detect false or misleading claims through investments in new technologies (such as

Artificial Intelligence systems)" (47%). The least selected measures by this group were the following:

- Require national enforcement bodies to prioritise (e.g. by allocating more resources) enforcement of provisions that enhance the participation of consumers in the circular economy;
- More EU-funded training of enforcement authorities and judges on these matters
- Introducing at EU level deterrent penalties for providing misleading information to consumers in these matters.

Table A12. OPC Question 6. Which of the following would be in your view most effective in improving the enforcement of EU consumer laws in the interest of enhanced participation of consumers in the green transition?

	Citizens (N=74)	Consumer Organisation	Company/Business organisation	Business Association	Public authority (N=36)	Other (N=49)	Total (N=299)
Detailed EU guidance for enforcement bodies against greenwashing and obsolescence practices and on enforcing consumer information rules	39%	21%	33%	27%	56%	41%	**36%**
Strengthen cooperation between public authorities and businesses allowing for swift removal/correction of misleading claims/information and ensuring that consumers are informed and/or proposed adequate remedies	24%	16%	45%	53%	31%	27%	**35%**
Introducing at EU level deterrent penalties for providing misleading information to consumers in these matters	50%	89%	10%	8%	22%	51%	**32%**
Setting up at EU level an advisory system to ensure sustainability claims on products are based on reliable information	28%	21%	29%	25%	31%	37%	**29%**
Create an effective tool through which consumers can report to authorities problems experienced – e.g. absence of environmental information, misleading information, etc.	41%	26%	19%	8%	25%	41%	**26%**
Require national enforcement bodies to prioritise (e.g. by allocating more resources) enforcement of provisions that enhance the participation of consumers in the circular economy	28%	53%	21%	19%	14%	22%	**24%**
Assisting national enforcement bodies in tracing the whole value chain to detect false or misleading claims through investments in new technologies (such as Artificial Intelligence systems)	45%	11%	14%	5%	47%	18%	**24%**
More EU-funded training of enforcement authorities and judges on these matters	9%	11%	10%	10%	14%	14%	**11%**
None of the above	1%	0%	10%	9%	0%	4%	**5%**
Other	5%	42%	26%	46%	19%	14%	**24%**

The other measures suggested by stakeholders were the following:

Many respondents highlighted the need for a better control over potentially harmful products imported in the EU from non-EU traders or producers. Several respondents also indicated measures such as the implementation of a product passport or of a public blockchain system that would ensure traceability and transparency in supply chains or a pre-approval system for green claims that would increase consumer trust in green products.

A8.4.3 Other feedback

Regarding the right to repair products, 14% of the respondents indicated that that would be an effective measure to empower consumers. The answers varied across stakeholders: while around 25% citizens and consumer associations and 30% of other organisations considered this as an effective measure, none of the business associations selected the measure and only 5% of companies and 11% of the public authorities selected this as an effective measure.

Another area covered in the OPC relates to the provision of information on social aspects of sustainability. Overall, 14% selected as most useful to have "Information on products social aspects of sustainability, such as respect of human rights and workers' rights" and 11% indicated that "Providing better consumer information on social aspects of sustainability, such as respect of human rights and workers' rights" would be an effective measure.

In addition, 23% indicated that "Raising awareness about the role of consumers on circular economy and green transition" would be an effective measure while only 2% considered effective to "provide better consumer information on how to operate under extreme climate conditions products destined to be exposed to the elements and used outside".

A8.5 Targeted Stakeholder Consultations

A.9.5.1. Views on current problems

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on products' environmental characteristics

Key findings:

Almost all of the stakeholders consulted (16 out of 21; comprising seven consumer associations, seven other organisations and two industry associations) considered that consumers are not aware of the environmental impacts of products because the information is not provided or available. Only three industry associations indicated that such information is generally provided.

Detailed findings:

- Consumer Associations (n=8):
  - Most consumer associations (n=7) agreed that consumers are aware of the impact on the environment of buying less environmentally-friendly or less sustainable products and services. One respondent, on the other hand, totally disagreed and indicated that it is often difficult for consumers to compare the environmental impact of similar products and services because that

information is often not provided or available (six totally agreed with this statement; one somewhat agreed; one neither agreed nor disagreed)

- Business Associations (n=12)
  - The views of business associations on whether companies generally provide consumers with information on the environmental impact of products and services were divided. Three business associations agreed (one totally agreed and two somewhat agreed) that the information is generally provided while two disagreed and one neither agreed nor disagreed.
  - Most business associations (five) estimated that around 75%-89% of companies calculate/know the environmental impacts of their products/services. However, five business associations estimated that the percentage would be between 10%-49% and another business association estimated an even lower percentage of 1%-9%. One business association indicated that the lack of standardisation is a problem and also that for small companies with complex supply chains it is challenging to assess these impacts.
  - Most business associations (five) estimated that around 10%-49% of companies provide information to their clients on the environmental impacts of their products/services (two between 25%-49% and three between 10%-24%). However, three business associations estimated that the percentage would be above 50% while three other business associations estimated a percentage of less than 10%. One business association argued that one barrier to providing information in a standardised matter is that there is no consensus at industry level regarding the methodology that has to be used in order to promote the same sustainability claims.
  - Most business associations (eleven) considered that companies provide information about environmental impacts to clients in order to differentiate from the competition. An equal amount of business associations (eleven) also indicated other reasons: to improve the image of the product / service, to comply with Legal and Regulatory Compliance and to show efforts made to improve environmental impacts. Several business associations (six for each reason) also pointed that companies provide information about environmental impacts to clients to improve sales or because it is requested by consumers.
  - On the methods most used by companies to know/estimate environmental impacts of their products, industry associations indicated that different methods are used but most are LCA calculation methods (including PEF).
  - Regarding the main obstacles preventing companies from providing information about the environmental impact, "the diversity of methods and non-standardization" was mentioned by four respondents and also a few (three) indicated that providing the overall environmental impact is very complicated and difficult (in particular when the supply chain is complex) and finally a few also mentioned that difficulties in providing information on the packaging or on the product and fragmented approach across the EUC can be also important obstacles. One business association also mentioned that companies may find themselves conflicted between reducing packaging and providing more information because often in order to provide more information they need to increase the size of the packaging they use. Another business association added that manufacturers do not have financial incentives to invest in testing and improving products' environmental footprint which are costly processes.
- Other – labels/logos/certification schemes (n=13)
  - Nine respondents agreed ('totally agreed' and 'somewhat agreed') that consumers are aware of the impact on the environment of buying less

environmentally friendly/sustainable products and services, whereas 2 respondents somewhat disagreed and 1 respondent neither agreed nor disagreed;
- Most (11) of the respondents agreed ('totally agreed' and 'somewhat agreed') that it is difficult for consumer to compare the environmental impact of similar products/services because that information is often not provided/available; whereas one respondent neither agreed nor disagreed

- Other (n=7)
  - All (seven) respondents totally agreed that it is difficult for consumers to compare the environmental impact of similar products and services because that information is often not provided or available. According to one respondent, one of the reasons for that is the existence of too many labels and information types that makes it difficult for consumers to distinguish between green products and products that are not.
  - One organisation agreed to some extent that consumers are aware of the impact on the environment of buying less environmentally-friendly or less sustainable products and services, while one neither agreed not disagreed and one totally disagreed.

Sub-problem 1.2: Lack of reliable information on products' lifespan

Key findings:

Overall, the stakeholders consulted considered that consumers are not provided with information on either the lifespan of goods (without and with minor repairs) or any known product-specific features that may lead to early product failure.

Most respondents also considered that consumers are not aware of the environmental impact of buying fewer durable products and / or the long-term costs of buying fewer durable products.

Detailed findings:

- Consumer Associations (n=8)
  - Most respondents (six) considered[187] that the information on the availability of commercial guarantees is not widely available to consumers, while the remaining two organisations indicated that the information is available. All (8) indicated that consumers face problems with commercial guarantees.
  - All (eight) consumer organisations indicated that information on the expected lifespan without and/or with minor/reasonable repairs of products is not widely made available to consumers.
  - All (eight) associations indicated that information relating to known product features that may lead to early product failure is not widely available to consumers.
  - Six respondents considered that consumers are not aware of the environmental impact of buying fewer durable products and / or the long-term costs of buying fewer durable products. Two respondents disagreed.

- Business Associations (n=11)
  - As regards the extent to which commercial guarantees (i.e. warranties beyond the legal guarantee of two years) are provided in their specific sector, three business associations mentioned that retailers generally offer commercial guarantees. Another three respondents indicated that the extent to which commercial guarantees are offered varies greatly; this depends on economic

[187] Somewhat disagree or totally disagree.

operators, clients, or purpose. On the other hand, one business association stated that very few commercial guarantees are provided beyond statutory requirements. Four other business associations stated that the provision of commercial guarantees is often associated with being more competitive. It is often publicised or sold as an additional service at a specific price.

- Most of the associations were not able to indicate to what extent companies test and assess the expected lifespan of their products either without repair or with minor/reasonable repair(s). Three respondents recognised that durability or expected lifespan depend heavily on the product group, while three other respondents believed that manufacturers do not simply have this information. Conversely, one business association mentioned that the majority of companies test products based on technical specifications in terms of durability and safety requirements. Products that require specific safety marks before they can be commercialised often meet the necessary standards. Manufacturers of white goods constitute a good example.
- On current practices surrounding the provision of information on lifespan: all business associations agreed (four totally agreed and two somewhat agreed) that companies generally provide consumers with information on the availability of commercial guarantees ("guaranteed lifespan"). On the other hand, two business associations somewhat agreed that companies generally provide consumers with information on the expected lifespan of products without repairs, while three neither agreed nor disagreed with this statement and one totally disagreed. Furthermore, three business associations neither agreed nor disagreed with the fact that companies generally provide consumers with information on the expected lifespan with minor/reasonable repair of products, while one business association totally agreed, and two others disagreed.
- On the current practices regarding provision of information on lifespan: all business associations agreed (four totally agreed and two somewhat agreed) that companies generally provide consumers with information on the availability of commercial guarantees ("guaranteed lifespan"); two business associations somewhat agreed that companies generally provide consumers with information on the expected lifespan without repair of products, while three neither agreed nor disagreed with this and one totally disagreed with this; three business associations neither agreed nor disagreed with the fact that companies generally provide consumers with information on the expected lifespan with minor/reasonable repair of products, while one business association totally agreed and two other disagreed; four business associations agreed (one totally and three somewhat) that companies generally provide consumers with information on the known product features that may lead to product early failure. One business association neither agreed nor disagreed and another totally disagreed.

- One association suggested using QR codes (or other means) to facilitate the provision of durability-related information to consumers. Two other associations however remarked that a product's actual lifespan will likely depend on how the product is used and maintained over time. For instance, durability may be affected by the frequency of use, level of maintenance or external conditions (e.g. water hardness).

- Public authorities (n=19)

  - A majority (13) of respondents indicated that there is a need for consumers to receive more information on the lifespan of goods. Two respondents considered the information that is currently available to be adequate. One respondent however explained that the provision of the relevant information to consumers may not be sufficient to influence their purchasing habits and that it would be preferable to prevent products that are harmful to the

environment from entering the market in the first place. No respondent indicated that consumers would not be interested in receiving information on durability.

- Other (n=6)
  - Three respondents considered that information on the availability of commercial guarantees (i.e. "guaranteed lifespan" going beyond the legal guarantee) is widely available to consumers (one totally agreed; two somewhat agreed). In contrast, two respondents disagreed[188] and one neither agreed nor disagreed. One of the respondents argued that there is the need for clearer information on the difference between legal and commercial guarantees as there is much confusion among consumers and such differences are not well understood. In fact, five respondents considered that consumers face problems with commercial guarantees.
  - All six organisations indicated that information on the expected lifespan without repairs and with minor/reasonable repair is not widely available to consumers.
  - Similarly, all respondents did not consider that information on any known product features which may lead to early product failure(s) is widely available to consumers. One respondent argued that manufacturers should be required to provide this information.
  - Furthermore, all six respondents indicated that information on the availability of product software update/upgrades is not widely available to consumers. Specifically, one respondent highlighted that there is a lack of clarity between updates required for security reasons and updates necessary to maintain / boost functionality.
  - Half of the respondents believed that consumers are not aware of the environmental impact of buying fewer durable products, while two considered that consumers are sufficiently informed. In contrast, one respondent neither agreed nor disagreed. Regarding consumer awareness of the long-term costs of buying fewer durable products, two respondents considered that consumers are not well informed, while two felt that consumers have sufficient information about costs.

Sub-problem 1.3: Lack of reliable information about products' reparability

Key findings:

Almost all consumer associations and other organisations consulted considered that information on the availability of repair services, on the availability of spare parts and on relevant software update/upgrades was not widely available to consumers. On the contrary, most of the industry associations consulted felt that information relating to reparability is widely available.

Detailed findings:

- Consumer Associations (n=8)
  - Most of the consumer organisations (seven) considered that information on the availability of repair services and on relevant software updates or upgrades was not widely available to consumers, while one considered that it is available to some extent. All respondents (eight) agreed that there is a lack of information provided to consumers in relation to the availability of spare parts and repair manuals.
- Business Associations (n=6)

[188] One totally disagreed and one somewhat disagree.

- Almost all (five) business associations agreed (two totally and three somewhat agreed) that companies generally provide consumers with information on the availability of repair services as well as repair manuals. Only one business association totally disagreed with this statement.
- Four business associations agreed (half totally agreed, and half somewhat agreed) that companies generally provide consumers with information on the availability of spare parts. However, one business association neither agreed nor disagreed and one other somewhat disagreed.
- In addition, four business associations agreed (one totally agreed and three somewhat agreed) that companies generally provide consumers with information on the availability of software updates or upgrades, while two neither agreed nor disagreed.

- Public authorities (n=19)
  - 15 respondents agreed that consumers should be better informed about the reparability of products as such information is currently lacking[189]. Only two respondents considered that the information currently available is sufficient. One other respondent remarked that it is important that products are accompanied by sufficient information or guidance around maintenance and care. This was echoed by another respondent who stressed the need for more information on reparability. No respondents believed consumers would not be interested in information pertaining to reparability.
- Other (n=8)
  - All eight respondents shared the view that information relating to the availability of repair services, spare parts and / or repair manuals is not widely available to consumers.
- Other – digital information tools (n=1)
  - One respondent indicated that consumers need information on why they should buy the more sustainable product. They need to know how they can get more from their products by having clear information on the available repair options.

Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

Key findings:

The majority of consumer associations and other organisations considered that there is premature obsolescence to some extent (but not necessarily planned), industry associations disagreed. Experts consulted are of the opinion that while products may be failing earlier than they could, that might not be linked to an intention of companies to increase the replacement rate for product.

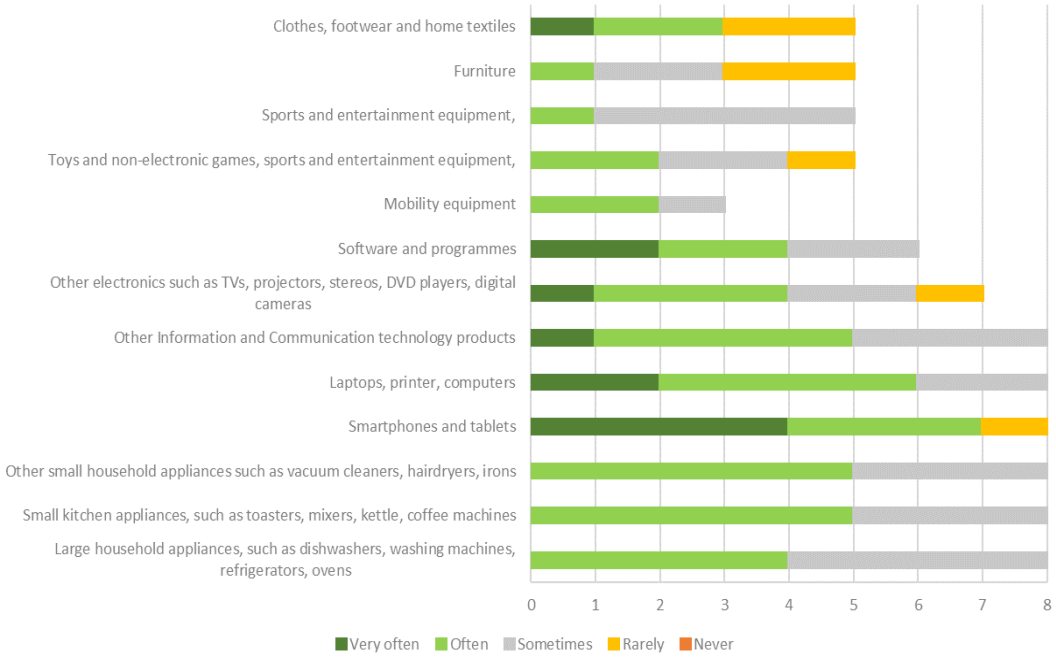
Detailed findings:

- Consumer Associations (n=8)

[189] by responding 'Yes they need more information about repairability (e.g. availability of repair services, spare parts or repair manuals)'

- The extent of this problem is represented by the number of complaints consumer associations receive from consumers dissatisfied with products failing earlier than expected. The views of consumer associations on the frequency of planned/premature obsolescence per product is provided in Figure A104.

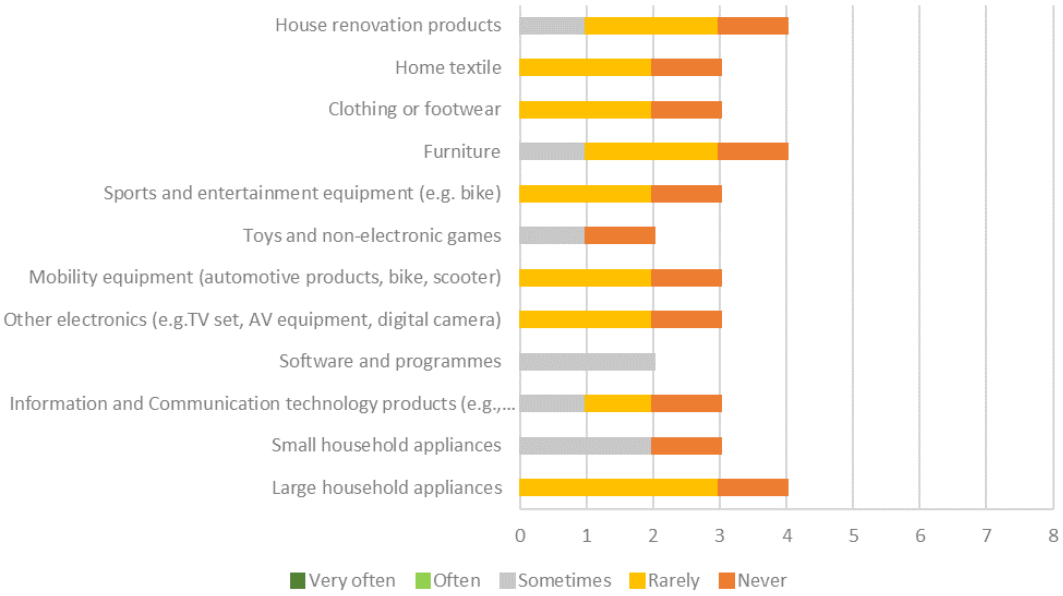
Figure A104. Consumer associations: planned and/or premature obsolescence per type of product



- Regarding the underlying causes for planned/premature obsolescence:
  - Four consumer organisations believed that "very often" products are designed to stop working or to deteriorate quickly, while two considered that that happens "sometimes".
  - Three considered that prevention of repairs or of replacement of parts happens "sometimes", whereas one association believed it happens "often".
  - Four respondents indicated that "often" product/software can no longer be maintained, and/or the manufacturer stops supporting it. Three associations suggest this occurs "very often".
  - Three consumer organisations argued that "often" products do not receive new security updates or other updates necessary for the proper functioning, by contrast, two respondents highlighted that this happens "very often" and one that it happens "sometimes".
  - Three respondents indicated that "sometimes" products have mandatory software updates that reduce the performance of the products, while one believed that this happens "very often" and one that it happens "rarely".
  - Some respondents also indicated that the lack of availability of parts and the lack of repair shops can also be underlying causes of premature obsolescence

- Business Associations (n=4)
  - The views of business associations on the frequency of planned/premature obsolescence per product type is provided in Figure A105

Figure A105. Business associations: planned and/or premature obsolescence per type of product



- Some associations highlighted that the existence of planned obsolescence was not found by a comprehensive investigation of the Federal Environmental Agency (a new study of the European Parliament comes to a similar result), and that the same investigation concluded that increasingly shorter useful lives of goods are often not product-related but are determined by product innovation and consumer preferences.
- Only two business associations commented on the underlying causes that lead to planned/premature obsolescence, one indicated that "cheap products manufactured outside [the] EU by using material that don't keep well and may contain forbidden chemicals almost always cause failures."; and the other "that it is not a design fault that has led to the product's inoperability, but rather excessive use or an operating error, increases with the passage of time."

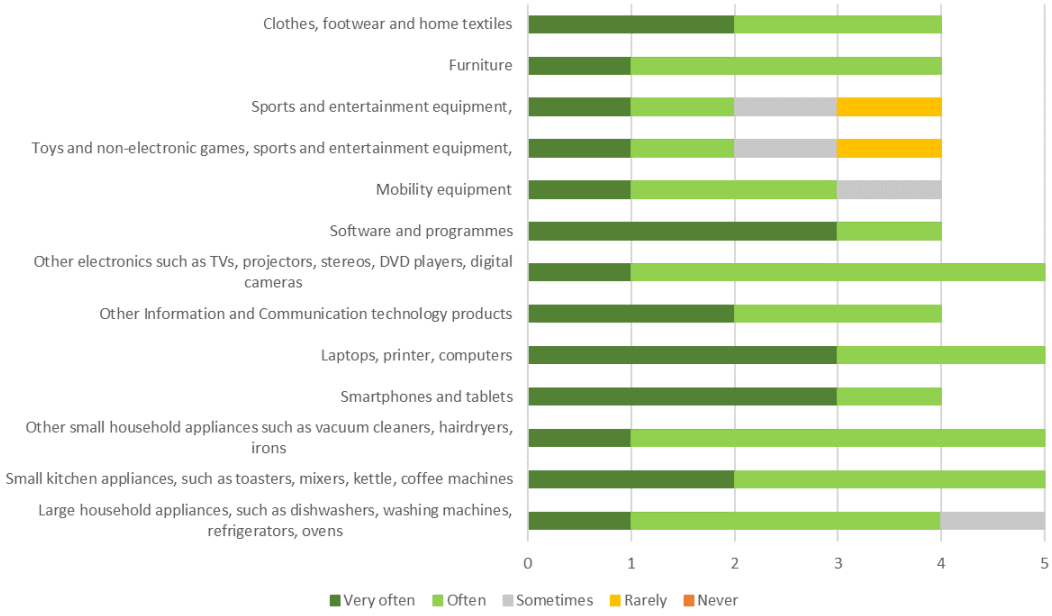
- Public authorities (n=18)
  - As public authorities do not necessarily gather consumer complaints, most respondents could not provide a meaningful response on whether "in the last 2 years, what has been the share of complaints about goods that failed or stopped working after the legal guarantee expired but earlier than could normally be expected". Of the 17 respondents, 12 replied, "do not know", three that "there have been no such complaints" and two "not relevant". One respondent that did not select any of the options above, however added that: "[…], we do not have specific statistics for these types of complaints. However, it has occurred that such complaints have been received." Two respondents specified that there are difficulties for consumers both in understanding planned obsolescence and in knowing where and to whom to complain.
  - Only two respondents commented on the main underlying causes of planned/premature obsolescence.

- Products designed to deteriorate quickly: the 2 respondents indicated that this is **sometimes** the case.
- Products designed to stop working: the 2 respondents indicated that this is **seldom** the case.
- Prevention of repairs or of replacement of parts: the 2 respondents indicated that this is **seldom** the case.
- Product/Software can no longer be maintained, and/or the manufacturer stops supporting it: the 2 respondents indicated that this is **often** the case.
- Software updates that reduce the performance of the products: 2 respondents viewed this as being **often** the case and **seldom** the case.[190]
- Poor manufacturing or materials: 1 respondent viewed this as being **often** the case and 1 as **sometimes** the case.

- Other

  - The views of other organisations on the frequency of planned/premature obsolescence per product is provided in Figure A106.

Figure A106. Other stakeholders: planned and/or premature obsolescence per type of product



  - Regarding the main underlying causes of planned/premature obsolescence, the two organisations that provided their views on this considered that premature obsolescence often happens because products are designed to stop working or to deteriorate quickly; prevention of repairs or of replacement of parts happens, product/software can no longer be maintained, and/or the manufacturer stops supporting it; products do not receive new security updates or other updates necessary for the proper functioning and that products have mandatory software updates that reduce the performance of the products. The respondents also specified additional underlying causes such as the lack of maintenance on the consumer side (e.g. washing machines).

[190] This is an outlier insofar as one respondent chose to reply only to this product group.

- Independent experts consulted were of the opinion that while products may be failing earlier than they could, it is not necessarily linked to an intention of companies to increase the replacement rate for product.

Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

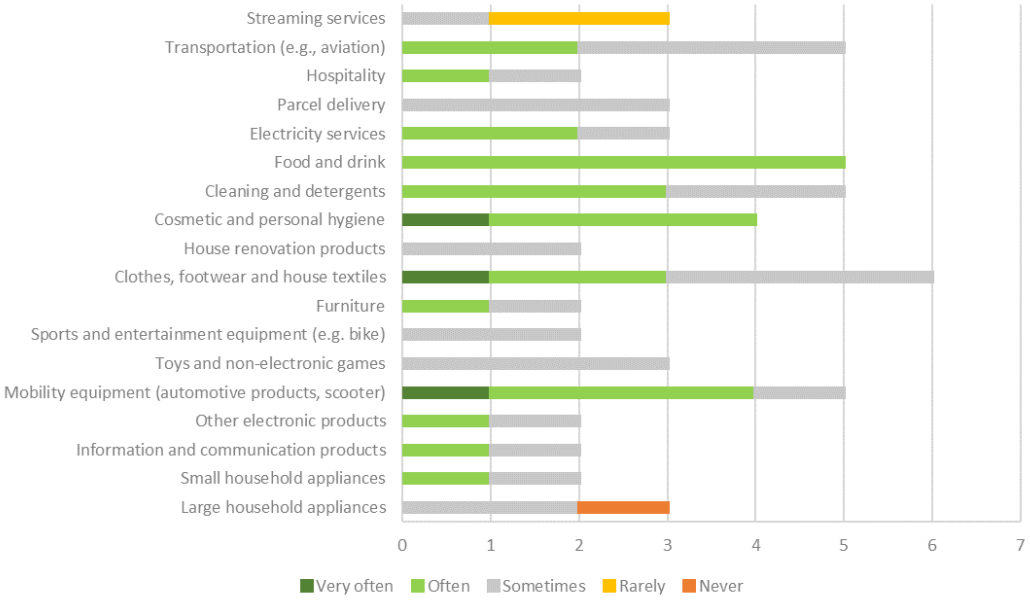
Key findings:

The majority of consumer associations and other organisations considered that there is greenwashing. Industry associations tend to disagree that the practice is very prevalent. Experts consulted are of the opinion that greenwashing is a common practice, based mostly on manipulating information (by using general, vague terms for example) than rather by providing completely false information.

Detailed findings:

- Consumer Associations (n=8)
  - The views of consumers associations on the frequency of greenwashing per product is provided in Figure A107.
  - Almost all (seven) respondents considered that consumers do not trust environmental claims due to greenwashing practices (one totally agreed; six somewhat agreed), while one somewhat disagreed.

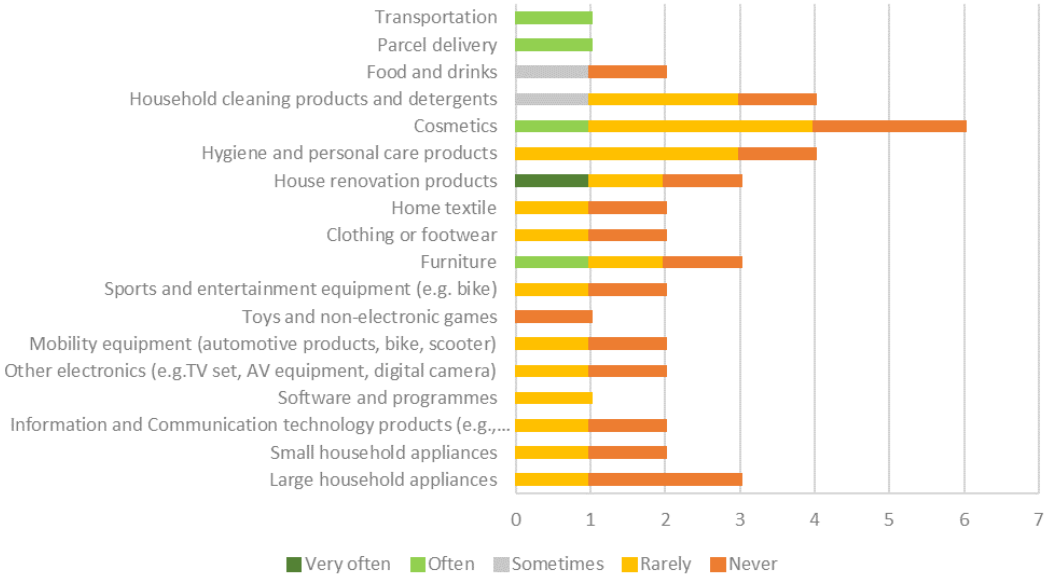
Figure A107. Consumer organisations: frequency greenwashing practices per type of products



- Business Associations (n=6)
  - The views of business associations on the frequency of greenwashing per product is provided in Figure A108. One business association added the following: "We do not really deal with misleading or false claims around environmental performance but more around the degree of recyclability of packaging. Another association mentioned that greenwashing is not as frequent as it was 10 years ago but that is still happening. In their view, there are different levels of greenwashing in different markets depending on how aware consumers are and on the activity of market authorities. One problem is the lack of harmonised guidance and guidelines. There is some guidance it

is rather fragmented and thus there is no room for a consistent and informed choice for consumers.

Figure A108. Business associations: frequency greenwashing practices per type of products



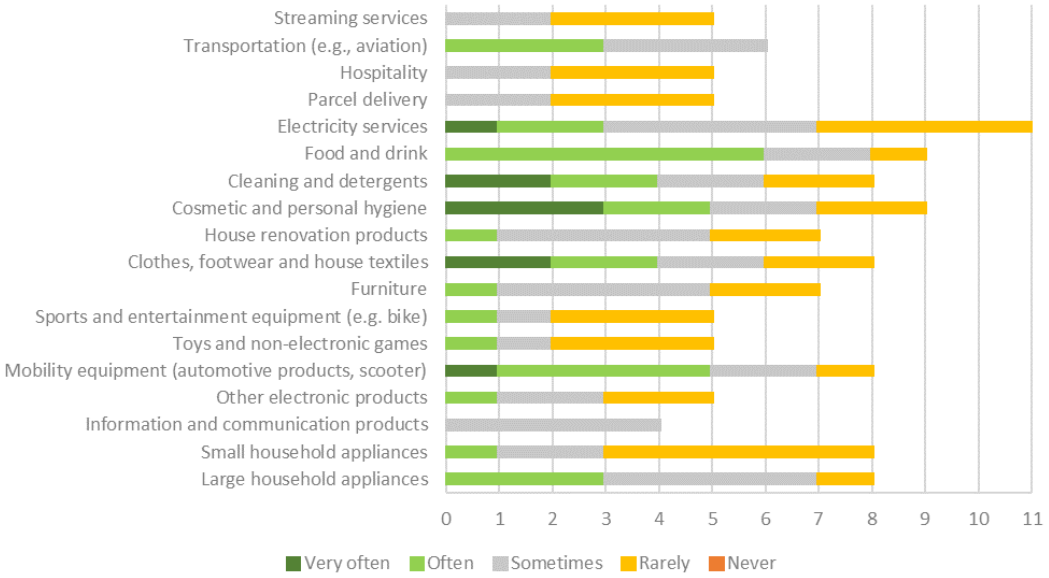
- Public authorities (n=21)
  - Greenwashing is viewed by the respondents as something that occurs in all product groups, in fact no respondent selected the "never" option. In most product groups this occurrence is mostly seen to be occasional, with either sometimes or rarely being the most selected options.[191] There are some exceptions however, as illustrated below (with response numbers in brackets):[192]
    - Greenwashing was identified by respondents as something occurring often (4) or very often (1) among 'mobility equipment'.[193]
    - 'Cosmetics and personal hygiene' is also a product group in which greenwashing is considered to occur more very often (3) and often (2) than sometimes (2) or rarely (2).
    - Similarly, the product group 'food and drink' was considered to be an area in which greenwashing occurs more often (6) than sometimes (2) or rarely (1).
    - In the case of 'clothes, footwear and house textiles', responses were split evenly between very often (2), often (2), sometimes (2) and rarely (2).
    - Similarly, in Transportation responses were split evenly between often (3) and sometimes (3).
  - A full overview of responses in relation to each product group is provided in Figure A109.

[191] Selected 84 times (sometimes 45 and rarely 39) in total.

[192] "Often" and "very often" were selected 39 times (very often 9 and often 30) in total

[193] "Sometimes" was selected 2 times and "rarely" 1 time.

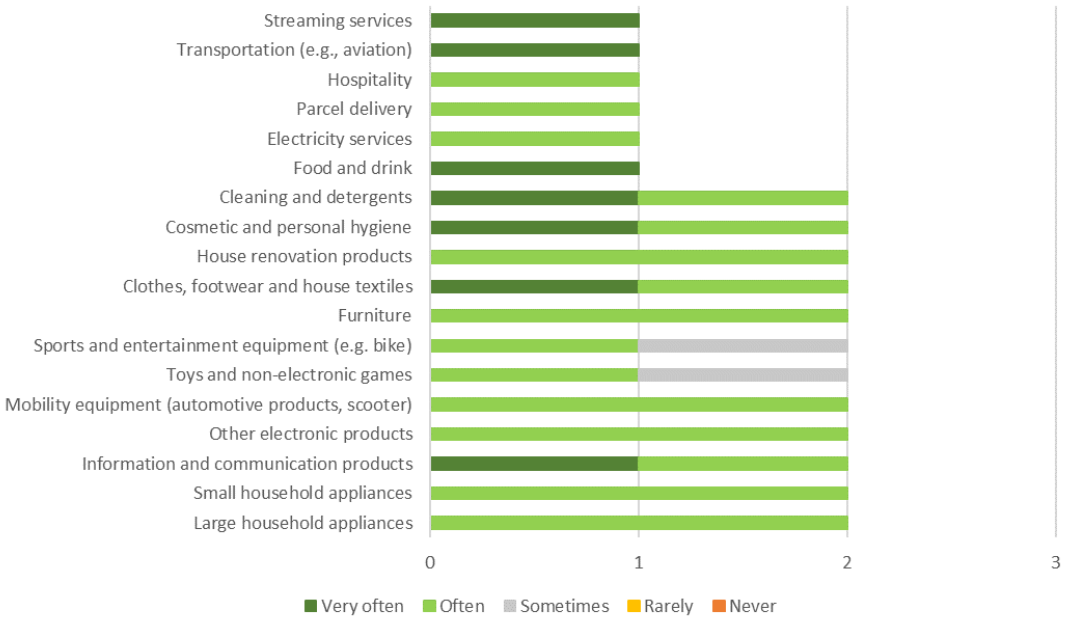
Figure A109. Public authorities: frequency greenwashing practices per type of products



Note: the totals do not include the answers not applicable/not relevant

- Other – labels/logos/certification schemes (n=13)
  - Eight respondents agreed ('totally agreed' and 'somewhat agreed') that consumers do not trust environmental claims due to greenwashing practices; whereas one respondent totally disagreed and 3 respondents neither agreed nor disagreed.
- Other (n=3)
  - The views of 'other' stakeholders on the frequency of planned/premature obsolescence per product is provided in Figure A110.
  - All three respondents agreed that consumers do not trust environmental claims due to greenwashing practices (1 totally agreed; 2 somewhat agreed).
- Other – digital information tools
  - One respondent indicated that they observed more and more greenwashing in the food industry because companies don't always offer the whole picture regarding their sustainability policy. They present one aspect of their business as being sustainable, but they lack the same level of responsibility in other areas such as their packaging or their supply chain or corporate practices.
  - Another respondent indicated that they didn't observe an increased level of greenwashing in the cosmetics industry. However, the chemical origin of products makes it difficult to consumers to understand the ingredients in the products they buy so they can also be easily misled by false claims.

Figure A110. Other stakeholders: frequency greenwashing practices per type of products



Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

Key findings:

The majority of the stakeholders consulted considered that the proliferation of labels/logos leads to greenwashing, confusion, and loss of effectiveness. Some also indicated that the proliferation of labels and logos and the national measures to address the problem will lead to market fragmentation and hinder the EU single market.

Detailed findings:

- Consumer Associations (n=8)
  - All eight consumer associations indicated that the proliferation of environment/sustainability logos and labels leads to confusion and mistrust among consumers (seven totally agreed and one somewhat agreed).
  - All eight also considered that consumers have difficulties in assessing the reliability of environment/sustainability logos and labels and that it is difficult for consumers to compare the environmental impact of similar products/services when they have different logos/labels/other green claims.
  - Six associations considered that consumers have difficulties in assessing the reliability of information provided by digital information tools (websites, apps) on the environmental and social impact of products and services (four totally agreed while two somewhat agreed).
- Business Associations (n=11)
  - All respondent business associations (11) considered that companies provide information about environmental impacts via ISO Type labels. However, an equal amount of business associations (10) considered that this information is provided via the company/sector's environmental logo/label. Many business associations (9) also pointed that companies provide information about environmental impacts to clients via website or app or on the product or shelf (7).

- A few business associations were of the opinion that actually there is no proliferation of labels/logos. One of the reasons indicated was the cost per product to obtain an ISO Type 3 declaration. One business association commented the following: "We do not see a proliferation of labels in our industry but one area which is under much scrutiny relates to claims about products being "organic" or "natural."
- Regarding the consequences of the proliferation of environmental/sustainable labels and digital information tools, a few respondents highlighted greenwashing, confusion, and ineffectiveness of labels. A few business associations added that the proliferation of environmental/sustainable labels and digital information tools is problematic for consumers but also for businesses, as manufacturers feel the pressure to actually come up with an adequate sustainability label and many of those labels become used as branding. One business association added that this brings significant additional costs for manufacturers.
- Four business highlighted that the current focus on environmental concerns more and that more countries and companies are adopting different ways to provide the information and leading to an increasingly fragmented EU market and barriers to cross-border sales.

- Other – logos, labels, and certification schemes (n=15)
  - On the ISO type, seven respondents indicated that their label/logo/scheme belongs to the ISO 14024 Type I (Ecolabel); no respondent indicated that their label/logo/scheme belongs to ISO 12021 Type 2 (Self-declared environmental claims) nor to ISO 14025 Type 3 (Environmental declarations); eight respondents declared that their label/logo/scheme belongs to other non-environmental label, e.g. ISO 17011 Type and ISO 17065 Type
  - Regulation of the label/logo/scheme: seven respondents declared that their label/logo/scheme is regulated by the industry, sector or other standards of code of conduct; two respondents indicated that their label/logo/scheme is regulated by national legislation and no label/logo/scheme is regulated by regional legislation
  - Three respondents indicated that the verification and certification process is carried out by independent and accredited third-party certification bodies
  - Acceptance in the Green Public Procurement: most of the respondents (8) declared that their label/logo/scheme is accepted by the government as a proof in Green Public Procurement, while five respondents indicated that their label/logo/scheme is not accepted as a proof in Green Public Procurement
  - Regarding awareness and adherence to the recommendations "2010 EU best practice guidelines for voluntary certification scheme for agricultural products and foodstuffs": five respondents were not aware of the Guidelines, while five are ware but not adhere to them and four are aware and do adhere to the Guidelines. The main advantages of the guidelines are to create a level playing field (mentioned by two respondents) and to reduce the proliferation of unsubstantiated claims. One respondent mentioned that one disadvantage is the additional bureaucracy imposed by the guidelines.
  - Adherence to other guidelines, standards, and codes of conduct:
    - 7 respondents declared that their label/logo/scheme is compliant with the ISEAL Codes of Good Practice
    - 3 respondents mentioned that their label/logo/scheme adheres to ISO standards. In particular, all of them (3) declared that their label/logo/scheme adheres to 17065 SIO standards, 2 of them also adhere to the 17011 ISO standard, 1 of them adhere to the 17021 ISO standard and 1 also adhere to the ISO 19011 standards.

  - 2 respondents indicated that they also comply with different UN FAO standards, e.g. FAO CoC compliance, FAO GL for seafood ecolabelling and FAO Technical Guidelines on Aquaculture Certifications

- Impacts covered by the labels/logos and certification schemes:
  - In terms of environmental impact, most of the logo/scheme/labels (10) cover climate change and waste management; 9 respondents declared that their labels/logo/scheme cover resource efficiency; 8 labels/logo/scheme cover eco-toxicity; 7 labels/logo/scheme cover biodiversity; 6 labels/logo/scheme cover the environmental impact of the emission of ozone-depleting substances; 4 labels/logo/scheme cover the overall excellent environmental performance and a minority of the labels/logo/scheme (3) cover human toxicity and particulate matter.
  - In terms of social impacts, most of the labels/logo/scheme (8) cover labour conditions (e.g. child labour, workers' rights, decent wage) whereas 7 labels/logo/scheme cover human rights and gender equality and 4 labels/logo/scheme cover animal welfare and fair trade
- Most of the respondents (5) declared that the methodology used to assess the various environmental and social impact consider aspects on reparability, obsolescence and possibility to upgrade/update the product, while one respondent declared that the methodology used does not consider aspects on reparability, obsolescence and possibility to upgrade/update the product
- Their views on the impact of their label/logo/scheme:
  - Most (11) of the respondents agreed ('totally agreed' and 'somewhat agreed') that their logo/label has been effective in promoting more sustainable consumption behaviour, whereas 1 respondent neither agreed nor disagreed
  - Most (10) of the respondents agreed ('totally agreed' and 'somewhat agreed') that consumers now what aspects and impacts are covered by your logo/label, whereas 1 respondent neither agreed nor disagreed
  - 10 respondents agreed ('totally agreed' and 'somewhat agreed') that their logo/label has been effective in ensuring consumer trust, whereas 2 respondents neither agreed nor disagreed
  - Most (11) of the respondents agreed ('totally agreed' and 'somewhat agreed') that their logo/label is widely recognised by consumers, whereas 2 respondents somewhat disagreed and 1 respondent neither agreed nor disagreed
  - 9 respondents agreed that ('totally agreed' and 'somewhat agreed') their logo/label is widely understood by consumers, whereas 3 respondents neither agreed nor disagreed.

- Other – labels/logos/certification schemes
  - Nine respondents (of 12) agreed ('totally agreed' and 'somewhat agreed') that the proliferation of environment/sustainability logos and labels leads to confusion and mistrust among consumers; whereas two respondents disagreed ('somewhat disagreed' and 'totally disagreed') and one respondent neither agreed nor disagreed;
  - All (11) respondents agreed ('totally agreed' and 'somewhat agreed') that consumers have difficulties in assessing the reliability of environment/sustainability logos and labels
  - Nine respondents agreed ('totally agreed' and 'somewhat agreed') that consumers have difficulties in assessing the reliability of information provided

by digital information tools (websites, apps) on the environmental and social impact of products and services, whereas one respondent totally disagreed and one respondent neither agreed nor disagreed.

- Most (11 out of 12) respondents agreed that it is difficult for consumers to compare the environmental impact of similar products/services when they have different logos/labels, whereas one respondent 'somewhat disagreed'.

- Other (n=3)
  - Three organisations considered that:
    - the proliferation of environment/sustainability logos and labels leads to confusion and mistrust among consumers;
    - consumers have difficulties in assessing the reliability of environment/sustainability logos and labels;
    - consumers have difficulties in assessing the reliability of information provided by digital information tools (websites, apps) on the environmental and social impact of products and services; and
    - it is difficult for consumers to compare the environmental impact of similar products/services when they have different logos/labels/other green claims.
- Other – Digital information tools organisations
  - One respondent indicated that one problem would be that some organisations are finding ways to trick the requirements around green certifications and the issue of traceability should gain more importance and more transparency should be provided. Information overload was also reflected as an issue that which prevents consumers from making the effort to distinguish between various green claims.

Ineffective enforcement of existing consumer protection rules related to imperfect information and obsolescence and greenwashing

- Public authorities
  - Seven out of 23 respondents indicated that there are requirements in their country regarding the obligation to provide consumers with information on the lifespan (e.g. expected lifespan with repairs, without repairs and/or guaranteed) and/or reparability (e.g. availability of repair services, spare parts, repair/user manuals, etc.) of products. The effectiveness of the enforcement (extent of compliance) of these existing requirements was addressed by only one respondent. The respondent makes reference to the national legislation transposing Directive 1999/44/EC[194] and indicates that the provisions are generally followed, with the only challenge being the large number of complaints registered by consumers regarding the exceeding of the legal term for repairing defective products.
  - Stakeholders considered current obsolescence provisions to be generally ineffective mostly because they do not address the root causes of the problem and because they are difficult to enforce. Issues with enforcement are mostly linked to the difficulty of identifying the practice of premature obsolescence and proving the manufacturer's intent. In fact, of the 15 respondents that provided their views on the effectiveness of the current general EU consumer protection rules aimed to counter intentional (planned) or other

[194] Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees.

(unintentional) premature obsolescence practices] in preventing obsolescence, 13 considered them ineffective or very ineffective, while two considered them very effective. Respondents considered that the main reasons for the ineffectiveness of the provisions were the following:

- They are difficult to enforce (selected seven times), because of lack of specific legal provisions prohibiting such practices (selected two times), difficulties in identifying the practice of premature obsolescence (selected seven times) and difficulties in proving intent on manufacturers behalf (selected six times). One respondent that selected 'Difficulties in identifying the practice of premature obsolescence' and 'Difficulties in proving intent on manufacturers behalf' further explained that: "*It is difficult to demonstrate and prove the planned obsolescence of a product. Digital elements of both goods and services are not visible and only an expert can find out the reason why a product fails, especially since these are hidden features. Maximum timeline for product conformity creates incentives for obsolescence*."
- They do not address the root causes of the problem (selected six times)
- Definitions are not specific enough (selected three times)
- The sanctions are not a sufficient deterrent (selected two times)
- Planned obsolescence is very difficult to prove (selected one time)

- Only one respondent indicated that there any specific measures/requirements in their country regarding the prevention of early/planned failure of products (12 indicated that there are no specific provisions in their country). While no specific measures were described by the respondent, the following comment was provided: "*Current legal framework does not prevent the fact that companies are able to release such products in the market that are designed to lose their usefulness before the expected lifetime. Maximum timeline for product conformity creates incentives for obsolescence.*"

- The positions expressed on the current provisions on greenwashing are very balanced with regards to their effectiveness. Only one respondent considered them to be "very effective" however, and the reasons for not considering the provisions to be excellent are due mostly to the difficulties with enforcement and the vagueness of the definitions. In fact, of the 19 respondents, eight indicated that the *current general EU consumer protection rules such as the Unfair Commercial Practices Directive are* 'ineffective', while eight considered them effective and one very effective.[195] The respondent who chose 'very effective' added that: "*In Austria the enforcement under the UCPD works very well. It is settled case-law that environmental claims may only be used in advertising if they are clearly substantiated and there is no risk of misleading the consumer. […] Competent courts therefore apply a strict standard when examining such claims, but the existing law provides for the necessary flexible application.*" Those that replied ineffective and effective were asked to explain why:[196]

  - They are difficult to enforce (selected seven times)
  - They do not address the root causes of the problem (selected one time)
  - Definitions are not specific enough (selected four times)
  - The sanctions are not a sufficient deterrent (selected three times)

[195] 2 respondents selected "not relevant/I don't know".

[196] 'Not relevant/Do not know' was selected 3 times.

  - Other (selected 4 times): "*the assessment of the documentation can sometimes be challenging*"; "*very difficult or not possible to prove the correctness of the claim. For consumer organisations considerable expense or effort and an often-unfavourable risk/reward balance is given; the trader can give evidence much easier*"; and "*monitoring and enforcing green washing requires resources and often detailed knowledge of the specific sector, sometimes requiring the assessment of an external expert. This is not resources that we have at hand*."

- The respondents who indicated difficult to enforce were asked about what those difficulties are[197], respondents selected the following options: lack of specific legal provisions prohibiting such practices (selected two times), difficulties in identifying the practice of greenwashing (selected four times) and difficulties in proving that the claim is unfounded and/or misleading (selected seven times). One respondent that selected "Lack of specific legal provisions prohibiting such practices" and "Difficulties in proving that the claim is unfounded and/or misleading", added that: *"With reference to the Volkswagen enforcement case, we face difficulties in proving that a claim is misleading, because it needs technical knowledge.[198] Moreover, the rules in the UCPD are generally stated so there is too much leeway for traders to make vague claims.".* Another respondent that selected only "Difficulties in proving that the claim is unfounded and/or misleading", echoed this stating that *"[…] It is difficult to prove that an environmental claim is misleading and even more difficult to prove that there is an omission. Loose expressions such as environmentally friendly and green in words or images or otherwise communicated is always vague and inaccurate and often misleading marketing. However, it is not easy to prove that the vagueness affected the consumer's choice. If the claim is not as vague, it can cause difficulties in proving that the claim in fact is misleading despite the studies and evidence it is based on. Environmental claims are an area where special expertise is needed, and consumer law enforcement authorities need external support.".* And one respondent that selected "Difficulties in identifying the practice of greenwashing" and "*Difficulties in proving that the claim is unfounded and/or misleading", added that: "The main problem is the difficulties to assess whether the claim is unfounded or not […]. UCPD is a sufficient framework. However, possibly extending blacklist or developing specific provisions regarding green claims could be considered. In addition, we see a need of developing an updated UCPD guidance with focus only on green claims and also the introduction of EU requirements to substantiate green claims based on a common EU method (PEF) should be further looked into."*

- Eight out of 20 respondents indicated that there are specific *measures/requirements in their country (beyond the Unfair Commercial Practices Directive and other general requirements) that regulate claims/labels/logos made about the environmental impact or social sustainability of products and services*", while four indicated that that is not the case. Eight respondents selected that it was "not relevant/do not know". Of those eight, six considered the specific measures effective. Five (of the eight respondents) also provided relevant explanations of the specific measures:

  - Environmental product certification according to existing schemes (Ecolabel, EDP ed ISO 14020)
  - An environmental label called "Umweltzeichen".

[197] N.b. this is a multiple-choice question.

[198] https://www.acm.nl/en/publications/decision-objection-concerning-fine-volkswagen-unfair-commercial-practices

- An Ombudsman-issued guidance paper on environmental claims
- A code of conduct in the field of advertising and communication with its relevant regulatory council.
- The ICC Consolidated Code of Advertising and Marketing Communications Practice (ICC Code) (integrated into national law).

- The reasons indicated for those specific measures not being very effective were:[199]
  - They are difficult to enforce (one response)
  - Definitions are not specific enough (one response)
  - The sanctions are not a sufficient deterrent (one response)[200]
  - Other reasons (four responses): the costs for producers are comparatively high and there is a lack of consumer awareness.[201]; it is a complex area.[202]; they can be difficult to apply in specific cases due to the difficulty in knowing how good certain measures are for the environment; sometimes, it is also technically difficult to apply complicated ISO standards; in some cases, e.g. regarding carbon neutral, the definition in ISO 14021 is not precise enough.[203]

A8.5.2 Views on possible interventions

Problem 1. Consumers lack reliable information to make environmentally sustainable purchases

Sub-problem 1.1: Lack of reliable information on products' environmental characteristics

Measure A: Require the indication of the overall excellent environmental performance of products

Summary findings

- Overall, in terms of effectiveness, the proposed measure to require the indication of the overall environmental performance of products was judged to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others). There were generally (slightly) more respondents that thought that the proposed measure would be "highly effective" as opposed to "somewhat effective."
- Only business associations commented on the feasibility, costs and challenges associated with the proposed measure. Most respondents generally considered the measure to be "somewhat feasible," though likely to entail "high costs." The most commonly reported challenges were expected to be: the relevance / appropriateness of additional requirements in relation to the provision of environmental information, given that some requirements are already covered by current legislations; and the lack of a generally-acceptable standard that can be used to measure environmental performance across all product categories.

Detailed findings

- Consumer Associations:

[199] "They do not address the root causes of the problem" was also an option, however it was not selected.

[200] Code of conduct.

[201] Umweltzeichen environmental label

[202] Ombudsman's guidance

[203] ICC Code.

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring an indication of the overall excellent environmental performance of products and services. Their views were as follows:

- Eight respondents agreed that the indication of the overall excellent environmental performance of products, including durability and reparability aspects, would be effective in fostering more sustainable consumption behaviours (two respondents recognising this measure would be "highly effective" versus six saying it would be "somewhat effective").
- Other responses provided by consumer organisations included *inter alia*: (1) the provision of better/enhanced information as a means to boost consumer involvement; (2) the provision of information in a standardised and accessible format, such as the provision of more detailed environmental / sustainability-related information via a QR code as opposed to information being solely displayed on products' packaging (which tends to be "lost" once a product reaches the second-hand market(s)).
- No views on impacts and challenges were provided.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the proposition to mandate the indication of the overall excellent environmental performance of products. Their views were as follows:

- *Effectiveness:* All business associations (n=5) agreed that an indication of the overall excellent environmental performance of products, including durability and reparability aspects, would be an effective measure (three respondents recognising that such a measure would be "highly effective", two "somewhat effective").
- *Feasibility:* Almost all business associations generally felt that the proposed measure would be feasible (one respondent indicated that the measure would be "highly feasible," while four other respondents felt it would be "somewhat feasible"). Only one business association expressed concerns and felt that the measure would be "unfeasible."
- *Cost impacts:* Three business associations believed that, by mandating an indication of the overall excellent environmental performance of products, including durability and reparability aspects, the impact on costs would be high. Two other business associations considered that cost impacts would be moderate. There was no indication from any respondent that the costs entailed by such a measure would be low.
- *Other impacts:* One business association believed that any information relating to environmental performance would have to be sufficiently explained to the buyer. For example, it can be expected that a product's environmental performance will likely be influenced by the extent of product use. Buyers need to be made aware of this, such that manufacturers are not held responsible for reduced performance as a result of misuse or intensive use of a product. Another business association felt that the proposed measure ought to be accompanied with clear guidance in relation to certification / validation. If claims relating to the overall environmental performance of products are not certified (by means of a pre-agreed set of ecological or scientific criteria), there may be a risk of greenwashing, i.e. manufacturers wrongfully indicating that their products offer excellent environmental performance.
- *Challenges:* One business association remarked that the proposed measure may not achieve its desired objectives of helping consumers to make more informed purchase decisions. In the respondent's view, current information requirements, especially those stemming from the Consumer Rights Directive

as well as from numerous voluntary initiatives, are already "appropriate and sufficient." In addition, there are other ways keeping consumers informed. In Germany, for example, environmental information is extensively made available by third parties, such as test organisations. Furthermore, the respondent, along with one other business association, felt that the term "overall excellent environmental performance" was not sufficiently clear. As such, information about environmental performance can be conveyed via a wide array of indicators. There is currently no generally-acceptable standard that can be used to measure environmental performance across all product categories[204]. Another business association explained that the proposed measure may unfairly impact on certain product categories, for which performance may be affected by other factors, such as frequency of use or availability of recyclable materials. One business association, operating in the cosmetics sector, remarked that some sustainability aspects may not be relevant to cosmetics. For instance, the cosmetics industry comprises various market segments and sub-segments, so enforcing information requirements around environmental performance or impacts would have to be tailored in accordance with these specific product or sub-product categories. For example, a specific lifecycle assessment developed for shampoos exclusively would help differentiate different brands or types of shampoos. But a similar methodology may not apply to other cosmetics categories.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness of a possible measure requiring an indication of the overall excellent environmental performance of products and services. Their views were as follows:

- Five respondents considered that the proposed measure would be effective in fostering more sustainable consumption behaviours (with three respondents recognising that the proposed measure would be "highly effective" and two "somewhat effective").
- One respondent did not share the same view, questioning the relevance / appropriateness of regrouping all sustainability aspects, such as durability, reparability, etc., under one measure / indicator of environmental performance.

- Other respondents

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring an indication of the overall excellent environmental performance of products and services. Their views were as follows:

- Five respondents agreed that the indication of the overall excellent environmental performance of products, including durability and reparability aspects, would be effective in fostering more sustainable consumption behaviours (three respondents recognising this measure would be "highly effective" versus two saying it would be "somewhat effective"). One respondent indicated that reparability and durability should be specifically covered.

[204] The respondent mentioned that only product-specific seals and labels currently have pre-defined standards against which products' environmental performance is assessed, such as the EU Ecolabel, the FSC certification and the Blue Angel environmental label.

Measure B. Require that information on the environmental and climate impacts of all products and services is available to consumers according to a pre-defined framework

Summary findings

- Across the different stakeholder groups consulted, the consensus was that the proposed measure would be effective (with more respondents, especially among business associations and public authorities) indicating that the measure would be "highly effective" as opposed to "somewhat effective").
- Only business associations commented on the feasibility and the likely cost impacts of the measure. Most business associations felt that the measure would be feasible, though the number of respondents considering that the measure would be "somewhat unfeasible" or "unfeasible" was not that dissimilar. On costs, business associations were generally of the view that the proposed measure would entail additional costs for manufacturers / sellers, with most respondents indicating that such costs would be "high, and possibly leading to knock-on effects, notably in the form indirect costs for consumers (i.e. higher prices as additional costs borne by manufacturers / sellers are passed on to consumers). On the contrary, among organisations responsible for labels/logos/certification schemes, most respondents felt that the proposed change would have a positive impact on their operations.
- Various challenges were cited by business associations and public authorities, including: (1) the development of a common impact estimation/quantification methodology; (2) the potential for information overload and the resulting increase in confusion / obfuscation among consumers; (3) the potential for misleading claims if a common estimation methodology is not established.

Detailed findings

- Consumer Associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring that information on the environmental and climate impacts of all products and services be made available to consumers in accordance with a pre-defined framework. Their views were as follows:

- Three consumer associations indicated that the proposed measure would be "highly effective."
- In contrast, three other consumer associations believed that the proposed measure would be "somewhat effective".
- No views on impacts and challenges were provided.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, cost impacts and challenges associated with the proposition to require that information on the environmental and climate impacts of all products and services be made available to consumers in accordance with a pre-defined framework. Their views were as follows:

- *Effectiveness:* Most business associations (n=15) considered that the proposed measure could prove effective in fostering a greener economy (with eight respondents saying it would be "highly effective" and seven "somewhat effective"). Two other business associations, on the other hand, felt that the proposed measure would not be effective.
- *Feasibility:* Most business associations (n=10) shared the view that the proposed measure would be feasible (with six respondents saying it would be

"feasible" and four others "somewhat feasible"). In contrast, six other business associations felt that the proposed measure would be unfeasible (with four respondents saying it would be "somewhat unfeasible" and two "unfeasible").

- *Impact on costs:* Most business associations felt that the proposed measure would entail additional costs for manufacturers / sellers, with eight respondents positing that such costs would be "high" and three others "moderate." It was remarked, for example, that costs would depend on the amount of information to be provided as well as the means of communicating that information (e.g. on packs, via a label, in-store/online, etc.). The cost of information delivered orally is likely to be less expensive than the provision of written information. The proposed measure may also result in indirect costs for consumers. As such, the additional costs associated with information provision could ultimately be passed on to consumers in the form of higher prices. Conversely, three business associations believed that costs would likely be low. Only one business association claimed that the proposed measure would bear no additional costs.
- *Challenges:* Among the most commonly-cited challenges[205] were:
    - *Potential for information overload*: some respondents warned against the obfuscating effect of additional consumer information. The respondents felt that there is already an adequate amount of information communicated to consumers ahead of purchases. The provision of additional environmental information could thus prove counterproductive. The respondents also highlighted the difficulties of communicating additional environmental information, notably owing to a lack of space on products' packaging. A more appropriate format for information dissemination would therefore have to be discussed and agreed.
    - *Consensus on a pre-defined framework*: there were concerns that a pre-defined framework for calculating / assessing environmental and climate impacts would not be appropriate for certain product categories. Such a framework would have to be heavily tailored in practice.
    - *Continued surveillance*: it will be necessary to monitor the environmental and climate impacts communicated to consumers about specific products. For example, some environmental attributes, such as recyclability, may not be relevant in the context of certain products. Bricks, for example, are not generally recyclable, though they are often advertised as such.
    - *Consumer attitudes*: the extent to which the additional information proposed will help foster more sustainable consumption behaviours will depend on consumers' understanding and use of such information. Many consumers do not pay attention to environmental claims and some are not digital-literate and would not easily consume information provided through digital means. Additional environmental information may therefore be ignored.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness and challenges of a possible measure requiring that information on the environmental and climate impacts of all products and services be made available to consumers in accordance with a pre-defined framework. Their views were as follows:

[205] Some challenges were repeated across multiple proposed measures. Only the challenges anticipated specifically in relation to proposed measure B are set out here.

- All respondents (n=3) believed that it would be "highly effective" to require that information on the environmental and climate impacts of all products and services be made available to consumers according to a pre-defined framework.
- Some respondents discussed some of the challenges that are likely to arise in the context of the proposed measure. They called for a common methodology to be put in place, without which, traders would be resorting to different quantification / estimation methodologies, undermining product comparability and possibly misleading consumers.

- Organisations responsible for labels/logos/certification schemes

  The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure on the environmental and climate impacts of all products and services be made available to consumers in accordance with a pre-defined framework. Their views were as follows:

  - Most of the respondents (9) believed that the requirement would be effective, whereas two respondents believed it would be ineffective.
  - Nine respondents considered that the requirement would have a high or moderate positive impact on their organisation, whereas one respondent believed that it would have a 'low negative' impact.

- Other – Digital information tools

  One respondent indicated that the energy consumption standards are already in use and that the measure could be a system similar to that. The impact also depends on the moment when the consumer needs the information.

- Other stakeholders (n=3)

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring that information on the environmental and climate impacts of all products and services be made available to consumers in accordance with a pre-defined framework. Their views were as follows:

- All three respondents indicated that the proposed measure would be "highly effective."
- No views on impacts and challenges were provided.

Measure C. Provide methodological guidance to support companies in calculating the environmental impact of their products and services

Summary findings

- Among the stakeholders consulted, respondents generally felt that the proposed measure would be effective. Among business associations, specifically, most respondents recognised that the proposed measure would be "highly effective" than "somewhat effective."
- In addition, most business associations felt that the measure would be feasible. They also generally felt that the measure would be costly, though views on the magnitude of these costs were evenly distributed, with the same number of respondents estimating that the costs would be high versus those who estimated that the costs would be moderate. Among organisations responsible for labels/logos/certification schemes, most respondents believed that the proposed measure would have a positive impact on their organisation.

Detailed findings

- Consumer Associations

The consumer associations consulted were asked about their views on the effectiveness, impact, and challenges of a possible measure to provide methodological guidance to support companies in calculating the environmental impact of their products and services. Their views were as follows:

- Four consumer associations considered that it would be "somewhat effective" to implement the proposed measure. One respondent, specifically, felt that such a measure would be "highly effective."
- No views on impacts and challenges were provided.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, cost impacts and challenges associated with a possible measure to provide methodological guidance to support companies in calculating the environmental impact of their products and services. Their views were as follows:

- *Effectiveness:* All business associations (n=16) considered that the proposed measure would prove effective in fostering a greener economy (with 12 respondents recognising that the measure would be "highly effective" and four "somewhat effective").
- *Feasibility:* Most business associations (n=14) considered that the proposed measure would be "feasible" (among whom five respondents felt that the measure would be "somewhat feasible"). In contrast, two business associations believed that the measure would be "somewhat unfeasible."
- *Impact on costs:* Eight business associations believed that new / additional methodological guidance around the calculation of environmental impacts would be costly (with four respondents indicating that the costs would be "high" and six others "moderate"). In contrast, four business associations believed that cost impacts would be low and one other business association considered that there would be no impact on costs.
- *Challenges:* No relevant response.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness and challenges of a possible measure to provide methodological guidance to support companies in calculating the environmental impact of their products and services. Their views were as follows:

- One organisation considered that it would be "somewhat effective" to provide methodological guidance to support companies in calculating the environmental impact of their products and services.
- In contrast, two organisations believed that the proposed measure would not be effective. One of the respondents explained that such guidance already exists (at least to some extent) and not all businesses choose to adhere to the guidelines. In that respect, regulations are more effective.

- Organisations responsible for labels/logos/certification scheme

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to provide methodological guidance to support companies in calculating the environmental impact of their products and services. Their views were as follows:

- Most of the respondents (11) declared that providing methodological guidance to support companies in calculating the environmental impact of their products and services would be effective, whereas one respondent declared that it would not be effective.
- Most (10) of the respondents believed that providing this methodological guidance would have a positive impact on their organisation, whereas one respondent indicated that it would have no impact.

- Other – Digital information tools

  - One respondent indicated that the measure would be feasible and would be highly effective as it could be a powerful tool.

- Other stakeholders (n=3)

The other stakeholders consulted were asked about their views on the effectiveness, impact, and challenges of a possible measure to provide methodological guidance to support companies in calculating the environmental impact of their products and services. Their views were as follows:

- One respondent indicated that the proposed measure would be "somewhat effective", while the other two considered it not effective. One respondent says that this already exists to an extent and companies do not really adhere to these types of guideline unless they are forced to through regulations.
- No views on impacts and challenges were provided.

Sub-problem 1.2: Lack of reliable information on products' lifespan

Measure D: Require the indication of the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee)

Summary findings

Most consumer associations felt that the proposed measure would be "somewhat effective." The same was observed among public authorities and other stakeholders. Among business associations, the number of respondents indicating that the measure would be highly effective versus somewhat effective was slightly higher.

Business associations also commented on the feasibility and potential costs of the measure. A slightly higher number of respondents felt that the measure would be "feasible" as opposed to "somewhat feasible." As many business associations felt that the costs entailed by the proposed measure would be high as those who estimated costs to be moderate.

On challenges, some public authorities highlighted the possibility of low consumer understanding of guarantees as the difference between legal and commercial guarantees may not be sufficiently apparent and therefore understood by consumers. Asked about enforcement, most public authorities considered that the measure requiring the provision of information on the guaranteed lifespan of products would be easy to enforce and easy or somewhat easy to monitor.

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee). Their views were as follows:

- All eight consumer organisations indicated that providing information on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee) would be effective in fostering more sustainable consumption behaviours (one highly effective; seven somewhat effective).
- None provide views on the impacts and challenges of the measures.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability. Their views were as follows:

- *Effectiveness:* Most business associations (five out of six respondents) considered that providing consumers with information on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee) would be an effective measure (three highly effective and two somewhat effective), while one business association considered that the measure would not effective.
- *Feasibility:* Almost all (five out of six) business associations considered that providing information on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee) would be feasible (three feasible and two somewhat feasible), with only one business association considering the measure to be not feasible.
- *Impact on costs:* Two business associations considered that the impacts on costs would be high, two that the impact on costs would be moderate, and one that the costs would be low.
- *Challenges:* One business association mentioned "it is tricky to use commercial guarantees as an indication of the lifespan of a product." But did not provide further details.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges, of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability. Their views were as follows:

- 15 out of 17[206] respondents considered this requirement to be a mostly somewhat effective measure. The possible impacts that the respondents identified were both positive and negative, and include:
  - *[that] "mandatory information that no commercial guarantee is available might cause confusion among consumers believing that there is no guarantee at all, not even the legal guarantee."*
  - *"seeing this information displayed prominently could be helpful to consumers when comparing products and challenge traders to offer commercial guarantees beyond the legal guarantee."*
- Possible challenges include low consumer understanding of guarantees as many consumers may not know the difference between the legal and the commercial guarantee and could be confused by this type of information.

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability. Their views were as follows:

[206] 10 replied 'somewhat effective' and 5 replied 'highly effective'. 2 replied 'not effective'.

- 14 out of 17[207] respondents considered the measure requiring the provision of information on the commercially guaranteed lifespan of the product (i.e., whether a commercial guarantee is available and, if yes, the period covered by it) to be mostly easy to enforce.
- Monitoring this measure was considered either easy or somewhat easy by 11 out of 16 respondents.[208] A possible challenge included the fact that: "The measure may require physical inspection of the goods, which is not always possible (in the case of e-commerce)."

- Other (n=7)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee). Their views were as follows:

- All seven respondents indicated that providing information on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee) would be effective in fostering more sustainable consumption behaviours (one highly effective; six somewhat effective).
- None provide views on the impacts and challenges of the measures.

Measure E: Requirement to provide information on the number of years/months that a product is covered by a commercial guarantee

Summary findings

- All consumer organisations consulted considered that the proposed measure would be effective in fostering more sustainable consumption. The same view was generally shared by business associations and public authorities respectively (although more respondents within these cohorts felt that the proposed measure would be "highly effective" than "somewhat effective"). Among other stakeholders, most respondents felt that the proposed measure would be "somewhat effective."
- Business associations also commented on the feasibility of the proposed measure. All of the respondents indicated that it would be feasible. Asked specifically about costs, most respondents felt that the costs would be high.
- Some public authorities discussed the likely challenges associated with the proposed measure, including: possible information overload for and confusion among consumers, and additional compliance costs for traders.

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the number of years/months that a product is covered by a commercial guarantee. Their views were as follows:

- All consumer organisations indicated that providing this information would be effective in fostering more sustainable consumption behaviours (one highly effective; seven somewhat effective).

[207] 10 replied "Easy to enforce", 4 replied "somewhat easy to enforce", 1 replied "Somewhat difficult to enforce" and 2 replied "difficult to enforce."

[208] 5 replied "Easy to monitor", 6 replied "somewhat easy to monitor", 3 replied "Somewhat difficult to monitor" and 2 replied "difficult to monitor."

- None provide views on the impacts and challenges of the measures.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the number of years/months that a product is covered by a commercial guarantee. Their views were as follows:

- *Effectiveness:* Most business associations (five out of six respondents) considered that this requirement would be an effective measure (three highly effective and two somewhat effective), while one business association considered that the measure would not effective.
- *Feasibility:* All (six) business associations considered that information on the number of years/months that a product is covered by a commercial guarantee would be a feasible measure (four feasible and two somewhat feasible).
- *Impact on costs:* Three business associations considered that the impacts on costs would be high and two that the impact on costs would be moderate.
- *Challenges:* No challenges were mentioned.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the number of years/months that a product is covered by a commercial guarantee. Their views were as follows:

- 15 out of 17[209] respondents considered requiring the provision of the number of years/months that a product is covered by a commercial guarantee of durability to be an either highly or somewhat effective measure. The possible impacts that the respondents identified were positive and include:
  - "This measure could make it easier for consumers to claim their right to remedies for breach of contract and could also incite traders to make products with a longer commercial guarantee." and
  - "[ensuring that] the consumer is better informed, raising awareness"
- Possible challenges include risks linked to providing industry with additional obligations: (a) information on the commercial guarantee combined with the legal guarantee and also the products lifespan could also be overwhelming and confusing to the consumer; and (b) monitoring would probably not be very difficult, but measures may cause additional obligations and costs for traders, which they may not be interested in doing.

- Other (n=5)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of an additional commercial guarantee of durability (beyond the statutory legal guarantee). Their views were as follows:

- All respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (two highly effective; three somewhat effective).
- None provide views on the impacts and challenges of the measures.

[209] 9 replied 'somewhat effective' and 6 replied 'highly effective'. 2 replied 'not effective'.

Measure F: Requirement to provide information on expected lifespan of the product before repair

Summary findings

Most consumer associations consulted believed that the proposed measure would be highly effective. Among business associations, most respondents indicated that the proposed measure would be somewhat effective. Public authorities, on the other hand, generally believed that the measure would be effective.

There were mixed views as regards the feasibility of the measure among business associations. Most respondents felt that the measure would be feasible, though a small number also felt that it would be unfeasible.

On costs, most business associations consulted felt that the costs entailed by the measure would be high.

In terms of other impacts, some public authorities mentioned that the proposed measure could bring about various benefits, such as: (1) the creation of incentives to make products more durable; and (2) an increased ability for consumers to compare products, based on their durability.

Furthermore, public authorities generally shared the view that the proposed measure would be easy to enforce. On the other hand, views on the ease or difficulty of monitoring the measure in practice were evenly split – i.e. as many respondents felt that the measure would be easy or somewhat easy to monitor as those who felt that the measure would be difficult or somewhat difficult to monitor.

Some respondents also warned against possible challenges. Among business associations, the most commonly cited challenges were: (1) difficulties in assessing products' lifespan; and (2) potential distortions to competition and markets. For some public authorities, the main challenge was considered to be possible misunderstandings among consumers, especially around repairs (i.e. consumers may be easily misled into thinking that the trader must pay for repairs until the end of a product's lifetime). Finally, other respondents questioned the reliability of the information that will be provided to consumers, especially if information on durability will not account for differences in product specificities, such as usage.

Detailed findings:

- Consumer Associations (n=8)

  The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the expected lifespan of the product if minor/reasonable repairs are carried out. Their views were as follows:

  - All consumer organisations indicated that providing this information would be effective in fostering more sustainable consumption behaviours (seven highly effective and one somewhat effective).
  - None provide views on the impacts and challenges of the measures.

- Business Associations

  The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

  - *Effectiveness:* Half of the business associations (three out of five respondents) considered that this requirement would be a somewhat effective measure, while two business associations considered that the measure would not effective.

- *Feasibility:* Four business associations considered that this requirement would be a feasible measure (two feasible and two somewhat feasible). However, two business associations considered that the measure would be unfeasible (one somewhat unfeasible and 1 unfeasible).
- *Impact on costs:* Three business associations considered that the impacts on costs would be high and two that the impact on costs would be moderate.
- *Challenges:* The challenges mentioned were difficulties in assessing this lifespan for some products, and the fact that the lifespan highly depends on the use of the product. If the obligation would be on the seller than, one association highlighted, the seller would need to get much more insights about the products, some of which might risk IP-rights and industrial secrets. Finally, it can lead to serious distortion of competition if the enforcement and monitoring would not be effective.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

- 16 out of 17[210] respondents considered requiring the provision of the expected lifespan of the product before repair to be an either highly or somewhat effective measure. The possible impacts that the respondents identified were mostly positive:
  - "This could be impactful and create and incentive for traders to make products with a longer lifespan, and at the same time make it easier for consumers to compare products by their durability. Although, we imagine that it would be more impactful if the trader also was responsible for repairs during this "lifespan"."
  - "highly efficient and should be as same as prominent as information regarding the energy efficiency is labelled today".
  - "[ensuring that] the consumer is better informed, raising awareness".
  - "A distinction between different types of products might need to be done. For example, for products that do not require regular maintenance or repair, e.g. a washing machine, we think that this alternative would be most effective […]. However, a distinction between products requires careful analysis and it might be difficult to apply in practice."
- The possible challenges identified by the respond include possible misunderstandings among consumers, as consumers may be easily misled into thinking that the trader must pay for repairs up until that point.

The public authorities consulted were asked about their views on the monitoring and enforcement of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

- 10 out of 16[211] respondents considered the measure requiring the provision of information on the expected lifespan of the product before repair is required (but in case of repair it is at the expense of the consumer) to be easy to enforce.
- Opinions on the ease or difficulty of monitoring this measure were evenly split. 7 considered it either easy or somewhat easy and 7 considered it either

[210] 8 replied 'somewhat effective' and 8 replied 'highly effective'. 1 replied 'not effective'.

[211] 9 replied "Easy to enforce", 1 replied "somewhat easy to enforce", 3 replied "Somewhat difficult to enforce" and 2 replied "difficult to enforce." 1 replied "Neither easy nor difficult to enforce".

somewhat difficult or difficult.[212] Possible challenges envisaged include the following:

- *"[…] to check the substance of the information (e.g. prove early failure), it is difficult to enforce because this may need controlling within the company. It may be time consuming to check all the requirements."*
- *"The measure may require physical inspection of the goods, which is not always possible (in the case of e-commerce)".*

- Other (n=9)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

- All respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective; six somewhat effective).
- Two stakeholders highlighted that the main challenges are related to: ensuring that the information is reliable and that is based on the same assumptions regarding usage of the product; challenging enforcement and monitoring and that using a single metric for all products may not make sense; external factors, use and maintenance can influence the lifespan.

Measure G: Requirement to provide information on expected lifespan of the product if minor/reasonable repairs are carried out

Summary findings

Most consumer associations consulted believed that the proposed measure would be somewhat effective. The same was observed among business associations. Public authorities, on the other hand, generally believed that the measure would be effective. It was however cautioned that the measure might prove more effective across specific product categories, i.e. products that require more regular maintenance or products that entail major / unreasonable repair costs and where such costs are covered by the trader.

There were mixed views as regards the feasibility of the measure among business associations. As many respondents felt that the measure would be feasible as those who felt it would be unfeasible. On costs, most business associations felt that the costs entailed by the measure would be high.

Public authorities generally shared the view that the proposed measure would be easy to enforce. On the other hand, views on the ease or difficulty of monitoring the measure in practice were evenly split – i.e. as many respondents felt that the measure would be easy or somewhat easy to monitor as those who felt that the measure would be difficult or somewhat difficult to monitor.

Finally, some respondents also warned against possible challenges. Among business associations, the main challenges indicated were: the lack of harmonised methods for assessing lifespan; and the lack of information reliability, given that important factors, such as the frequency of usage, may not be factored into calculations of durability. Similar concerns were shared by (some) public authorities.

[212] 4 replied "Easy to monitor", 3 replied "somewhat easy to monitor", 5 replied "Somewhat difficult to monitor" and 2 replied "difficult to monitor." 1 replied "Neither easy nor difficult to monitor".

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the on known product features that may lead to product early failure. Their views were as follows:

- Seven consumer organisations indicated that providing this information would be somewhat effective in fostering more sustainable consumption behaviours, while one considered the measure not effective.
- The main challenge is that this information is less straight-forward as defining what is a minor/reasonable repair is difficult.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the expected lifespan of the product if minor/reasonable repairs are carried out. Their views were as follows:

- *Effectiveness:* Four business associations (out of six respondents) considered that this requirement would be a somewhat effective measure, while two considered that the measure would not effective.
- *Feasibility:* Three business associations considered that this requirement would be a somewhat feasible measure, while the other three considered that it would be unfeasible (two somewhat unfeasible and one unfeasible).
- *Impact on costs:* Four business associations considered that the impacts on costs would be high and one that the impact on costs would be moderate.
- *Challenges:* The main challenges indicated were lack of harmonised methods for assessing lifespan, the fact that the lifespan depends heavily on the use of the product; lead to serious distortion of competition if the enforcement and monitoring would not be effective.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the expected lifespan of the product if minor/reasonable repairs are carried out. Their views were as follows:

- 14 out of 16[213] respondents considered requiring the provision of the expected lifespan of the product including the timeframe in which minor/reasonable repairs are carried out to be an either highly or somewhat effective measure. The possible impacts that the respondents identified called for caution in one instance, was positive in another and negative in another:
  - *"A distinction between different types of products might need to be done. For example, for products that do require regular maintenance or repair, e.g. a bicycle, we think that this alternative would be most effective […]. However, a distinction between products requires careful analysis and it might be difficult to apply in practice."*
  - *"If major/unreasonable repairs are at the expense of the trader during the given "lifespan", we expect that this could be an effective measure."*

[213] 7 replied 'somewhat effective' and 7 replied 'highly effective'. 2 replied 'not effective' and 1 did not provide an answer.

- *"Not effective, because not measurable and therefore not able to be [monitored] by market surveillance authorities."*

- The possible challenges related to this measure include difficulties in calculating the lifespan of products and cost of repairs:
  - *"Difficulty in accurate determining the lifespan of some products."*
  - *"this measure could have some effects if the [cost] of the minor/reasonable repair is set (possibly as a % of the price)."*

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

- 10 out of 16 respondents[214] considered a measure requiring the provision of information on the expected lifespan of the product if minor/reasonable repairs are carried out, to be easy to enforce.
- Opinions on the ease or difficulty of monitoring this measure were evenly split. 7 considered it either easy or somewhat easy and 7 considered it either somewhat difficult or difficult.[215] The same possible challenges that were identified for the previous measure, were reiterated in relation to this measure.

- Other (n=8)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the expected lifespan of the product if minor/reasonable repairs are carried out. Their views were as follows:

- Five respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (two highly effective; three somewhat effective), while three considered the measure neither effective nor ineffective.
- Two respondents indicated that it is very challenging to define what minor/reasonable repairs are and also that the information lead consumers not to repair if products break close to the indicated lifespan.
- One respondent suggested that the best solutions would be i) increased availability of repair information to all repairers; ii) repair information available and free on the internet; iii) increased availability of spare parts and tools.

Measure H: Requirement to provide information on known product features that may lead to product early failure

Summary findings

Most consumer associations consulted believed that the proposed measure would not be effective. There were concerns that such information would be "too complex" for consumers. On the contrary, most business associations and public authorities believed that the measure would be effective. Among other stakeholders, the general view was that the measure would be somewhat effective.

[214] 8 replied "Easy to enforce", 2 replied "somewhat easy to enforce", 2 replied "Somewhat difficult to enforce" and 3 replied "difficult to enforce." 1 replied "Neither easy nor difficult to enforce".

[215] 4 replied "Easy to monitor", 3 replied "somewhat easy to monitor", 4 replied "Somewhat difficult to monitor" and 3 replied "difficult to monitor." 1 replied "Neither easy nor difficult to monitor".

Most business associations felt that the measure would be feasible. On costs, the shared view was that the costs entailed by the measure would be high.

Some public authorities commented on the positive impacts / aspects of the proposed measure, indicating that the information provided will be relatively easy to understand by consumers and will allow them to compare products more confidently. As regards enforcement, public authorities generally felt that the proposed measure would be difficult to enforce. Similarly, the shared view was that monitoring would be difficult. Finally, some public authorities warned against other possible challenges, including: (1) the likely complexity of information; (2) possible information overload for and confusion among consumers; and (3) potentially poor regulatory design as it would be difficult to implement common rules on product features that may cause early product failures across all product groups (owing to product specificities).

Detailed findings:

- Consumer Associations (n=9)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the on known product features that may lead to product early failure. Their views were as follows:

- Six consumer organisations indicated that providing this information would be ineffective, while three considered the measure effective (one highly and two somewhat).
- The main challenge is related to the fact that this information is too complex, and consumers should not have to carry the burden of bad design choices.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the on known product features that may lead to product early failure. Their views were as follows:

- *Effectiveness:* Most business associations (five out of six respondents) considered that this requirement would be an effective measure (three highly effective and two somewhat effective), while one business association considered that the measure would not effective.
- *Feasibility*: All (six) business associations considered that this information would be a feasible measure (four feasible and two somewhat feasible).
- *Impact on costs:* Three business associations considered that the impacts on costs would be high and two that the impact on costs would be moderate.
- *Challenges:* No challenges were mentioned.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the on known product features that may lead to product early failure. Their views were as follows:

- A majority (11 out of 14)[216] of respondents considered this requirement to be either highly or somewhat effective. As possible impacts, some respondents expected positive outcomes: this measure would probably have a positive impact; it could increase lifespan and lower consumption of certain products; if there are clear rules for information about (guaranteed) lifespan, design

[216] 4 replied "Highly effective" and 7 replied "Somewhat effective". 2 replied "Not effective" and 1 replied "Not applicable/do not know".

etc, consumers can determine whether or not they want to buy this product and they have a certainty on which they may rely. In other instances, respondents were more cautious in qualifying the expected benefits as positive:

- *[…] However, information on expected lifetime is probably easier for the consumer to understand.*
- *[…] The information is only useful is fit concerns [the] wear [of] parts which are not covered by the legal warranty regime.*

- Possible challenges identified by respondents included the need to provide consumers with accessible information: as consumers must have information easy to understand and the information should be clearly provided and should be easily comparable; otherwise it may lead to confusion and discouragement for consumers.
- A few indicated that the design and implementation of such rules would be difficult. In particular, due to issues related with the concept of early failure itself and its applicability to whole product groups.

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to inform consumers on the expected lifespan of the product before repair. Their views were as follows:

- Most stakeholders categorised this measure as either difficult or somewhat difficult to monitor (eight out of 11).[217]
- Enforcement of the measure was also considered more difficult than it was easy, but with a slimmer majority (6 out of 11).[218]
- A few indicated that possible challenges to the monitoring and enforcement of this measure were related to the complexity of identifying the practice of planned/premature obsolescence:
  - *"It would likely be difficult to prove that it concerns known aspects."*
  - *"Information requirements on lifespan, design, etc are easy to enforce, as long as the rules on this topic are clear. However to prove actual premature obsolescence might be technically difficult to monitor because this might require testing. Therefore, it depends on which 'specific rules' are meant here."*
- One respondent did not perceive this to be an obstacle as "Once common rules have been established, it should not be very difficult to monitor and enforce them."

- Other (n=7)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the on known product features that may lead to product early failure. Their views were as follows:

- All respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (two highly effective; five somewhat effective).
- None provide views on the impacts and challenges of the measures.

[217] 0 replied "Easy to monitor", 2 replied "somewhat easy to monitor", 3 replied "Somewhat difficult to monitor" and 5 replied "difficult to monitor." 1 replied "Neither easy nor difficult to enforce".

[218] 3 replied "Easy to enforce", 2 replied "somewhat easy to enforce", 1 replied "Somewhat difficult to enforce" and 5 replied "difficult to enforce."

Other suggested measures and feedback

Summary findings

As regards other potential measures to consider, the following were commonly discussed:

- *Measures to bring about stronger / tougher requirements around durability and reparability*, such as longer (legal) guarantee periods, longer reversal of the burden of proof, direct producer liability for the non-conformity of goods, and bans, notably where products do not meet basic / minimum durability requirements. These were suggestions provided by consumer associations mainly. In relation to the possibility of additional or further regulation, some public authorities believed that the legal warranty period ought to start when the consumer recognises that a defect exists as opposed to the warranty period starting at the time of delivery. They felt that this was particularly relevant in the context of products with a lifespan of more than two years. In addition, public authorities also generally felt that the provision of a "producer declaration" at the time of sale ought to be mandated by relevant laws in the future.
- *Measures to ensure that information is clear, reliable and comparable*, to help consumers switch to more sustainable purchase options. Minimum information requirements with regards to duration could, for example, be developed and mandated. However, it was remarked by some public authorities that product information on its own may not allow consumers to adopt more sustainable behaviours. For instance, providing information about reparability may not prove as effective if this is not accompanied with specific actions to make repairs more accessible and affordable.
- *Measures to facilitate / optimise information dissemination*, to facilitate ease of access for consumers and ensure they are taking full advantage of the information available. There are suggestions by some public authorities to make greater and better use of comparison tools and artificial intelligence solutions and suggestions from business associations to explore the opportunity of digitalisation and use digital means to provide additional information to consumers.

Detailed findings:

- Consumer Associations (n=8)

Consumer associations were asked to provide suggestions about other relevant measures. This were their views:

- Other responses given by consumer organisations include: stronger requirements for durability and reparability (e.g. by eco-design); longer legal guarantee periods; mandatory guarantee for the producer; ban of products not respecting minimum durability requirements; longer reversal of the burden of proof under the EU sales directives (linked to the legal guarantee); direct producer liability for the non-conformity of the goods; price signals should reflect the durability of products; and an EU durability label.

- Public authorities

Public authorities were asked their views on the best approach to ensuring that consumers receive the above-mentioned information. This were their views:

- Half of respondents (8 out of 16) selected "Producer declaration based on a methodology to be developed in a future delegated or implementing act". The remaining options selected were as follows:
    - Simple declaration from the producer (one respondent)
    - Simple declaration from the producer that is (regularly, occasionally, etc) monitored by a body at national level (three respondents)

- Other, please specify (our respondents):

- *Obligation on the seller to provide a simple declaration to the consumer. The declaration should be visible both online and offline. However, there should also be an obligation on the producer to provide the seller with the accurate information.*
- *there should be a legally binding obligation for the provision of this information. The information is to be provided on the label or close to the product.*
- *Authority or stakeholder could regulate lifespans for specific product groups.*
- *Need to find the best way of providing information which content and presentation is standardized. Utilization of comparison tools and/or artificial intelligence. It is important to have comparative data easily available for consumers. It is important that consumers receive information in a timely manner*.

Public authorities were also asked to provide suggestions about other relevant measures. This were their views:

- Stakeholders focused mostly on the need for information to be clear, comprehensive, and comparable.
    - *"Information should be presented in such way that it can be compared. If information requirements are developed in this field, comparability should be taken into account. Standardised information could be helpful. To promote sustainability of products, it could also be considered to develop requirements for minimum duration of lifespan. This is however a matter for policymakers related to production requirements."*
    - *"It is vital that the information is understandable for both producers/sellers and final consumers, so that consumers receive and act upon it. New technologies can also contribute to reparability. For example, 3D technology can open up opportunities to increase the availability of spare parts."*
    - *"Introduction of the Total annual cost - it should include price and energy consumption based on standard use. In the long run (after a trial stage and a proper assessment) it could replace the energy label".*
    - *"If products usually have a lifespan more than 2 years, the period for legal warranty remedies should start when he/she recognizes the defect (and not already with delivery). Additionally to the seller also the producer should be liable in case of defects. Also information about social criteria (working conditions etc) could be motivating. Lowering costs of repair e.g. by reducing VAT on repair services."*
    - *"All information requirements must be given in a clear and easy manner. The performance of information should be quite easy to monitor and enforce. However, the crucial question is the legal remedy or additional sanctions. The legal remedy for the consumer must be practicable, easy to access and thus effective. Only the information alone will not be effective (e.g. if the consumer knows that a product can be repaired, but he/she has to bear the costs and the costs are inadequately high."*
- Two other suggestions were:
    - "Instead of listing information requirements, it should be studied what kind of measures affect the markets most efficiently. For example, would it encourage sustainable product development as well as consumer choice if warning signs were required for example: *in cases where the good is not*

expected to last longer than 2 years; when there is a lack of spare parts; when there is no possibility to repair the product at all.

- *"Policy considerations are needed in making harmful products difficult to get. Most effective measure is to prevent the specifically harmful products entering the market in the first place. Given the actual behaviour of the consumers, providing information on specific characteristics of a product does not effectively guide the choice of the consumer […]".*

- Other

Other organisations were asked to provide suggestions about other relevant measures. This were their views:

- Other measures proposed by respondents include introduction of a minimum lifetime labelling requirement with civil law effect – as lifespan labelling is horizontal, it would be better than Eco-design. According to one respondent, this would not need verification if combined with a guarantee.

Sub-problem 1.3: Lack of reliable information about products' reparability

Measure I: Requirement to provide information on the availability of spare parts

Summary findings

All consumer associations and business associations consulted believed that the proposed measure would be effective (though more respondents generally felt that the measure would be "somewhat effective" than "highly effective"). Among public authorities and other stakeholders, respondents generally considered that the proposed measure would be "highly effective."

Most business associations agreed that the measure would be feasible. On costs, the prevailing view was that the costs entailed by the measure would be high.

Some respondents also discussed potential challenges associated with the proposed measure. Among business associations, there were concerns that misleading information would be provided to consumers from retailers, notably about reparability. These respondents felt that manufacturers would be better placed to provide that information as opposed to sellers or retailers. Furthermore, some business associations warned against the potential information overload that may result from additional information requirements. Finally, some public authorities highlighted that information on reparability may not prove effective in encouraging repairs / reuse if buying a new product is much cheaper to consumers.

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of spare parts. Their views were as follows:

- All eight consumer organisations indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective and five somewhat effective).
- None provide views on the impacts and challenges of the measures.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the availability of spare parts. Their views were as follows:

- *Effectiveness:* All business associations (six) considered that this requirement would be an effective measure (one highly effective and five somewhat effective)
- *Feasibility:* Four business associations considered that this information would be a feasible measure (two feasible and two somewhat feasible). While two considered it somewhat unfeasible.
- *Impact on costs:* Four business associations considered that the impacts on costs would be high and one that the impact on costs would be moderate.
- *Challenges:* One business association highlighted that the "information about spare parts and accessories can only be provided by the manufacturers of the products. The retailer lacks knowledge of which parts the manufacturer offers in addition to the product." Another that the information obligations of dealers and manufacturers are being increased more and more. There is therefore a risk that the customer will no longer take any notice of information at all and therefore ignore important information (e.g. on product safety).

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform on the availability of spare parts. Their views were as follows:

- All respondents[219] considered the requirement to provide consumers with Information on the availability of spare parts to be effective. The possible impact that was identified by respondents was a positive one: *"Giving consumers information about repairs and availability of spare parts will enable them to repair products more easily than today. Although, it requires that the information be given in a way that is understandable and easily accessible to the consumer."*
- Possible challenges related to the effectiveness of this measure included:
  - *"For any of the information requirements regarding repairs to have effect, it is essential that it is not cheaper to buy a new product than to repair the old one."*
  - *"Difficult to enforce. We see as extremely difficult to sue misleading information (could be considered an unfair commercial practice?)"*

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of spare parts. Their views were as follows:

- All six respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective; three somewhat effective).
- None provide views on the impacts and challenges of the measures.

Measure J: Requirement to provide information on the time that it takes to deliver spare parts

[219] 12 replied "Highly effective" and 5 replied "Somewhat effective".

Summary findings

Consumer associations, business associations and public authorities that were consulted generally believed that the proposed measure would be "somewhat effective". Views on effectiveness were also positive among other stakeholders, though they were evenly split (i.e., as many respondents felt that the measure would be "highly effective" as those who believed it would be "somewhat effective").

Most business associations agreed that the measure would be "somewhat feasible." On costs, the prevailing view was that the costs entailed by the proposed measure would be high.

Most public authorities felt that the proposed measure would be easy to enforce and somewhat easy to monitor.

Some respondents also discussed potential challenges associated with the proposed measure. Some public authorities and business associations felt that manufacturers would be better placed to provide information on reparability as opposed to sellers or retailers, given that they are more closely involved in product design. In addition, some public authorities highlighted that information on reparability may not prove effective in encouraging repairs / reuse if replacing a product is much cheaper than repairing it for consumers.

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the time that it takes to deliver spare parts. Their views were as follows:

- All (eight) consumer organisations indicated that providing this information would be somewhat effective.
- None provide views on the impacts and challenges of the measures

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the time that it takes to deliver spare parts. Their views were as follows:

- *Effectiveness:* All business associations (six respondents) considered that this requirement would be an effective measure (one highly effective and five somewhat effective).
- *Feasibility:* Most (five out of six) business associations considered that this information would be a feasible measure (two feasible and three somewhat feasible). However, one business association considers the measure would be somewhat unfeasible.
- *Impact on costs: Four business associations considered that the impacts on costs* would be high and one that the impact on costs would be moderate.
- *Challenges:* Retailers will need to receive this information from manufacturers.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform on the time that it takes to deliver spare parts. Their views were as follows:

- A majority (15 out of 16)[220] of respondents considered the requirement to provide consumers with information on the time that it takes to deliver spare parts to be either highly or somewhat effective. Respondents reiterated the possible impact identified in relation to the previous measure, adding another, possibly negative one:
    - *"Giving consumers information about repairs and availability of spare parts will enable them to repair products more easily than today. Although, it requires that the information be given in a way that is understandable and easily accessible to the consumer."*
    - *"[It is] Important to avoid an information overload. Such information is not necessary and will likely not affect the consumers' choice of products."*
- Possible challenges echoed the ones related to the previous measure:
    - *"For any of the information requirements regarding repairs to have effect, it is essential that it is not cheaper to buy a new product than to repair the old one."*
    - *"Difficult to enforce. We see as extremely difficult to sue misleading information (could be considered an unfair commercial practice?)"*

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure requiring the provision of information on the reparability of the product (e.g., availability of spare parts, time that it takes to deliver spare parts, availability of repair services, availability of repair manual). Their views were as follows:

- 11 out of 16[221] respondents considered a measure requiring the provision of information on the reparability of the product (e.g., availability of spare parts, time that it takes to deliver spare parts, availability of repair services, availability of repair manual) to be either easy or somewhat easy to enforce.
- Monitoring this measure was considered either easy or somewhat easy by half (8 out of 16) respondents.[222]
- Regarding possible challenges, one respondent mentioned that "Repair may be a viable solution for some consumers but not for others. Therefore, it can be difficult to assess how (easily) a product can be repaired by the (average) consumer."
- One respondent suggested that: *"[…] if traders are required to have the information available online it is easy to monitor by doing digital sweeps. If it is required to be on the packaging of the product it can be more challenging to monitors as it requires more resources. Our experience is that administrative fines from public authorities is an effective tool when it comes to these types of information requirements. This has been effective when enforcing the informational requirements of the Consumer Rights Directive".*

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the time that it takes to deliver spare parts. Their views were as follows:

- Four respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (two highly effective

[220] 7 replied "Highly effective" and 8 replied "Somewhat effective". 1 replied "Not effective".

[221] 7 replied "Easy to enforce", 4 replied "somewhat easy to enforce", 2 replied "Somewhat difficult to enforce" and 1 replied "difficult to enforce." 2 replied "Neither easy nor difficult to enforce".

[222] 3 replied "Easy to monitor", 5 replied "somewhat easy to monitor", 3 replied "Somewhat difficult to monitor" and 1 replied "difficult to monitor." 4 replied "Neither easy nor difficult to enforce".

and two somewhat effective), while one considered it neither effective nor ineffective.

- None provide views on the impacts and challenges of the measures

Measure K: Requirement to provide information on the availability of repair services

Summary findings

All consumer associations consulted on this proposed measure generally believed that it would be "somewhat effective". Among business associations, as many respondents were of the view that the proposed measure would be "somewhat effective" as those who felt it would be "highly effective." Most public authorities and most of the respondents falling into the "other" category believed that the measure would be highly effective.

Most business associations agreed that the measure would be feasible. On costs, the prevailing view was that the costs entailed by the proposed measure would be high, although the number of business associations estimating that the costs would be moderate was not that dissimilar.

Finally, on possible challenges, a concern among public authorities was that information on reparability may not prove effective if new products are cheaper to acquire than having products repaired. As such, consumers would be discouraged from seeking repairs.

Detailed findings

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of repair services. Their views were as follows:

- All consumer organisations indicated that providing this information would be somewhat effective.
- None provide views on the impacts and challenges of the measures.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the availability of repair services. Their views were as follows:

- *Effectiveness:* All business associations (six respondents) considered that this requirement would be an effective measure (three highly effective and three somewhat effective).
- *Feasibility:* All (six) business associations considered that this would be a feasible measure (three feasible and three somewhat feasible).
- *Impact on costs:* Three business associations considered that the impacts on costs would be high and two that the impact on costs would be moderate.
- *Challenges:* No challenges were mentioned.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform on the availability of repair services. Their views were as follows:

- A majority (17 out of 17)[223] of respondents considered the requirement to provide consumers with information on the availability of repair services to be either highly or somewhat effective. Respondents reiterated the possible impact identified in relation to the previous measure, adding another, raising the following potential issues:
    - *"Giving consumers information about repairs and availability of spare parts will enable them to repair products more easily than today. Although, it requires that the information be given in a way that is understandable and easily accessible to the consumer."*
    - *"[…] If there are repair services in the country the consumer purchased the product from [online, cross-border], it may be too expensive and unsustainable to send it back for repair. Another complication regarding cross-border purchases, is if the e-commerce trader needs to ensure consumers have information on the availability of repair services in all countries the trader is directing its activities to? There is a risk that the trader might choose not to engage in cross-border trade if the rules are too "heavy". At the same time, the information would not be as useful for the consumer if it only concerns the availability of repair services in the country where the trader is established and not in the consumer's country. Information overload also needs to be taken into consideration so that the consumer is not faced with too much material information […]."*
- Possible challenges echoed one related to the previous measure "*For any of the information requirements regarding repairs to have effect, it is essential that it is not cheaper to buy a new product than to repair the old one."*

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform on the availability of repair services. Their views were as follows:

- Five respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective and two somewhat effective).
- None provide views on the impacts and challenges of the measures.
- Another respondent suggested to impose a tax on irreparability to stimulate repairable products and discourage the purchase of irreparable products.

Measure L: Requirement to provide information on the availability of repair manual

Summary findings

Consumer associations and business associations consulted on this measure generally believed that it would be "somewhat effective". Among public authorities, the predominant view was that the proposed measure would be "highly effective."

Views on the feasibility of the proposed measure among business associations were mixed. As such, as many respondents indicated that the measure would be "feasible"

[223] 10 replied "Highly effective" and 7 replied "Somewhat effective".

as those who indicated it would be "somewhat feasible." On costs, the prevailing view was that the costs entailed by the proposed measure would be moderate.

Some respondents, notably public authorities, also discussed potential challenges associated with the proposed measure. Specifically, they highlighted that consumers would not seek to undertake repairs if repair manuals are not clear or if they are not sufficiently convinced that repairs can be carried out safely.

Detailed findings

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform consumers on the availability of repair manual. Their views were as follows:

- Seven consumer organisations indicated that providing this information would be effective in fostering more sustainable consumption behaviours (one highly effective and six somewhat effective).
- None provide views on the impacts and challenges of the measures.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the availability of repair manual. Their views were as follows:

- *Effectiveness:* All business associations (six respondents) considered that this requirement would be an effective measure (two highly effective and four somewhat effective).
- *Feasibility:* All (six) business associations considered that this information would be a feasible measure (three feasible and three somewhat feasible).
- *Impact on costs:* All business associations considered that the impacts on costs would be moderate.
- *Challenges:* No challenges were mentioned.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform on the availability of repair manual. Their views were as follows:

- A majority (14 out of 17)[224] of respondents considered the requirement to provide consumers with **information on the availability of repair manual** to be either highly or somewhat effective. Respondents reiterated the **possible positive impact** identified in relation to the previous measure: "*Giving consumers information about repairs and availability of spare parts will enable them to repair products more easily than today. Although, it requires that the information be given in a way that is understandable and easily accessible to the consumer.*"
- Possible challenges identified refer to the difficulties of the measure being actionable by consumers:
  - *"The actual repair manual must be made in a way that is easy for a consumer to understand, for this measure to be impactful".*
  - *"Only some consumers would do the repair by themselves, and the manual should make clear what kind of intervention could be made by the*

[224] 8 replied "Highly effective" and 6 replied "Somewhat effective". 3 replied "Not effective".

consumer him/herself without putting at risk the safety requirements of the product".

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform on the availability of repair manual. Their views were as follows:

- Five respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective and two somewhat effective).
- None provide views on the impacts and challenges of the measures.
- One respondent suggested that people do not read the manual and that it would be better if manufacturers shared information in alternative ways such as tutorials or videos.

Measure M: Requirement to provide information on the availability of software update/upgrades (e.g. frequency, content, how to install/modify, how long they will be provided, under which conditions, etc.)

Summary findings

Consumer associations that were consulted generally believed that the proposed measure would be "somewhat effective". Views on effectiveness were also positive among business associations, though they were evenly split (i.e. as many respondents felt that the measure would be "highly effective" as those who believed it would be "somewhat effective"). Among public authorities and other stakeholders, the general view was that the measure would be "highly effective."

Most business associations agreed that the measure would be "somewhat feasible." On costs, the prevailing view was that the costs entailed by the proposed measure would be moderate.

Most public authorities felt that the proposed measure would be easy to enforce and somewhat easy to monitor.

Detailed findings

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform on the availability of software update/upgrades. Their views were as follows:

- All eight consumer organisations indicated that providing this information would be effective in fostering more sustainable consumption behaviours (one highly effective and six somewhat effective).
- One respondent highlighted that the effectiveness will not only depend on the availability but also the quality of the updates; i.e. whether the devices would continue to correspond to consumers' privacy needs and expectations after installation.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform consumers on the availability of software update/upgrades. Their views were as follows:

- *Effectiveness:* All business associations (six respondents) considered that this requirement would be an effective measure (three highly effective and three somewhat effective).
- *Feasibility:* All (six) business associations considered that this information would be a feasible measure (two feasible and four somewhat feasible).
- *Impact on costs:* Four business associations considered that the impacts on costs would be moderate and one that the costs would be high.
- *Challenges:* No challenges were mentioned.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform on the availability of software update/upgrades. Their views were as follows:

- A majority (14 out of 17)[225] of respondents considered the requirement to provide consumers with a measure requiring the provision of information on the availability of software update/upgrades[226] to be highly effective. The potential impact mentioned *"Information may be important depending on the product. However, must be balanced against the risk for information overload and it might be difficult for C to understand the given information. A simple declaration by the trader where the information is given in a standardised way would make it easy for consumers to compare the information with other products."*
- No challenges were identified by respondents.

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to inform consumers on the availability of software update/upgrades. Their views were as follows:

- 10 out of 16[227] respondents considered a measure requiring the provision of information on the availability of software update/upgrades[228] to be either easy or somewhat easy to enforce.
- Monitoring this measure was considered either easy or somewhat easy by half (8 out of 16) respondents.[229]
- Two possible challenges to monitoring and enforcing this measure were mentioned:
  - "Information requirements are easy to enforce, however, to check the substance of the information (e.g. prove early failure), it is difficult to enforce because this may need controlling within the company. It may be time consuming to check all the requirements."
  - "It may be difficult to enforce because traders may not be interested in disclosing this information."

- Other (n=5)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to inform on the availability of software update/upgrades. Their views were as follows:

[225] 10 replied "Highly effective" and 4 replied "Somewhat effective". 1 replied "Not effective". 2 replied "Do not know".

[226] (e.g. frequency, content, how to install/modify, how long they will be provided, under which conditions, etc)

[227] 8 replied "Easy to enforce", 5 replied "somewhat easy to enforce", 1 replied "Somewhat difficult to enforce" and 1 replied "difficult to enforce." 1 replied "Neither easy nor difficult to enforce".

[228] (e.g. frequency, content, how to install/modify, how long they will be provided, under which conditions, etc)

[229] 4 replied "Easy to monitor", 6 replied "somewhat easy to monitor", 4 replied "Somewhat difficult to monitor" and 1 replied "difficult to monitor." 1 replied "Neither easy nor difficult to enforce".

- Five respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective and two somewhat effective).
- None provide views on the impacts and challenges of the measures.

Problem 2. Consumers face misleading practices in relation to sustainable purchases

Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

Measure N: Set specific rules prohibiting obsolescence

Summary findings

Consumer associations, public authorities and other stakeholders consulted generally believed that the proposed measure would be "highly effective". Among business associations, the shared view was that the measure would not be effective. Nonetheless, most business associations believed that the measure would be "somewhat feasible." On costs, the prevailing view among business associations was that the costs entailed by the proposed measure would be high.

Most public authorities explained that it would be difficult to enforce and difficult to monitor the proposed measure, specifically because it may not be possible to prove planned or premature obsolescence. In addition, some public authorities remarked that enforcing and monitoring practices, such as planned / premature obsolescence, would require an in-depth knowledge of all products, which they do not have.

Some of the challenges commonly discussed by business associations related to the extent of time and resources that it would take to determine the actual service life of each product, thereby creating an undue administrative burden on traders. In addition, a ban could have undesired consequences, such as market distortions, i.e. reduced innovation and choice for consumers.

Detailed findings:

- Consumer Associations (n=9)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set specific rules prohibiting obsolescence. Their views were as follows:

- All nine consumer organisations indicated that this measure would be highly effective.

- Business Associations

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set specific rules prohibiting obsolescence. Their views were as follows:

- *Effectiveness:* Two business associations considered that setting specific rules prohibiting early or planned obsolescence would be effective (one highly, one somewhat) in fostering more sustainable consumption behaviours while three business associations think this measure would not be effective.
- *Feasibility:* All (six) business associations considered that this information would be a feasible measure (two feasible and four somewhat feasible).
- *Impact on costs:* Two business associations considered that the impacts on costs would be high and one that the costs would be low.

- *Challenges:* A couple of associations mentioned that it takes time and resources to determine the usual service life for each product and that the *"legislator would be permanently busy determining the normal life span of products, which would create a lot of bureaucracy for the companies. In addition, such specifications would mean a considerable encroachment on the entrepreneur's freedom in product development and design and would restrict the choice for consumers, who would sometimes, depending on the intended use, also make a conscious decision in favour of an inexpensive product for which they also have lower expectations."*[230]

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set specific rules prohibiting obsolescence. Their views were as follows:

- A majority (12 out of 13)[231] of respondents considered the requirement to provide consumers with setting specific rules for planned and premature obsolescence practices to be either highly or somewhat effective. The expected impact identified by respondents was mostly positive, and respondents reiterated the need for uniform rules and methodology:
  - *"The impact would be great if uniform rules were followed."*
  - *"Need to set general rules, able to keep the pace of technology".*
  - *"If there are clear rules for information about (guaranteed) lifespan, design etc, consumers can determine whether or not they want to buy this product and they have a certainty on which they may rely".*
  - *Could increase lifespan, and lower consumption of certain products where this is relevant.*
- Regarding expected challenges, difficulties with monitoring and enforcement and overall implementation were also mentioned :

- *"This measure would probably require detailed knowledge about the product in question. Thus, it could be difficult to monitor."*
- *"Possible reluctance from manufacturer."*
- *"Given the diversity and variety of IT products, it may be difficult to set a specific rule."*
- *"Design and implementation of such rules would be difficult in a fast-evolving environment. Even with these caveats, a rule would be desirable".*
- *"General ban with the exemption for products where there is a safety or security risk if premature obsolescence is not applied. It is however necessary that such a ban is combined with an information requirement on the product's expected lifespan. Nevertheless, it needs to be stressed that the above-mentioned ban would likely be difficult to enforce."*
  - As well as a risk that it may confuse consumers: *"Information should be clearly provided and should be easily comparable; otherwise it may lead to confusion and discouragement for consumers".*

[230] Sources indicated: https://www.umweltbundesamt.de/en/press/pressinformation/lifetime-of-electrical-appliances-becoming-shorter; and https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648767/IPOL_STU(2020)648767_EN.pdf

[231] 7 replied "Highly effective" and 5 replied "Somewhat effective". 1 replied "Not applicable/do not know".

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to set specific rules prohibiting obsolescence. Their views were as follows:

- A majority of stakeholders categorised this measure as either difficult or somewhat difficult to monitor (eight out of 10)[232] and to enforce (six out of 10).[233]
- Possible challenges to the monitoring and enforcement of this measure were related to the complexity of identifying the practice of planned/premature obsolescence:
    - "If this means controlling if planned or premature obsolescence practices are used, it would likely be difficult."
    - "This measure would probably require detailed knowledge about the product in question. Thus, it would be difficult for us to monitor without having this type of knowledge. We do not have that today."
- In other instances, such difficulties were considered less of an obstacle:
    - Information requirements on lifespan, design, etc are easy to enforce, as long as the rules on this topic are clear. However, to prove actual premature obsolescence might be technically difficult to monitor because this might require testing. Therefore, it depends on which 'specific rules' are meant here.
    - Once common rules have been established, it should not be very difficult to monitor and enforce them.

- Other (n=5)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set specific rules prohibiting obsolescence. Their views were as follows:

- Five respondents indicated that providing this information would be effective in fostering more sustainable consumption behaviours (three highly effective and two somewhat effective).
- None provide views on the impacts and challenges of the measures.

Sub-problem 2.2: Commercial practice of greenwashing

Measure O: Requirement to set EU specific requirements for green claims based on the compliance criteria developed by a multi-stakeholder group (i.e. defining a notion of green claims/greenwashing; explicit provisions that green claims must be clear, unambiguous and specific; must relate to relevant environmental impacts; green claims on a product must relate to the product and not the company as a whole or future aspiration, etc.)

Summary findings

Consumer associations consulted generally believed that the proposed measure would be "highly effective". Among business associations, the shared view was that the measure would be "somewhat effective." Among public authorities, views on effectiveness were more evenly split – as many respondents believed that the measure would be "highly effective" as those who believed it would be "somewhat effective." Among organisations responsible for labels/logos/certification schemes and among

[232] 0 replied "Easy to monitor", 0 replied "somewhat easy to monitor", 3 replied "Somewhat difficult to monitor" and 5 replied "difficult to monitor." 2 replied "Neither easy nor difficult to enforce".

[233] 3 replied "Easy to enforce", 0 replied "somewhat easy to enforce", 2 replied "Somewhat difficult to enforce" and 4 replied "difficult to enforce." 1 replied "Neither easy nor difficult to enforce".

other stakeholder groups, respondents generally believed that the proposed measure would be effective.

Most business associations believed that the measure would be "somewhat feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Most public authorities explained that it would be "somewhat easy" to enforce the proposed measure. However, some public authorities did foresee various challenges with enforcement and monitoring, including *inter alia*: (1) too broad or too narrow a definition set out in regulations to define greenwashing; and (2) the lack of adequate metrics against which to test whether a green logo, label or claim is unfounded / unsubstantiated.

Nonetheless, some public authorities mentioned that they expected the proposed measure to bring about some positive impacts, such as greater uniformity in the enforcement of greenwashing across the EU.

Some of the other challenges commonly discussed, notably by business associations, related to the need for developing sector-specific approaches to testing / validating green claims across industries / sectors (owing to product differences). There would also be a need to engage with all relevant stakeholders within an industry. Where views would diverge, this could slow down the process of developing the necessary measurement criteria for validating environmental claims.

Detailed findings:

- Consumer Associations (n=7)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set EU specific requirements for green claims. Their views were as follows:

- Four consumer organisations indicated that this measure would be highly effective and thee that it would be somewhat effective.
- None provide views on the impacts and challenges of the measures.

- Business Associations (n=18)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set EU specific requirements for green claims. Their views were as follows:

- *Effectiveness:* 14 (out of 18) business associations considered that this measure would be effective (eight highly, seven somewhat) in fostering more sustainable consumption behaviours while three business associations think this measure would not be effective.
- Four associations highlighted that this guidance is already provided (e.g., by the UCPD guidance on greenwashing published in May 2016).
- *Feasibility:* Most (13) business associations considered that this information would be a feasible measure (six feasible and eight somewhat feasible), while three indicated that the measure would be unfeasible (one somewhat unfeasible and two unfeasible).
- *Impact on costs:* While most business associations considered that introducing EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint) would have a high (eight) or moderate (six) impact on costs, one business association considered that the impact would be low and two other that it there would be no impact on costs.
- *Challenges:* One business association added that the measure "Would require a sector approach." Another highlighted that "Opposing views of different stakeholders may slow down progress in defining criteria."

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to inform to set EU specific requirements for green claims. Their views were as follows:

- A majority (14 out of 18)[234] of respondents considered that setting EU specific requirements for green claims based on the compliance criteria developed by a multi-stakeholder group[235] would be either highly or somewhat effective in fostering more sustainable behaviours.
- The possible impact expected by stakeholders was positive:
  - "Could ensure uniform practise within the EU countries, and ease taking enforcement actions on misleading green claims".
  - "If they were mandatory EU-wide requirements, they would certainly have a major impact."
- Two respondents indicated that:
  - "Multi-stakeholder agreement might lead to watering down rules".
  - "Likely better to develop a new UCPD guidance focused only on green claims."

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to set EU specific requirements for green claims. Their views were as follows:

- Enforcement of this measure was considered either easy or somewhat easy by 7 out of 13 respondents[236]. 4 respondents considered it either difficult or somewhat difficult.[237] 2 considered it neither easy nor difficult.
- The respondents identified possible challenges with monitoring and enforcing if the rule is too general:
  - *"If the regulation is too general, then the monitoring can be complicated and somewhat difficult to implement/enforce."*
  - *"[…] the existing law provides a flexible application, which is necessary in such cases. We are reluctant when it comes to defining a notion of green claims/greenwashing, as either a too broad or a too narrow definition can cause problems in application."*
  - *"Defining adequate metrics."*
- The following two approaches were identified as effective measures by respondents:
  - *"legal proceedings in front of an administrative authority"*
  - *"Thorough guidance to traders, administrative fees and sanctions in case of breaches."*

- Other - labels/logos/certification scheme (n=13)

[234] 7 replied 'Highly effective' and 7 replied 'Somewhat effective'. 2 replied 'not effective' and 2 replied "not relevant/do not know".

[235] (i.e. defining a notion of green claims/greenwashing; explicit provisions that green claims must be clear, unambiguous and specific; must relate to relevant environmental impacts; green claims on a product must relate to the product and not the company as a whole or future aspiration, etc.)

[236] 2 replied "easy to enforce" and 5 replied "somewhat easy to enforce".

[237] 2 replied "difficult to enforce" and 2 replied "somewhat difficult to enforce".

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to set EU specific requirements for green claims. Their views were as follows:

- All respondents (11) declared that this measure would be effective
- All also indicated thar the measure would have a positive impact on their organisation.

- Other – Digital information tools

  - One respondent indicated that auditing would be one important issue here because that would put more workload for companies and would generate more costs for them. Companies are already using a variety of ISO standards and other standards as well. The respondent added that whatever solution is developed should follow what is already used at industry level.

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set EU specific requirements for green claims. Their views were as follows:

- Four respondents indicated that providing this information would be highly and one that it would be somewhat effective.

- None provide views on the impacts and challenges of the measures.

Measure P: Ban "broad/vague general benefit environmental claims" (such as "environmentally friendly", "sustainable" or "green") in commercial communications, unless they are verified/certified by independent authority and/or based on recognised methodology

Summary findings

Consumer associations, business associations, public authorities, and other stakeholders generally believed that the proposed measure would be "highly effective". Similarly, among organisations responsible for labels/logos/certification schemes, respondents shared the view that the proposed measure would be effective. They also generally felt that the measure would have a positive impact on their organisations.

Views on the feasibility of the proposed measure were evenly split among business associations. As many respondents believed that the measure would be "feasible" as those who considered that the measure would be "somewhat feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Public authorities held mixed views on the ease of enforcement and monitoring. As many respondents believed that it would be "somewhat easy" to enforce as those who considered the measure would be "somewhat difficult" to enforce. Specifically, some public authorities questioned the usefulness of banning specific environmental claims.

Detailed findings:

- Consumer Associations (n=7)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- Six consumer organisations indicated that this measure would be highly effective and one that it would be somewhat effective.
-

- Business Associations (n=20)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- *Effectiveness:* 15 business associations considered that this measure would be effective (nine highly, four somewhat) in fostering more sustainable consumption behaviours while five business associations think this measure would not be effective. Two associations highlighted that greenwashing is already regulated under UCPD and so no further action is needed. One indicated that banning words is not effective as companies will start using other words, the approach needs to be more "high-level".
- *Feasibility:* Nine business associations considered that this information would be a feasible measure (five feasible and four somewhat feasible), while six considered it not to be feasible (three somewhat unfeasible and three unfeasible).
- *Impact on costs:* Seven business associations considered that the impacts on costs would be high, while two that they would be moderate and three that it would not have an impact on costs. One business association indicated that the impact on costs would be low.
- *Challenges:* None provided.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- A majority (15 out of 18)[238] of respondents considered that introducing a "ban on "broad/vague general benefit environmental claims"[239] in commercial communications, unless they are verified/certified by independent authority and/or based on recognised methodology would be highly effective in fostering more sustainable behaviours.
- Possible impact identified by respondents was positive:
    - "Banning certain commercial practices could send a signal to traders, it could also contribute to a uniform practice within the EU."
    - "Prohibiting such claims would have a major impact. However, it would also require that such claims would not be used."

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- Enforcing this measure was considered either easy or somewhat easy by 8 out of 13 respondents[240] while 5 considered it either difficult or somewhat difficult.[241]

[238] 11 replied 'Highly effective' and 4 replied 'Somewhat effective'. 2 replied 'not effective' and 1 replied "not relevant/do not know".

[239] (such as "environmentally friendly", "sustainable" or "green")

[240] 4 replied "easy to enforce" and 4 replied "somewhat easy to enforce".

[241] 4 replied "difficult to enforce" and 1 replied "somewhat difficult to enforce".

- Opinions on the ease with which this measure may be monitored were evenly split with 6 out of 12 considering it either easy or somewhat easy[242] and 6 more considering it either difficult or somewhat difficult.[243]
- The following possible challenges with monitoring and enforcement were mentioned by respondents:
    - *"Banning could make regulations less dynamic and be at risk of being outdated in an ever changing field."*
    - *"It should be considered carefully to what extent a per se ban can be useful, as this type of advertising can be designed in manifold ways. Most of the existing per se bans are formulated in a restrictive manner and have a rather narrow scope."*
    - *"If the claims are too general, then the monitoring can be complicated and somewhat difficult to implement/enforce."*
- Echoing the previous measure, the following were mentioned as effective approaches by respondents:
    - *"Legal proceedings in front of an administrative authority"*
    - *"Thorough guidance to traders, administrative fees and sanctions in case of breaches."*

- Other - labels/logos/certification scheme (n=13)

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- Most respondents (10) declared that this measure would be effective, while one believed that it would be ineffective.
- Most (9) also indicated that the measure would have a positive impact on their organisation, while one considered that it would have a low negative impact.

- Other – Digital information tools
    - One respondent indicated that this measure would be very onerous and would probably affect small business which would not have the means to get the certifications they need.

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to ban "broad/vague general benefit environmental claims. Their views were as follows:

- Four respondents indicated that providing this information would be highly effective and two somewhat effective.
- None provide views on the impacts and challenges of the measures.

Measure Q: Ban other specific greenwashing examples

Summary findings

[242] 4 replied "easy to monitor" and 2 replied "somewhat easy to monitor".

[243] 4 replied "difficult to monitor" and 2 replied "somewhat difficult to monitor".

Consumer associations, public authorities and other stakeholders generally believed that the proposed measure would be "highly effective." Business associations, on the other hand, believed that the measure would be "somewhat effective." Organisations responsible for labels/logos/certification schemes generally believed that the proposed measure would be effective. These organisations also generally felt that the measure would have a positive impact on their organisations.

Business associations generally considered that the proposed measure would be "somewhat feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Public authorities held mixed views on the ease of enforcement and monitoring. As many respondents believed that it would be "somewhat easy" to enforce as those who considered that the measure would be "somewhat difficult" to enforce. Specifically, some public authorities questioned the usefulness of banning specific environmental claims.

Detailed findings:

- Consumer Associations (n=7)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to ban other specific greenwashing examples. Their views were as follows:

- Five consumer organisations indicated that this measure would be highly effective and two that is would be somewhat effective.

- Business Associations (n=15)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to other specific greenwashing examples. Their views were as follows:

- *Effectiveness:* Most business associations (11) considered that this measure would be effective (six highly, five somewhat) in fostering more sustainable consumption behaviours, while four business associations thought that this measure would not be effective. One association indicated that their members were not in favour of this measure as they would favour criteria over examples as latter cannot be exhaustive. Examples provided by the associations:
  - "sustainably produced" claim
  - "environmentally friendly" claim
  - "zero emissions" claim
  - "ethically correct choice" claim.
- *Feasibility:* Seven business associations considered that this information would be a feasible measure (three feasible and four somewhat feasible). Five considered it not feasible (four somewhat unfeasible and one unfeasible).
- *Impact on costs:* Seven business associations considered that the impacts on costs would be high, two that they would be moderate and two that there would be no impact on the costs. One business association indicated that the impacts on costs would be low.
- *Challenges:* A couple of associations mentioned that it takes time and resources to determine the usual service life for each product and that the *"legislator would be permanently busy determining the normal life span of products, which would create a lot of bureaucracy for the companies. In addition, such specifications would mean a considerable encroachment on the entrepreneur's freedom in product development and design and would restrict the choice for consumers, who would sometimes, depending on the intended*

use, also make a conscious decision in favour of an inexpensive product for which they also have lower expectations."[244]

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to ban other specific greenwashing examples. Their views were as follows:

- A majority (15 out of 18)[245] of respondents provided their views on a potential ban on specific greenwashing examples (by amending Annex I of the Unfair Commercial Practices Directive. The examples provided by respondents were the following:
  - Plastic water bottles that have pictures of nature on them (highly effective)
  - Vague environmental claims on packaging (highly effective)
  - Unfounded claims of animal welfare
  - Energy sources labelled as renewable without being confirmed
  - Long term future aspirations about sustainability where the core business is predominantly polluting

- Other - labels/logos/certification scheme (n=13)

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to ban other specific greenwashing examples. Their views were as follows:

- All respondents (11) declared that this measure would be effective.
- All (9) indicated that the measure would have a positive impact on their organisation.

- Other (n=6)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to ban other specific greenwashing examples. Their views were as follows:

- Six respondents indicated that providing this information would be highly effective in fostering more sustainable consumption behaviours.
- None provide views on the impacts and challenges of the measures.

Measure R: Introduce EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint)

Summary findings

Consumer associations generally believed that the proposed measure would be "somewhat effective." Views on effectiveness were evenly split among business associations. As many respondents felt that the measure would be "highly effective" as those who believed it would be "somewhat effective." Public authorities and other stakeholders, on the other hand, generally considered that the proposed measure would be "highly effective." Organisations responsible for labels/logos/certification schemes

[244] Sources indicated: https://www.umweltbundesamt.de/en/press/pressinformation/lifetime-of-electrical-appliances-becoming-shorter; and https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648767/IPOL_STU(2020)648767_EN.pdf

[245] 11 replied 'Highly effective' and 4 replied 'Somewhat effective'. 2 replied 'not effective' and 1 replied "not relevant/do not know".

were generally of the view that the proposed measure would be effective. They also generally felt that the measure would positively impact their organisations.

Business associations generally indicated that the proposed measure would be "feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Most public authorities believed that the measure would be "easy to enforce" and "easy to monitor." In addition, some public authorities were of the opinion that the measure would bring about positive changes or benefits as a result of the implementation of a common or harmonised method for calculating environmental impact, thereby increasing/facilitating comparability across products for consumers as well as enforcement agencies.

Nonetheless, concerns were raised by some public authorities as regards the potential difficulty of developing tailored PEF methodologies to suit the needs of different sectors. This may require specific technical knowledge. As regards other challenges / difficulties likely to be encountered with the proposed measure, some business associations warned that it would be difficult to measure the environmental impact of complex products, such as sports equipment, food products, technical goods, etc.

Detailed findings:

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

- Five consumer organisations indicated that this measure would be somewhat effective and three indicated that it would highly effective.
-

- Business Associations (n=16)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

- *Effectiveness:* 13 (out of 16) business associations considered that this measure would be effective (eight highly, six somewhat) in fostering more sustainable consumption behaviours while four business associations think this measure would not be effective.
- *Feasibility:* Most (12) business associations considered that this information would be a feasible measure (seven feasible and five somewhat feasible), while five indicated that the measure would be unfeasible (two somewhat unfeasible and three unfeasible).
- *Impact on costs:* While most business associations considered that introducing EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint) would have a high (10) or moderate (4) impact on costs, one business association considered that the impact would be low and one other that it there would be no impact on costs.
- *Challenges:* Some indicated that measuring the impact of complex goods, for instance pieces of sports equipment (tents/ treadmills, ski's etc.) is extremely difficult, likewise for other technical goods and food products. Also, some considered that it would be challenging to enforce and monitor this measure.

Some also highlighted that companies are already required to substantiate their claims, so they do not see the need for additional measures.

- Public authorities (n=16)

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

- A majority (10 out of 16)[246] of respondents considered that to introduce EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint) would be highly effective in fostering more sustainable behaviours.
- When asked about its possible impact, respondents replied positively to the idea of having a common EU method:
    - *"General comment: We think it would be good to have a common method within the EU. PEF could hopefully be a solution and the method would likely be highly or somewhat effective depending on how it is used."*
    - *"A common method of calculating environmental impact could make it easier to compare products for both consumers and enforcement agencies."*
    - *"If they were mandatory EU-wide requirements, they would certainly have a major impact."*

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

- 8 out of 14 respondents considered this measure either easy or somewhat easy to enforce[247] while 6 considered it either difficult or somewhat difficult.[248]
- The divide between opinions in relation to monitoring the measure was slimmer, with a small majority of 6 out of 11 respondents[249] considering it either easy or somewhat easy, while the remaining 5 considered it either difficult or somewhat difficult.[250]
- The possible challenges identified by respondents focus on the technicality of the topic:
    - *"Depending on how the requirements are made/formulated, enforcing and monitoring could require technical and detailed knowledge of each specific sector."*
    - *"It might be a challenge to verify the PEF information, it needs technical knowledge".*
- The effective measure mentioned by one respondent echoes the previous measure and focuses on both supporting and sanctioning where necessary: "*Thorough guidance to traders, administrative fees and sanctions in case of breaches."*

[246] 8 replied 'Highly effective' and 4 replied 'Somewhat effective'. 2 replied 'not effective' and 2 replied "not relevant/do not know".

[247] 4 replied "easy to enforce" and 4 replied "somewhat easy to enforce".

[248] 3 replied "difficult to enforce" and 3 replied somewhat difficult to enforce".

[249] 4 replied "Easy to monitor" and 2 replied "somewhat easy to monitor".

[250] 2 replied "Difficult to monitor" and 3 replied "Somewhat difficult to monitor".

- Other - labels/logos/certification scheme (n=13)

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

  - All respondents (11) declared that this measure would be effective.
  - Also all (11) indicated that the measure would have a positive impact on their organisation.

- Other (n=3)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to introduce EU requirements to substantiate environmental claims based on a common EU method. Their views were as follows:

  - All three respondents indicated that providing this information would be highly effective in fostering more sustainable consumption behaviours.
  - None provided views on the impacts and challenges of the measures.

Other suggested measures

- Consumer Associations
  - Respondents indicated other measures that could be effective in preventing greenwashing: the adoption of a new EU legislative act (possibly a Regulation), which would establish a pre-approval procedure for all green claims, similar to the EU health claim regulation; the creation of a Public Register with all approved and prohibited green claims; work in line with ISO 26000 Social responsibility; further use of existing tools such as Ecolabel and Ecodesign.
- Business Associations
  - "Compulsory recycled plastic content, tax benefits for companies that incorporate recycled material in their articles, ecological public purchase."
  - "Companies who knowingly make misleading claims about their products should have to withdraw that product from the market and recall those already sold."
  - "When it comes to green claims, we need harmonisation"
  - Use digital means to provide the information
  - "You need schemes that allow to compare and give manufacturers an incentive to produce more environmentally sustainable goods which means you need a dynamic label that changes all the time (such as the energy label). Same with nutrition labelling"
  - Having a common methodology at EU level on LCA and on how the information should be communicated.
  - Creating a logo that would be transparent, reliable, used as a global standard and developed in close cooperation with the sector it affects.
- Public authorities
  - Respondents suggested the following measures:
    - *Introduce information requirements saying that if a trader use an environmental claim, it is not only required to specify what the environmental benefit is but also what environmental impact the product has in order to balance the claim.*

- *Ban of exaggeration of positive contributions to ethical and sustainable products if they are potentially misleading […].*
- *surveillance activities*
- *We find that it could be worth exploring if new recommendations or guidelines to the UCPD could be introduced on this subject. This would promote a common understanding of how the UCPD should be understood and enforced between the consumer protection agencies. It would for instance be helpful to have recommendations for how the relevance criteria mentioned in point 5.1.3 page 100 of the current guidelines to the UCPD should be assessed when it comes to products that by nature are more harmful to the environment than most other products. In our opinion, it could be worth discussing whether there could be more stringent rules for the biggest polluters in terms of what they can claim in their marketing. Furthermore, we welcome a discussion on how to assess the relevance criteria when the environmental improvement in question only relates to a marginal part of the product, but at the same time is the best degree of improvement achievable with today's technology.*

- Consumer awareness and education.

- Other – Digital information tools
  - One respondent suggested the taxation of virgin materials would ensure that manufacturers are truly incentivised to produce green products.
  - Another respondent indicated that a product passport or a tag would be a solution that could offer trustworthy information to consumers and that databases managed by public authorities would be a trustworthy source.
  - Another respondent indicated that apps through which consumers can quickly check a rating of a product in terms of its sustainability when shopping proves to be a very useful tool for consumers. The fact that consumers increasingly use technology and smartphones can empower them to search for more information if they have the right tools.
- Other
  - Respondents also suggest additional measures such as ensuring there is transparency on calculation and evaluation; penalties against non-verified labels; stronger civil society and consumer protection organisations that can raise problems derived from greenwashing practices; consumer awareness and education.

Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

Measure S: Setting minimum requirements (on transparency, reliability, etc.) and possibly certify sustainability labels/logos

Summary findings

Most consumer associations consulted believed that the proposed measure would be "somewhat effective," unlike most business associations, public authorities and other stakeholders which generally felt that the measure would be "highly effective." In the same vein, organisations responsible for labels/logos/certification schemes were generally of the view that the proposed measure would be effective.

Business associations generally indicated that the proposed measure would be "feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Most public authorities believed that the measure would be "somewhat easy to enforce" and "easy to monitor." In terms of potential challenges around enforcement/monitoring, some public authorities expressed concerns as regards the use / focus on minimum requirements as the basis to test / validate a whole range of products. These authorities believed that the minimum requirements ought to be tailored to specific products / sectors. In addition, there were concerns that enforcement / monitoring may require in-depth technical knowledge of each specific product / sector.

Detailed findings

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

- Six consumer organisations indicated that this measure would be somewhat effective and two indicated that it would highly effective.

- Business Associations (n=18)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

- *Effectiveness:* 14 (out of 18) business associations considered that this measure would be effective (ten highly, four somewhat) in fostering more sustainable consumption behaviours while four business associations think this measure would not be effective.
- *Feasibility:* Most (12) business associations considered that this information would be a feasible measure (nine feasible and three somewhat feasible), while five indicated that the measure would be unfeasible (two somewhat unfeasible and three unfeasible).
- *Impact on costs:* While most business associations considered that introducing EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint) would have a high (eight) or moderate (four) impact on costs, two business association considered that the impact would be low and one other that it there would be no impact on costs.
- *Challenges:* No views provided.

- Public authorities (n=16)

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

- A majority (15 out of 18)[251] considered that setting minimum requirements (on transparency, reliability…) and possibly certify sustainability labels/logos would be either highly or somewhat effective in fostering more sustainable behaviours.
- Respondents identified possible impact as being either positive:
    - *"Labels and logos could, if used in an informative and uniform way, give consumers good and trustworthy information on environmental impacts*

[251] 8 replied 'Highly effective' and 7 replied 'Somewhat effective'. 3 replied 'not effective'.

and social aspects of products. Minimum requirements could hopefully strengthen the official and internationally recognized labelling schemes like the EU Ecolabel and Nordic Swan."

- Or positive with some reservations and suggestions:
  - *"It is difficult to set and control all different types of labels/logos. Today, this falls under the UCPD and it would likely be better to develop the section regarding labels/logos in the guidance to the UCPD."*
  - *"It would definitely be useful, but at the same time most of products already have quite a many different labels/logos."*
  - *"In the field of environmental performance consumers are overflown by trust marks and labelling. Different indications need be comparable. Also they need to be verified by an independent trusted party."*

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

- A majority of respondents (eight) considered this measure to be either somewhat easy or easy to enforce.[252] Five had a different opinion and considered it either somewhat difficult or difficult,[253] while two respondents considered it neither easy nor difficult.
- 13 respondents expressed an opinion on the ease with which the measure could be monitored, a majority of 7 of which considered it either easy or somewhat easy.[254] Four respondents considered it either difficult or somewhat difficult,[255] while two respondents considered it neither easy nor difficult.
- The following possible challenges with monitoring and enforcing this measure were mentioned:
  - *"[…] It can be difficult for us to enforce labels/logos even if there are minimum requirements, there can be a lot of different criteria for a certain third party certification. It would also likely be a great challenge in setting minimum requirements for all types of different products on the market."*
  - *"Implementation of internal procedures in order to bring any possible breach of rules to sanction; capacity to follow new market developments and update the electricity labelling framework."*
  - *"[…] enforcing and monitoring could require technical and detailed knowledge of each specific sector."*
- The following were identified as effective approaches to enforce the measure:
  - *"legal proceedings in front of an administrative authority"*
  - *"Thorough guidance to traders, administrative fees and sanctions in case of breaches."*

- Other - labels/logos/certification scheme (n=13)

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

[252] 3 replied "easy to enforce" and 5 replied "somewhat easy to enforce"

[253] 4 replied "somewhat difficult to enforce" and 1 replied "difficult to enforce".

[254] 4 replied "easy to monitor" and 3 "somewhat easy to monitor"

[255] 3 replied "somewhat difficult to monitor" and 1 replied "difficult to monitor".

- All respondents (11) declared that this measure would be effective.
- Also all respondents (10) indicated that the measure would have a positive impact on their organisation.

- Other (n=3)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set minimum and possibly certify sustainability labels/logos. Their views were as follows:

- Six respondents indicated that providing this information would be highly effective in fostering more sustainable consumption behaviours and one that it would be effective.
- None provide views on the impacts and challenges of the measures.

Measure T: Setting minimum requirements (on transparency, reliability, etc.) and possibly certify digital information tools that provide information on sustainability of products and services to consumers

Summary findings

Most consumer associations consulted believed that the proposed measure would be "somewhat effective," unlike most business associations which generally felt that the measure would be "highly effective." In the same vein, public authorities and organisations responsible for labels/logos/certification schemes were generally of the view that the proposed measure would be effective.

Views on the feasibility of the proposed measure were evenly split. As many business associations indicated that the proposed measure would be "feasible" as those who considered the measure to be "somewhat feasible." In relation to costs, the prevailing view was that the measure would entail high costs.

Most public authorities believed that the measure would be "somewhat easy to enforce," while views on monitoring were evenly split. As many public authorities indicated that the measure would be "somewhat easy to monitor" as those who felt that the measure would be "somewhat difficult to monitor." In terms of potential challenges around enforcement/monitoring, there were concerns (among some public authorities) that enforcement / monitoring may require in-depth technical knowledge of each specific product / sector.

Respondents from the different stakeholder groups also shared their views on possible minimum criteria to certify digital information tools that provide information on sustainability of products / services. Views from consumer associations and business associations were relatively similar, with suggestions to align the minimum criteria with existing standards for green labels (e.g. ISO 14025, EN 4555X). Some consumer associations further added that the criteria ought to be developed on the basis of input provided by all relevant stakeholders and for control / verification procedures to be carried out by independent, third-party organisations.

In the context of possible minimum criteria, respondents were also asked about their awareness of the recommendations of the "2010 EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs." Awareness levels were generally low and lacking across all stakeholder groups.

Detailed findings

- Consumer Associations (n=8)

The consumer associations consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- Four consumer organisations indicated that this measure would be somewhat effective and two indicated that it would highly effective.
- None provide views on the impacts and challenges of the measures.

- Business Associations (n=18)

The business associations consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- *Effectiveness*: 15 (out of 18) business associations considered that this measure would be effective (nine highly, four somewhat) in fostering more sustainable consumption behaviours while three business associations think this measure would not be effective.
- *Feasibility*: Most (11) business associations considered that this information would be a feasible measure (six feasible and five somewhat feasible), while four indicated that the measure would be unfeasible (two somewhat unfeasible and two unfeasible).
- *Impact on costs*: While most business associations considered that introducing EU requirements to substantiate environmental claims based on a common EU method (Product Environmental Footprint) would have a high (eight) or moderate (three) impact on costs, one business association considered that the impact would be low and one other that it there would be no impact on costs.
- *Challenges*: Need to clearly define what digital information tools mean.

- Public authorities (n=16)

The public authorities consulted were asked about their views on the effectiveness, feasibility, of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- A majority (13 out of 15) of respondents considered that setting minimum requirements and possibly certify digital information tools that provide information on sustainability of products and services to consumers would be effective in fostering more sustainable behaviours.
- Possible impact identified by stakeholders was positive:
    - *"Could provide good information to consumers, NGOs and enforcement agencies, making it easier to compare products and services."*
    - *"It would have an impact, but it would be questionable whether consumers would take this information into account when making a purchase decision."*

The public authorities consulted were also asked about their views on the monitoring and enforcement of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- Of the 16 respondents, seven considered the measure either easy or somewhat easy[256] to enforce while seven considered it either difficult or somewhat difficult.[257] Two respondents considered it neither easy nor difficult.
- The same division of opinions presented itself in relation to monitoring, with six out of 14 considering it either easy or somewhat easy[258] and six considering it either difficult or somewhat difficult.[259] Two respondents considered it neither easy nor difficult.
- Echoing their response in relation to the previous measure, respondents identified the following possible challenges:
    - *"Implementation of internal procedures in order to bring any possible breach of rules to sanction; capacity to follow new market developments and update the electricity labelling framework."*
    - *"[…] enforcing and monitoring could require technical and detailed knowledge of each specific sector."*
- Echoing their response in relation to the previous measure, the following were identified as effective approaches by respondents:
    - *"legal proceedings in front of an administrative authority"*
    - *"Thorough guidance to traders, administrative fees and sanctions in case of breaches."*

- Other - labels/logos/certification scheme (n=13)

The organisations responsible for labels/logos/certification schemes consulted were asked about their views on the effectiveness and impact (on their organisation) of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- Most respondents (11) declared that this measure would be effective, whereas one considered it not effective.
- Most respondents (9) indicated that the measure would have a positive impact on their organisation, while one considered that it would not have an impact.

- Other (n=3)

The other stakeholders consulted were asked about their views on the effectiveness, impacts and challenges of a possible measure to set minimum and possibly certify sustainability digital information tools. Their views were as follows:

- Two respondents indicated that providing this information would be highly effective in fostering more sustainable consumption behaviours and one that it would be somewhat effective.
- None provide views on the impacts and challenges of the measures.

Views on possible minimum criteria

- Consumer associations
    - When asked about what the possible minimum criteria could be, consumer organisations expressed various opinions: criteria should follow existing standards for green labels; criteria should be scientifically sound; possibilities

[256] 1 replied "easy to enforce" and 6 replied "somewhat easy to enforce".

[257] 6 replied "somewhat difficult to enforce" and 1 replied "difficult to enforce".

[258] 1 replied "easy to monitor" and 5 "somewhat easy to monitor"

[259] 5 replied "somewhat difficult to monitor" and 1 replied "difficult to monitor".

that blockchain offers must be explored; award criteria publicly available; criteria established in concertation with relevant stakeholders; award criteria going beyond what is requested by law; control procedure should be impartial with a third-party verification procedure.

- Regarding consumer organisations' awareness of the recommendation of the "2010 EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs", three associations were aware of them, as opposed to five that indicated not to be aware of those guidelines.

- Industry associations
  - Regarding suggested criteria:
    - ISO, Eucertplast, Recyclass.
    - "Germany: guidelines from BDI und UBA"
    - "The criteria should be based on recognised standards (ISO 14025, EN 4555X series...) and accompanied by an appropriate operating manual. Minimum requirements could be derived from existing legislation. One could for example envisage (but needs verification and supported by a methodology) that only energy class A labelled products could make a claim to being environmentally friendly. This would have the advantage of combining messages on environment and energy aspects."
    - Natrue standards (they own it, its created by external experts and implemented and controlled by a 3rd party accredited by a 3rd party themselves) Cosmos standards Nordic Swan Union of ethical bio trade (standard for sourcing of raw material, social sustainability, etc.) – recently introduced. Work in MS (DE in particular) looking at codes of conduct for green claims and greenwashing.
    - "The labels should clearly state: a) If they are placed on the product following third-party assessment or only the manufacturers' self-declaration b) On which standards they are based and c) the name, or reference number, of the accredited body who delivered it (see CE mark)".
  - The majority of business associations (12) consulted were not aware of the recommendations of the "2010 EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs", while five were aware of the recommendations. One business association commented that "the recommendations are very general in terms of how a label should be set up but make sense and appear useful. Another indicated that these are old guidelines that need to be updated but did not provide further suggestions.

- Public authorities
  - None of the authorities consulted suggested criteria.
  - The majority of authorities (none of the 18) consulted were not aware of the recommendations of the "2010 EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs", while four were aware of the recommendations and the remaining five indicated it was not applicable. One authority indicated that a key advantage of these guidelines is the third-party certification requirement. Two respondents mentioned that having minimum criteria is positive.

- Other organisations (n=5)
  - When asked about what the possible minimum criteria could be, one respondent suggested to implement a benchmark system in the labels and provide more or less points weighted against criteria such as durability, in

that way consumers could use the information (logo/label) to inform their decision.
- None was aware of the recommendation of the "2010 EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs".

Ineffective enforcement of existing consumer protection rules related to imperfect information and obsolescence and greenwashing

Public authorities provided their views on the enforcement of possible measures:

- *Information Requirements*
  - There was agreement among respondents (10 out of 13)[260] that the measures introducing information requirements should be included within the remit of the Consumer Protection Cooperation Network.
  - The reasons provided by those that agreed were:
    - *"This could ensure an effective and uniform enforcement of the information requirements. We believe it is important that these information requirements are subject to monitoring and enforcement by public authorities to ensure that traders comply with them."*
    - *"More effective protection for consumers."*
    - *"This is relevant for the entire EU, considering the coverage of transnational companies the information requirements and infringements it should be included in the EU-wide cooperation of CPC authorities."*
    - *"Since (software) products are often made/developed abroad (i.e. in another Member State), it makes sense that the infringements of the above-mentioned information requirements are also included within the remit of the CPC Regulation (which is applicable to all Member States)."*
  - The reason provided by those that agreed was: "As they aren't legal obligations, we see this as a useless administrative burden".
  - The reasons provided by those that indicated that they did not know were: *"Need to consider the pros and cons of complicating the consumer law regulations compared to preventing such products from entering the market that do not last. Monitoring EU's product specific requirements should not be the responsibility of the consumer law enforcement authority since they are more technical in nature. For example, product safety authorities are more experienced in this. Need to consider developing the existing system of international environmental standards".*
- *Obsolescence*
  - There was agreement among respondents (7 out of 9)[261] that the measures introducing requirements in the field of planned and premature obsolescence should be included within the remit of the Consumer Protection Cooperation Network.
  - The reasons provided by those that agreed were:
    - *"These types of products are subjected to cross border trade."*
    - *"Better consumer protection in terms of economic interest."*
    - *"Yes, because it might entail EU-wide issues […]"*

[260] A further 8 replied "do not know/not relevant".

[261] A further 7 replied "do not know/not relevant".

- *"Since the hardware, firmware and software products are often made/developed abroad (i.e. in another Member State), it makes sense that the infringements of the above-mentioned information requirements are also included within the remit of the CPC Regulation (which is applicable to all Member States)."*

- The reason provided by those that agreed was: *"Not if related to production requirements. Furthermore, it would be too complicated to investigate compliance with a ban of premature obsolescence."*

- *Greenwashing*

  - There was agreement among respondents (12 out of 15)[262] that the measures introducing requirements in environmental and sustainability claims should be included within the remit of the Consumer Protection Cooperation Network.

A8.5.3 Other feedback

Legal and Commercial guarantees

- Industry Associations

  - Three business associations pointed to costs as the main reason for companies to replace instead of repairing products.
  - Respondents indicated the following as the main effects of longer legal guarantees on the lifespan and reparability of the products offered in those Member States when compared to other Member States:

- One business association mentioned that the corresponding product prices tend to rise.
- One business association mentioned that the effects would be probably minor, as there are research results showing that most of the faults (original faults/errors) get acknowledge within the first year. The respondent added that it would therefore be an ineffective measure to connect the legal guarantee with the estimated lifespan of a products.

Social impacts of products

- Consumer Associations

  - 3 respondents indicated that it would be "somewhat effective" to provide methodological guidance to support companies in calculating the social impact of their products and services, and two that it would be "highly effective".

- Business Associations

  - View on the current practice

    - Most business associations (9) estimated that less than 50% of companies calculate/know the social impacts of their products/services. Only two business associations estimated that the percentage would be above 50%.
    - Most business associations (9) estimated that less than 50% of companies provide information to their clients on the social impacts of their products/services. Only two business associations estimated that the percentage would be between 50%-74%.
    - Most business associations (12) considered that companies provide information about social impacts to clients in order to differentiate from the competition. However, nine business associations considered that the reason is to improve the image of the product / service, while seven

[262] A further 4 replied "do not know/not relevant".

business associations pointed that companies provide information about social impacts to clients to improve sales or another six indicated that this is done in order to show effort made to improve environmental impacts. Ten business association pointed to either legal and regulatory compliance (5) and to the request of consumers (4) as reasons for providing the information.

- Most business associations provide information about social impacts via the company/sector's environmental logo/label (7) or via website or app (7). Some business associations (6) considered that companies provide information about social impacts via ISO Type labels. Several business associations also indicated as means to provide this information through non-ISO label provided by third-parties (4), on the product or shelf (4) or via text messages (4).
- As regards other means indicated by business associations, some pointed to the AISE-sustainability label or via an independent logo/label e.g. Fairtrade/rainforest alliance labelling, also UTZ certification which is specific for cocoa supply chains."
- Among the main obstacles preventing companies from providing information about social impact of their products and services, business associations indicated the following:

- "Lack of knowledge, diversity of methods and non-standardization"
- "Because information on social conditions in third countries are often not made available"
- "Lack of minimum requirements at EU level and at global level."
- "The complexity of global value-chains and long supply-chains. This makes it more difficult to have access to information since a lot of products are manufactured outside EU.
- View on effectiveness, impacts and challenges of a measure to provide methodological guidance to support companies in calculating the social impact of their products and services

  - Effectiveness: all business associations considered that providing methodological guidance to support companies in calculating the social impact of their products and services would be an effective measure in fostering a greener economy (8 highly effective, 9 somewhat effective).
  - Feasibility: most business associations considered that providing methodological guidance to support companies in calculating the social impact of their products and services would be a feasible measure (6 feasible, 7 somewhat feasible). However, three business associations considered the measure would be somewhat feasible.
  - Impact on costs: while nine business associations considered that providing methodological guidance to support companies in calculating the social impact of their products and services would have a high (5) or moderate (6) impact on costs, three business associations considered the impact would be low and one other business association considers there would be no impact on costs.
  - Challenges: the approach needs to consider the specificity of the various types of products

- Public authorities

- Opinions were split (7 against 7)[263] on whether a requirement to provide methodological guidance to support companies in calculating the social impact of their products and services would be effective or not.
- When asked about possible impact, one respondent mentioned that "It is hard to believe that consumers would make their purchasing decisions based on companies' social impact." Other respondents echoed what was mentioned in relation to the previous measure, that: "Self-regulation: often traders do not care, if they are not obliged to." And that it: Could make it easier and more effective for enforcement agencies to control marketing claims regarding environmental impact"
- Opinions on the ease with which this measure can be enforced were evenly split. 5 out of 11 respondents considered it either easy or somewhat easy,[264] while 5 others considered it either difficult or somewhat difficult.[265] 1 respondent considered it neither easy nor difficult.
- Monitoring the measure was considered more difficult than it was easy. 4 out of 11 respondents considered it either easy or somewhat easy,[266] while 6 considered it either difficult or somewhat difficult.[267] 1 respondent considered it neither easy nor difficult.
- Possible challenges identified by respondents focus on the technical nature of the topic and on possible disputes between parties:
    - *"Depending on how the requirements are made/formulated, enforcing and monitoring could require technical and detailed knowledge of each specific sector."*
    - *"Disputes may arise as to how accurately the company has calculated the social impact."*
- The following was considered an effective measure in the monitoring and enforcement of this requirement: "Thorough guidance to traders."

- Other - labels/logos/certification scheme (n=13)
    - Most respondents (9) declared that this measure would be effective, whereas one considered it not effective.
    - Six respondents (out of 9) indicated that the measure would have a positive impact on their organisation, while three considered that it would not have an impact.
- Other
    - One organisation considered that it would be "highly effective" to provide methodological guidance to support companies in calculating the social impact of their products and services. While two organisations indicated this measure would be "not effective".

[263] 5 replied 'Highly effective' and 2 replied 'Somewhat effective'. 7 replied 'not effective' and 3 replied "not relevant/do not know".

[264] 2 replied "easy to enforce" and 3 replied "somewhat easy to enforce".

[265] 3 replied " difficult to enforce" and 2 replied "somewhat difficult to enforce".

[266] 1 replied "easy to monitor" and 3 replied "somewhat easy to monitor".

[267] 3 replied "difficult to monitor" and 3 replied "somewhat difficult to monitor".

A8.6 Targeted stakeholder consultations (beyond legal initiative)

A8.6.1 Extent of the problems

Problem 4. Repairing goods is often challenging and unappealing when compared to replacing them with something new

Key findings

Most Consumer associations and Public authorities agree that consumers are faced with many obstacles when it comes to deciding whether to repair goods rather than replace them. A significant majority of Consumer Associations and Public authorities consider that consumers consider that buying new products is cheaper than repairing their broken products and that repairing is expensive, time-consuming and burdensome.

Most business associations agree that only some companies commit to consumers to support them in repairing their products with necessary information, spare parts, clear and easy-to-understand repair manuals or affordable repair and maintenance services.

Detailed findings

- Consumer associations and Public authorities

Consumer associations and public authorities were asked about their views on a list of possible obstacles preventing consumers from repairing products. Their responses were as follows:

It is cheaper to buy new products than to have broken products repaired

- All consumer associations (eight) agreed this obstacle exists (with two respondents indicating that they "totally agreed with the statement while six "somewhat agreed").
- All (Seven) public authorities also agreed with the statement (three indicating that they totally agreed; four somewhat agreed).

It is very burdensome to have broken products repaired

- All consumer associations believed this obstacle exists (with four respondents indicating that they "totally agreed" with the statement; four others "somewhat agreed").
- All (seven) public authorities also agreed with the existence of the obstacle (three indicating that they totally agreed; four somewhat agreed).

It is difficult to get spare parts

- Most (six) consumer organisations thought that it is difficult for consumers to obtain the necessary spare parts (two indicating they "totally agreed"; four "somewhat agreed"; two "neither agreed nor disagreed").
- The majority of public authorities also agreed with the statement (four indicating that they totally agreed; two somewhat agreed).

It is expensive to get spare parts

- All (eight) consumer organisations agreed this obstacle exists for consumers (five indicating they "totally agreed"; three "somewhat agreed").
- All (seven) respondent public authorities indicated the same (five indicating that they "totally agreed"; two "somewhat agreed").

The delivery of spare parts takes a long time

- Almost all consumer organisations indicated that the delivery of spare parts would likely take a long time (three indicating that they "totally agreed"; four "somewhat agreed"; one "neither agreed nor disagreed").
- All public authorities agreed the obstacle exists (three indicating that they totally agreed; four somewhat agreed).

It is difficult to find reliable repair services

- Most consumer organisations (five) agreed with the statement (two indicating that they "totally agreed"; three "somewhat agreed"; two "neither agreed nor disagreed").
- Almost all public authorities (six) also agreed that the obstacle exists for consumers (three indicating that they totally agreed; three somewhat agreed; one neither agreed nor disagreed). For example, one respondent explained that, in London, it is difficult to find reliable repair services because retailers do not always provide all the relevant product information, such as length of guarantee, provenance of spare parts, etc.

The quality of repair services is uncertain

- Seven consumer organisations (out of eight) pointed out that the quality of repair services was uncertain (two indicating that they "totally agreed"; five "somewhat agreed"; one "neither agreed nor disagreed").
- Most public authorities (four) also indicated the same (two indicating they totally agreed; two somewhat agreed; three neither agreed nor disagreed).

Consumers prefer having a defective product replaced by the seller during the legal/commercial guarantee instead of repairing it

- Most consumer organisations (five) considered this as an obstacle preventing consumers from repairing products (four indicating that they "totally agreed"; one "somewhat agreed"; two "neither agreed nor disagreed").
- The same number of public authorities (five) also agreed with the statement (three indicating that they totally agreed; two somewhat agreed; one totally disagreed; one neither agreed nor disagreed).

Other obstacles mentioned

- Other aspects highlighted by consumer organisations were: (i) products not being always designed to be repaired (e.g. parts are soldered or glued); (ii) some retailers/producers making it difficult for independent repairers to repair defective products; (iii) consumers constantly tempted to buy new products because of advertisements; (iv) the commercial guarantee becoming void when a product is repaired by a third-party / independent repair service or by the user himself/herself.
- Several public authorities also provided examples of additional obstacles, such as the price of repairing a product which, in the view of one respondent, is often more than 50 per cent the cost of a new product. Spare parts were also judged to be too costly and their delivery often spanning a long period of time. Additional barriers highlighted by respondents included: convenience, trust and (lack of) education.

- Business / Industry Associations

Business associations were asked about their views on the extent to which traders they represent provide certain "commitments" or "engagements" towards consumers. Their responses were as follows:

Commitment to ensure that spare parts are available for a minimum period of years

- Business associations (n=4) generally acknowledged that only some companies currently commit to this. Only one business association believed that this commitment was being provided by a vast majority of companies / traders.
- There were several reasons advanced by business association for this lack of commitment towards consumers:

- One business association explained that information about spare parts and accessories can ultimately only be provided by manufacturers of the products. Retailers generally lack specific knowledge of which parts manufacturers offer in addition to the product.
- Another business association remarked that "*retailers can only provide spare parts if those have been made available by manufacturers. Retailers cannot stock spare parts. Only the manufacturer can, and only to a limited extent. Keeping large stocks of spare parts for many years would be expensive*."
- One business association further added that "*this question is difficult to answer" […] as it depends on the size of the company, a company's product range, etc…*"

Commitment to ensure that spare parts are available for a minimum period of years

- Business associations (n=3) generally recognised that only some companies currently commit to ensuring that spare parts are provided / delivered within a maximum number of days. Only one business association believed that this commitment was being provided by a vast majority of companies.
- There were several reasons advanced by business associations for the lack of commitment:
- As indicated previously: one business association explained that information about spare parts and accessories can ultimately only be provided by manufacturers of the products. Retailers generally lack specific knowledge of which parts manufacturers offer in addition to the product; another business association remarked that "*retailers can only provide spare parts if those have been made available by manufacturers*". One business association added that ""*this question is difficult to answer" […] as it depends on the size of the company, a company's product range, etc*."
- Conversely, one business association pointed to the "*eco-design requirements (latest Dec 2019) which, for many products, create the obligation to keep spare parts and deliver them fast and to make information available to professional repairers*. […]." The respondent went on to say that, on the basis of the latest information they have, "*more than 80 per cent of products that needed repair were repaired by their members. The rest did not really require repair – they needed to be replaced.*" According to the respondent "*the need to do something in the field of repairs is overestimated*."

Commitment to ensure that spare parts are affordable (e.g. cap on price)

- One business association recognised that only some companies currently commit to ensuring that spare parts are affordable. One other business association believed that this commitment was being provided by a small minority of companies or none.
- There were several reasons advanced by business associations for the lack of commitment:
- One business association explained that "*retailers can only provide spare parts if those have been made available by manufacturers*."
- On the other hand two business associations expressed concerns with the provision of such a commitment: first, one business association explained that placing a cap on prices could entail adverse competition effects. The market should be allowed to determine prices. If competition is strong, prices will remain competitive and affordable; second another business association remarked that low repair costs did not necessarily imply good or high quality repairs.

Commitment to ensure that repair services that meet minimum quality standards are available

- Some business associations (n=2) acknowledged that only some companies commit to ensuring that repair services that meet minimum quality standards are available. Only one business association believed that this commitment was being provided by a vast majority of companies. The respondent remarked that it was in retailers' own best interests to ensure that high standards are guaranteed to consumers.

Commitment to ensure that repair services are affordable (e.g., cap on price)

- Some business associations (n=2) recognised that only a small minority or no companies at all commit to ensuring that repair services are affordable (e.g. cap on price). Only one business association believed that this commitment was being often provided by some companies.
- There were several reasons advanced by business associations for the lack of commitment:

- One business association explained that "*a good service has its price*." The respondent highlighted that most retailers would seek to offer affordable repair services; however, in many cases "*cheap repairs would simply not be possible*." In addition, the respondent explained that repair prices may not be the sole factor determining whether the consumer decides to repair a product. There are other determinant factors, such as information provided to consumers on the price of acquiring a new product versus the price of repairing an old or defective product; convenience, whereby consumers may wish an "on-the-spot" or a quick service and would be prepared to pay more.

- Another business association explained that placing a cap on prices could entail adverse competition effects. The market should be allowed to determine prices. If competition is strong, prices will remain competitive and affordable.

Commitment to provide information on the availability and performance of repair services

- Some business associations (n=3) indicated that a vast majority of companies currently provide consumers with information on the availability and performance of repair services. Only one business association believed that such information is currently provided by some companies only.
- One business association remarked that information on the availability and performance of repair services is commonly provided by retailers who offer their own repair services as the information serves as "a *marketing tool*." In other words, it offers a competitive advantage to those retailers.

Commitment to provide well-developed "maintenance" services

- Business associations (n=3) generally indicated that only some companies often provide consumers with well-developed "maintenance" services. Fewer business associations (n=2) believed that a vast majority of companies always provide such information to consumers.
- One business association remarked that the provision of information on maintenance services constituted a marketing tool for retailers as a means to differentiate from other retailers and thus to be able to retain existing customers and/or attract new customers.

Commitment to design products so that they are easier to repair by consumers

- Business associations (n=2) generally indicated that some companies often design products so that they are easier to repair by consumers. Only one business association believed that this commitment was being provided by a vast majority of companies.
- The lack of commitment observed was explained by the fact that product design was "*an issue for manufacturers*" and was "*not applicable to retailers*." In addition, it was remarked that such a commitment may not always be relevant as "*some products may simply not be fixed or repaired by consumers themselves*."

Commitment to provide clear and easy-to-understand repair manuals

- Business associations (n=2) generally indicated that some companies often provide clear and easy-to-understand repair manuals to consumers. One business association believed that this commitment was being provided by a vast majority of companies, while another business association believed that it was being provided by a small minority only or no companies at all.
- The lack of commitment observed was explained by the fact that the provision of clear and easy-to-understand repair manuals was regarded as "*an issue for manufacturers*" as opposed to retailers.

Commitment to remove barriers to the provision of repair services by third-party repairers

- Business associations (n=2) generally indicated that some companies often seek to remove barriers to the provision of repair services by third-party repairers. One business association believed that this commitment was being provided by a vast majority of companies.
- With regard to this commitment specifically, one business association agreed that such a commitment could prove "*very useful*," although they felt that the onus of a commitment to remove barriers to the provision of repair services ought to be placed on manufacturers as opposed to retailers (who are generally only third-party repairers). One other business association added that it ought to be up to each company to decide whether to make such a commitment as this may depend on the nature of their product(s). For instance, such a commitment may not be relevant where products are "*specially designed and / or are complex*."

Commitment to ensure access to all key components of a product to allow for independent repair

- One business association recognised that a vast majority of companies always ensure access to all key components of a product to allow for independent repairs. One other business association indicated that this commitment was being often provided by some companies, while another business association considered that the commitment was being provided by a small minority of companies only or simply never provided.
- The lack of commitment was attributed to the complexity of certain products by one business association. The respondent provided the example of electronics, which he explained ought not to be repaired by consumers for safety reasons. The respondent further pointed out that some product-specific information, such as repairs, is often not made available within the public domain for commercial reasons.
- Another business association shared the above view and felt that the commitment to ensure access to all key components of a product, thus allowing for independent repairs, would not be feasible for all products, especially highly sophisticated products. Additionally, it would probably not appeal to consumers to undertake complex repairs by themselves and hence,

the commitment would be redundant. As such, the respondent stressed that the demand for repairs increases with product complexity.

- Finally, one business association remarked that certain factors need to be taken into consideration before mandating that businesses make such a commitment, including: Intellectual property rights, trade secrets, etc.

Commitment to ensure security and/or functional updates of the products for a minimum period of years

- Business associations (n=2) generally indicated that a vast majority of companies always ensure security and/or functional updates of the products they sell for a minimum number of years. One business association believe that this commitment was being often provided by some companies only.
- One business association remarked that such a commitment would be more appropriate for manufacturers as opposed to retailers / traders. Another business association pointed out that existing legislation, such as Directive (EU) 2019/771, already asks that sellers provide consumers with the necessary security and/or functional updates for their products.

Problem 5. Re-using of (parts of) goods and/or using cooperative consumption schemes is challenging and/or not appealing to consumers

Key findings

- Most Consumer associations and Public authorities consider that renting, leasing, using or sharing solutions or other collaborative solution occurs rarely and that 'bring-back' programmes, purchasing or selling of refurbished products only occurs sometimes. However, many Consumer associations and Public authorities acknowledge that purchasing and selling of second-hand products occurs often in the economy.
- Most business associations consider that companies generally commit towards consumers to collect old, defective or non-used products from consumers, to remanufacture or refurbish the old, defective or non-used products or to recycle the ones that cannot be remanufactured.

Detailed findings

- Consumer Associations and Public Authorities

Consumer associations and Public Authorities were asked about their views on the frequency of different practices, which were as follows:

Purchasing/selling of second-hand products

- Four consumer associations indicated that the purchasing / selling of second-hand products occurred "often" (one indicated "very often"), and two "sometimes".
- One public authority agreed that this practice occurred "often" and two "sometimes".

Purchasing/selling of refurbished products

- Most consumer associations (four) indicated this practice occurred "sometimes" one "often," and one indicated this "rarely" occurs.
- One public authority agreed that the practice occurred "very often", one "sometimes", and one "rarely".

Renting, leasing, using or sharing solutions or other collaborative solutions

- Three consumer associations indicated the practice occurred "rarely", two "often", and two "sometimes."

- The same number of public authorities indicated that renting, leasing, using or sharing solutions or other collaborative solutions occurred "rarely".

Company 'bring-back' programmes (ensuring consumers bring back old or defect products)

- Four consumer associations indicated that company 'bring-back' programmes occurred "sometimes" and two "rarely".
- Three public authorities also observed that this practice occurred "sometimes."
- Other practices that were commonly cited by consumer associations in the context of the promotion of more sustainable consumption behaviours included the following:
- Increased support for re-use and preparing for re-use by relevant actors;
- Establishment of separate re-use and preparing for re-use targets;
- Reduced VAT or vouchers on repair activities;
- National campaigns encouraging consumers to repair their used goods or purchase second-hand products;
- Display of product environmental footprint on new products;
- Extension of design requirements (e.g. eco-design) to reparability, spare parts and environmental performance;
- Increased due-diligence;
- Implementation of specific legislation, for example, in relation to corporate responsibility.
- Other practices that were commonly cited by public authorities in the context of the promotion of more sustainable consumption behaviours included the following:
- Wider promotion of the second-hand market;
- Practices to encourage repair over replacement in the legal guarantee period (for example, in France, if a product is returned for repairs during the legal guarantee period, the consumer gets an additional six-month warranty);
- Wider promotion of the economic value / advantages of recycling products and/or their materials.

- Business / Industry Associations

Business associations were asked about their views on the extent to which traders they represent provide certain "commitments" or "engagements" towards consumers. Their responses were as follows:

Collection of old/defective/non-used products

- Most business associations (n=6) indicated that companies generally commit to collecting old/defective/non-used products from consumers. Fewer respondents (n=4) considered that this commitment is not being provided by companies.

Remanufacture or refurbish old/defective/non-used products

- Most business associations (n=7) indicated that companies generally commit to remanufacturing or refurbishing old/defective/non-used products on behalf of consumers. Among those respondents, a majority (n=5) believed that only

some companies are providing this commitment, while two business associations indicated that it is provided by a small minority of companies (or close to none). Fewer respondents (n=3) indicated that this commitment is not provided by companies at all.

Recycling products that cannot be remanufactured

- Most business associations (n=8) indicated that companies provide consumers with the commitment to recycle products that cannot be remanufactured. Among those respondents, four business associations indicated that it was a vast majority of companies that provide consumers with this commitment, four indicated that it was some companies only and one other stated it was a minority of companies (or close to none). On the other hand, three business associations indicated that this commitment is not provided by companies at all.

Other

- Some business associations provided additional remarks:
- One business association indicated that through certain existing arrangements, they are collecting about EUR5 billion from companies operating within the consumer goods industry, which they are using to finance the collection, sorting and recycling of packaging. They expect financing to increase to EUR10-15 billion in the longer term.
- Another business association explained that more ought to be done to encourage businesses to engage / offer reuse schemes. This could be mandated through legislation. The respondent recommended that (basic) horizontal criteria be established and more specific rules for each product group. Appropriate labels and logos ought also to be used to signal those products that can be reused / refurbished. The approach to labelling ought to be harmonised.

A8.6.2. Possible policy interventions and their assessment

Problem 4. Repairing goods is often challenging and unappealing when compared to replacing them with something new

Measure A: Minimum period within which a company must make spare parts available (after the sale of a product)

Key findings

- Overall, in terms of effectiveness, the proposed measure to require the indication of a minimum period within which a company must make spare parts available was judged to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others). There were generally (slightly) more respondents that thought that the proposed measure would be "highly effective" as opposed to "somewhat effective."
- Concerning expected impacts, business associations generally believed that the measure would have a high impact on costs, whereas some public authorities believed that the measure could positively influence the overall quality of goods offered to consumers.
- Only business associations commented on the feasibility of the measure and their opinions were divided, half of the respondents considering the measure would be feasible while the other half, unfeasible.
- As regards to challenges, both business associations and public authorities underlined the likelihood of the measure being costly for traders. Respondents

from both sides mentioned that the proposed measure is somewhat already addressed by Directive 2009/125/EC (on Ecodesign) and associated regulations.

Detailed findings

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to provide consumers with a minimum period during which spare parts must be available. Their views were as follows:

- Most consumer associations (n=8) believed that the measure would be effective in fostering more sustainable behaviours (with six consumers indicating that the measure would be "highly effective" and two "somewhat effective").
- No views on impacts and challenges were provided.

- Business associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the requirement to provide a minimum period during which spare parts must be available. Their views were as follows:

- *Effectiveness:* Business associations (n=3) generally considered that requiring companies to provide consumers with a minimum period within which a company must make spare parts available (after the sale of a product) would be an effective measure in fostering a greener economy (with two respondents indicating that the measure would be "highly effective," one "somewhat effective"). However, two business associations considered that the proposed measure would not be effective.
- *Impact on costs:* Business associations (n=3) generally believed that requiring companies to provide consumers with a minimum period within which a company must make spare parts available (after the sale of a product) would have a high impact on costs. However, two business associations did not share this view, with one respondent indicating that the proposed measure would have a low impact on costs; and the other saying it would have no bearing on costs.
- *Feasibility:* Half of the business associations that responded (n=2) believed that requiring companies to provide consumers with a minimum period within which a company must make spare parts available (after the sale of a product) would be a feasible measure (with one respondent indicating that the proposed measure would be "feasible," one "somewhat feasible"). The other half of business associations (n=2) considered that such requirement would be an "unfeasible" measure.
- *Other impacts:* No comments
- *Challenges:* Two business associations explained that the proposed measure ought to be the responsibility of manufacturers as opposed to retailers. The proposed measure is somewhat already addressed by Directive 2009/125/EC (on Ecodesign) and the associated regulations which include provisions on reparability and durability of appliances. As such, several eco-design measures aim at facilitating repairs by ensuring the availability of spare parts, in particular that: (i) spare parts be made available over a long period of time after purchase (e.g. seven years, at a minimum, for refrigerating appliances; 10 years household washing-machines and household washer-dryers; 10 years for household dishwashers; etc.); (ii) the manufacturer shall ensure the delivery of the spare parts within 15 working days during that period; (iii) spare parts can be replaced with the use of commonly available tools and without permanent damage to the appliance; (iv) manufacturers have to

ensure the availability of repair and professional maintenance information for professional repairers. Another company warned against companies having to stock spare parts for a certain period of time. The respondent believed that the cost would be high.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a requirement for companies to provide a minimum period during which spare parts must be available. Their views were as follows:

- *Effectiveness:* 16 out of 17[268] public authorities considered that such requirement would be highly effective.
- *Impacts:* When asked about the possible impacts that this measure could have, some respondents believed that it could positively influence the overall quality of goods offered to consumers. For instance, one respondent explained that the proposed measure would potentially drive producers to improving the quality of goods "*as running and keeping for years a logistics system for spare parts would be expensive*." Other respondents offered suggestions on how the impact of the measure could be increased further. One authority suggested that the minimum period during which spare parts would be made available to be made / set on par with the expected lifespan of a product.
- *Challenges:* With regards to specific challenges, one respondent mentioned that the measure may not achieve its desired impact since it is already covered by existing legislation (e.g. the Ecodesign requirements) and may already have been implemented by affected parties. Other challenges comprised: possible difficulties for businesses to comply with the measure and the likelihood of the measure not being profitable for traders.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to indicate the minimum period during which spare parts must be available. Their views were as follows:

- 7 respondents suggest that the measure would be effective in fostering more sustainable behaviours (6 highly effective; 1 somewhat effective).

Measure B: Providing a maximum number of days for delivery of spare parts

Key findings

- Overall, in terms of effectiveness, the proposed measure to require companies to provide a maximum number of days for delivery of spare parts was deemed to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others). However, there were generally (slightly) more respondents that thought that the proposed measure would be "somewhat effective" as opposed to "highly effective."
- Concerning expected impacts, business associations generally believed that the measure would have a high impact on costs, whereas some public authorities warned that the possible impact of the measure would likely depend on the type of product.

[268] 4 replied 'somewhat effective' and 12 replied 'highly effective'. 1 replied 'not effective'.

- Only business associations commented on the feasibility of the measure and most of them considered that the proposed measure would rather be unfeasible.
- As regards to challenges, both business associations and public authorities warned about the difficulties in establishing a standard maximum number of days for the delivery of spare parts as this varies considerably based on product, damage or probability of breaking.

Detailed findings

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to provide consumers with maximum number of days for the delivery of spare parts. Their views were as follows:

  - Consumer organisations generally believed that the measure would be effective in fostering more sustainable behaviours (with two consumers indicating that the measure would be "highly effective" six "somewhat effective").
  - No views on impacts and challenges were provided.

- Business associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the requirement to provide consumers with a maximum number of days for the delivery of spare parts. Their views were as follows:

  - *Effectiveness:* Most business associations (n=3) believed that this would be an effective measure (with two respondents indicating that the measure would be "highly effective" one "somewhat effective"). However, two business associations considered that such requirement would not be effective.
  - *Impact on costs:* Most business associations (n=3) believed that the proposed measure would have a high impact on costs. However, one business association believed that the measure would have a low impact on costs, and another business association thought that there would be no impact on costs.
  - *Feasibility:* Most business associations (n=3) considered that the proposed measure would be "unfeasible" (with two respondents indicating that it would be "unfeasible" one "somewhat unfeasible"). However, two business associations considered that such a measure could be feasible (with one respondent indicating that it would be "feasible" and one "somewhat feasible").
  - *Challenges:* One business association agreed that the measure could further the transition towards a more circular or greener economy. However, the respondent warned that fast deliveries could entail detrimental environmental (side) effects. Another business association indicated that "*setting an exact number of days is not appropriate, as it must be based on product and damage. Swedish companies look at the hierarchy within the right of complaint in terms of remedying errors (legal guarantee)*."

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a requirement for companies to establish a maximum number of days for the delivery of spare parts. Their views were as follows:

  - *Effectiveness:* 13 out of 16[269] respondents believed that the measure would be somewhat effective.

[269] 9 replied 'somewhat effective' and 4 replied 'highly effective'. 3 replied 'not effective'.

- *Impacts:* Some respondents however warned that the possible impact of the measure would likely depend on the type of product.
- *Challenges:* Some respondents explained that an important challenge would be to "develop a system where the measure is profitable to traders." In that respect, another respondent believed that the measure ought to distinguish between spare parts with a high probability of breaking, which the trader would therefore have to stock on and make available in a timely manner, as opposed to spare parts with a low probability of breaking, for which the trader would not need to hold on to stocks and delivery could be allowed to take longer. If not, the respondent believed that it would become very costly for producers to maintain a system that requires the availability of spare parts and their prompt delivery. Ultimately, the costs would be passed on to consumers in the form of higher prices.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to provide a maximum number of days for the delivery of spare parts. Their views were as follows:

- 7 organisations believe that all key components of a product must be easily accessible to effectively foster more sustainable behaviours (5 highly effective; 2 somewhat effective).

Measure C: Cap on price of spare parts

Key findings

- In terms of effectiveness, stakeholders had divergent views on the proposed measure to establish a cap (e.g. as a percentage of the product price) on the price of spare parts. Most business associations considered the measure would not be effective and the majority of public authorities stated that the measure would be somewhat effective. In contrast, most consumer associations and the other stakeholders deemed the measure would be effective, with many seeing the measure as highly effective.
- As regards expected impacts, most business associations shared the view that the proposed measure would have a high impact on costs while public authorities were reserved, stating that the likely impact of the measure would depend on a number of factors.
- Only business associations commented on the feasibility of the measure and most of them considered that the proposed measure would be unfeasible.
- Among the expected challenges mentioned, only one business association remarked that the measure would be difficult to implement in practice as the price of spare parts would depend on the actual product.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure establishing a cap on the price of spare parts. Their views were as follows:

- Consumer organisations felt that the measure would be effective (six respondents indicating the measure would be "highly effective" two "somewhat effective").
- No views on impacts and challenges were provided.

- Business associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with establishing a cap on the price of spare parts. Their views were as follows:

- *Effectiveness:* Most business associations (n=4) considered that imposing a cap (e.g. as a percentage of the product price) on the price of spare parts would not be an effective measure. Only one business association consulted believed that the proposed measure would be "highly effective."
- *Impact on costs:* Most business associations (n=3) shared the view that the proposed measure would have a high impact on costs. Conversely, one business association believed that the measure would have a moderate impact on costs, while another business association thought that there would be no impact on costs.
- *Feasibility:* Most business associations (n=4) considered that the proposed measure would be an unfeasible measure (with three respondents indicating that it would be "unfeasible" and one "somewhat unfeasible"). On the other hand, one business association felt that the measure would be feasible.
- *Challenges:* One business association remarked that the measure would be difficult to implement in practice as the price of spare parts would depend on the actual product. For example, in the context of smartphones, the cost of a replacement screen at EUR250 would be considered quite high, while for another product, it would be acceptable.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a measure establishing a cap on the price of spare parts. Their views were as follows:

- *Effectiveness:* 13 out of 16[270] respondents considered that the measure would be somewhat effective.
- *Impacts:* According to some respondents, the likely impact of the measure would however depend on a number of factors, such as: longer-termed commitments from retailers / traders that price caps would be unchanged; maintained efforts to keep repair costs affordable for all consumers; extent to which consumers are provided with information on price levels for repairs prior to making a purchase; extent to which repairs (under such conditions) would prove profitable for traders; etc.
- *Challenges:* No views were provided.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure establishing a cap on the price of spare parts. Their views were as follows:

- 7 participants agree that the cap on the price of spare parts would be effective in fostering more sustainable behaviours (6 highly effective; 1 somewhat effective).

[270] 9 replied 'somewhat effective' and 4 replied 'highly effective'. 3 replied 'not effective'.

Measure D: Availability and quality of repair manuals

Key findings

- In terms of effectiveness, a possible measure requiring companies to ensure availability and quality of repair manuals was considered as likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others). However, there were generally (slightly) more respondents that thought that the proposed measure would be "somewhat effective" as opposed to "highly effective."
- Only business associations commented on the feasibility of the measure and most of them considered that the proposed measure would be feasible.
- As regards the expected impacts, most business associations considered that the proposed measure would have a moderate impact on costs while public authorities generally felt that the measure would have an overall positive impact on reparability.
- In terms of challenges, among others, some public authorities warned that self-repairs may not be possible in the context of complex products, and that in some situations self-repair would be unsafe, which would deter consumers from undertaking repairs themselves.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to ensure availability and quality of repair manuals. Their views were as follows:

  - Consumer organisations generally believed that the measure would be effective in fostering more sustainable behaviours (with two consumers indicating that the measure would be "highly effective;" six "somewhat effective").

- Business associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with a measure requiring companies to provide consumers with clear and easy-to-understand repair manuals. Their views were as follows:

  - *Effectiveness:* All business associations (n=6) agreed that this would be an effective measure (with three respondents indicating that the measure would be "highly effective" three "somewhat effective").
  - *Impact on costs:* Most business associations (n=3) considered that the proposed measure would have a moderate impact on costs. However, one business association believed that the measure could have a low impact on costs. Another respondent felt that there would be no impact on costs.
  - *Feasibility:* Most business associations (n=5) believed that the measure would be feasible (with one respondent indicating that it would be "feasible" and four "somewhat feasible").
  - *Challenges:* No comments.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a requirement on the availability and quality of repair manuals. Their views were as follows:

- *Effectiveness:* 15 out of 17[271] respondents considered that the measure would be somewhat effective.
- *Impacts:* The respondents generally felt that the measure would have an overall positive impact on reparability. They believe that it would encourage consumers to repair products themselves.
- *Challenges:* However, two respondents warned that the impacts may be limited as self-repairs may not be possible in the context of complex products. Various challenges were also identified by some respondents, such as: (1) the potential lack of consumer-friendliness of repair manuals, especially if/where technical jargon is used; (2) the possibility of repairs being unsafe, which would deter consumers from undertaking repairs themselves.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure ensuring availability and quality of repair manuals. Their views were as follows:

- Six respondents say that the availability and quality (up to date, in relevant language, etc.) of repair manuals would be effective in fostering more sustainable behaviours (6 highly effective). While one respondent says this measure would not be effective.

Measure E: Availability of repair services that are certified by manufacturers and/or retailers

Key findings

- Across the different stakeholder groups consulted (Consumer organisations and public authorities), the consensus was that a possible measure requiring availability of repair services that are certified by manufacturers and/or retailers would be effective, with more respondents indicating that the measure would be "somewhat effective" as opposed to "highly effective". Business associations were not consulted on this particular measure.
- As regards the expected impacts, public authorities pointed to an overall positive impact of the measure.
- In terms of challenges, among public authorities consulted the possibility of the manufacturer being the only certified repairer was raised, in which case there was suggested that repairs could actually become more costly for consumers.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring availability of repair services that are certified by manufacturers and/or retailers. Their views were as follows:

- Consumer organisations generally believed that the measure would be effective in fostering more sustainable behaviours (with one respondent indicating that the measure would be "highly effective;" five "somewhat effective;" two "neither effective nor ineffective").

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of establishing a requirement on the availability of repair

[271] 10 replied 'somewhat effective' and 5 replied 'highly effective'. 2 replied 'not effective'.

services that are certified by manufacturers and/or retailers. Their views were as follows:

- *Effectiveness:* 13 out of 16[272] respondents considered that the proposed measure would be somewhat effective.
- *Impacts:* The expected impact of the measure on repairs was judged positive.
- *Challenges:* One expected challenge commonly identified by respondents was: the possibility of the manufacturer being the only certified repairer, in which case there would be room to increase prices and repairs would become more costly for consumers.

Measure F: Availability of independent repair services that are not certified by manufacturers and/or retailers

Key findings

- Overall, in terms of effectiveness, the proposed measure requiring availability of repair services that are not certified by manufacturers and/or retailers was deemed to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others).

- As regards the potential impacts of this measure, most business associations thought that the measure would have a moderate impact on costs, whereas among public authorities, the likely impacts of the measure on repairs were judged mostly positive.

- When asked about their views on possible challenges, one business association warned that information on spare parts might become difficult to access in this context and some public authorities cautioned about the likelihood of poor-quality repairs.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring availability of repair services that are not certified by manufacturers and/or retailers. Their views were as follows:

- Most consumer organisations (n=7) indicated that the measure would be effective in fostering more sustainable behaviours (with three consumer associations indicating that the measure would be "highly effective;" four "somewhat effective;" one "neither effective nor ineffective").

- Business associations (n=6)

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with a possible measure requiring availability of repair services that are not certified by manufacturers and/or retailers. Their views were as follows:

[272] 9 replied 'somewhat effective' and 4 replied 'highly effective'. 2 replied 'not effective' and 1 replied "not applicable/so not know".

- *Effectiveness;* Most business associations (n=3) believed that the proposed measure would be effective in fostering a greener economy (with two respondents indicating that it would be "highly effective" and one "somewhat effective"). However, two other business associations believed that the measure would not be effective.
- *Impact on costs:* Most business associations (three) shared the view that the measure would have a moderate impact on costs. One business association considered that the costs entailed would be low. Two other business associations believed that there would be no impact on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association explained that, since "*certification of repair services is done by manufacturers, and not retailers, it will be difficult to get information on spare parts […*]." Another business association questioned the relevance of the measure in the context of commercial warranties.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of establishing a requirement on the availability of repair services that are not certified by manufacturers and/or retailers. Their views were as follows:

- *Effectiveness:* 11 out of 16[273] respondents considered that the proposed measure would be effective (with six respondents indicating that the measure would be highly effective; five somewhat effective).
- *Impacts:* The likely impacts of the measure on repairs were judged mostly positive. One respondent indicated that the measure would allow more independent repairers to offer their services (as opposed to repairers certified by manufacturers/retailers only). The measure could, in essence, foster a "repair culture". Another respondent explained that the measure could help in paving the way for more self-repairs.
- *Challenges:* However, an important challenge cited by two respondents was the likelihood of poor-quality repairs. In that respect, one respondent suggested that pre-defined standards be established for independent repairers. Finally, one respondent argued that the measure may not prove effective and/or achieve the desired change in the extent of repairs undertaken if spare parts are not made sufficiently available.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring availability of repair services that are not certified by manufacturers and/or retailers. Their views were as follows:

- Seven respondents indicated that the measure would be highly effective in fostering more sustainable behaviours.

Measure G: Cap (e.g. as a percentage of the product price) on the cost of repair services

Key findings

- Across the different stakeholder groups consulted (Consumer organisations, business associations, public authorities and other), opinions on a possible measure imposing a cap (e.g. as a percentage of the product price) on the cost

[273] 5 replied 'somewhat effective' and 6 replied 'highly effective'. 3 replied 'not effective' and 2 replied "not applicable/so not know".

of repair services were divided. Consumer organisations, public authorities and other stakeholders consider that the measure would be effective, with more respondents indicating that the measure would be "somewhat effective" as opposed to "highly effective". On the contrary, most business associations believed that the proposed measure would not be effective.

- As regards the potential impacts of this measure, most business associations indicated the measure would have a high impact on costs, while public authorities determined the impacts would be mostly positive, although possibly limited.
- Several potential challenges were highlighted, such as the difficulty in implementing the measure and the issue of competition in the repair services market.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible a cap on price of repair services. Their views were as follows:

- Most consumer organisations (n=7) believed that a cap on price of repair services would be effective in fostering more sustainable behaviours (with three respondents indicating that the measure would be "highly effective" four "somewhat effective").

- Business associations (n=6)

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with a possible cap on the price of repair services. Their views were as follows:

- *Effectiveness:* Most business associations (n=4) believed that the proposed measure would not be effective. Only one business association felt that the measure would be "highly effective."
- *Impact on costs:* Most business associations (n=3) were of the view that the proposed measure would have a high impact on costs. Only one business association felt that the measure would have no bearing on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association argued that it would be a difficult measure to implement as the duration of and the effort associated with repairs will vary and, consequently, the costs associated with such repairs. It would therefore be difficult to put a cap on prices.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of establishing a cap on the price of repair services. Their views were as follows:

- *Effectiveness:* 13 out of 15[274] respondents considered that the cap would be somewhat effective.
- *Impacts:* The expected impact of the proposed measure, while judged mostly positive, was seen as possibly limited.
- *Challenges:* As such, some respondents have warned that, in a free market economy, price-setting may not be appropriate. The cost / price of repairs would likely depend on the nature and extent of staff involved (including skills, time / effort spent, wages, etc.). Prices would also depend on product

[274] 10 replied 'somewhat effective' and 3 replied 'highly effective'. 2 replied 'not effective'.

specificities. Some products may take longer to repair and hence, repairs would be priced at higher rates. Furthermore, according to one respondent, a price cap would only be effective if it is not excessive. In addition, consumers' personal circumstances would have to be accounted for. One set price may not work for certain consumer groups, for example, those on the lower income end.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure establishing a cap on price of repair services. Their views were as follows:

- 5 participants consider that the cap would be effective in fostering more sustainable behaviours (2 highly effective; 3 somewhat effective). While 2 respondents think this measure would not be effective.

Measure H: Provision of performance rankings on repair services

Key findings:

- Overall, in terms of effectiveness, the proposed measure requiring the provision of performance rankings on repair services was deemed to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others). However, more respondents indicated that the measure would be "somewhat effective" as opposed to "highly effective".
- When asked about the possible impacts of the proposed measure, most business associations indicated that the impacts on costs would be moderate, while some public authorities highlighted that impacts would likely depend on whether the performance criteria are objective and clearly defined.
- As regards the potential challenges, concerns were raised about the applicability of the measure to all product groups.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring the provision of performance rankings on repair services. Their views were as follows:

- Most respondents (n=8) agreed that the proposed measure would be effective in fostering more sustainable behaviours (with one organisation indicating that the measure would be "highly effective" seven "somewhat effective").

- Business associations (n=6)

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the requirement to provide performance rankings on repair services. Their views were as follows:

- *Effectiveness:* All business associations (n=6) believed that the proposed measure would be effective in fostering a greener economy (with two respondents indicating that the measure would be "highly effective" four "somewhat effective").
- *Impact on costs:* Most business associations (n=3) believed that the measure would have a moderate impact on costs. Another business association felt

that the measure would have no bearing on costs. Only one business association considered that the measure would have a high impact on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association argued that the measure ought to remain voluntary.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a requirement to provide performance rankings on repair services. Their views were as follows:

- *Effectiveness:* 13 out of 16[275] respondents considered that the measure would be somewhat effective.
- *Impacts:* However, some respondents remarked that the measure would only prove effective if performance criteria are objective and clearly defined.
- *Challenges:* In addition, one respondent questioned the applicability of the measure to all product groups. There were doubts as to whether a single set of performance criteria would be suitable for all products. Another respondent expressed concerns in relation to the possibility for performance rankings to be "manipulated." The respondent explained that this was recently observed in the Norwegian electricity market.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring the provision of performance rankings on repair services. Their views were as follows:

- 4 respondents mentioned that the proposed measure would be effective in fostering more sustainable behaviours (4 somewhat effective). While 1 respondent reports this measure would not be effective.

Measure I: Minimum period within which your company must make updates available to keep products secure and functional (after the sale of a product and as an extension of the existing requirement for sellers under the SGD)

Key findings:

- Across the different stakeholder groups consulted, the consensus was that the proposed measure would be highly effective.
- As regards the potential impacts of the measure, several business associations indicated a high impact on costs, while among public authorities, the expected impact was generally deemed to be positive.
- A few challenges were identified, such as the potential lack of compatibility between new software and older versions of a product or the fact that the measure should specifically target the manufacturers, and not the retailers.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring a minimum

[275] 9 replied 'somewhat effective' and 4 replied 'highly effective'. 3 replied 'not effective'.

period of availability for software updates and/or upgrades to keep products secure and functional. Their views were as follows:

- Most respondents (n=8) indicated that the measure would be effective in fostering more sustainable behaviours (with seven organisations indicating that the measure would be "highly effective" one "somewhat effective").

- Business associations

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the requirement to provide the availability of software updates and/or upgrades to keep products secure and functional (e.g. frequency, content, how to install/modify, how long they will be provided, under which conditions, etc.). Their views were as follows:

- *Effectiveness:* Most business associations (n=4) considered that the proposed measure would be effective in fostering a greener economy (with three respondents indicating that it would be "highly effective" and one "somewhat effective"). However, two business associations felt that the measure would not be effective.
- *Impact on costs:* Two business associations believed that the proposed measure would have a high impact on costs. On the other hand, one business association felt that the measure would have no impact on costs, while another respondent considered that the measure would have a moderate impact on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association remarked that the measure would be more suited to manufacturers as opposed to retailers.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a measure requiring the availability of software updates and/or upgrades to keep products secure and functional (e.g. frequency, content, how to install/modify, how long they will be provided, under which conditions, etc.). Their views were as follows:

- *Effectiveness:* 15 out of 17[276] respondents considered that the measure would be highly effective.
- *Impacts:* The expected impact was also generally expected to be positive. For instance, one respondent was praiseworthy of the measure, explaining that many products, especially IoT and smart products, are dependent on the good functioning of the product software. Ensuring that software updates or upgrades are available throughout the product lifetime would be therefore important. Another respondent further argued that allowing software updates / upgrades to be more accessible would allow consumers to use them for longer and to avoid unnecessary replacements or new purchases.
- *Challenges:* There were some challenges however identified, such as: (1) the possibility for software updates to decrease a product's lifespan (e.g. by reducing the lifespan of the product's battery); and (2) the potential lack of compatibility, such as new software not compatible with older versions of a product.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to indicate a

[276] 2 replied 'somewhat effective' and 13 replied 'highly effective'. 1 replied 'not effective' and 1 replied "dot applicable/do not know".

minimum period of availability of software updates and/or upgrades to keep products secure and functional. Their views were as follows:

- 6 respondents believe that the proposed measure would be effective in fostering more sustainable behaviours (6 highly effective).

Measure J: Reduce barriers to third-party repair services

Key findings

- Overall, in terms of effectiveness, the proposed measure reducing barriers to third-party repair services was deemed to be likely effective by most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others), with more respondents indicating that the measure would be "highly effective" as opposed to "somewhat effective".
- When asked about the potential impacts of the measure, most business associations indicated the measure would have a moderate impact on costs, whereas among public authorities the impacts were viewed as positive, especially on consumer rights.
- In terms of potential challenges, some respondents raised concerns regarding the potential quality of repair services, especially if no certifications are to be applied to third-party repairers.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of the reduction of barriers to third-party repairs. Their views were as follows:

- Consumer organisations generally believed that this measure would be effective in fostering more sustainable behaviours (with five respondents indicating that the measure would be "highly effective" three "somewhat effective").

- Business associations (n=5)

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with the reduction of barriers to third-party repairs. Their views were as follows:

- *Effectiveness:* Most business associations (4) considered that the proposed measure would be effective in fostering a greener economy (with two respondents indicating that it would be "highly effective" two "somewhat effective"). However, one business association believed that the measure would not be effective.
- *Impact on costs:* Business associations (3) generally believed that the proposed measure would have a moderate impact on costs. One business association argued that the measure would have no impact on costs, whereas another respondent believed that the measure would have a low impact on costs.
- *Feasibility:* No comments.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges expected from a reduction of barriers to third-party repairs. Their views were as follows:

- *Effectiveness:* 15 out of 16[277] respondents considered that reducing barriers to third-party repairs would be highly effective or somewhat effective.
- *Impacts:* The expected impact of the measure was viewed as positive, especially on consumer rights. Several respondents also praised the measure for (potentially) allowing the repairs market to become more competitive, thereby enabling consumers to choose from a wider range of repairers and possibly benefiting from better / lower prices.
- *Challenges:* However, some respondents questioned whether repairs would be of a reasonable quality. They therefore called for third parties to be assessed against a pre-defined set of standards and to be certified before they can offer their services to consumers.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure ensuring a reduction of barriers to third-party repairs. Their views were as follows:

- 6 participants think that the reduction of barriers to third-party repairs would be highly effective in fostering more sustainable behaviours.

Measure K: Product design must ensure that products can be easily repaired by consumers

Key findings

- In terms of the expected effectiveness of the measure, most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others) deemed the measure would be effective, with more respondents indicating that the measure would be "highly effective" as opposed to "somewhat effective".
- The measure was judged as having the potential to result in a high impact on costs by most business associations whereas public authorities generally felt that the impact of the measure would be positive as the cost of repairs could be expected to fall.
- Among the challenges identified by the business associations and public authorities consulted were: safety/health concerns when consumer repair products themselves, issues regarding intellectual property rights or trade secrets or consumers' lack of interest in self-repairing activities.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring a product design that would ensure that products can be easily repaired by consumers. Their views were as follows:

- Most participants (n=8) considered that such requirement would be effective in fostering more sustainable behaviours (with seven organisations indicating that it would be "highly effective;" one "somewhat effective").

- Business associations

[277] 6 replied 'somewhat effective' and 9 replied 'highly effective'. 1 replied "not applicable/do not know".

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with a requirement that product design must ensure that products can be easily repaired by consumers. Their views were as follows:

- *Effectiveness:* Most business associations (n=3) believed that the proposed measure would be effective in fostering a greener economy (with two respondents indicating that the measure would be "highly effective" one "somewhat effective"). However, two business associations indicated that the measure would not be effective.
- *Impact on costs:* Two business associations were of the view that the proposed measure would have a high impact on costs. One business association believed that the measure would have a low impact on costs. Conversely, one other business association argued that there would be no impact on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association explained that ensuring that reparability is embedded in product design may not relevant in the context of complex products. The respondent provided the example of electronics, which he explained ought not be repaired by consumers for safety reasons. The respondent also pointed out that repairs may not be appropriate in cases where intellectual property rights or trade secrets ought to be protected.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of requiring that product design must ensure that products can be easily repaired by consumers. Their views were as follows:

- *Effectiveness:* 14 out of 16[278] respondents considered that the measure would be either highly effective or somewhat effective.
- *Impacts:* Respondents also generally felt that the impact of the measure would be positive as the cost of repairs could be expected to fall. This is because consumers would have an additional option to consider for repairs, which would be to undertake the repairs themselves (at minimal or no cost). Some respondents remarked that the easier a product will be to repair, the lower the cost of repair will likely be, irrespective of whether repairs are undertaken by a professional repairer or by the consumer.
- *Challenges:* Some respondents however cautioned that, for some products, it would likely be better for repairs to be carried out by a professional repairer as opposed to the consumer. Another respondent argued that the measure may not be that effective as most consumers would most likely still continue to seek repairs from professionals than undertaking self-repairs. Other challenges were identified, including: (1) potential health/safety risks for consumers (especially in the context of complex products); (2) potential reduction in products' functionality, safety and performance if/where consumers are not able to carry the repairs successfully; (3) the possibility for inconsistencies in the application of the measure, such as self-repairs being prohibited for certain product categories or for certain types of repairs.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring companies to indicate … . Their views were as follows:

[278] 5 replied 'somewhat effective' and 9 replied 'highly effective'. 2 replied "not effective".

- 6 respondents indicate that the product design must ensure that products can be easily repaired by consumers would be highly effective in fostering more sustainable behaviours.

Measure L: All key components of a product must be easily accessible

Key findings

- In terms of the expected effectiveness of the measure, most respondents within each stakeholder category (i.e. consumer organisations, business associations, public authorities, and others) indicated that a measure requiring that all key components of a product should be made easily accessible would be effective, with more respondents indicating that the measure would be "highly effective" as opposed to "somewhat effective".
- As regards expected impacts, most business associations believed that the measure would have a high impact on costs, whereas most public authorities felt that the measure could have positive effects for consumers.
- Several challenges were highlighted, such as the complexity of some products which might make the measure difficult to implement or concerns regarding the safety and quality of repairs carried by consumers themselves compared to those carried by professional repairers.

Detailed findings:

- Consumer associations

The consumer associations consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring that all key components of a product must be made easily accessible. Their views were as follows:

- Most respondents (n=8) believed that such measure would effectively foster more sustainable behaviours (with five respondents indicating that this measure would be "highly effective" and three "somewhat effective").

- Business associations (n=5)

The business associations consulted were asked about their views on the effectiveness, feasibility, other impacts, and challenges associated with a requirement that all key components of a product must be made easily accessible. Their views were as follows:

- *Effectiveness:* Business associations (4) generally believed that the proposed measure would be effective in fostering a greener economy (with two respondents indicating that the proposed measure would be "highly effective" two "somewhat effective"). On the other hand, two business associations felt that the measure would not be effective.
- *Impact on costs:* Most business associations (3) believed that the measure would have a high impact on costs. On the other hand, one other business association believed that the measure would have a moderate impact, while another business association argued that it would have no bearing on costs.
- *Feasibility:* No comments.
- *Challenges:* One business association explained that ensuring that all key components of a product are made accessible may not possible in the context of complex products. The respondent provided the example of electronics, which he explained ought not be repaired by consumers for safety reasons. The respondent also pointed out that the proposed measure may not be appropriate / relevant in cases where intellectual property rights or trade

secrets ought to be protected. Another business association added that the measure may not be appropriate / relevant in the context of highly sophisticated products. The application of the measure would have to be considered on a case-by-case basis.

- Public authorities

The public authorities consulted were asked about their views on the effectiveness, impacts and challenges of a measure requiring that all key components of a product must be easily accessible. Their views were as follows:

- *Effectiveness:* 14 out of 16[279] respondents considered that such measure would be highly effective or somewhat effective.
- *Impacts:* Respondents felt that the measure could have some positive effects, such as increasing consumer's ability to carry out repairs themselves, allowing greater ease of market entry for independent / third-party repairers, professional repairers, etc, thereby offering more repair options to consumers at potentially reduced costs (owing to greater competition in the repairs market).
- *Challenges:* However, some challenges were evoked by a few respondents, including: (1) potential health/safety risks for consumers (especially in the context of complex products); (2) potential reduction in products' functionality, safety and performance if/where consumers are not able to carry the repairs successfully.

- Others

The other stakeholders consulted were asked about their views on the effectiveness, impact and challenges of a possible measure requiring that all key components of a product must be easily accessible. Their views were as follows:

- 6 respondents believe that all key components of a product must be easily accessible to effectively foster more sustainable behaviours (5 highly effective; 1 somewhat effective).

Other measures proposed

- Consumer associations: other suggestions from consumer associations included:
  - Lower prices of repair;
  - Replacement of defective products by second-hand ones instead of new ones;
  - Additional guarantees for consumers who choose repair over replacement;
  - Freedom for consumers to choose whom they would like to repair their product;
  - A general shift in mindsets (i.e. consumers and businesses).

- Other stakeholders:
  - Respondents also suggested alternative measures to incentivise consumers to repair products instead of replacing them. These include measures such as repair funding from manufacturers (i.e. he who pollutes pays); information on the mapping of repairers to improve accessibility to repair options; implementation of fiscal measures that promote repair (e.g., national/regional initiatives in France, Sweden, Austria); reduction of VAT on repair or use of vouchers

[279] 5 replied 'somewhat effective' and 9 replied 'highly effective'. 2 replied "not effective".

A8.6.3 Other feedback

The expected impact of the COVID-19 pandemic

Stakeholders were asked about their views on the possible impacts of the COVID-19 pandemic on the various aspects covered by the study.

Detailed findings:

- Consumer Associations

Consumer associations believe that the situation derived from the Covid-19 may have an impact on the various aspects covered by the study (e.g., by influencing the behaviour of the various economic agents).

On the one hand, some respondents indicate some negative impacts. One participant argues that It is important to prevent the COVID situation from encouraging consumers to slip back into bad habits (i.e. consumers are being now encouraged to use single-use items such as masks and gloves to avoid being contaminated). It may also impact consumer trust on second-hand products, so it is important to remind that security measures are implemented by second-hand shops. Additionally, a consumer association believes that companies will be even more reluctant to accept new rules/legislation in a difficult economic situation. This goes in line with the opinion of another consumer association, which argues that green policies have often been seen as contradictory to economic and social measures and suggests that environmental measures now more than ever need to make social and economic sense to be accepted by the society.

On the other hand, other associations seem to have a more positive view on the impacts derived from the Covid-19. One participant indicates that despite the existing challenges, in a time of crisis there are always big opportunities that should be used to achieve a sustainable transition of the society and that it is important to focus now on the most resource consuming areas (e.g. households, cars, food). Further to this, another respondent argues that the Covid-19 situation should not delay the green transition and that all the recovery programs should ensure that sustainability criteria are being followed. Changes in consumer purchasing behaviour are also highlighted by one association: consumers now purchase more online, so it is an area in which traders make most claims.

- Business associations

Most business associations complained about the negative impacts of the Covid-19 pandemic on the various sectors and markets in which they operate. One aspect highlighted by several business associations was that the pandemic prompted major changes in the consumption patterns of consumers. For example, consumption of food products has increased as people started to cook and consume more food at home rather than in restaurants, whereas the non-food industry has seen a decrease in demand for many types of products.

Several business associations also indicated that one major change that they observe in the retail sector is that consumers shifted their preference towards online shopping as physical shops were closed for large periods of time, prompting a potentially lasting change in consumers' behaviour as well. Among other challenges indicated were the fact that companies are dealing with financial difficulties, the need to restructure their businesses or to make redundancies or a reduced flexibility for authorities, in terms of efforts / resources that can be put into new initiatives.

Quite a few business associations also believed that the Covid-19 pandemic has not had a significant impact on their members and one respondent highlighted that the crisis should not have any impact on the further development of consumers' environmental awareness.

Several respondents indicated that positive effects can also be expected especially in relation to the overall increased digitalisation observed with one respondent even pointing that the post Covid-19 recovery can be an accelerator of the green transition because the pandemic actually highlighted the need for a "green digital revolution".

- Others

Respondents mention that the Covid-19 situation may affect the various aspects covered by the study (e.g., by influencing the behaviour of the various economic agents). As an example, one organisation notes that purchasing behaviours are shifting toward online shopping and delivery – which may have a substantial impact on the environment. Additionally, an increased use of single-use products such as masks has been observed. Fear of buying second-hand products for hygienic reasons is also pointed out. Another respondent indicates that the Covid-19 further underscores the need for consumers to play an active role in the green transition, as it can bring tangible monetary savings alongside environmental benefits.

Other industry initiatives fostering a greener economy

Business and industry associations were asked whether they might share any other relevant initiatives that would foster a greener economy. Among the initiatives mentioned were the following:

- An Advertising and Marketing Communications Code - setting out principles for responsible marketing to ensure legal, honest, decent and truthful communications and practices.[280]
- A framework for responsible environmental marketing communications.[281]
- Initiatives of companies promoting sustainability in relation to materials used, production, recycling and reusing strategies or creating awareness among consumers.[282]
- A Digital Labelling Platform that would provide product information in multiple languages across several product categories in a format that is accessible, useful and relevant to consumers.[283]
- A standards-based knowledge system for the circular economy that aims to enable information exchange between companies.[284]
- A digital watermarks initiative experimenting with digital watermarking technologies for sorting and recycling.[285]
- A corporate forum where companies collaborate in order to implement circular material flows in their business models.[286]
- An online tool in which Repair Café volunteers keep track of their repair data in order to share information regarding ways in which products can become more repairable.[287]
- An online lifestyle test where consumer can learn if their lifestyle harms the environment and what kind of solutions they can implement to improve this.[288]

[280] See https://cms.iccwbo.org/content/uploads/sites/3/2018/09/icc-advertising-and-marketing-communications-code-int.pdf

[281] See https://iccwbo.org/content/uploads/sites/3/2019/08/icc-framework-for-responsible-environmental-marketing-communications-2019.pdf

[282] See https://einzelhandel.de/component/attachments/download/9737

[283] See http://www.etrc.org/uploaded/downloads/press-release-etrc-tfwa-cooperation-on-digital-platform-21-01-2020.pdf

[284] See https://www.gs1.eu/news/a-standards-based-knowledge-system-for-the-circular-economy

[285] See http://www.aim.be/priorities/digital-watermarks/

[286] See https://www.circularsweden.se/in-english

[287] See https://repairmonitor.org/en and https://repaircafe.org/en/wp-content/uploads/sites/2/2020/05/RepairMonitor_analysis_2019_05052020_ENGLISH.pdf

[288] See https://lifestyletest.sitra.fi/

A8.7 Minutes of Workshops

A8.7.1 Expert Workshop

The expert workshop was held on the 9th of July and had the participation of 10 independent experts. In preparation to the workshop, participants received a briefing note. The summary of the interventions of the various experts in provided in the text box below.

Summary of the interventions in the Expert Workshop

Green claims and greenwashing

Expert 1: green claims/washing sometime consumers go beyond the product in question. Many companies communicate environmental performance (also in reports for example). If consumers don't trust companies then they think it's greenwashing even if it isn't. Zooming out form product level for example there's Ecover and if you trust them you won't check every claim. Need to monitor claims and make sure they are up to scratch.

Expert 2: not aware of studies on monitoring and enforcement. Looking at things from the consumer's point of view and has not encountered studies on the monitoring/enforcing of robustness of green claims. At some point the consumer has to believe the claim because they can't check everything so you will always be limited by what you can achieve through labels/logos and digital information tools. Proliferation contributes a lot to the lack of trust in claims. Once you remove the name often the label is not recognised anymore, meaning that they don't understand what the label conveys. People think that a label = good for everything (both environment and social issues, etc.).

Expert 3: universal label/traffic light managed by the public authorities could be a way of classifying products, science based and provide credibility can help curb the proliferation because the market will not regulate this. Difficulty also to do LCAs and similar analyses.

Expert 4: impact of lifetimes study: people do not necessarily associate a longer lifetime with a lesser impact on the environment. People say they look at the energy label a lot so they would need a standardised label for longevity that can be used in the same way. Anton is doing a testing program for consumer orgs to determine the lifetime of products so they can communicate this to consumers.

Expert 1: need to distinguish between comparative labels and env info labels. Consumers do not see differences between types of environmental impact label. Did a study on the interpretation of labels. There's no consensus as such (LCA has ISO but there is a lot of elbow room). They have to divide in 2 ways the info provided on the product and then provide in addition a QR code that gives more info. Simplicity is the key, but it should not mean losing the key messages. Management science journals and marketing and advertising there are lots of studies/research on greenwashing and green claims.

Expert 2: setting minimum criteria? There are criteria for logos in ISO. Many of the more reliable logos have their own criteria but it's not a perfect solution because not all consumers get to know the logos and their criteria. Can always use things like the colour green, a leaf, etc. which are not logos/labels.

Expert 5: big focus on consumer buying products, the consumer may choose based on price, etc. at that point. If producers provide information on a rolling basis on the durability etc. of products then consumers could check that

Expert 6: greenwashing: in this term which is usually negative but if you think for example lifetime guarantee this can be a misleading phrase but without malice. Would this be included? Or do you just mean deliberately misleading?

Expert 6: Minimum requirements: in future years we need consumers to accept the need for products to be made out of recycled material but at the moment consumers view recycled material as inferior. So if you inform consumers about the recycled nature of the material they will consider it inferior and possibly not purchase it. People don't associate consumer goods with the waste problem.

Expert 1: min requirements don't help. See nutritional claims, they give you the info about the ingredients from a health perspective and consumers do not look at this, so in France they adopted the nutri-score. Criteria for logos is good. Greenwashing: also companies repetition so maybe targeting through information directive setting up a common benchmarking for how companies declare their env performance could be good.

Expert 7: reducing info asymmetries between consumer and producer is good and should not surcharge at the moment in which they take a decision. 'product passports' could be used with a smart device on impact but also how could I as a user reduce its impact during use, how can I maintain it properly, etc.

Expert 3: consumers are much more sensitive to negative info (e.g. red colour) and this should be kept in mind. Producers will not want to highlight these types of colour. He's a little bit sceptical about the labelling – need to think about the debate in terms of tax/subsidies as well because these can be very effective. There is no panacea, no simple rule and labels may be ineffective sometimes.

Expert 2: Retailers can also play a role here so it might be interesting to also set info requirements at that level or incentivise them to buy more sustainable products. This way you can also choose to shop in a specific place without having to look at each product separately and choose between them.

Expert 8: idea is that more people get engaged with sustainable products and if we go to specific platforms it can be a bit undemocratic and not engaging of people that might not necessarily shop in these places. Need to work with distributors as well.

Expert 9: if you have a monopoly of platforms it's not obvious that they will reveal the environmental information.

Expert 7: database being created by COM at the moment considering energy labels and it is the European Product Database for energy labelling available to consumers late this year/next year.

Durability and obsolescence

Expert 6: data is not easy to get hold of. Couple of recent studies (NL and DE) both indicating a slight decline in product lifetime but then a JAP study shows the opposite. Difficult to generalise given the wide variety of consumer products. Methodologically problematic because products change over time (so diff for longitudinal study). Issue is to do with when we say "premature" exactly how do we define it? We have an optimal lifetime, but we can also talk about consumer expectations and some of their research suggests that expectations have fallen which is a key issue to address. Because of this, consumers may well be happy to have a product that lasts less than it used to. Generations can afford different types of good as well.

Expert 4: if you look at hoe people replace products and they have expectations about the lifetime and take it into consideration. They replace products even when they are not completely broken but just to get a new model.

Expert 1: the issue is critical and they did a study on electrical and elec parts, the industry attacked them saying it's their fantasy. Need to distinguish between intentional (e.g. software update) and because components are not lasting (e.g. phone lasts less than phone itself). Sometime also design leads to obsolescence: laptop vs desktop, they have same components but laptop lasts less.

Expert 7: to add: need to well define planned and premature. With planned you have the intention (see FR leg) and he would doubt that many manufacturers actually make things fail on purpose, it's rather driven by costs. Material might not be as durable as before. There are also controversies in the data. Trend in textiles: Zalando wardrobe to sell older products. Large companies are adapting their business model to avoid being considered "throw away". No data on that though.

Expert 6: mental expectation of replacement of product: need to look at value for money and how that has changed. I f consumers are encouraged to spend more on better quality is to enable through information measures to calculate the difference economically. Currently this is not necessarily the case.

Expert 2: not just budget restrictions, we are also lacking skills like repairing and maintaining goods. She does not know how to repair things and so this may also one reason why durable goods are not purchased or why goods are replaced.

Expert 10: Info requirements are to be combined with other rules, e.g. guarantees. When consumers have info and the product does not conform, they can claim for repair/replacement, etc. Cost issues: in NL guarantee period is based on expected lifespan of good per product category and cost of product. Could be an incentive to buy more longer lasting goods. Guarantees Directive (new one) does not encourage consumers to keep their products because for example when you see the hierarchy of remedies you see repair/replace on an equal footing and consumers may probably choose replacement.

Expert 6: Companies don't provide info and a long warranty because that leads to disputes and discussions. Companies fear a lot of claims and difficulty in proving where the problem originated from.

Expert 1: Samsung offers a guarantee in the sense that they replace every 2 years with a new phone and it's completely covered by the insurance and they recover/reuse the components.

Expert 10: obsolescence: premature: new FR law: when there were claims the parties were also relying on the UCPD which shows that maybe would need to amend the UCPD annex and include blatant cases of premature obsolescence like Samsung and Apple and the consequences of installing updates on the devices.

Expert 7: Apple case: the way that the while thing was dine was not acceptable for consumers but again what is intentional? Manufacturer did an update e.g. for battery lifetime but this led to problems for other applications. So can argue both ways. If you really want to test for obsolescence you need a large sample and a lot of time (keep the product running, lots of samples and it's very expensive). So now within PROMPT they tried to establish a testing program to help market surveillance authorities to address this issue.

Expert 6: solutions for durability: cost: PHD researcher looking at market for premium range goods and whether it equates with quality and with longevity. In any market you can buy something that lasts longer but what's the proportion of the market accounted for? New Porsche 911 (used to be THE car for durability) but obviously very expensive.

Expert 5: lifespan is important to consider and boost the mental book value Expected lifespan before/after repair? If provided before repair could help obviate the idea that it's acceptable to throw stuff away when it's still working because it's old.

Expert 4: need to repair appears gradually, especially with furniture and clothing so need to take this into consideration because the decision is not black/white. Need to look at all consumer durables not just electric/electronic goods.

Expert 2: important to look beyond traditional business models and look at sharing models, etc. to increase frequency of use without increasing the lifespan.

Expert 1: looking at thing from resource use perspective but if we look at energy efficiency, a long-lasting energy inefficient good is not necessarily good for the environment. Can't generalise for all products.

Expert 6: trade-off durability and energy efficiency and come across very few studies that convincingly suggest that it's best to discard products that are still functional. The reason is that although products do improve it's not enough to offset the impact of manufacture. Only credible issue is where there's a step change in technology and one such case is with cars. Moving towards elec vehicles means that a new petrol car doesn't necessary make sense.

Expert 8: Belgian initiative working with vulnerable households (Bosch) and the idea is that they don't have the means to buy the more energy efficient appliances so Bosch rents them instead.

Expert 7: These Bosch type models are still quite expensive, but this idea could be understood even further. When it comes to equipment like washing machines, drillers, etc. where in a building you have a specific dedicated area where those devices are shared. Needs to be thought when building a house though.

Expert 4: Leasing: potential problem is that people take less care of products that they don't own.

Expert 1: in FR the energy agency is now thinking of doing work in this direction so products that used to be mutualised in the past are increasingly individualised. So need to understand which products to focus on and understand how to move back to mutualisation of products.

Expert 6: reliability of info: FR is finalising work on repair index starting in 2021 and on a durability index for 2024. This will be an experimentation on this type of information. Is the data comparable between companies? Need to do harmonised testing but then also need to verify it and make it available to consumers. It will be like a bio label but for products.

Expert 2: using consumer orgs to check info: good idea because easy to implement but there's a danger of having a sample selection bias because consumers that are dissatisfied are the ones that will communicate to consumer orgs.

Expert 6: use a counter on products or date stamping products so there's a degree of certainty to the consumer. This is important for second-hand markets. Guarantees of specific components of products is something that manufacturers were keener on doing.

Reparability

Expert 6: Tung Dao PHD: consumer repair journey (based on buying journey) which looks at different sequences people go through and types of repair and post repair evaluation. What he did find out reinforces that there are a lot obstacles such as inconvenience, uncertainty of residual life, etc. Obstacles are well mapped out. Strategically need to decide whether to focus on self-repair/repair cafes of on professional repair (which is expensive though). Economic trade-off between repair and replacement. 1/3 o 1/5 of the price is the average threshold for repair. E.g. changing a dishwasher's motherboard costs almost as much as the whole dishwasher. Commercial repair leads to a lot of repairable stuff not being repaired for economic reasons.

Expert 4: time is also an important factor. How long to repair? People feel that certain objects are indispensable and can't wait 3 days. If people are not aware of the environmental impact of not repairing we also need to stimulate their environmental motivation.

Expert 1: could also be cultural factors. In India it's almost obvious that you repair whereas in Europe it's not so immediate. For smartphones where the services are readily available

people do tend to repair. They saw this trend they did in FR on mobile phones. Labour costs may or may not be an issue but they don't seem to have an impact on smartphones for example.

Expert 7: they did a study 4 years ago in FR where they summarised the different barriers. There are a lot of aspects to consider, it depends on the good. If it's small you can send by mail but large someone has to come collect it. Time is a big issue for consumers because buying something takes 2 seconds online and it will be sent to you in 24 hours or so. We are impatient. Decentralised small repair shop model can be a solution. FR to provide funds to repair. Consumers are not willing to pay more than 30% of price.

Expert 2: product service system where repair is included and drivers/barriers. Manufacturers have more information on how to repair and they can make reparability attractive to consumers. There are trust issues with warranties, etc.

Expert 10: repair could be strengthened by extending legal guarantee for repaired products.

Expert 7: spare part availability: ecodesign directive includes product groups on this. Price caps are tricky because you don't want to disturb the market. FR index has this criterion (e.g. one part should not be more than X related to sales price). If product decrease in price however the spare part may become increasingly expensive as time goes by.

A8.7.2 Industry Workshop on Digital means

On the 14th of September, the Study team organised a workshop with industry representatives to gather their views on the use of digital means to provide product information to consumers. A number of 44 people participated in the online workshop, 39 were industry representatives, 3 DG JUST officers, and 2 ICF members. The 39 industry participants represented to belonging to 29 different business associations. The minutes of the workshop are in the following:

Minutes of the Online Workshop - Mandatory product information and digital means. 14 September 2020, 14.30 – 17h00 (Brussels time)

Introduction and attendees

A number of 44 people participated in the online workshop organised by ICF on mandatory product information and digital means. Out of these 44 participants, 39 were industry representatives, 3 DG JUST officers, and 2 ICF members. The 39 industry participants represented to belonging to 29 different business associations.

European Commission (DG JUST)

VAN LAER Jeroen
BALTA Liene
PANEK Jan

ICF

ESTEVES Sofia
CORDON Ana

Industry representatives

CEEV - Comité Européen des Entreprises Vins
EuroCommerce
European Travel Retail Confederation (ETRC)
Construction Products Europe
A.I.S.E.
AIM - European Brands Association
APPLiA
CEEV
CEVI - European Confederation of Independent Winegrowers

Cosmetics Europe
DIGITALEUROPE
EFOW - European Federation of Origin Wines
ERPA
EuroCommerce
European Advertising Standards Alliance (EASA)
European Confederation of the Footwear Industry
European Footwear Confederation (CEC)
European Travel Retail Confederation (ETRC)
EUROPEN
Federation of the European Sporting Goods Industry (FESI)
FoodDrinkEurope
GS1
Independent Retail Europe
International Fragrance Association
Laroche Conseil / IFRA Europe
NATRUE AISBL, The International Natural and Organic Cosmetics Association
SMEunited
spiritsEUROPE
The European Council of the Paint, Printing Ink and Artists' Colours
TIC Council
TIE - Toy Industries of Europe

Part I: the study

Jan Panek (DG JUST) welcomes participants to share their views and make a positive contribution beyond their positions in the OPC

Sofia (ICF) introduces the study and presents possible information that could be provided via digital means to empower consumers for the green transition

- Information on how to properly maintain/use the goods
- Information on lifespan (without repairs, with repairs, guaranteed)
- Information on repair options (availability of spare parts, availability of repair services, repair manual, information about price ranges of spare parts and repair services)
- Information on sustainability aspects of the product:
- Environmental characteristics/impacts
- Sustainability labels
- Information about how to reuse and recycle the product

Part II: views of the Industry Associations

Position of Signatory organisations of the Letter sent to the European Commission on "Mandatory product information and digital means".

Julie Lassaigne in her role of **Group Coordinator of the signatory organisations** of the letter sent to the European Commission on "Mandatory product information and digital means" introduces the initiative. Relevant points mentioned by Julie:

- Our position: we want the EC to take the opportunity of the Green Deal to explore how consumers can have access to accurate information
- Sometimes requirements of information end up in overcrowded information, which is detrimental to the purpose of it as consumers cannot read the information.
- Problems around mandatory information led the associations to join forces and sign the letter, following the publication of different papers including the European Green Deal

- We have witnessed in our businesses an acceleration of the digitalisation of provision of information (e.g. use of QR code to access the menu of restaurants).
- Labels are sometimes not readable (overcrowded labels), so makes us think there may be other ways to provide consumers with that information, perhaps via digitalisation. It should be needed to inform consumers in a more efficient and personalised way.
- Digital means can really become an improvement in comparison to what it can be done. When we look at digitalisation, we believe it is also a fair opportunity to reduce packaging waste. There is a lot of packaging which is likely to be big because it is necessary to contain all information – especially when it is a product covering different markets and needs to have information in different languages. This would be against the final objective, as it would increase shipment economic and environmental costs.
- It should be built of existing European initiatives.

Julie makes the following recommendations to the EU Commission to consider concrete proposals:

- Stakeholders forum for digital consumer information. It would be with all stakeholders, not only industry representatives. We could really move along these digital means and do it in a way that satisfies all parties.
- Investigate where opportunities exist for digital means as a legally recognised option.

Response of other parties to the position letter:

- **EU Commission** - The EC welcomes the recommendations highlighted, in particular in the context of the Circular Economy Action Plan. We were quite open about the initiative and that is why we shared it with BEUC, because we want this to consider all stakeholders to reach common benefits.
- **SMEUnited** - For businesses in Europe there are different levels when it comes to digitalisation of information. It requires resources, so some smaller players would probably require additional financial support to make it possible. For small companies it is challenging to keep up with the digital transition, sometimes they do not even have financial support to acquire electronical devices. It is important for entrepreneurs to be digital literates
- **APPLIA** - APPLIA also supports the joint initiative, we did not sign up because we did not sign up a blank letter as there are many ongoing initiatives. But we support the initiative.

Presentations of initiatives/projects/best practices on using digital means to provide product information to consumers

In this part, 5 industry representatives presented initiatives from industry that can serve as inspiration to provide information in a cost effective and efficient way via digital means.

ETRC - Julie Lassaigne. ETRC represents the duty free and travel retail industry. Presentation of pilot project carried out in 2017-18 where they developed a website accessible via mobile device which could provide information about products across confectionary, alcohol and beauty products. Key takeaways:

- We have seen increased information requirements in the last years (food, cosmetics, etc), but we still don't know if there Is opportunity to reduce packaging if we can move information to digital means → this is why we decided to undertake this pilot project
- What we decided was to be able to scan the barcode or do a manual search by typing the name of the product.
- For that particular pilot, data was provided by suppliers directly. For us that was the only way to provide accurate and reliable information and that the supplier takes responsibility for the information they provide
- We decided to test it with consumers in December 2018, duty free shop at Hamburg airport – once travellers passed the security control they had the chance to test it using tablets available. We could extrapolate the results to take the right feedback. The acceptance for travellers was a 70% of satisfaction, but there is room to improve: The most challenging aspect was dealing with the scanning, back in 2018 was way less developed.
- Developing the second phase of this project (February 2020), launch scheduled for October 2020. Delay caused by covid19.

- At the moment rules say information needs to be on the package, so unless regulation changes it won't be possible to implement this project.

Construction Products Europe - Christophe Sykes. Importance of data templates and its harmonisation across Member States plus some of their members developing an app. Key takeaways:

- We have our own particular legislation in construction products. We already have the obligation to deliver data to our consumers, during the revision of the Directive the politicians involved both in the Commission and Parliament were clever enough to put digital means without specifying the format.
- We have environmental data that we share but this is only on a voluntary basis. EPD (Environmental Product Declaration). Data templates, there is a lot of fight at the moment because construction is one of the points highlighted in the circular economy. Data templates is something we should look at. The schemes at national level are different and that is why there are some tensions.
- The construction products legislation already includes digitalisation of information but does not specify the means, some of our members include a pdf on their website. Nobody looks at it, nobody downloads it, nobody sees it. So we looked at other options to see how we could provide the information, we came up with an idea that was published by the EC. So, the old-fashioned construction product industry became an example of innovation. We are trying to bridge the gap of something that is already there and that could be of use, giving visibility to the data and the use of data. Some of our members now have taken this even further and are looking at creating an app so consumers can access information via an app. You come up with a simple idea and it triggers additional ideas.
- Green Public Procurement – we have a gap to fill in green public procurement when it comes to what we could do and what it has been already done at local level.

CEEV - Comité Européen des Entreprises Vins - Ignacio Sánchez Recarte. Presentation of e-label platform developed in the wine sector and expanded to the spirit sector. Key takeaways:

- In the next PAC reform the list of ingredients will be regulated and it has been authorised the use of electronic labels for the first time. We have assessed how to support our companies (see slides).
- The same wine can have different ingredients, this means that the list of ingredients represent a huge challenge for wine companies because we need them to adjust the label on real time basis if we want to transmit this to consumers. That is why we asked the commission to digitalise the system.
- The problem is that because of the size of the companies it would be very difficult to launch its own label system, that is why we decided to develop a common e-label system. Also, by creating a common system we would generate some synergies. By creating a unique system, we'll have the possibility of creating interconnections with existing databases.
- The last benefit is that we will be able to harmonise the way information is presented. We think this is fundamental, we are talking about digital means but not all of us have the same idea of how a e-label is and how the information should be presented.
- This will be open to all wine companies. The Commission will be able to replicate it. We are willing to include certification information, at least certifications related to sustainability aspects. We have a huge opportunity to work together, identify all certifications validated (not greenwashing) and also those logos/certifications considered as greenwashing. In that way, we can harmonise information and logos/certifications and encourage companies to go after the validated ones, empowering consumers in that way.

A.I.S.E. - Valérie Sejourne. Presentation of a demo on product information and digitalisation. Key takeaways:

- Evidence shows that almost half of people do not read the information. Whereas 80% prefer simple labels, which is important in terms of how impactful labels are.
- Different regulations are considered in silos, not coherent and posing challenges. The vision we would have is to move from a complicated puzzle with different regulations to a better

and comprehensive approach more consumer friendly. This would also have expanded info online, with personalised information (e.g. allergens).

- Presentation of a demo on product information and digitalisation. Citizens have a growing interest to move to online information, irrespective of their age. Product packaging and the internet and the two sources of information.
- We have an opportunity ahead as current labels fail to convey relevant safety information to consumers. We have the opportunity to join forces all sectors and simplify labels, adding complementary information via digital means.

GS1. - Francesca Poggiali. Importance of open standards. Key takeaways:

- GS1 is an international standards organisation.
- When open standards are used there is better opportunity to include all sectors. Standards are available in our website and can be used. This is also a message for our regulators, because by using standards we could escalate it to all sectors and actors along the supply chain and in this sense existing standards can play a big rule.
- Data structured in a cross-sectorial way so all actors can use data in an efficient way, open data that is able to speak with other ecosystems. There will be different data ecosystems that cannot be interoperable, using the same structure. In this way we are sure that the mandatory elements are the same, can be adjusted by sectors, for specific requirements but there will be a specific part of data.

Part III: Discussion

How to ensure that we can make use of digitalisation to provide information for consumers not able to use digital means?

Jan (DG JUST) emphasizes how important it is to have quantifiable data on this from different initiatives and encourages participants to send relevant data

Ignacio (CEEV) says that the development of new labels cost companies between 10k-20k euros. Here we are talking about costs of producing a concrete label would be less than 2k euros. This is one of the reasons why companies decided to go for e-labels. Some partners have been working on the development of an automatised system. By developing a common system the cost would be minimum, industry associations etc. would take care of this cost.

Valerie (AISE) – costs of implementing legislation is of significant importance and substantial part of it is linked to labelling. How to cope with consumers with no digital means is an open question we all need to discuss together. We need to brainstorm together on the optimal way.

Marc Boissonnet (TIC Council) - Need to contribute to the acceleration of green transition. We need to inform much better than we do, not only about safety aspects of the product but also about green impacts of the product. We do believe we need to maintain the information on the packaging of the product but also via digital means, to add further information. For that we could develop the carbon tax, for which we need information. I recommend using international standards applied to all industries in order to align communications to this standard. Some sectors have developed specific labels, and these should be maintained as these are often recognised by consumers. We recommend the use of third external parties to validate the use of green claims to fight greenwashing.

Sofia (ICF) Any of the pilots allowed to compare information of products? Do you see added value here? Do you consider this possibility?

Ignacio (CEEV) - We thought about that, the consumer can scan more than one product and it will be very easy for consumer to compare information in an easy way as information will be structured in the same way. Sometimes the producer does not structure the information in the same way.

Julie (ETRC) - We took the same approach to develop a website where all the landmarks for consumer information is shown in the same way. Same structure at the same place so they can find the information very easily and so they could compare. This was very welcomed by consumers when we did the pilot at the airport.

A8.7.3 Stakeholder Workshop

On the 6th of October the Study team organised a workshop open to all stakeholders to present the preliminary results of the study and gather their views on the extent of the problems but most importantly on the possible measures to address them. The workshop brought together 72 participants from consumer associations, NGOs, industry associations and other relevant stakeholders (excluding the European Commission).

The agenda and briefing note that were distributed to participants in preparation for the workshop are in the text box below.

Agenda

STAKEHOLDER WORKSHOP

Empowering consumers to play an active role in the green transition

Problems and possible EU consumer policy interventions

6 October 2020 | 10h00 - 16h10 | online

AIM

Collect feedback on the problems and possible EU consumer policy solutions identified to empower the consumer for the green transition, in particular on:

- Ensuring that consumers receive reliable and useful information on the sustainability, durability, reparability and software update policy at the point of sale for all products;
- Preventing vague, misleading or unfounded environmental information ('greenwashing practices')
- Preventing sales of products with a covertly shortened lifespan ('obsolescence practices')
- Ensuring EU wide minimum criteria on transparency and reliability criteria for sustainability logos and information tools to ensure they can assist consumers in an adequate way.
- Preventing consumer confusion and improve enforcement on above matters

AGENDA

Morning Session

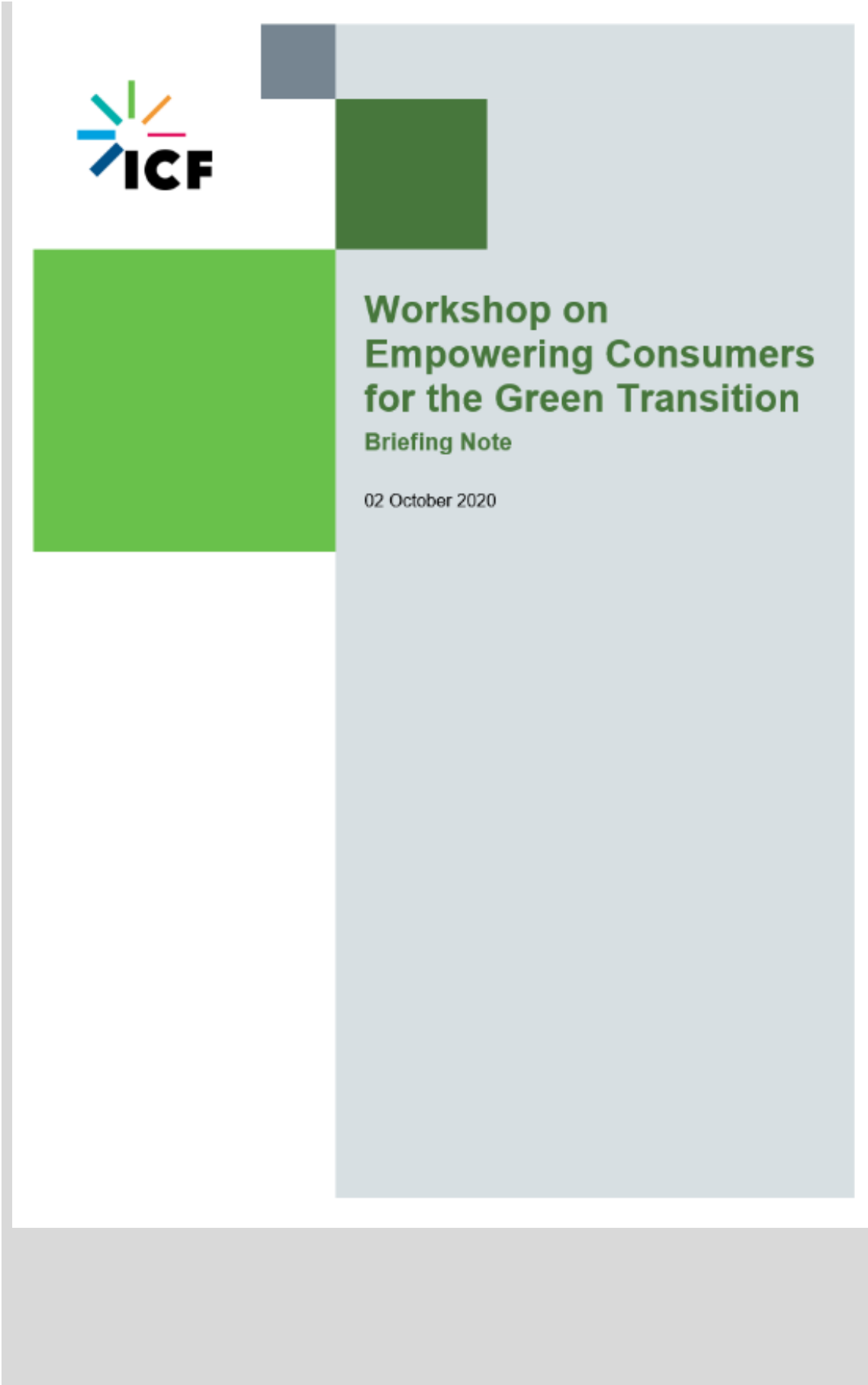
Part I. Presentation of the study/initiative

10h00 – 10h15: Jan Panek, Head of Consumer Policy Unit, DG JUST, Welcome note

10h15 – 10h30: Presentation of the study and preliminary findings (Study Team)

10h30 – 10h35: Introduction to the workshop plan (Study Team)

Briefing Note


ICF
Workshop on Empowering Consumers for the Green Transition
Briefing Note
02 October 2020

Contents

1 Introduction

This briefing note aims to provide a brief overview of the various aspects that will be covered in the Stakeholder Workshop on "Empowering Consumers for the Green Transition" that will take place on the 6th of October.

In order to enable consumers and businesses to play an increasingly active role in the 'green transition', the Circular Economy Action Plan (CEAP) announced an initiative to improve consumer information and strengthen consumer protection against commercial practices that run counter to Green Deal and CEAP objectives (see Inception Impact Assessment for the "Empowering Consumers for the Green Transition" initiative here).

The specific objectives of the initiative are to:

- ensure that consumers receive reliable and useful information on the sustainability, durability, reparability and software update policy at the point of sale for all products;
- prevent sales of products with a covertly shortened lifespan ('obsolescence practices')
- prevent vague, misleading or unfounded environmental information ('greenwashing practices')
- ensure EU wide minimum criteria (e.g. on transparency and reliability) for sustainability logos and information tools to ensure they can assist consumers in an adequate way.
- prevent consumer confusion and improve enforcement on above matters

This initiative will be developed in close coordination with other Commission initiatives with a strong relation to product policy, in particular the Sustainable Products Initiative[1] and the initiative focusing on the substantiation of environmental claims using product and organisation environmental footprint (PEF/OEF) (Green Claims Initiative)[2] for which public consultations are on-going.

ICF is supporting the European Commission with gathering evidence to carry out the Impact Assessment for this initiative, through extensive desk research, a mystery shopping exercise and surveys to consumers and industry and targeted stakeholder and expert consultations (i.e. interviews, surveys and workshops), which will complement the information collected by the European Commission through the Open Public Consultation.

This document does not express the Commission's views and is without prejudice of the further assessment of the different policy options by the Commission.

2 Ensure that consumers receive reliable and useful information on the sustainability, durability, reparability, and software update policy at the point of sale for all products: extent of the problem and possible solutions

When comparing products and making purchase decisions, evidence suggests that consumers often lack clear information on product sustainability, such as environmental characteristics of products, expected or guaranteed lifespan of products, the availability of repair services, spare parts and repair manuals; and on the software update/upgrade policy concerning the product. Results from the consumer survey and consultations carried out in the context of this study corroborate these observations.

[1] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12567-Sustainable-Products-Initiative
[2] https://ec.europa.eu/environment/eussd/smgp/initiative_on_green_claims.htm

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Without clear information, consumers cannot properly take sustainability aspects into consideration when deciding which products to purchase.[3] This lack of information has various direct and indirect consequences, such as potential consumer detriment, non-realised consumer welfare, negative environmental and climate impacts, insufficient external incentives for companies to provide products with superior environmental characteristics, longer lifespans, higher repair potential and better software update/upgrade policies, as they do not sufficiently compete on these aspects.

Whenever information on environmental characteristics requires quantification of impacts, this will take into account the Environmental Footprint methods[4]. When formulating policy options, principles of good environmental information will be considered, including the relevance and reliability of information.

Based on the preliminary findings from the desk research and stakeholder consultations, we have identified the following possible measures and elements to address this problem (whilst the ideas are discussed in the framework of the current revision of consumer law, some may actually inform more medium or long-term initiatives).

During the workshop, the possible elements listed below will be further discussed. The discussions will cover, among others, the following aspects: feasibility and relevance of the possible elements, the approach to communicate the information to consumers (who and how e.g. sticker, QR codes), enforceability and sector/product scope.

- Requirement for traders to provide information on the **environmental characteristics** of products to consumers at the point of sale in a consistent way across products and Member States. Possible elements are:
  - Element 1a: Requirement to provide information on the overall environmental performance of products (via the PEF method).
  - Element 1b: Requirement to provide information on one single key environmental characteristic related to climate change (CO2 equivalent emissions) considering the life cycle of the product.
  - Element 1c: Requirement to warn consumers in case the product within its product category has a high impact on climate (measured using CO2 equivalent emissions).
  - Element 1d: Requirement to warn consumers in case the product within its product category has a high impact on environment.

[3] Several studies demonstrate that providing information on environmental impact can influence consumers' buying decisions. See a review [http://www.wrap.org.uk/sites/files/wrap/Env%20Sust%20Product%20Purchase%20Decisions_0.pdf]
[4] https://ec.europa.eu/environment/eussd/smgp/ef_transition.htm

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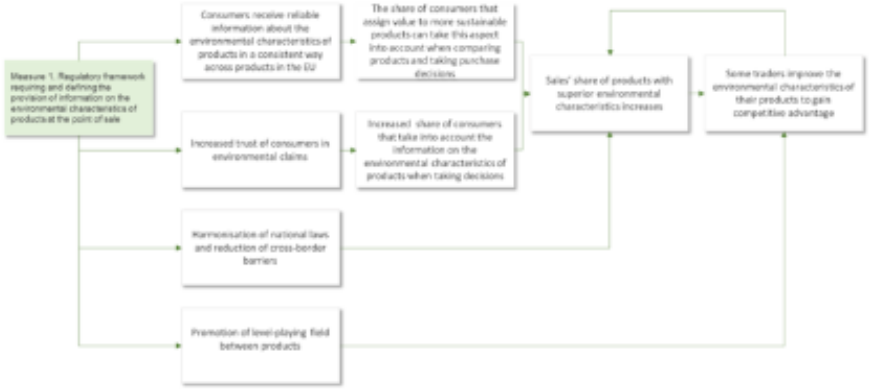
Figure 2.1 Measure 1: Provision of information on the environmental characteristics of products at the point of sale – impact chain



- Requirement for traders to provide information on the **lifespan** of products to consumers at the point of sale in a consistent way across products and Member States. Possible elements are:
  - Element 2a: Requirement to provide information on the guaranteed lifespan of goods in a prominent place (e.g. next to the price), i.e., the number of years of lifespan of the good covered by a commercial guarantee (included in the price of the good) by the manufacturer and/or seller; if no commercial guarantee is offered with the good then this should be also communicated to consumers in the same prominent way.
  - Element 2b: Requirement to provide information on the expected/estimated lifespan of goods (with the consumer bearing the cost of any necessary repairs in case of product failures within this time frame) in a prominent place (e.g., next to the price), i.e., the average duration of proper functioning of a good assuming normal usage and maintenance. This information can be expressed in cycles, years.
  - Element 2c: Requirement to provide information on the expected/estimated lifespan including minor/reasonable repairs of goods (with the consumer bearing the cost of any necessary repairs in case of product failures within this time frame) in a prominent place (e.g. next to the price), i.e., the average duration of proper functioning of a good assuming normal usage and maintenance and the performance of minor/reasonable repairs.
  - Element 2d: Requirement to provide information on how the expected lifespan of a good compares with the minimum expected lifespan (if it has been set for the product type) for that type of goods in a prominent place (e.g. next to the price).
  - Element 2e: Provision of user-friendly and up-to-date maintenance manuals and tips on how to extend the lifespan of a product by manufacturers.

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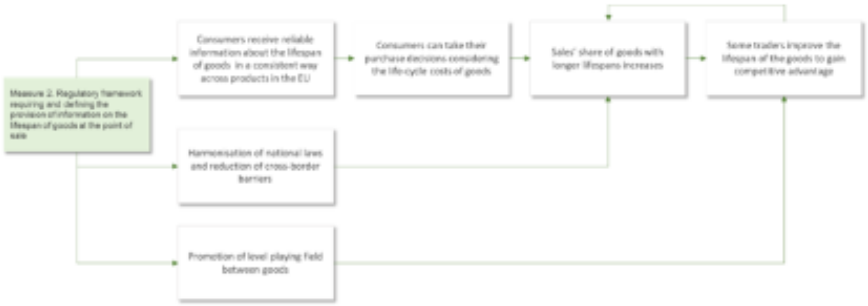
Figure 2.2 Measure 2: Provision of information on the lifespan of goods at the point of sale – impact chain



- Requirement for traders to provide information on the **reparability/repair** of products to consumers at the point of sale in a consistent way across products and Member States. Possible elements are:
  - Element 3a: Requirement to provide information on the period of time (in years) during which a good can be easily repaired by virtue of a design that does not hinder repairs, ensured availability of spare parts and access to information necessary to repair defective products.
  - Element 3b: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of spare parts after the purchase of the product.
  - Element 3c: Requirement to provide information on the maximum time it will take to deliver spare parts upon request.
  - Element 3d: Requirement to provide information on how and where consumers /independent repairers can purchase the spare parts.
  - Element 3e: Requirement to provide information on recommended price of spare parts.
  - Element 3f: Requirement to provide up-to-date information on available repair services (by location).
  - Element 3g: Requirement to provide up-to-date information on the average price of repair services (by location) by output.
  - Element 3h: Provision of user-friendly and up-to-date repair manuals to consumers/independent repairers
  - Element 3i: Provision of user-friendly and up-to-date repair manuals to "professional repairers" (this may also include independent repairers - reference to an official registration system as professional repairer, where such system exists in the Member States concerned, shall be accepted as proof).
  - Element 3j: Use a repair score system to inform consumers of the level of reparability of a product, as for example the one developed by a JRC research project[5] or the French score system developed for certain products.

[5] https://ec.europa.eu/jrc/en/publication/analysis-and-development-scoring-system-repair-and-upgrade-products

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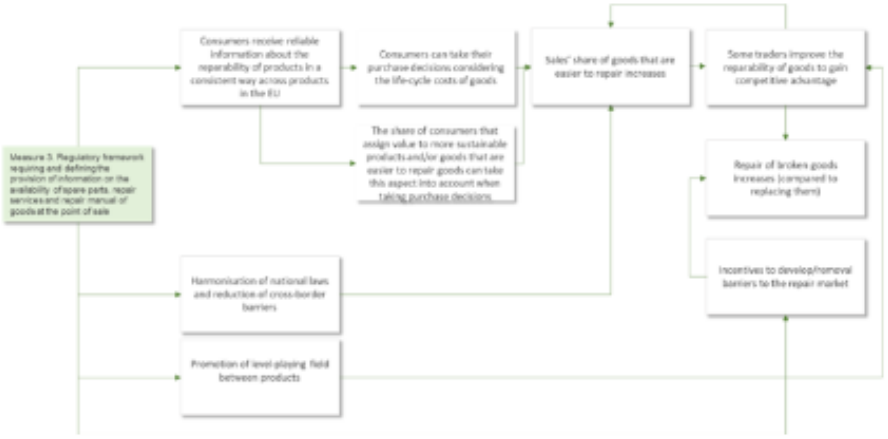
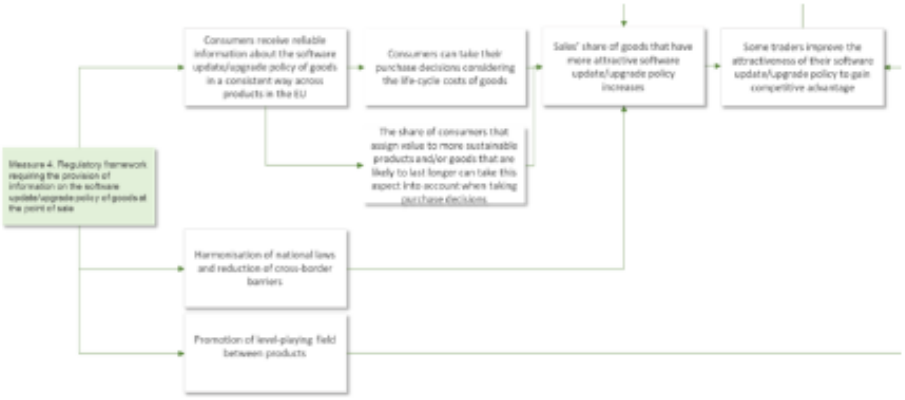
Figure 2.3 Measure 3: Provision of information on the reparability/repair of goods at the point of sale – impact chain



- Requirement for traders to provide information on the product **software update/upgrade** policy to consumers at the point of sale in a consistent way across products and Member States. Possible elements are:
  - Element 4a: Requirement to provide information on the period of time (in years) during which the trader will ensure the availability of software updates to guarantee the appropriate and secure functioning of the product.
  - Element 4b: Requirement to provide information on how and where consumers / independent repairers can get software updates and upgrades.
  - Element 4c: Requirement to provide information on the frequency and cost policy (i.e., whether they are provided for free to consumers or against payment) of the software upgrades.

Figure 2.4 Measure 4: Provision of information on the software update/upgrade policy of goods at the point of sale – impact chain



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3 Prevent commercial practices that run counter to the objectives of the Green Deal and the green transition: extent of the problem and possible solutions

Many consumers are currently confronted with commercial practices that run counter to the objectives of the Green Deal and the green transition. These practices can cause consumer confusion and misinformation, or breed mistrust and can dampen their interest in purchasing more sustainable products. Following main categories have been identified:

- Planned/premature obsolescence practices: development of goods (particularly of durable consumer goods), that (a) fail early, i.e. goods are purposely designed not to last as long as the average consumer would expect, or (b) fail due to poor manufacturing, choice of materials, etc
- Greenwashing practices, i.e., use of vague, misleading, and/or unfounded information on products' environmental characteristics.
- The proliferation of sustainability logos, labels, trust marks, quality marks, claims, etc. and online information tools/apps (e.g. mobile applications comparing the environmental impact of selected products) that signal/inform consumers about economic, social and environmental virtues of products that are difficult to interpret, compare and verify by consumers.

These commercial practices exploit information failures, as consumers have imperfect information and less information than providers (asymmetric information).This unequal information between consumers and providers distorts the market and directly leads to consumer detriment, unfair or imperfect competition and undermines the proper functioning of the Single Market; and negative environmental and climate impacts, which can lead to negative health, social and economic impacts.

Following recent trends, it is expected that a growing number of Member States will introduce legislation to deal with the three sub-problems mentioned above. While these legislative initiatives might, to some extent, address some or all the sub-problems, it will lead to non-uniform rules across the EU and may create barriers to the proper functioning of the Single Market.

Based on the preliminary findings from the desk research and stakeholder consultations, we have identified the following possible measures and elements to address this problem (whilst the ideas are discussed in the framework of the current revision of consumer law, some may actually inform more medium or long-term initiatives).

During the workshop, the possible elements listed below will be further discussed covering, among others, the following aspects: feasibility and relevance, enforceability, and sector/product scope.

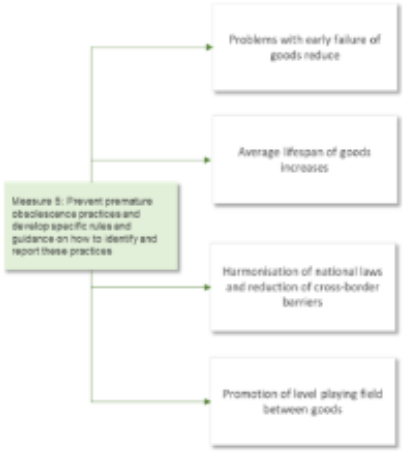
- Measure 5: prevent sales of products with a covertly shortened lifespan ('obsolescence practices'). Possible elements are:
  - Element 5a: prohibit, in the Unfair Commercial Practices Directive 'blacklist'[6], the existing practices in the area of product premature obsolescence that are known to cause consumer harm (e.g. software updates resulting in reduced functionality or performance of the device, without informing the consumer about such effect of the update; inclusion of a device/component into the product which renders the product unusable after a certain period of time or a certain number of uses; prohibit any design strategy and/or production technique to intentionally make consumer goods

[6] The blacklist (Annex I of the UCPD) includes commercial practices which are prohibited under all circumstances (not subject to a case-by-case assessment).

that are impossible to repair, preventing access to key components of the product (unless there is an obvious safety/security reason for that); promoting frequent replacement of products on through marketing strategies, etc).

- Element 5b: general prohibition of "planned obsolescence"[7] i.e. product failures which were deliberately planned (given the deterrent impact such general prohibition may have)
- Element 5c: General prohibition of "premature obsolescence" i.e., early product failure defined as either when more than e.g. 10% (to be defined) of the products sold fail before the minimum lifetime set for the product type or when tests run by independent parties show that the expected lifespan of the product is below the minimum lifetime set for the product type.
- Element 5d: Requirement on the traders to inform consumers about known aspects in the product's design (hardware, firmware and software) that can cause it to fail significantly earlier than a consumer could reasonably expect (or the minimum expected lifespan for the product type if available).

Figure 3.1 Measure 5: Prevent premature obsolescence practices – impact chain



- Measure 6: prevent vague, misleading or unfounded environmental information. Possible elements are:
  - Element 6a: General prohibition of providing information on environmental characteristics and/or impacts that do not fulfil a minimum set of criteria, for example inspired by the compliance criteria of the multi-stakeholder group on environmental claims[8].

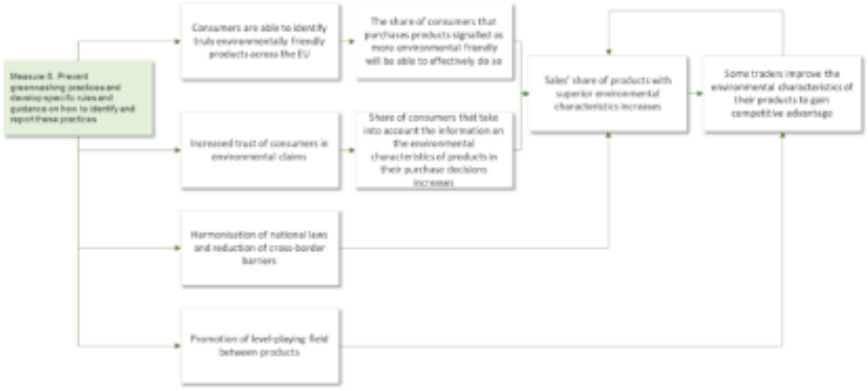
[7] Inspired by the French law "The Law on energy transition for green growth (2015) Available here, the Belgium proposal "Proposition de loi visant à lutter contre l'obsolescence organisée et à soutenir l'économie circulaire.", and the Italian proposal "Legislative proposal S.615 "Modifications to Legislative Decree 206/2005 and other provisions to fight the planned obsolescence of consumer products", Art. 1. Available here: here.

[8] See compliance criteria here https://ec.europa.eu/info/sites/info/files/compliance_criteria_2016_en.pdf. For example, they included the following criteria:

-Claims need to reflect main environmental impacts of the product over its life cycle
-Claims should be clear to which aspects of the product or its life cycle they refer to

- Element 6b: Amending Annex I of the Unfair Commercial Practices Directive (black list) to ban all "environmental claims" that do not clearly and prominently qualify the specific environmental benefit or benefits of the product or that are not substantiated by ISO-type I ecolabels or by life cycle assessment studies proving the product's positive environmental performance
- Element 6c: Amending Annex I of UCPD to ban vague statements such as "environmentally friendly", "ecological", green", "sustainable", "eco" unless the "environmental excellence" of the product has been proven (e.g. via ISO-type I ecolabels or life cycle assessment studies).
- Element 6d: similar objective as in 6b but to be achieved by amending Article 6(2) in UCPD on misleading action, thus requiring a case-by-case assessment by national consumer protection bodies of the negative impact of the vague claim on consumers

Figure 3.2 Measure 6: Prevent greenwashing practices – impact chain



- Measure 7: introduce minimum criteria/requirements[9] for the transparency and/or reliability of sustainability logos, labels, information tools[10]. Possible elements are:
  - Element 7a: Only allow the use of voluntary sustainability labels/logos and information tools that meet a minimum set of criteria based on self-declaration (either through simple disclosure or tied disclosure through a specific website/on-line tool);
  - Element 7b: Only allow the use of voluntary sustainability labels/logos and information tools that meet a minimum set of criteria based on "pre-endorsement" by a national or EU public body or an accredited third-party.
  - Element 7c: Companies could request the use of a stamp or other mark to inform consumers of which voluntary sustainability labels/logos and information tools meet a minimum set of criteria. The assessment would be based on self-declaration (either

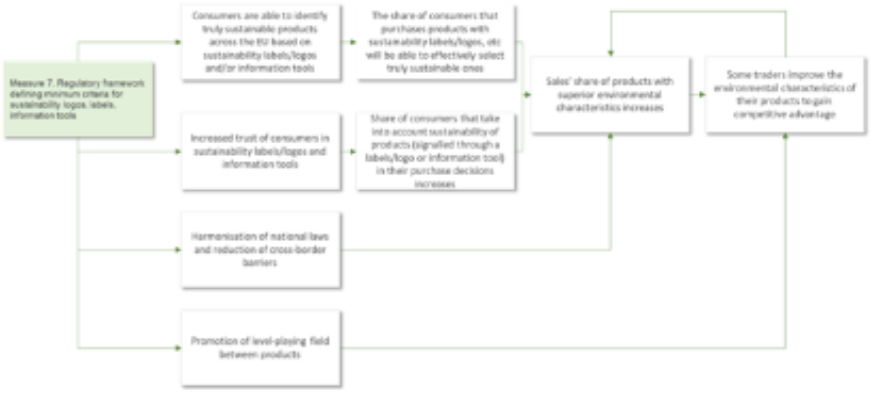
-Claims should be meaningful in the relevant market
-The benefit claimed should not result in an undue transfer of impacts
-Comparisons should not be misleading but objective and relevant
-Companies shall not make claims about aspects that are required by law

[9] Examples: ISO 14020 standards, ISEAL, EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs (https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:341:0005:0011:en:PDF) and https://label-online.de/unsere-bewertung/.

[10] Note this measure goes beyond ecolabels and would also cover labels on social aspects etc.

through simple disclosure or tied disclosure through a specific website/on-line tool) or based on "pre-endorsement" by a national or EU public body or an accredited third party.

Figure 3.3 Measure 7: Define minimum criteria for sustainability logos, labels, information tools – impact chain



4 Improve enforcement on above matters

The current Union consumer law (e.g. the UCPD) allows national authorities to take action against unfair commercial practices of planned obsolescence and greenwashing where it can be evidenced that they harm consumers' economic interests. However, the horizontal nature of the legislation and the absence of a common set of requirements and specific rules in the above matters meant that national authorities can only act on the basis of a case-by-case assessment of individual cases which makes it difficult to address the aforementioned issues effectively. In particular, the enforcement of the current rules is very challenging because of:

- A lack of a common set of consumer information requirements on products' environmental characteristics, lifespan, reparability, and software update/upgrade policies defined in a clear and concrete way.
- Lack of specific rules, guidance, and benchmarks on early failure of goods, including a common and actionable definition of planned obsolescence and clear and concrete examples of such practice.
- Lack of specific rules, guidance, and benchmarks on what constitutes greenwashing, including a common and actionable definition of greenwashing and clear and concrete examples of such practice.
- Lack of specific rules, guidance, and benchmarks on what constitutes reliable and transparent sustainability logos, labels, information tools.

A majority of public authorities surveyed agreed that infringements to new requirements on the provision of information, planned/programmed obsolescence and greenwashing should be within the remit of the CPC Network as this would ensure more effective protection for consumers and address the cross-border, EU-wide scope of the problem.

It would be useful to receive views from the stakeholders where they see issues with the enforcement in the aforementioned areas and whether they consider the existing legislation (UCPD, CRD) and the CPC framework sufficient. Can they foresee additional legal instruments or enforcement mechanisms that could be effective?

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The minutes of the workshop are the following**:**

Minutes of the workshop

Study on "Empowering Consumers for the Green Transition"

Stakeholder workshop

6 October 2020, 10:00 – 16:00

Part I: Introduction

Welcome and introduction

Jan Panek (Head of Consumer Policy Unit, DG JUST) welcomed participants to the workshop and delivered a welcome speech, where he emphasised the importance of the study and offered background and other contextual information around the study.

Presentation of the study findings

Sofia Esteves (Project coordinator, ICF) presented the study and the preliminary findings. She explained the three main challenges and obstacles that prevent consumers to adopt a more sustainable behaviour, i.e.: (1) lack of information; (2) commercial practices that contribute to confusion and misinformation (e.g. premature obsolescence, greenwashing, proliferation of sustainability labels, logos and information tools); and (3) obstacles that prevent the repair and reuse of the whole product or its components. She then presented an overview of the methodological approach to the study, the progress made to date and the remaining and upcoming study tasks. Furthermore, she highlighted that the study would contribute to the assessment of impacts associated with the legislative proposal 'Empowering consumers for the Green Transition' and would provide evidence to support other medium- and long-term EU-level initiatives.

Finally, the workshop plan and agenda were discussed.

Part II: Promoting the provision of reliable information on goods' lifespan and reparability as well as preventing planned/premature obsolescence

Session I – Information on lifespan

Preliminary findings

The study team presented the problems and possible policy solutions identified concerning information on the lifespan of goods.

- To date, research undertaken as part of the study confirms that consumers are interested in receiving more information about the lifespan of goods and some are willing to pay for it. However, at the moment consumers are not able to compare products, notably on the basis of their expected lifespan, when purchasing them. This leads to consumer detriment as consumers need to repair/replace the product earlier

1

than expected, with a consequent loss of consumer welfare. It also has a negative impact on the environment and harms the single market.

- The introduction of a regulatory framework was identified by the study team as a possible measure to tackle these issues. The regulatory framework would require the provision of information on the lifespan of goods at the point of sale. This measure would ensure that consumers have access to reliable information on the lifespan of goods, prevent legislative fragmentation across the EU, and promote a level-playing field between goods.

The study team presented the different policy options that are currently being considered in the context of a new regulatory framework.

Discussion panel

Isabelle Maurizi (Eurocommerce)

- Studies show that 80% of the sustainability of the product should be handled during the design phase. Hence, for the purpose of this study, we are only able to find solutions to improve the remaining 20%.
- In this context, she envisages two challenges: one regarding the lifespan and the other on relevant information.
    - There is a difference between the expected lifespan and the lifetime. The difference lies in the fact that a product's durability also depends on how much this product has been used, how it has been taken care of, etc.
    - In order to provide the consumer with reliable information, it is necessary to define what constitute reliable information and how it is reliable.
- Eurocommerce does not have a preference on the type of label (either physical or digital) that should be used. However, Ms Maurizi highlighted that having digital tools is useful as it allows companies to provide more than just mandatory information, yet it is also important that this information is accessible to non digital-savvy consumers.
- Eurocommerce does not have any preference on the measures presented as the type of measure should depend on the type of product in question.

Patrycja Gautier (BEUC)

- It was remarked that many consumers are interested in the lifespan of products and whether they are repairable. Accordingly, consumers are willing to pay a higher price if the product is expected to last longer. Consumers' purchases are motivated by both environmental concerns and the product's price.
- She mentioned a project carried out by BEUC's Belgium member where consumers reported products that broke much faster than what they would expect. Until now, more than 11.000 testimonials were reported. This project allowed to easily assess the extent of the problem we are dealing with.
- As regards the proposed solutions, BEUC believes that from the options proposed by the study team, the first measure (i.e. provide information on the guaranteed lifespan) would be the most efficient. Simple information requirement is not sufficient if there are no consumer rights that go hand in hand with it. However, BEUC sees this rather as a short-term solution. In the long term, a most efficient measure would be to expand the length of the legal guarantee right for durable goods to match their lifespan, further

expand the reversal of the burden of proof and introduce a direct producer liability for products defects.

- Although BEUC does not have a fixed position on the idea to introduce an information requirement on the guaranteed lifespan yet, in BEUC's preliminary view, providing a longer commercial guarantee could create a competitive advantage for companies providing it. In turn, this could boost the number of commercial guarantees provided and their length. However, since the commercial guarantee would remain a purely voluntary measure, there is also a risk that the impact of this measure would be low. Its effectiveness would be highly dependent on how the market would react to this new information requirement.

Siddharth Prakash (Öko-Institut)
The issue (i.e. information on lifespan) was discussed from a technical, legal and consumer angle respectively.

1. Consumer perspective: It is important to increase the transparency for consumers, but the large quantity of information will not necessarily lead to better informed decisions. While some consumers ask for comprehensive product information, the majority of consumers welcome precise and more selective information. A good example is the energy label that compares a product's efficiency. Thus, information overload should be avoided. Overall, our research has shown that an equal share of consumers was satisfied and unsatisfied with the lifespan of products, thus showing differences in the consumer expectations. There is a lack of data to understand what kind of products led to consumer unsatisfaction with the lifespan, e.g. were they low-price products not intended to be used intensively? Information on product design and intended use is not available to consumers (information asymmetry).
2. Legal perspective: Thus, one of the most promising options would be to provide consumers with mandatory guarantee of durability or mandatory information on the commercial warranty. This could be a short-term measure that can be introduced. In our consumer research, we have seen that the information on the manufacturer warranty influences the purchase behaviour of the consumers even clearly more strongly in favour of higher-quality devices than the indication of the lifespan alone. In the longer run, The European Sales of Goods Directive should be revisited to adapt the legal warranties according to the expected lifetime of the product. Experiences from the Netherlands and Finland can be taken as example for determining the expected lifetime. For example, in the Netherlands, the Dutch trade association for installers and electrical contractors prepared guidelines for some product groups. Such a list can also be differentiated according to the quality of products, price category etc. Additionally, time-limits for non-conformity claims need to be defined according to the expected lifetime of products as well.
3. Technical analysis: It is obvious that development of technical standards for lifetime labelling is tedious and requires substantial efforts. Also, for this reason, it is recommended to use the mandatory information on commercial warranty as a proxy for the lifetime related information. Considering the fact that already today a large number of manufacturers provide 1-2 year guarantee and a strong differentiation between products would not be possible if this information is used as a stand-alone measure, the revision of legal warranties and time-limits of non-conformity claims according to the expected lifetime of products is imminent in the long run. .

Remarks from participants

- Shailendra Mudgal (Study Team - BioInnovation): A survey conducted in four Member States revealed that there has been a shift in the way consumers perceive information. Whereas traditionally, consumers did not want to be overwhelmed with information, the younger generation asks for more and more information. Therefore, an option could be to provide basic information for all consumers and add a QR code which allows interested consumers to have access to more detailed information.
- Mathieu Rama (REUSE): As regards the way information is displayed, using a QR code would facilitate any changes / updates to the information as well as facilitate access, even when the product reaches second-hand markets.
- Isabelle Maurizi (Eurocommerce): Eurocommerce does not necessarily support the extension of the legal guarantee because 80-85 per cent of products are being replaced or repaired within the first two years. Each product would need a specific type of repair (e.g. the repair of digital devices is different from the one needed for textile products) and the extension of legal guarantees would not solve this issue.
- Siddharth Prakash (Öko-Institut): It is difficult to develop different technical standards for all products. While it takes time to develop technical standards for the minimum lifetime labelling requirement, providing mandatory information on the minimum commercial guarantee is the best option in the short term.
- Hugh Kirk (DigitalEurope): For DigitalEurope, establishing an objective, reliable, comparable and verifiable tool to assess and determine a product's lifetime would be particularly challenging. Certain products are complex by design and a product's lifetime is highly dependent on the use by the final customer.
- Jerome Pero (FESI): Greater emphasis should be put on raising awareness as many consumers do not use or stock products in the correct manner. This could have an impact on the difference between the expected lifespan and the lifetime of a product.

Session II – Information on reparability

Preliminary findings

The study team presented the problems and possible policy solutions identified concerning information on repair options.

- The study found that consumers are interested in having more information on the reparability of goods and are more interested in repairing the product, rather than replacing it. However, consumers face different problems when trying to repair a product: lack of information on how/where to do it, it is often expensive, difficulty in obtaining spare parts, etc. These problems lead to consumer detriment, loss of consumer welfare, adverse environmental impacts and negative effects on the single market.
- In order to tackle these issues, the study team suggested to introduce a regulatory framework requiring the provision of information on the availability of spare parts and repair services and the provision of repair manuals at the point of sale.

ICF presented the different policy measures currently under consideration aimed at improving information on reparability.

Discussion panel

Ruth Mugge (TU Delft)

- There are three main elements to a consumer's decision to having a product repaired: motivation, ability to repair and triggers.
- **Motivation**: It is important to provide very straightforward and relatively cheap repair solutions to encourage consumers in seeking repairs. If consumers would know thatit is easy to repair or at least that there are repair possibilities, they would be more inclined to do so.
- **Ability to repair**: Information is pivotal to increasing consumer's ability to repair. It is not enough to provide consumers with manuals as they usually get lost. Although this information can be easily accessed via the Internet, this is usually an extra effort for the consumer. The European Commission and companies should introduce more information on the product itself.
- **Triggers**: A TU Delft student designed a coffee-maker with a specific logo on the product. This logo allows the consumer to easily access the procedure to repair it through a mobile phone, while standing right next to the coffee-maker. This logo is an example of what would constitute a trigger to a consumer. Similarly, providing a reparability index could help people in purchasing a product based on its ease of reparability. It should be initiated by the European Commission.

Maarten Depypere (iFixit)

- All products must be reparable. However, there are still many obstacles that prevent repairs. iFixit supports all the measures being considered but has a greater preference for facilitating universal access to repair manuals and spare parts. Providing information on how to repair a product would make repairs safer.
- Specifically, measure b (requirement to provide information on the period of time during which the manufacturer will ensure the availability of spare parts after the purchase of the product) and measure h (provision of user-friendly and up-to-date repair manuals to consumers/independent repairers) would help towards encouraging repairs.
- He also supports the idea of developing a repairing score system (iFixit has developed one) and providing consumers with a global score of the product. As developing such a score for all products takes time, iFixit supports horizontal measure 3a that can be applied swiftly to all product categories. Studies show that a consumer is more likely to purchase a product without a score than one with a low score. Hence, it is important to avoid creating legal gaps and loopholes in the legislation.
- Price of repair is a main barrier and it is important to include measures 3e and 3g to address this barrier.
- Finally, another obstacle to address is *software locking*. This practice prevents from replacing a product component because the software is able to detect a replaced component and does not allow the device to function. Hence, it is important to provide information also on software support to restore a device to fully function after the repair.

Flavien Barraud (Commissariat général au développement durable (CGDD)

- France has developed a reparability index as part of its Circular Economy Roadmap (which comprises a total of 50 measures). This measure aims to promote responsible

consumption by improving consumer information through the establishment and display of a reparability index.

- This index covers washing machines, laptops, smartphones, televisions and electric lawnmowers. There are different working groups that are developing specific criteria for each product category.
- Current statistics show that, when products fail or break down, only 40 percent are repaired. France's goal is to raise this rate to at least 60 percent and the index is one of the various ways to reach it.

Remarks from participants

- Siddharth Prakash (Öko-Institut): In a globalised economy, repair costs in Europe will continue to be high when compared to the price of new products (owing to mass production, notably in low and middle-income countries (economic obsolescence)). As there is an inherent motivation from consumers (economic as well as general appreciation for high-quality products) to repair durable products, he would recommend combining repair-related measures with measures capable of increasing product durability.
- Efthymia Ntivi (TIC Council): TIC Council's main concern relates to conformity assessments and recognition bodies. These types of bodies should be mandatory as they can play an important role in ensuring that consumers receive reliable information.
- Ugo Vallauri (Restart project): Repair policy should be seen as part of a bigger picture, where unnecessary replacement of products is prevented. It is important to be clear about the fact that there is no durability without a right to repair a product. Addressing the issue of *software locking* is also important. In that regard, the introduction of more transparent information on the frequency and the potential costs of software and security upgrades, as well as for how long a product continues to be improved in terms of security and software updates throughout its lifespan, is recommended.
- Korrina Hegarty (APPLiA): There are certain risks associated with repairs carried out by non-professional repairers. To ensure the safety and conformity of products, the repair of appliances must be made by professional repairers. Where DIY or self- repairs are encouraged by the manufacturer, maintenance tips and troubleshooting information should continue to be included in user manuals or on the manufacturer's website.
- Jean-Pierre Schweizer and Maarten Depypere (iFixit) agreed that making repair information available would lead to safer repairs.
- Jerome Pero (FESI) drew attention to the fact that the national label currently in place in France is raising several issues within the internal market. It is seen as confusing, especially among consumers outside of France. FESI thus recommends a harmonised initiative at EU level in order to avoid a proliferation of different regional, national or local labels.
- Isabelle Maurizi (Eurocommerce) underlined the importance of simplifying access to spare parts. She also mentioned that the reparability aspect could be tackled by existing legal frameworks, such as the Ecodesign Directive.

Session III – Preventing premature obsolescence

Preliminary findings

The study team presented problems and possible policy solutions under consideration for preventing planned/premature obsolescence.

- Consumers are interested in buying goods with longer lifespans. However, certain consumers goods are not designed to last long, and consumers are not aware that certain products will not last as long as they reasonably expect. Furthermore, current legislation (e.g. the UCPD) has certain limitations, such as requiring a case by case assessment. Therefore, the following issues arise: consumer detriment, negative environmental impact, and harm to the single market.
- To tackle these issues, the study team suggested to ban the practice of premature obsolescence and to develop specific rules and guidance on how to identify and report this practice.

ICF then presented potential ways to implement this measure.

Discussion Panel

Siddharth Prakash (Öko-Institut)

- He mentioned the importance of distinguishing between premature obsolescence and planned obsolescence.
- As regards premature obsolescence, he mentioned that in a recently published study, the Öko-Institut has assessed different standards and statistical parameters (e.g. B-10 values) that can be used as an indicator for a product's lifetime. These parameters are, however, of limited benefit to individual consumers and should rather be used for the verification by market surveillance authorities.
- As for the planned obsolescence, it is very challenging for lawmakers to regulate. In most cases, product design decisions can be substantiated from the technical and economic perspective. Therefore, the impact of a specific legislation on planned obsolescence is very limited. In a recent study conducted by the Öko-Institut, it was concluded that a new criminal provision could be included in the German Penal Code (StGB) or in secondary criminal law and there are no substantial constitutional objections to criminal sanctioning of planned obsolescence in Germany. German criminal law already offers the possibility of sanctioning the deliberate shortening of product lifetimes. Therefore, a new law might not have a significant additional impact. However, a criminal provision for the purpose of deterrence or a "symbolic effect" may still make sense in order to enact an explicit prohibition of planned obsolescence. However, it was clearly stated that other product-related instruments and consumer protection measures, as also discussed in today's workshop, may in fact be more effective and pursue a similar form of protection.

Adèle Chasson (HOP):

- It was remarked that 90 per cent of Europeans are currently aware of the existence of product obsolescence. The important difference between the expected durability of a product and its real durability is a source of frustration for consumers as they cannot do anything about it.
- The introduction of a scoring system was judged beneficial. To this end, it would however be necessary to have a scientifically-robust and reliable methodology for the calculation of scores.

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- The possibility to advise / inform consumers on / about a product's typical usage was also raised. For instance, it could be interesting to inform consumers on how many cycles a washing mashing can be expected to do before it breaks down and/or needs repairs.
- There was also support for the extension of the legal guarantee which would oblige the retailers to replace a product having failed prematurely.
- Finally, the importance of developing a clear definition of planned obsolescence, with clear examples, was provided.

Anton Berwald (Fraunhofer IZM, PROMPT project lead):

- The importance of developing a common definition of and around premature obsolescence, which is measurable, was stressed. It would also be important to align some of the wording of the listed elements under measures 5a-d with the work that is ongoing under the Ecodesign Directive and its probable revision (where the scope will go beyond Energy-related products (ErP). It is essential to develop a common language between the DGs at the Commission which would make aspects like minimum lifespan and expected lifespan measurable. For the technical terms for ErP, it would be possible to stick to the definitions created in the general method for the assessment of the durability of energy-related products EN 45552. Many terms used in propositions 5a-5d need proper definitions to avoid ambiguity, like
  - Reduced functionality or performance (how should it be measured?)
  - Impossibility to repair (for whom, with which tools?)
  - Early product failures (how to define and enforce "early"?)
  - Minimum lifetime (how to define and enforce "minimum"?)
  - Expected lifespan (how to define and enforce "expected"?)

  All these expressions need a proper definition which will make them measurable, e.g. through existing tests or tests that need to be developed in the future.

Remarks from participants

- Siddharth Prakash (Öko-Institut): As lifetime tests are very cumbersome in terms of costs & time, he advised against requiring market surveillance authorities to conduct their own tests. In his opinion, market surveillance authorities should only focus on reviewing and verifying manufacturers' technical documentation (e.g. on complaints about possible non-compliance) and not use their limited resources to carry out their own calculations or conduct own tests.
- In order not to overwhelm market authorities, it has also been suggested to reverse the burden of proof on companies. However, it was also pointed out that this aspect might fall within the remit of the Ecodesign directive as opposed to legislation on consumer empowerment.

ICF made concluding remarks and summarised the main findings of the morning session.

Part III. Promoting the provision of reliable information on product environmental characteristics, preventing

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greenwashing, and setting minimum criteria for sustainability labels/logos and information tools

Session IV – Information on environmental characteristics

Preliminary findings

ICF presented problems and possible policy solutions under consideration in the context of the provision of information on environmental characteristics:

- Evidence shows that consumers are interested in receiving information on the environmental characteristics/impact of products and they are willing to purchase more "environmentally-friendly" products. However, this information is not widely available, and consumers are not able to compare products. This situation contributes to a loss of consumer welfare, negative environmental impacts and harm to the single market.

The study team suggested the introduction of a regulatory framework requiring the provision of information on environmental characteristics of products at the point of sale. The team then presented the different policy measures currently being assessed.

Discussion panel

Guido Lena (SMEUnited)

- SMEs are not familiar with new methodologies being deployed for measuring products' environmental impacts. Furthermore, SMEs lack the staff and technologies required to perform in-house assessments. SMEUnited therefore advocates that any proposed measure be implemented on a voluntary basis.
- SMEUnited highlighted the importance of developing, at EU level, a methodology that is not based on the approach of larger firms / industries but that takes into account the resources of SMEs as well, such as specific SME tools. Moreover, free online data bases with life cycle for different product groups in different languages would support SMEs.
- Finally, it was pointed out that the EU should increase and improve access to finance for SMEs because banks are not yet prepared to lend money that would allow SMEs to invest in these new methodologies.

Patrycja Gautier (BEUC)

- The proliferation of green claims is causing a lot of confusion among consumers as these claims are often misleading, false, unsubstantiated or just too vague. Additionally, according to the UCPD, a company is obliged to provide evidence only after a claim has been challenged.
- The idea of developing a common methodology to assess the environmental characteristics of a product was praised. However, this method should not be a stand-alone instrument and should cover all types of products.
- Conversely, the idea of creating a new mark did not win any support, owing to the number of existing labels that were deemed to be functioning very well (e.g. EU Ecolabel). To reduce the number of claims, the development of a pre-authorisation scheme that does not allow green claims to enter the market if they do not satisfy certain requirements could be envisaged.

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Sylvia Maurer (BEUC)

- Consumers do not fully understand information on carbon emissions. Hence, any additional information would overwhelm consumers and is therefore not desirable.
- As regards the EU Ecolabel specifically, it should be more widely used. Currently, it applies mostly to the "best products" in the market.

Eléonore Maitre-Ekern (University of Oslo, Norway)

- She stressed the difference between the types of information that have to be provided to consumers, i.e. information that is meant to directly compete with the price dominance (to be accompanied by specific rights to consumers); other information to be actively provided to consumers (using labelling and ecodesign); and information that should be made available upon request (right to know). Consumers should be able to distinguish between mandatory labelling and labels with green claims (e.g. using a CE-type marking).
- The new consumer legislation should introduce the right for all citizens to know about all sustainability aspects of products' entire life cycle. A similar measure is currently discussed in Norway.
- Finally, she stressed that a sustainable transition must also include social aspects: gender equality, fair working conditions, etc. These are also important elements that should be considered in the EU labelling and ecodesign schemes in the future.

Remarks from participants

- Blanca Morales (BEUC) stressed the importance of reinforcing the EU Ecolabel's policy. It is not widely available as it only covers 27 product groups. Other labels, such as the Nordic Swan, have thus gained greater prominence, notably in the Nordic region. Hence, a new voluntary label that would compete with the Ecolabel is unnecessary.
- The study team asked participants whether they would agree to provide a set of minimum requirements.
    - Eleonore Maitre-Ekern (University of Oslo, Norway) felt that it would not be enough to focus solely on CO2 emissions or climate change (as part of these requirements). It would be important to have a more holistic approach and to clearly specify the weight attributed to the different elements involved in the lifecycle of a product.
- Efthymia Ntivi (TIC Council) explained that having a single label might not be an ideal solution. The EU Ecolabel already covers the best products in the market.
- Guido Lena (SMEUnited) stressed the importance to keep in mind that the information provided needs to be simple to understand as Europe is an aging society.
- David D'Hollander (ISEAL) was of the opinion that, in view of the level of verification/certification and the type of data needed, this type of environmental footprint approach would not be feasible for small enterprises. On the other hand, allowing for self-assessments might lead to potential abuses.

Session V – Preventing greenwashing

Preliminary findings

The study team presented the problems and possible policy solutions under consideration in the context of greenwashing.

- Consumers should base their purchase decisions on reliable information. However, evidence shows that 61 per cent of consumers find it difficult to understand which products are truly environmentally-friendly. Moreover, several studies show that environmental claims are often not based on robust evidence and assessment. This leads to loss of consumer welfare, negative environmental impact and harm to the single market.
- In order to tackle these issues, the study team suggested to ban the practice of green washing. Finally, ICF presented the different ways in which this ban could be implemented.

Discussion panel

Matej Žežlin (EASA):

- The International Chamber of Commerce covers misleading environmental claims. These rules are complemented by specific guidance and framework, e.g. framework for responsible environmental marketing / communication.
- EASA believes that the current legal framework should continue using the support of advertising self-regulatory systems which provide a robust, flexible and consumer-friendly mechanism to ensure responsible environmental advertising.
- It was also stressed that adding "wording" to existing legislation would not be the best solution to the problem, because it is unpractical to modify the legislation every time the advertising industry uses new and/or more innovative advertising channels.

Jean-Pierre Schweitzer (EEB)

- 'Alternative' greenwashing practices were discussed. An example is the current trend across larger industries to declare very ambitious environmental commitments without necessarily meeting such commitments. This practice has become widespread as there is currently no specific way / mechanism to enforce / control / verify the commitments made. .
- Results gathered from various Eurobarometer surveys were also discussed. It was specifically remarked that more than 30 per cent of consumers / participants think that changing the way they consume is the most efficient way of tackling environmental problems. 81 percent of participants, on the other hand, have indicated that they do not trust products claiming to be environmentally-friendly.
- It was stressed that the burden of green transition should not be placed on consumers, but rather on the industry. To this end, eco-design can play a pivotal role. Additionally, other remedial actions were suggested, such as: the establishment of a "white" list of environmental labels (or blacklisting confusing and misleading claims); the prohibition of using claims for performance at the level of legal requirements; the establishment of a pre-approval scheme for claims and labels; the establishment of due diligence for

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environmental and social aspects; and the harmonisation of remedies or penalties at EU level.

Diego Vazquez-Brust (University of Portsmouth)

- Research has shown that voluntary declaration of compliance does not work. Compliance is achieved only through regulation and enforcement, or through independent audits.
- Currently, there are too many ecolabels (n=255) in circulation, which consumers do not fully or clearly understand. In addition, there is a general attitude among consumers that everything that comes from companies is not to be trusted.
- It was noted that the EU Eco-Management and Audit Scheme (EMAS) is strongly correlated with good environmental performance.
- We need to strengthen the protection of customers against misleading claims. This will not only help customers but also provide an incentive for firms to invest in green R&D and reward firms that are actually greening their processes and products and affected by customers mistrust on green claims.
- General prohibition or blacklisting practices could be equally effective depending on industry context. The main issue remains the verification of claims. ISO 14001 does not always correlate with environmental performance, particularly in the first years after adoption when companies do not have environmental performance targets. LCAs are very sensitive to gaps in data and assumptions, and research shows they are often used as a validation exercise.
- Legislation should include third party verification of claims and provide a qualification criterion or register for third parties.

Remarks from participants

- Marc Boissonnet (Bureau Veritas) believed that environmental communication needs to be simplified. It has to be focused on the characteristics of the product. Knowledge of product characteristics will be specifically valuable to product certification and help increase consumer trust.
- Diego Vazquez-Brust (University of Portsmouth) presented another example of greenwashing: many polluting companies develop a "green line" of products which is not part of their core business activities.
- Mark Smith (NATRUE) strongly agreed with the use of third-party certification. Moreover, he drew attention to the proliferation of green claims in the cosmetics sector.
- Carolina Gouveia (DECO) argued that, besides changes to the UCPD, it would be important to introduce an obligation on transparency for suppliers who wish to use / advertise green claims.

Session VI – Setting minimum criteria for sustainability labels/logos and information tools (environmental, social, economic characteristics)

Preliminary findings

The study team presented the problems and possible policy solutions currently under consideration in the context of the proliferation of labels/logos and information tools. To tackle

this issue, the study team suggested to introduce minimum criteria/requirements around transparency and/or reliability of sustainability logos, labels and information tools. The team then presented the different set of criteria that could be used: openness and transparency, reliability and level of ambition, independence and inclusion and control. Finally, three possible options to implement these criteria were presented.

Discussion panel

Anand Punja (FSC)

- Strengthening consumer protection was highlighted. One of the reasons is because trademarks are often misused or skewed.
- There was support for the establishment of minimum criteria for the development of labels/logos. However, there is a risk of these requirements being too ambitious and that certain countries may not be able to use the labels/logos. There is a risk of discrimination.
- It was also mentioned that the FSC has introduced a 'policy for association,' meaning that it dissociates from companies that have 'dodgy practices', e.g. companies that make green commitments but, in practice, generate high, adverse impacts on the environmental.

David D'Hollander & Caitlin Peeling (ISEAL)

- It was argued that a credible claim ought to be derived from a credible system. Hence, besides establishing criteria and standards, it is essential to develop a credible framework. ISEAL has developed credibility principles and codes of good practices that specify what it means to have a credible system.
- Among the different measures proposed, the importance of having publicly available and accessible information on how the scheme is operating was stressed. Moreover, when developing solutions, the producer's perspective should be taken into account.
- Furthermore, any regulatory policy/action should cover not only third-party certification systems but also in-house logos and other labelling schemes / systems.

Charline Depoorter (KU Leuven)

- It was stressed that not all sustainable labels/logos/claims are credible. Hence, in order to distinguish between them, it would be necessary to develop a minimum set of criteria that would allow to test/verify their credibility. One important criterion would be the objective/aim of the labels/logos, which should in principle be to contribute to sustainability.
- The criteria would benefit from input from all relevant stakeholders. Implementation would be carried out by an accredited third party.
- It would also be important to ensure accountability. To this end, a complaint or a dispute system/mechanism should be set up and be available to all those who have been negatively affected by a label/logo/claim.

Remarks from participants

- Sofia Esteves (ICF) explained that any policy measure/action would cover all voluntary labels/logos.
- Diego Vazquez-Brust (University of Portsmouth) suggested to differentiate on the basis of the level of compliance. Hence, each product would have a different type of

label according to their compliance. It should not be as strict as a ranking, but it should encourage the scheme to become mainstream.

- David D'Hollander (ISEAL) pointed out that the proposed measure may require an important amount of investment from relevant actors in the supply chain.
- Anand Punja (FSC) agreed that there must be a balance between offer and demand. It is important to keep in mind that downstream value chain players will also share the costs of these investments.

Closing remarks

ICF thanked the participants and invited them to share additional findings via email or through a phone call. Jan Panek (Head of Consumer Policy Unit, DG JUST) closed the workshop, highlighting that:

- Despite the attempts to divide the bigger problem of consumer protection into smaller research elements, the discussion showed that all of these elements are interlinked. Hence, it is essential to create a common set of horizontal rules that reinforce each other.
- The Commission is willing to revise previous legislations as well as adopt new ones as long as these changes are aligned with the better regulation principles and the one in/one out rule.

A8.7.4 CPC Workshop organised by DG JUST

On the 14th of October DG JUST organised a meeting with the OPC authorities to present and discuss the problem and measures considered in the context of the legal initiative "Empowering consumers for the Green Transition". Participants were provided with a briefing note prior to the meeting. In the text box blow we present the briefing note and the minutes of the meeting.

Briefing Note

CPC Workshop on the effective enforcement of green issues under EU existing and future consumer law

14/10/2020

1 Introduction

The purpose of this workshop is to exchange with CPC authorities on their experience in enforcement relating to green issues under EU consumer law, in particular greenwashing and premature obsolescence practices as well as on possible improvements. Discussions will notably feed into the ongoing preparation for the Commission's forthcoming initiative on "Empowering consumers for the Green transition"[1][2] (see Inception Impact Assessment here).

The specific objectives of this consumer law initiative are to:

1. ensure that consumers receive reliable and useful information on the sustainability, durability, reparability and software update policy at the point of sale;
2. prevent sales of products with a covertly shortened lifespan ('obsolescence practices')
3. prevent vague, misleading or unfounded environmental information ('greenwashing practices'); and
4. set EU wide minimum criteria (e.g. on transparency and reliability) for environmental/social sustainability logos and information tools to ensure they can assist consumers in an adequate way.

This workshop will specifically focus on the enforcement challenges and potential enforcement solutions **on points 2 and 3** (given the current legal consumer framework already enables to cover such practices). CPC authorities are also invited to bring up enforceability questions and/or solutions linked to possible new provisions **on point 1 and point 4**.

EU consumer legislation (e.g. the UCPD, CRD) allows national authorities to take action against unfair commercial practices of planned/premature obsolescence and greenwashing. However the absence of a common set of detailed requirements and/or specific examples of generally unfair practices in the area, means that national authorities have to proceed to case assessments. Experience so far is that it is difficult to address misleading greenwashing and obsolescence practices in a systematic manner.

A majority of public authorities surveyed in the course of the preparatory Study agreed that enforcement of the new legislation on the provision of sustainability information, planned/premature obsolescence and greenwashing should be within the remit of the CPC Network as this would ensure more effective an equal protection for consumers and address the cross-border and EU-wide manifestations of the problem (e.g when big traders such as car manufacturer, large electric appliances producers or travel operators are concerned).

[1] ICF and partners are supporting the European Commission with gathering evidence to carry out the Impact Assessment for this initiative, through extensive desk research, a mystery shopping exercise and surveys to consumers and industry and targeted stakeholder and expert consultations (i.e. interviews, surveys and workshops), which will complement the information collected by the European Commission through the Open Public Consultation.

[2] Please note that this initiative will be developed in close coordination with other Commission initiatives with a strong relation to product policy, in particular the Sustainable Products Initiative and the initiative focusing on the substantiation of environmental claims using product and organisation environmental footprint (PEF/OEF) (Green Claims Initiative) for which public consultations are on-going.

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2 Points for discussion

In this workshop, CPC authorities will be asked to provide their views:

a) Authorities with experience on enforcing the current legal consumer framework

Points for discussion:

- Where do you face issues in the enforcement of the existing legislation (CRD, UCPD) to address greenwashing and premature obsolescence practices (e.g. because of vague provisions in the legislation, lack of expertise and means, non-dissuasive sanctions, cross border dimension, etc.) ?;
- What is your experience with the administrative burden (resources, expertise, costs) in the enforcement of these practices?
- What would you expect from a CPC cooperation in this area?

b) Improving consumer law to better tackle premature obsolescence

Preliminary findings have identified the following solutions:

- Prohibition of existing practices in the area of product premature obsolescence that are known to cause consumer harm (e.g. software related obsolescence; and hardware-related obsolescence, psychological obsolescence, …).
- General prohibition of "planned obsolescence"[3] i.e. product failures which were deliberately planned.
- General prohibition of "premature obsolescence" i.e., early product failure defined as either when more than e.g. 10% (to be defined) of the products sold fail before the minimum lifetime set for the product type (to be set at EU level e.g. based on national experiences) or when tests run by independent parties show that the expected lifespan of the product is below the minimum lifetime set for the product type.

Points for discussion:

- What are your views on these options? What challenges would you see in enforcing (some of) them?
- Would you consider some more effective than others in addressing the problem?
- Would they require new enforcement mechanisms or capacities that you do not have currently?
- What burden would they entail for you (annual resources in training of staff, new staff, costs etc)?
- Would you have other options not listed here to put forward?

[3] Inspired by the French law "The Law on energy transition for green growth (2015) Available here, the Belgium proposal "Proposition de loi visant à lutter contre l'obsolescence organisée et à soutenir l'économie circulaire.", and the Italian proposal "Legislative proposal S.615 "Modifications to Legislative Decree 206/2005 and other provisions to fight the planned obsolescence of consumer products", Art. 1. Available here: here.

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c) *Improving consumer law to better tackle green washing*

Preliminary findings have identified the following solutions:

- Prohibit that information on environmental characteristics/impact do not fulfil a minimum set of compliance criteria (e.g. as identified by the multi-stakeholder group on environmental claims)[4]
- Ban/blacklist all "environmental claims" that do not clearly and prominently qualify the specific environmental benefit or benefits of the product or that are not substantiated by a specific scheme
- Ban/blacklist vague statements such as "environmentally friendly", "ecological", green", "sustainable", "eco" (unless the "environmental excellence" of the product has been proven e.g. via certain trustworthy ecolabels or life cycle assessment studies).

Points for discussion:

- What are your views on these options? What challenges do you see in enforcing (some of) them?

- Would you consider some more effective than others in addressing the problem?

- Would they require new enforcement mechanisms or capacities (including technical expertise or human resources) that you do not have currently?

- What burden would they entail for you (annual resources in training of staff, new staff, costs etc)?

- Would you have other options not listed here to put forward?

d) *On potential new provisions on 'mandatory consumer information on environmental characteristic, durability, reparability and software' and 'minimum criteria on transparency and reliability for sustainability logos and information tools'*

A preliminary list of possible elements has been identified in the 'Briefing Note' developed by the contractor of the preparatory study ICF, see also the background note on WIKI).

Points for discussion:

- What are your views on these options? What challenges do you see in enforcing (some of) them?

- Would you consider some more effective than others?

- Would they require new enforcement mechanisms or capacities (including technical expertise or human resources) that you do not have currently?

- What burden would they entail for you (annual resources in training of staff, new staff, costs etc)?

- Would you have other options not listed there to put forward?

[4] See compliance criteria here https://ec.europa.eu/info/sites/info/files/compliance_criteria_2016_en.pdf. For instance, they cover the following points:

- Claims need to reflect main environmental impacts of the product over its life cycle
- Claims should be clear to which aspects of the product or its life cycle they refer to
- Claims should be meaningful in the relevant market
- The benefit claimed should not result in an undue transfer of impacts
- Comparisons should not be misleading but objective and relevant
- Companies shall not make claims about aspects that are required by law

Minutes of the meeting with the CPC (prepared by DG JUST)

Units JUST.E3 and JUST.E1 organized a CPC meeting on 14 October which aimed to discuss problems and solutions related to effective enforcement of issues linked to the green empowerment. The aim of the meeting was to discuss concrete enforcement challenges and potential solutions but to also get evidence from authorities that could help the work on the impact assessment.

The meeting was attended by a big number of CPC authorities (20 EEA MSs were represented) and had a constructive spirit. The authorities welcomed the Commission's initiative to improve the framework enabling consumers' participation in the green transition. Authorities reported on their enforcement experiences (mostly on premature obsolescence and green claims) and commented on the options preliminarily identified that could help in improving the situation.

Authorities were invited to take part in bilateral interviews with the contractor of the preparatory study ICF. CPC authorities welcomed the exchange, and it could be discussed further whether there is a possibility and appetite to have regular discussions on sustainability issues between enforcers and policy makers.

The following main topics were discussed:

The Chair opened the meeting and highlighted that enforcement is crucial in getting consumers to act on the basis of environmental information. This is because sound enforcement promotes reliability of information. According to the ICF (contractor of the preparatory study) presentation, **public authorities find it difficult to enforce the current general EU consumer rules (UCPD) or specific national rules in the area of planned obsolescence**. One of the main reasons concern the difficulty in proving intent and analyzing parts of a product that might have contributed to premature obsolescence. **On greenwashing, the views of public authorities on the enforcement of the current general EU consumer rules (UCPD) where evenly split between perceiving the enforcement of the current rules as effective and those perceiving the enforcement of these rules as ineffective**. The reported reasons for perceiving them as ineffective was difficulties in proving environmental claims as unfounded or unsubstantiated, often due to a lack of technical knowledge to analyse the evidence supplied by traders. Second, proving the negative impact of the claim on consumer's transactional decision was also often difficult

On the discussion on **premature obsolescence** FR reported on two cases they had and explained that it was difficult to prove the intent. SE added that prohibition measures relying on intent could be too difficult to enforce and instead suggested measures based on information requirements. ICF mentioned that prohibition measures can take a threshold approach [by setting an expected minimum lifespan and looking at cases where more than 10% of the products got obsolete before], thereby avoiding the problem of intent. SE and ICT agreed that the main challenge of such a measure would be to determine and to assess whether the threshold had been met. BE, expressed support for applying a threshold approach or using information requirements. NL and SE, raised the possibility of establishing a European certified testing facility to help analyze products in relation to premature obsolescence.

On **Greenwashing**, NL, FIN and SE agreed that lack of technical knowledge is one of the main barriers in assessing and enforcing green claims. NL, supported the banning of the most frequent and unfounded environmental claims whilst agreeing with SE in that this would only be a partial solution in tackling greenwashing. Based on a national sweep of cases NL highlighted the importance of striking the right balance between allowing environmental aspirations to stimulate green markets and combatting greenwashing. A balance between providing consumers with relevant information and not overloading consumers with information, should also be struck. SE, was in favor of updating of the UCDP guidance document rather than amending UCPD itself.

On **measures related to information requirements**, SE said that information requirements should take into account that different information is needed for different sectors and consumers. SE expressed support for element 1a) if the information was provided in a simple manner, such as a labelling scheme. On repair SE supported measures 3a) and 3b) and measure 4a) on software updates adding that information on the price of updates should be included in the measure. On durability, SE highlighted that also in case 'no commercial guarantee' is offered, consumers should be made aware that the legal guarantee will still apply.

A8.8 Industry Survey

A8.8.1 Long-survey/interviews

More than 500 companies (retailers and manufacturers from various sectors) have been contacted through various means (both by email to general email addresses of the companies and to direct contacts of managers, and some by phone in the local language) but in spite of all efforts only 10 responses have been gathered from participants. The responses provided by 7 manufacturers and 3 retailers are detailed in a separate document for confidentiality reasons.

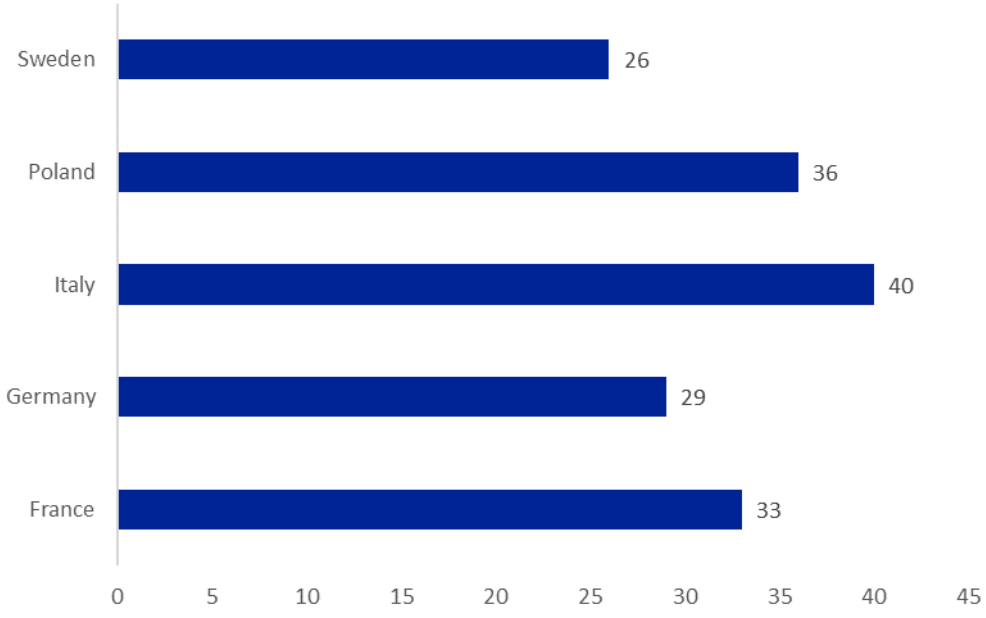
A8.8.2 CATI Survey

Given the low response rate of the industry survey, a CATI survey has been launched to complement the results of the online survey. Interviews took place across five different markets: Sweden, Poland, Italy, Germany and France and gathered responses from 164 companies. The respondents were retailers, manufacturers or service providers across a wide variety of product and service groups. A summary of the responses received can be consulted in the document below.

A8.8.2.1 Sample composition

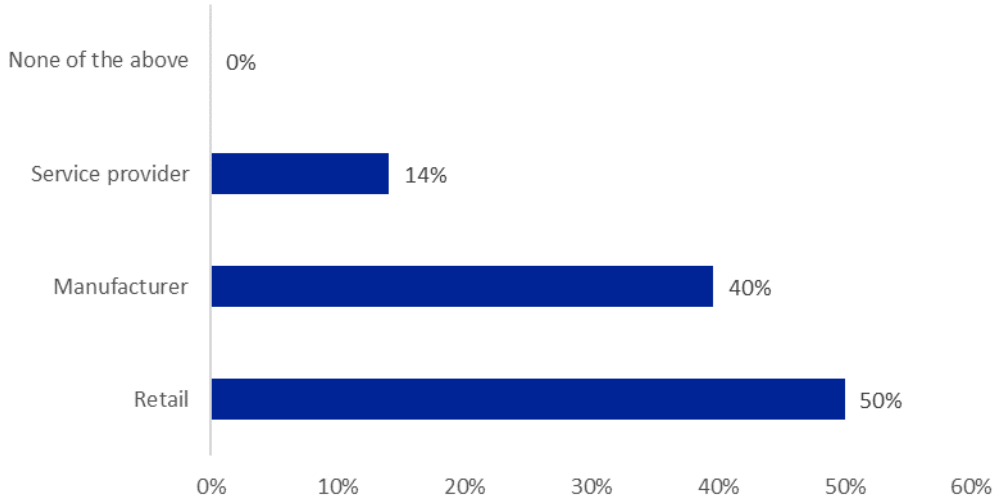
Interviews took place across five different markets: Sweden, Poland, Italy, Germany and France, proportions of which are shown in Figure A111.

Figure A111.Respondent market (N=164)



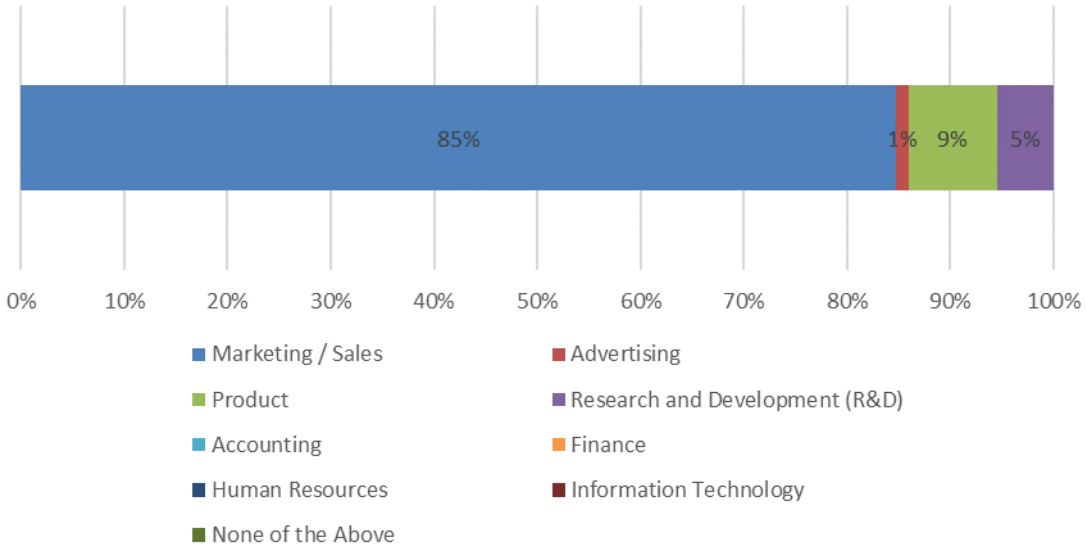
Interviews were across retailers, manufacturers, and service providers, the proportions of which are shown in Figure A112.

Figure A112. Which of the following best describes the industry segment of the company or organization for which you work? (N=164)



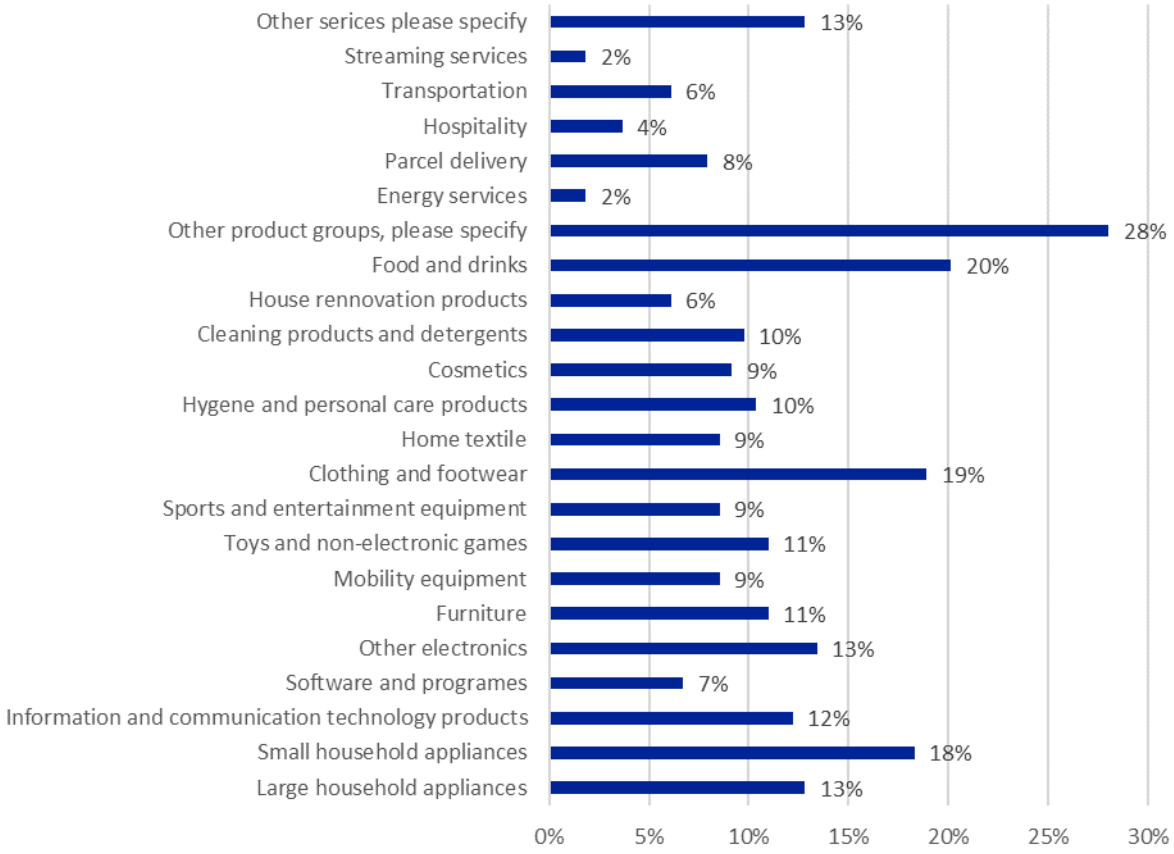
Respondents were asked about the department or functional role they occupied within their organisation. As shown in Figure A113, the majority (85%) of responses received were from those who worked in marketing or sales.

Figure A113. Which of the following best describes your department or functional role in the company or organization for which you work? (N=164)



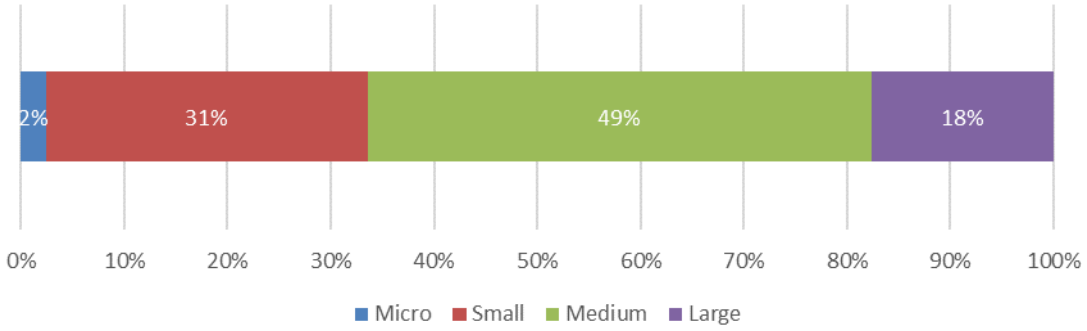
Interviews were conducted across a wide variety of product and service groups, a summary of which is shown in Figure A114. A single one of the relevant product groups was assigned to each respondent to be questioned about for the remainder of the survey.

Figure A114. Sector(s) in which your company operates (select all that apply): (N=164)



Finally, in this section, respondents were asked about the size of their organisation, the results of which are shown in Figure A115.

Figure A115. Please indicate the size of your company: (N=164)



A8.7.2.2 Lifespan and reparability

This section of the survey was asked only to those respondents in a sector that delivered products, as opposed to delivering services.

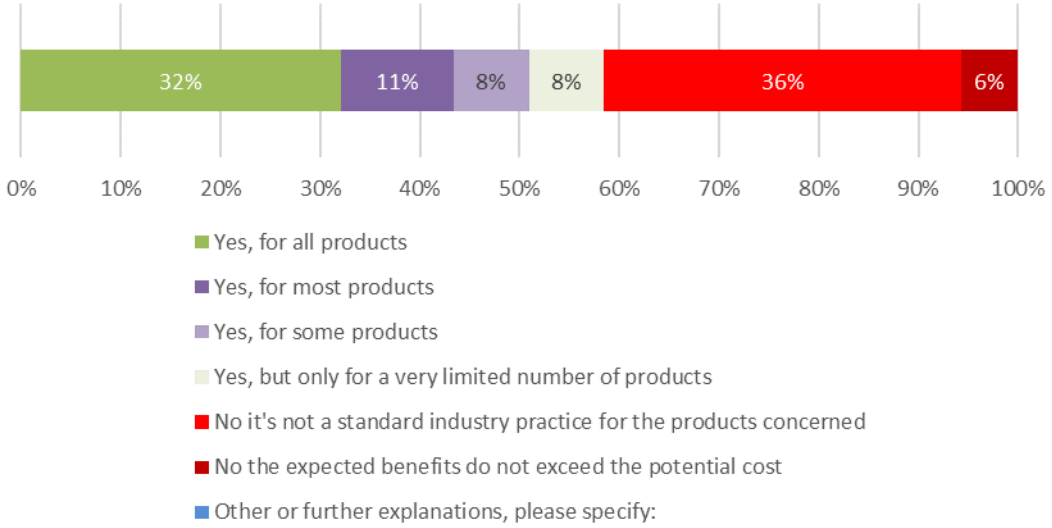
Manufacturers only

This subsection of the survey was asked only to those respondents in a sector that delivered produced products (as opposed to services) and who worked in the manufacturing industry.

These respondents were first asked if they provide commercial guarantees (beyond the legally mandated minimum) for the products they sell. As shown in Figure A116, just over half (58%) of respondents indicated that they did offer guarantees for at least some of their products, but only a third (32%) offered them on all products.

When it comes to reasons for not offering such guarantees, a third of respondents (36%) cited it not being standard industry practice, while only a very small number (6%) cited costs being too high.

Figure A116. Does your company provide commercial guarantees on the products it sells (beyond the legal guarantee of 2 years [3 years for Sweden])? (N=53)

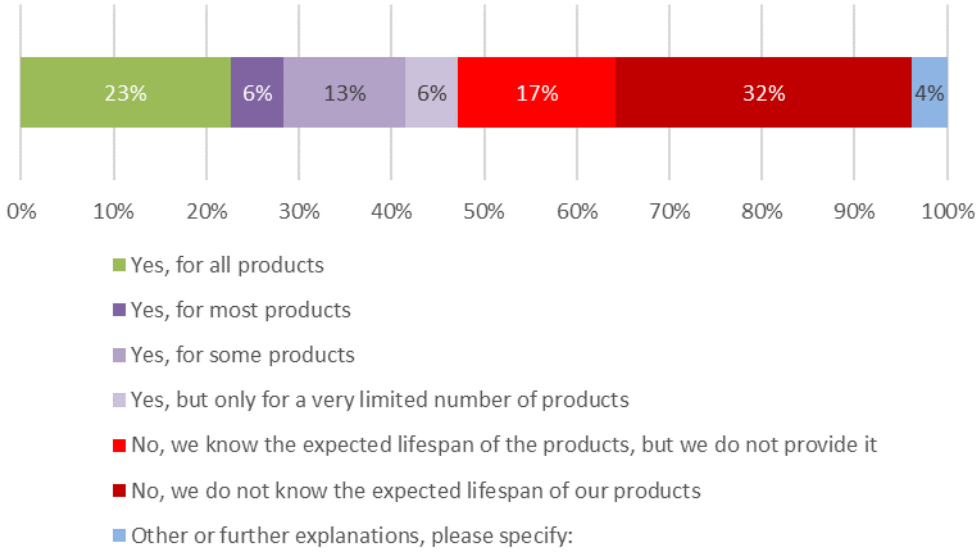


Respondents were then asked what the cost of providing a commercial guarantee on a product within their assigned product group. Respondents estimated the average cost to them of a 3-year commercial guarantee to be €617.00. Each additional year after this was estimated to result in an average additional cost of €15.42.

Respondents were then asked if they provide information on the expected lifespan of their products. A shown in Figure A117, just under half (47%) said that they provided this information, though only a quarter (23%) do so for all products they provide.

About a third (32%) of respondents said they did not know the expected lifespan of their products, while a significantly smaller number (17%) said they had this information but chose not to provide it.

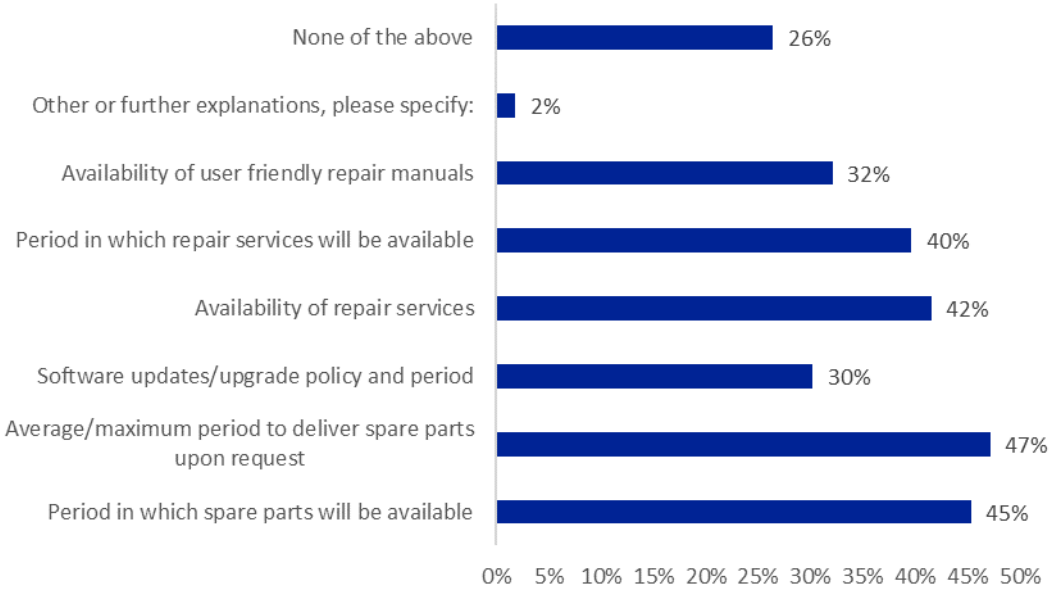
Figure A117. Does your company provide information on the expected lifespan (in years, cycles) of the products it sells? (N=53)



Respondents where then asked to estimate the cost to them of calculating and providing the expected lifespan of their products to consumers. The average cost estimated was €17,573.03 (N=33).

Respondents where then asked what other information they provided about the products they sell, the results of which are shown in Figure A118 below. The most common piece of information provided was the average/maximum period in which spare parts could be delivered, which was offered in almost half (47%) of cases. The least common information provided was the software update policy and period, which was provided in under a third (30%) of cases.

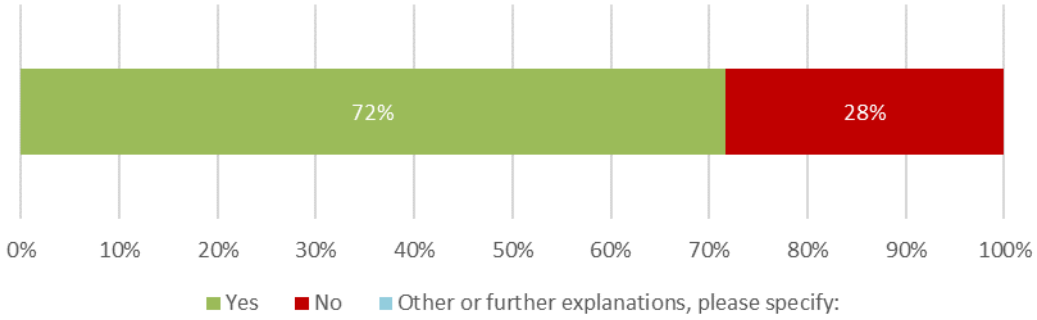
Figure A118. To support the repair of products, does your company provide the following information with the products it sells? (N=53)



Respondents were then asked what the cost of providing such information to consumers would be. The average cost estimated was €551.27 (N=33).

Respondents where then asked if they made distinction between different product categories. As shown in Figure A119, about three quarters (72%) answered that they did.

Figure A119. Do you make distinction between different product categories? (N=53)



Retailers only

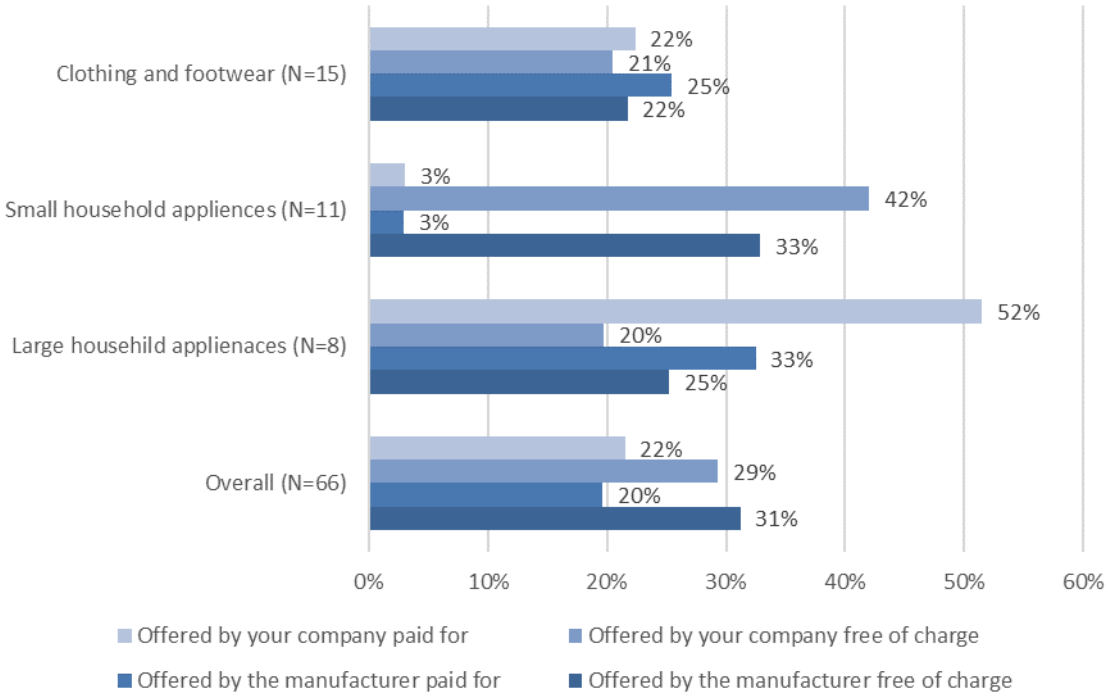
This subsection of the survey was asked only to respondents in sectors that provide products as opposed to services, and who worked in the retail industry.

Charts in this subsection of the analysis are broken down to show, in addition to the overall result, three of the most commonly surveyed product groups; large household appliances, small household appliances and clothing and footwear.

These respondents were first asked to estimate what proportion of their products came with a commercial guarantee beyond the legally required guarantee. As shown in Figure A120, the most common type of guarantee offered overall was a guarantee offered by the manufacturer free of charge, which on average, respondents estimated was offered in 31% (N=66) of cases. The least most offered guarantee was one that was offered by the manufacturer and that customers would have to pay for, which respondents estimated was offered for 20% (N=66) of products.

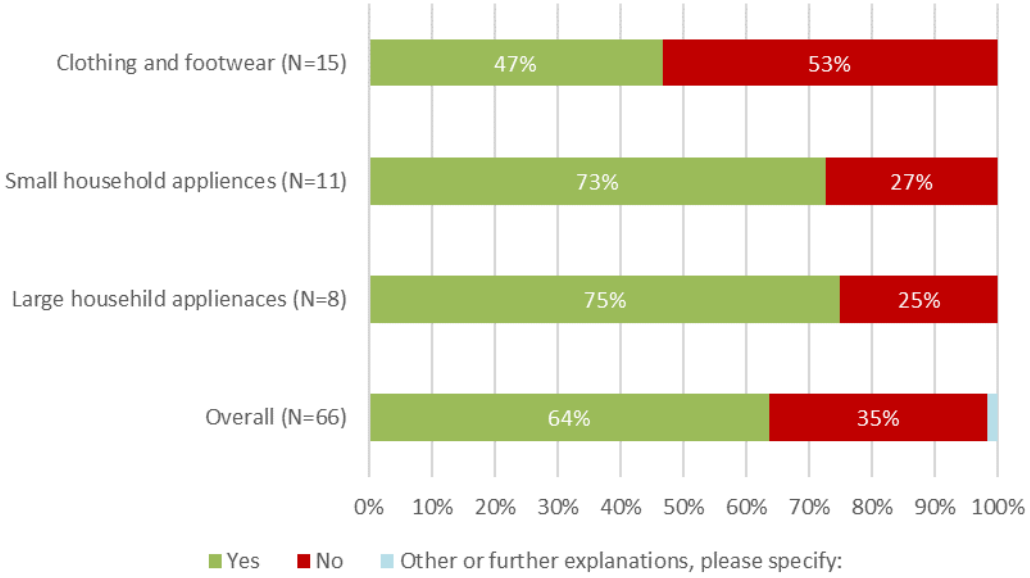
In terms of product groups, products in the category of large household appliances came with free commercial guarantees much more commonly than paid for guarantees, a stark contrast to small household appliances where free commercial guarantees were offered in only 3% (N=11) of cases, but free guarantees much more often.

Figure A120. What share of the products offered by your company come with a commercial guarantee (beyond the 2 year [3 years for Sweden] legal guarantee)? (mean estimates)



Respondents were then asked if they made distinction between different product categories. As shown in Figure A121, Overall 64% (N=66) answered that they did.

Figure A121. Is there distinction between different product categories?



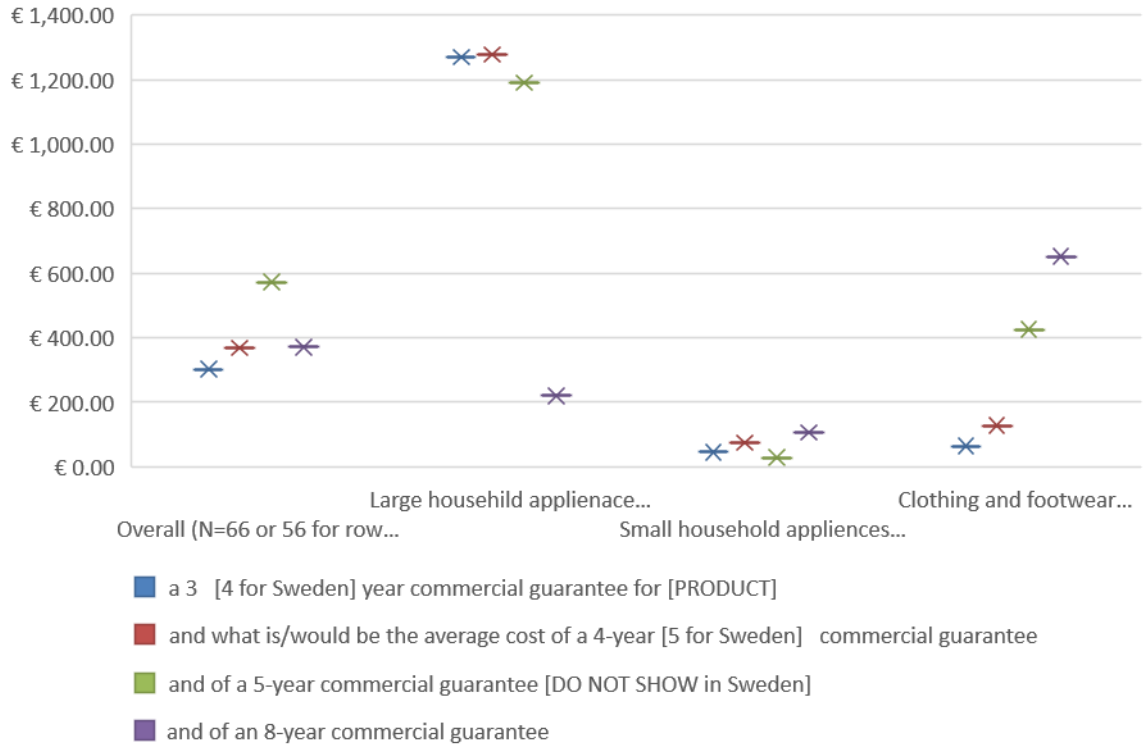
Respondents were then asked to estimate the cost to them of providing a commercial guarantee on their products beyond the legally mandated period, the results of which are shown in Figure A122. Overall, on average respondents estimated cost to them of a 3-year commercial guarantee would be € 302.44 (N=66). The cost did not rise proportionally with each additional year, as the cost of an 8-year guarantee was

estimated to be roughly the same as that of a 4-year guarantee (€ 368.55, N=66 vs € 370.70, N=66).

In terms of product categories, large household appliances had an extremely high average estimated cost compared to other categories, with the average estimated cost of providing a 3-year commercial guarantee being € 1,269.64 (N=8). Interestingly, this cost was estimated to fall if the guarantee were extended to 4 or 8 years.

The product category where costs rose the most sharply as years were added to the guarantee was clothing and footwear, with an average cost of € 244.56 per year of the guarantee.

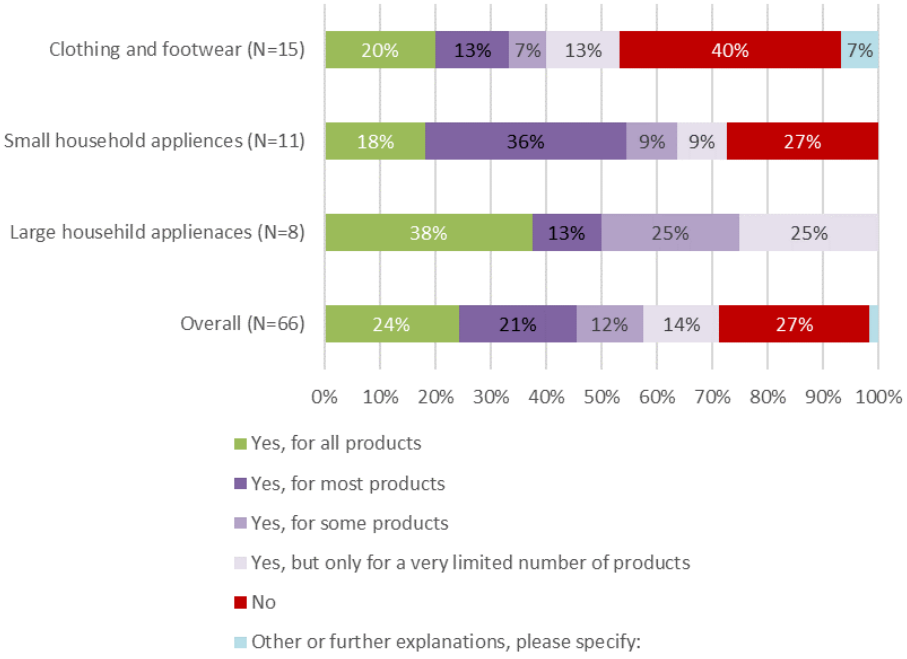
Figure A122. What is/would be the average cost of providing… (mean estimates)



Respondents were then asked if manufacturers provided them with information about the expected lifespan of their products. Overall, as shown in Figure A123, around three quarters (71%) of respondents said that they received this information about at least some products, but only a quarter (24%) received it for all of them.

Notably, in the category of large household appliances, all (100%) respondents reported receiving this information for at least some products.

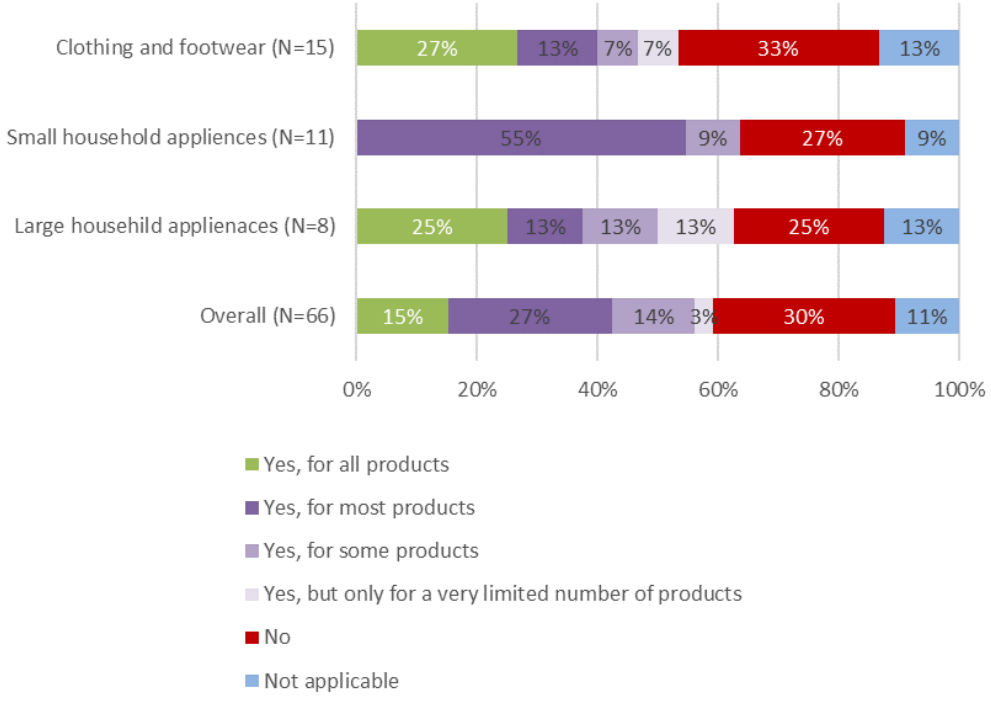
Figure A123. Do manufacturers provide information about the expected lifespan of products?



Respondents were then asked in cases where manufacturers did not provide this information, weather they provided it themselves. As shown in Figure A124, overall just over half (59%) of respondents indicated they provided this information for at least some products, but only a small proportion (15%) reported providing it for all products.

Notably, in the category of small household appliances, no (0%) respondents reported providing this information for all products.

Figure A124. When manufacturers do not provide that information, does your retail company estimate the expected lifespan of the products it sells?

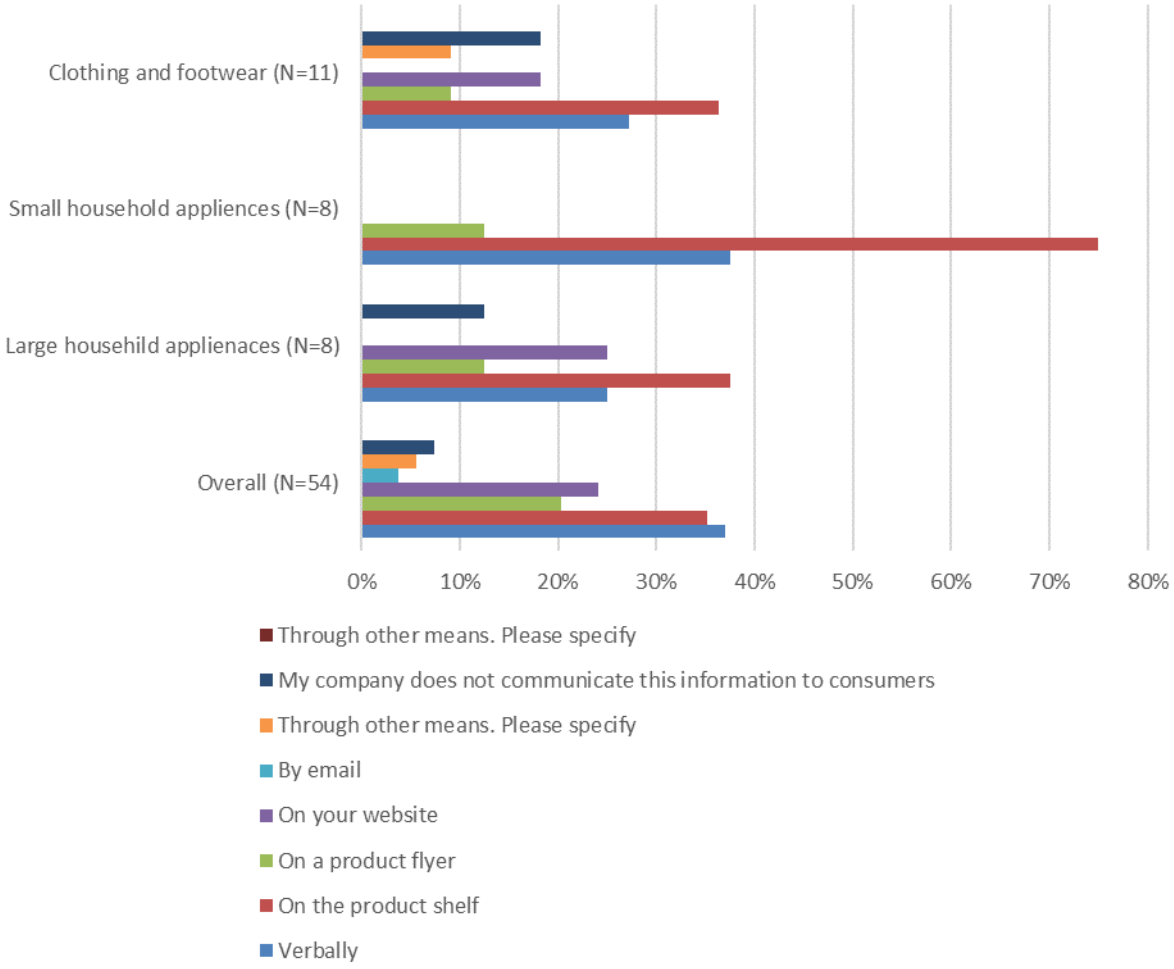


Respondents where then asked how they provide this information. Overall, as shown in Figure A125, the most common form of communication was verbal, which was used by around a third (37%) of respondents, followed by signage on the product shelf (35%) and then their website (24%).

As a write-in response, one respondent mentioned giving this information on the product receipt.

In each of the major categories (large household appliances, small household appliances and clothing and footwear), the most common form of communication used was signage on the product shelf.

Figure A125. How does your company communicate this information to consumers?

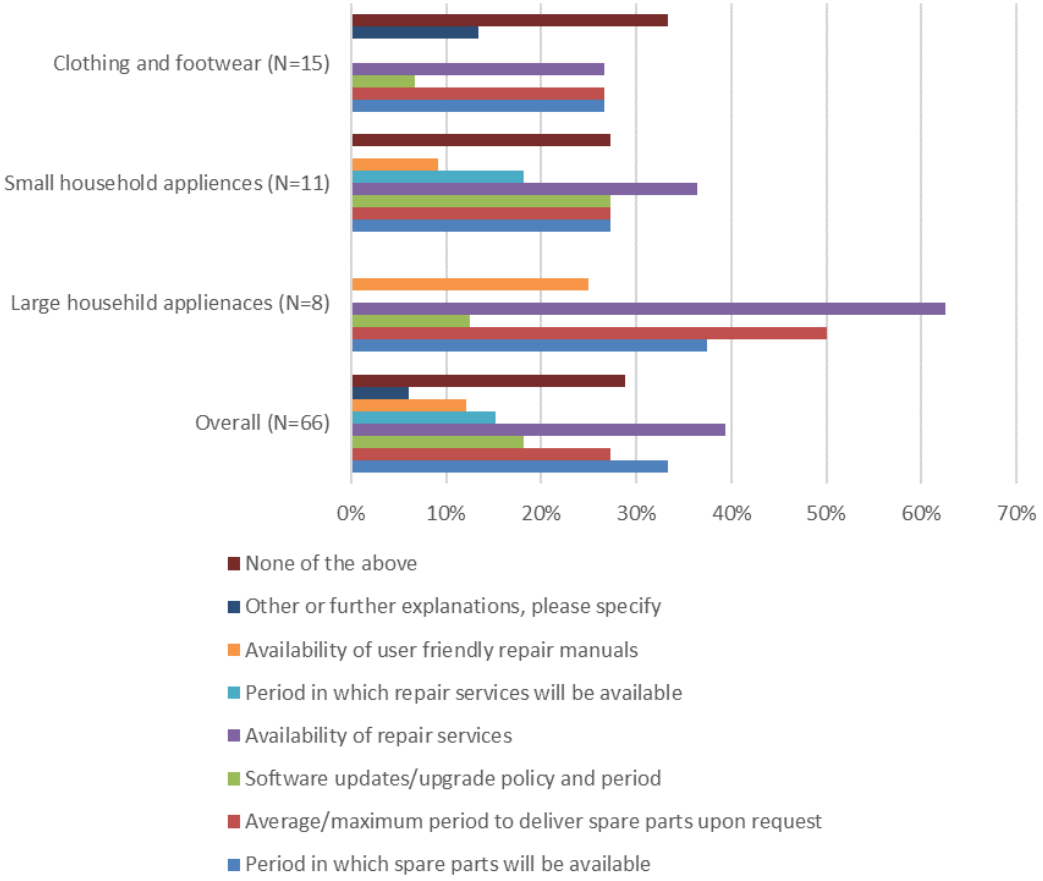


Respondents were then asked what additional information they were provided by manufacturers. As shown in Figure A126, just under a third (29%) of respondents reported receiving no information at all. The most common information received was the availability of repair services (39%), and the least common was availability of repair manuals (12%).

As a write-in response, one respondent mentioned that the manufacturer does provide this information, but only if prompted to do so by the retailer, not as standard.

In the category of large household appliances, no respondents (0%) reported receiving no information at all.

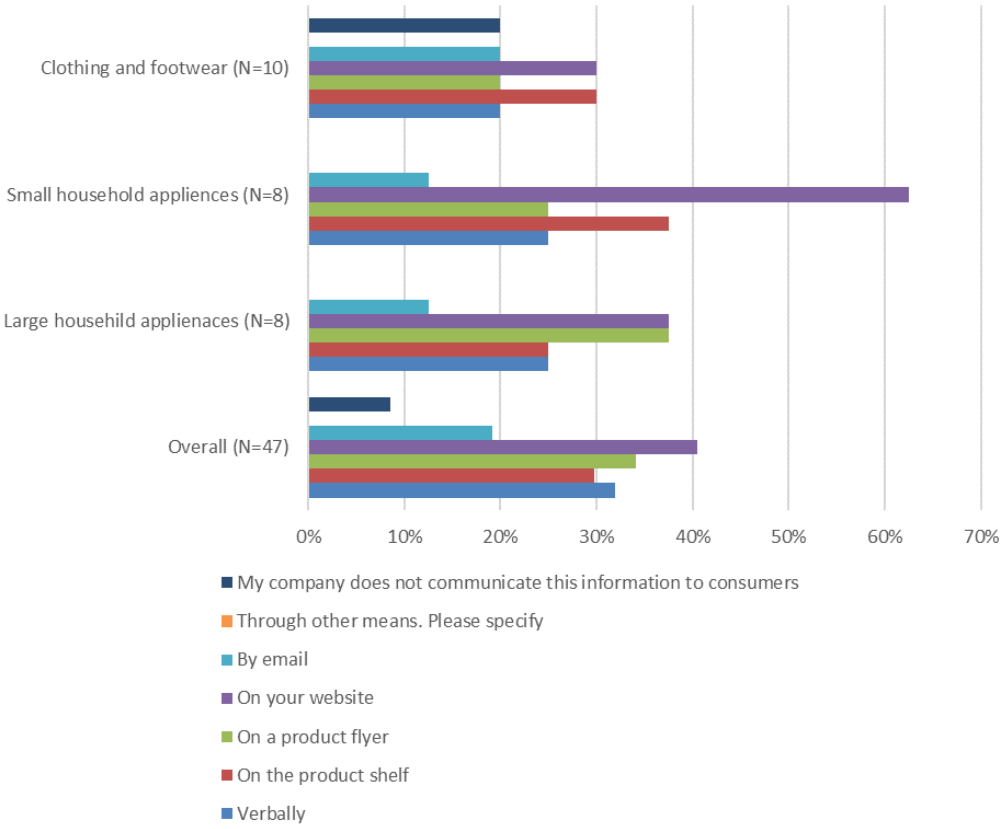
Figure A126. Do manufacturers provide you with any of the following information to support the repair of their products?



Respondents that reported receiving this information were then asked how they passed it on to consumers. As shown in Figure A127, overall about a tenth (9%) of consumers indicated they did not pass on this information on to consumers at all. The most common means of providing information was on the respondent's website, which was used in a fifth (40%) of cases, followed by on a product flyer (34% of cases) and then verbally (32% of cases).

In the categories of small household appliances and large household appliances, no respondents (0%) reported passing on this information to consumers.

Figure A127. How does your company communicate this information to consumers?



Manufacturers and retailers

This subsection of the survey was asked to all respondents who worked in sectors that produced products as opposed to services.

Charts and tables in this subsection of the analysis are broken down to show, in addition to the overall result, four of the most commonly surveyed product groups: large household appliances, small household appliances, information and communication technology products and clothing and footwear.

First, respondents were asked what the impact on their business would be of the introduction of various legal requirements, on a scale of no impact to very high impact. In order to facilitate comparison between these measures, each response option on the scale was assigned a score from 0 to 5, and a mean score calculated for each measure, as shown in Table A13 below:

Table A13. Scores assigned

Response	Score assigned
None	0
Very low	1
Low	2
Moderate	3
High	4
Very high	5

Not applicable/relevant/possible responses were excluded from this calculation and the base. The calculated mean scores are shown in Table A14. Greyed-out cells in the table indicate where scores where not calculated due to a low base.

Overall, the most impactful requirement was shown to be obligation to provide information on aspects in the product's design that can cause its early failure (2.61), followed by stronger consumer protection against premature obsolescence practices with a mean response of 2.55. The least impactful requirement obligation to provide information on the duration of the commercial guarantee for all products (2.12).

In the large household appliances sector, there were higher-than-moderate impacts cited in the case of obligation to provide information on aspects in the product's design that can cause its early failure (3.38), obligation to provide information on the lifespan of products including repairs for all products (3.13) and stronger consumer protection against premature obsolescence practices (3.11).

In the small household appliances sector, there were higher-than moderate impacts cited in the cases of obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product, obligation to provide information on the lifespan of products including repairs for all products and obligation to provide information on aspects in the product's design that can cause its early failure (all 3.08).

The full results of this question are shown in Figure A128 to Figure A137.

Table A14. What would be the impact on your business of the following legal requirements

Legal requirement	Mean score overall	Mean score large household appliances	Mean score small household appliances	Mean score information and communication technology products	Mean score clothing and/or footwear
Obligation to provide information on the duration of the commercial guarantee for all products	2.12 (N=97)	2.56 (N=9)	2.58 (N=12)	2.22 (N=9)	1.71 (N=14)
Obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product	2.26 (N=93)	2.22 (N=9)	3.08 (N=13)	2.50 (N=8)	2.36 (N=14)
Obligation to provide information on the expected lifespan of products without repair for all products	2.53 (N=91)	3.00 (N=8)	2.92 (N=12)	2.88 (N=8)	2.46 (N=13)
Obligation to provide information on the lifespan of products including (minor/	2.49 (N=93)	3.13 (N=8)	3.08 (N=12)	2.67 (N=9)	2.29 (N=14)

Legal requirement	Mean score overall	Mean score large household appliances	Mean score small household appliances	Mean score information and communication technology products	Mean score clothing and/or footwear
reasonable) repairs for all products					
Obligation to provide information on aspects in the product's design that can cause its early failure (for example, by providing information on the occurrence of early failure in the history of the product sales to date)	2.61 (N=96)	3.38 (N=8)	3.08 (N=12)	3.00 (N=9)	2.07 (N=14)
Obligation to provide information on the period in which spare parts will be available	2.43 (N=91)	2.78 (N=9)	2.82 (N=11)	2.00 (N=8)	2.69 (N=13)
Obligation to provide information on maximum period to deliver spare parts upon request	2.45 (N=89)	2.89 (N=9)	2.82 (N=11)	2.50 (N=8)	2.62 (N=13)
Obligation to provide information on software/updates policy and period	2.40 (N=78)	2.88 (N=8)	2.73 (N=11)	2.13 (N=8)	2.46 (N=13)
Obligation to provide information on availability of repair services	2.41 (N=92)	2.33 (N=9)	3.00 (N=12)	2.50 (N=8)	2.46 (N=13)
Availability of user-friendly repair manuals	2.44 (N=88)	2.55 (N=9)	3.00 (N=12)		2.41 (N=12)
Stronger consumer protection against premature obsolescence practices	2.55 (N=85)	3.11 (N=9)	3.00 (N=12)	2.44 (N=9)	2.23 (N=13)
Stronger consumer protection against planned (intentional) obsolescence practices	2.37 (N=90)	2.89 (N=9)	2.92 (N=12)	2.67 (N=9)	2.07 (N=14)

Figure A128. What would be the impact on your business of the following legal requirements - Obligation to provide information on the duration of the commercial guarantee for all products

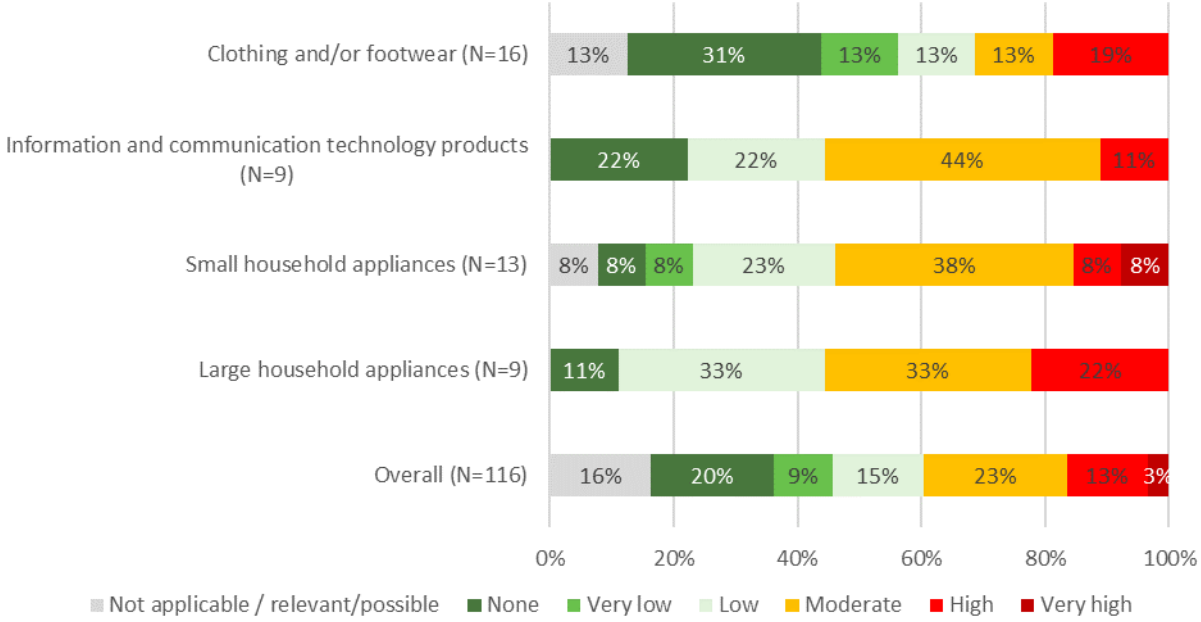


Figure A129. What would be the impact on your business of the following legal requirements - Obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product

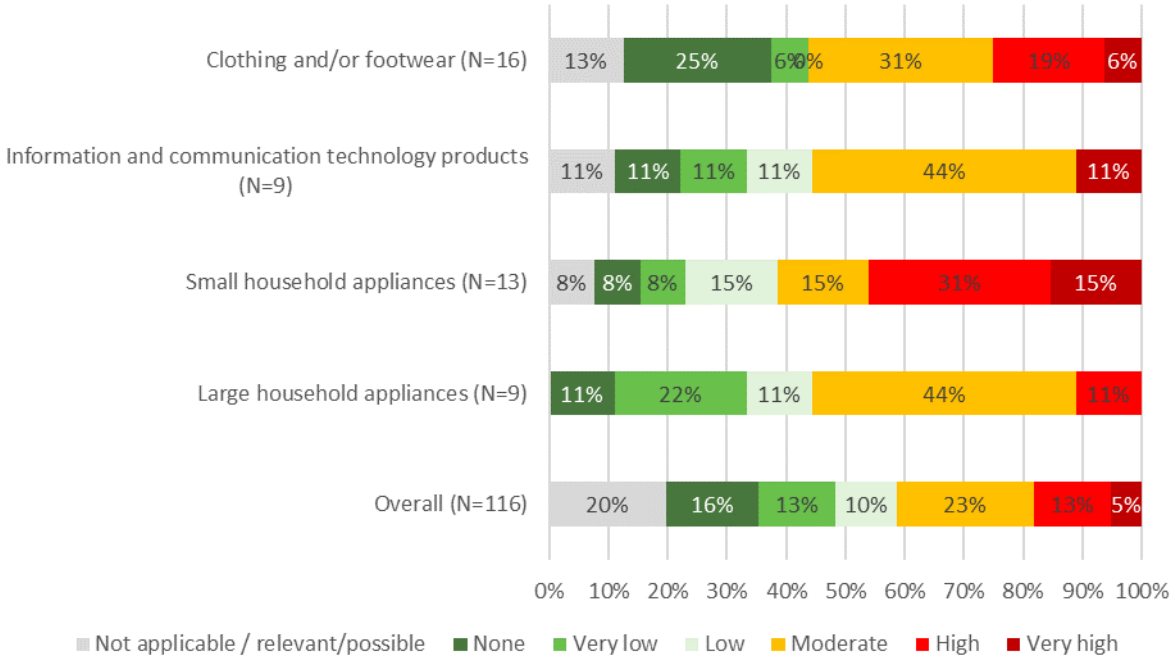


Figure A130. What would be the impact on your business of the following legal requirements - Obligation to provide information on the expected lifespan of products without repair for all products

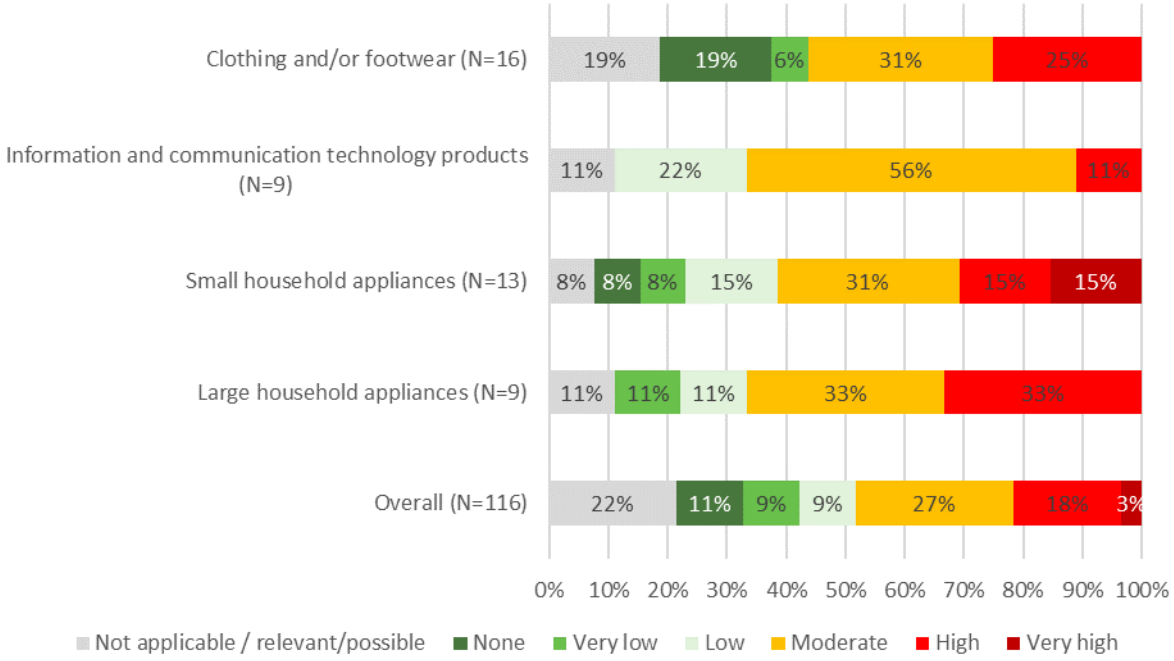


Figure A131. What would be the impact on your business of the following legal requirements - Obligation to provide information on aspects in the product's design that can cause its early failure (for example, by providing information on the occurrence of early failure in the history of the product sales to date)

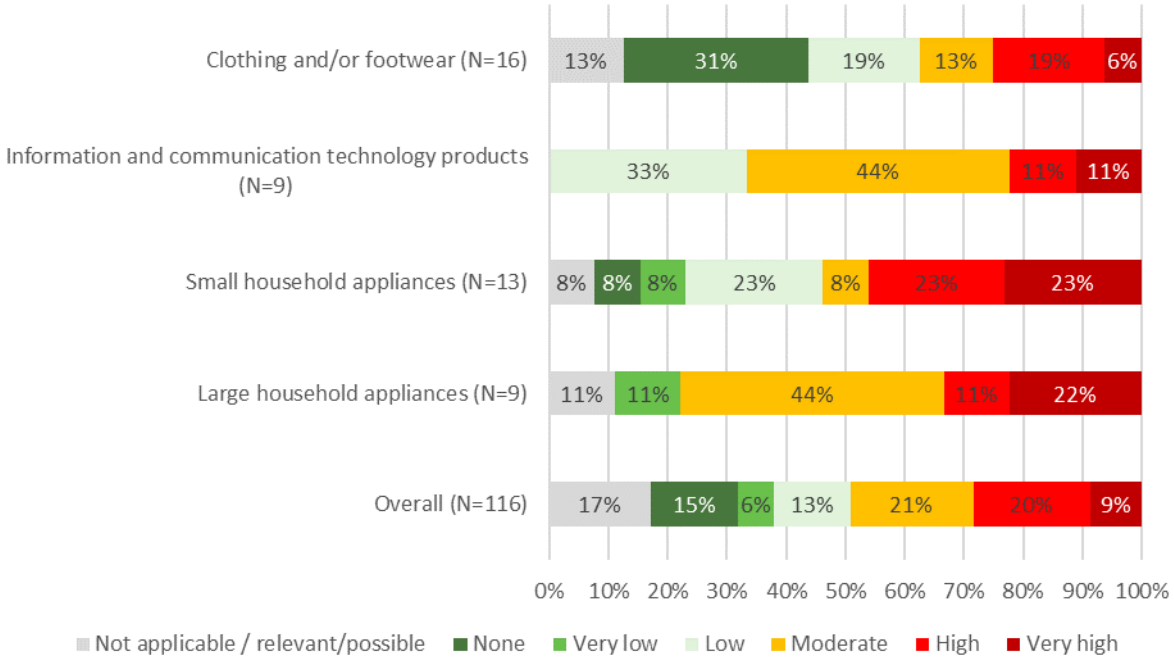


Figure A132. What would be the impact on your business of the following legal requirements - Obligation to provide information on the period in which spare parts will be available

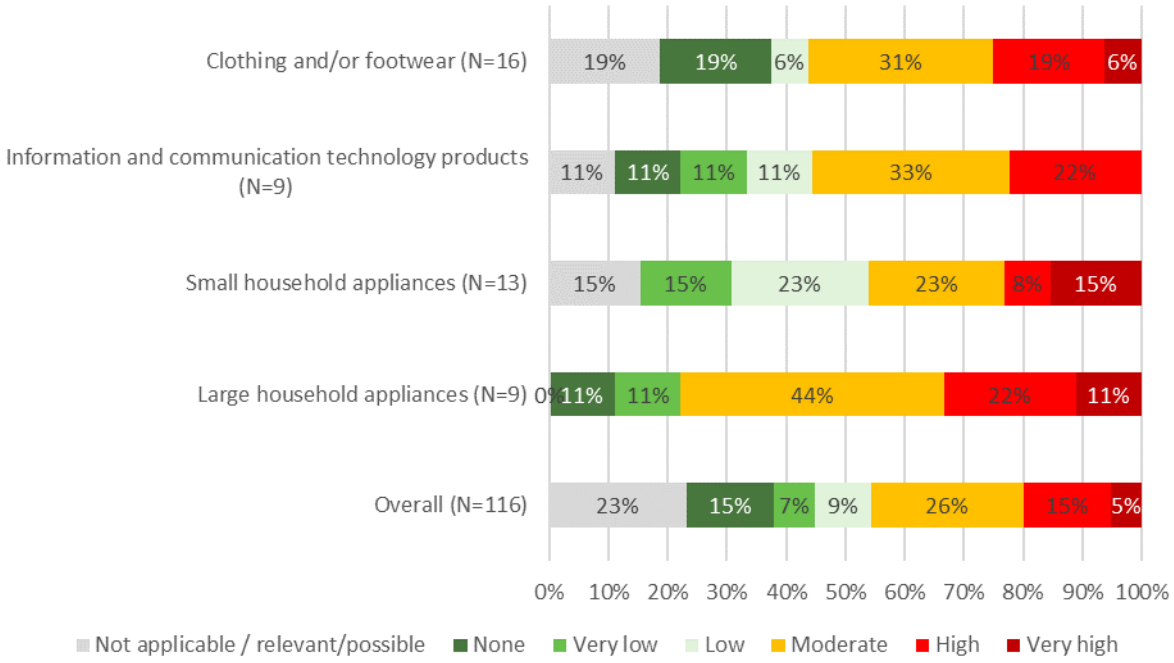


Figure A133. What would be the impact on your business of the following legal requirements - Obligation to provide information on software/updates policy and period

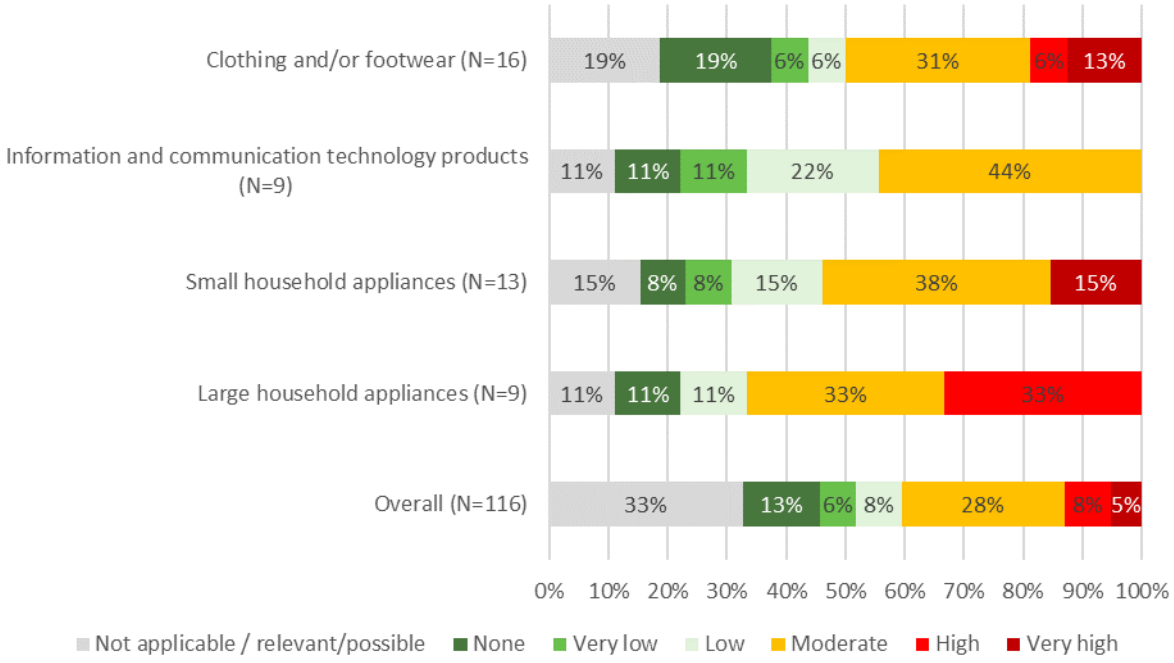


Figure A134. What would be the impact on your business of the following legal requirements - Obligation to provide information on availability of repair services

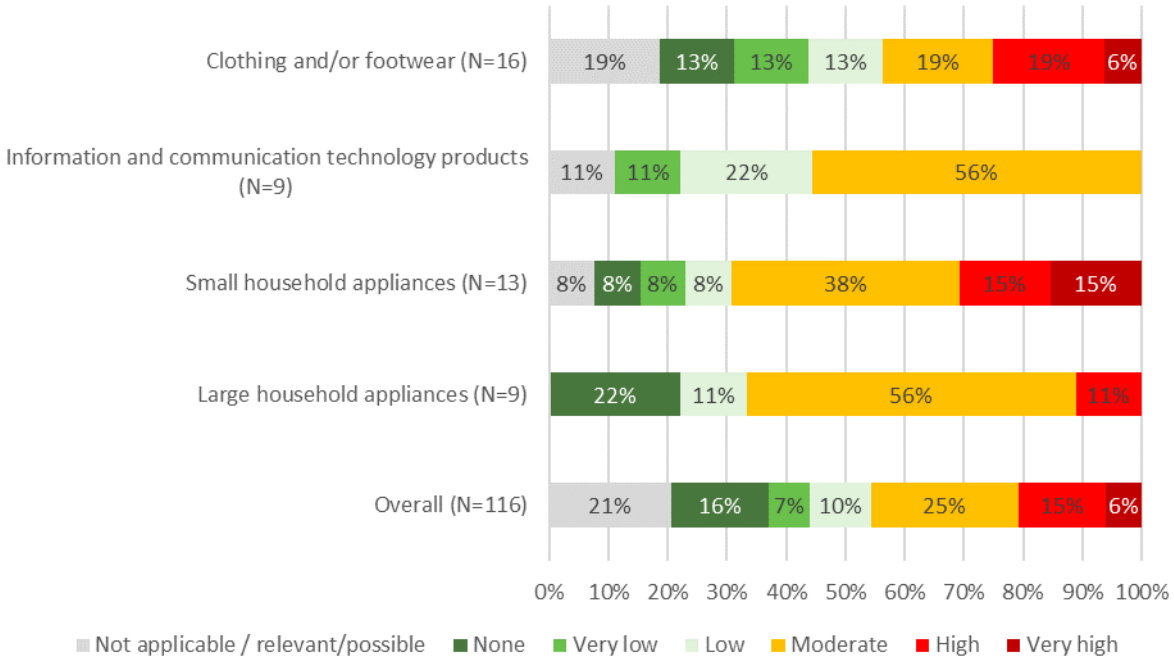


Figure A135. What would be the impact on your business of the following legal requirements - Availability of repair manuals

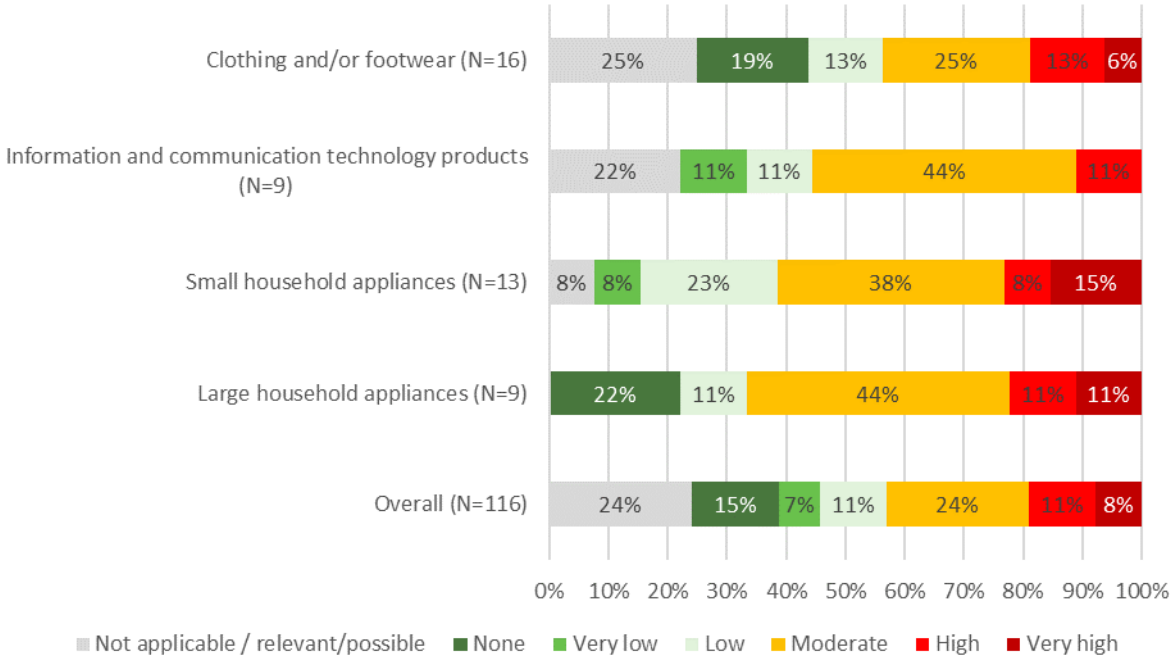


Figure A136. What would be the impact on your business of the following legal requirements - Stronger consumer protection against premature obsolescence practices

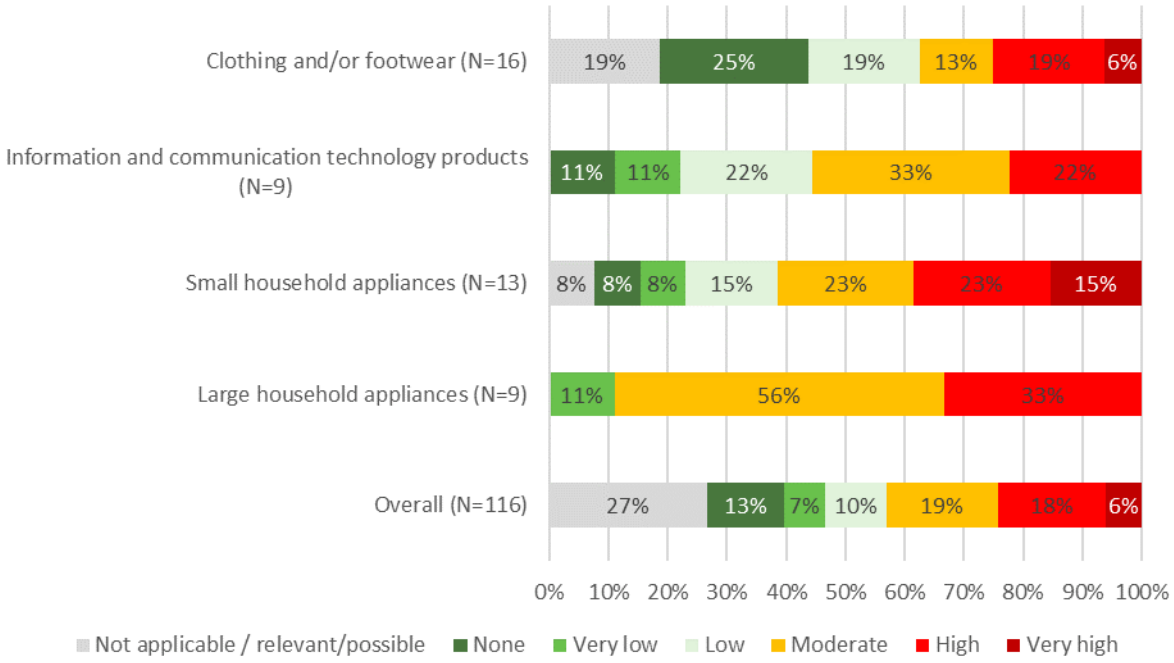
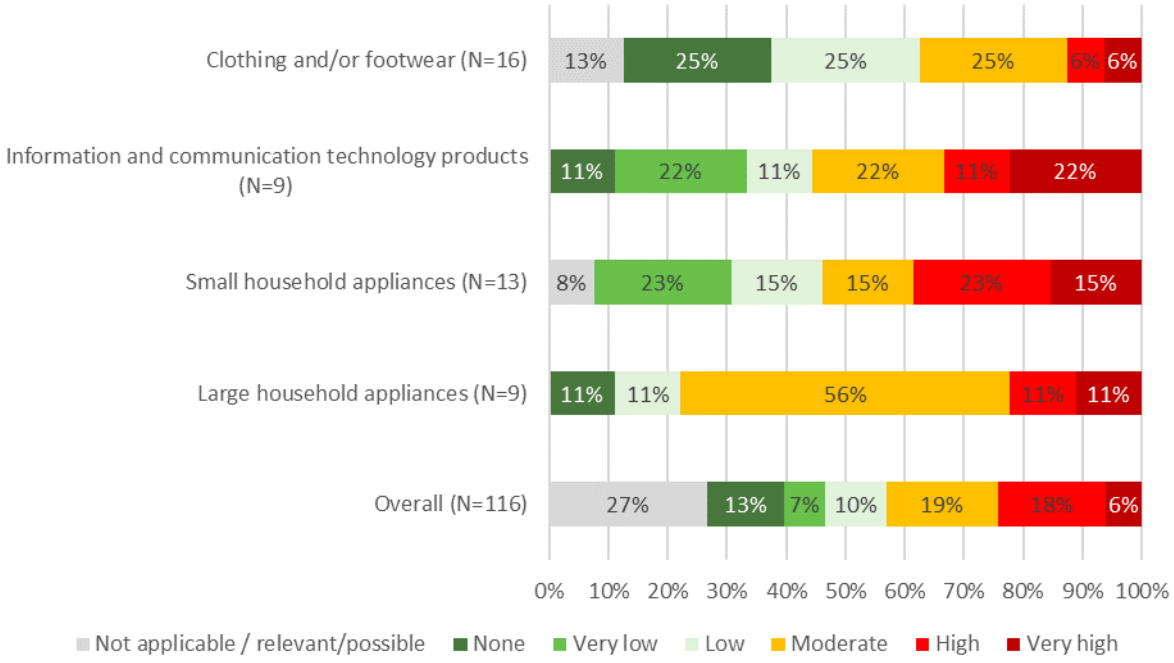


Figure A137. What would be the impact on your business of the following legal requirements - Stronger consumer protection against planned (intentional) obsolescence practices



Following this, respondents were asked what the costs for their business would be of the introduction of various legal requirements, on a scale of no cost to very high cost. In order to facilitate comparison between these measures, each response option on the scale was assigned a score from 0 to 5, and a mean score calculated for each measure, as shown in Table A15 below:

Table A15. Scores assigned

Response	Score assigned
None	0
Very low	1
Low	2
Moderate	3
High	4
Very high	5

Not applicable/relevant/possible responses were excluded from this calculation and the base. The calculated mean scores are shown in Table A16.

Overall, the most costly requirement was shown to be obligation to provide information on aspects in the product's design that can cause its early failure with a mean response of 2.25, followed by obligation to provide information on the lifespan of products including (minor/ reasonable) repairs for all products, with a mean response of 2.33. The least costly requirements were obligation to provide information on the duration of the commercial guarantee for all products and obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product, both with a mean response of 2.44.

In the large household appliances sector, there were higher-than-moderate costs cited in the case of obligation to provide information on the expected lifespan of products without repair for all products (3.50), obligation to provide information on the expected lifespan of products without repair for all products (3.38) plus obligation to provide information on the period in which spare parts will be available, obligation to provide information on maximum period to deliver spare parts upon request and stronger consumer protection against premature obsolescence practices (all 3.11).

The full results of this question are shown in Figure A138 to Figure A148.

Table A16. What would be the impact on your business of the following legal requirements

Legal requirement	Mean score overall	Mean score large household appliances	Mean score small household appliances	Mean score information and communication technology products	Mean score clothing and/or footwear
Obligation to provide information on the duration of the commercial guarantee for all products	2.04 (N=94)	2.22 (N=9)	2.17 (N=12)	1.89 (N=9)	2.46 (N=13)
Obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product	2.04 (N=92)	2.56 (N=9)	2.15 (N=12)	1.78 (N=9)	2.27 (N=15)
Obligation to provide information on the expected lifespan of products without repair for all products	2.30 (N=96)	3.38 (N=8)	2.42 (N=12)	1.78 (N=9)	2.57 (N=14)

Legal requirement	Mean score overall	Mean score large household appliances	Mean score small household appliances	Mean score information and communication technology products	Mean score clothing and/or footwear
Obligation to provide information on the lifespan of products including (minor/ reasonable) repairs for all products	2.33 (N=100)	3.50 (N=8)	2.33 (N=12)	2.00 (N=9)	2.29 (N=14)
Obligation to provide information on aspects in the product's design that can cause its early failure (for example, by providing information on the occurrence of early failure in the history of the product sales to date)	2.45 (N=98)	2.78 (N=9)	2.73 (N=11)	2.00 (N=9)	2.27 (N=15)
Obligation to provide information on the period in which spare parts will be available	2.14 (N=96)	3.11 (N=9)	1.27 (N=11)	2.22 (N=9)	2.14 (N=14)
Obligation to provide information on maximum period to deliver spare parts upon request	2.25 (N=97)	3.11 (N=9)	2.45 (N=11)	2.33 (N=9)	2.36 (N=14)
Obligation to provide information on software/updates policy and period	2.12 (N=83)	2.78 (N=9)	2.63 (N=11)	1.89 (N=9)	2.21 (N=14)
Obligation to provide information on availability of repair services	2.14 (N=96)	2.78 (N=8)	2.36 (N=11)	2.38 (N=8)	2.27 (N=15)
Availability of user friendly repair manuals	2.14 (N=95)	2.67 (N=9)	2.58 (N=12)	2.38 (N=8)	2.29 (N=14)
Stronger consumer protection against premature obsolescence practices	2.13 (N=90)	3.11 (N=9)	2.75 (N=12)	2.00 (N=8)	2.21 (N=14)

Figure A138. What would be the costs for your business of the following legal requirements: Obligation to provide information on the duration of the commercial guarantee for all products

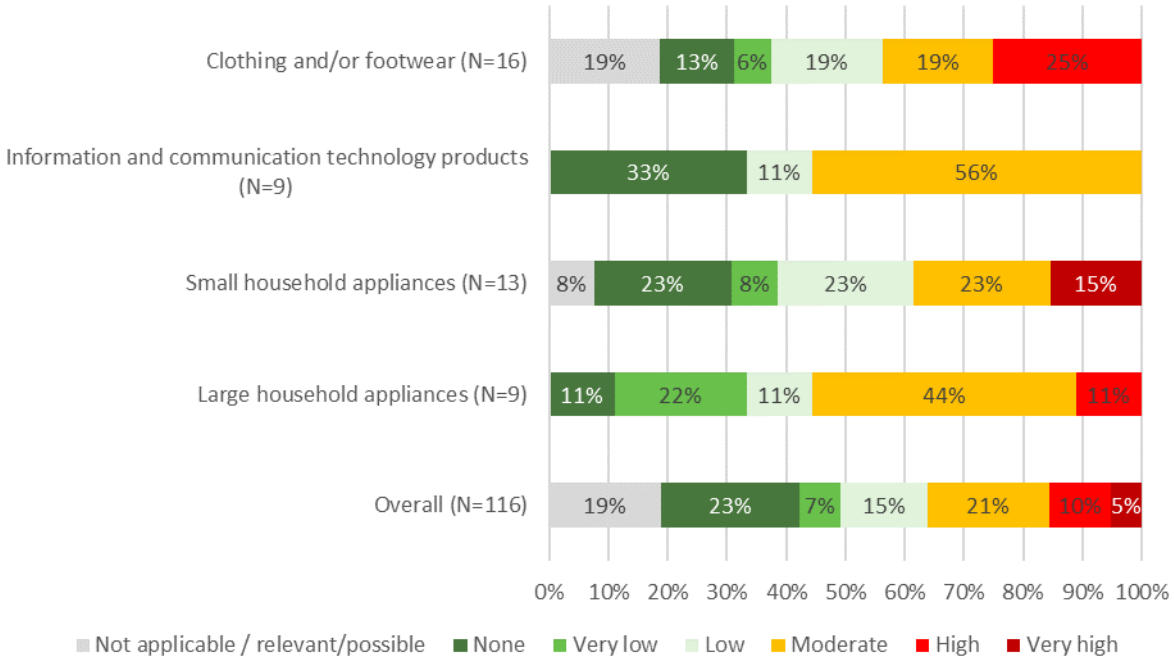


Figure A139. What would be the costs for your business of the following legal requirements: Obligation to expressly inform the consumer that no commercial guarantee of durability is provided for the given product

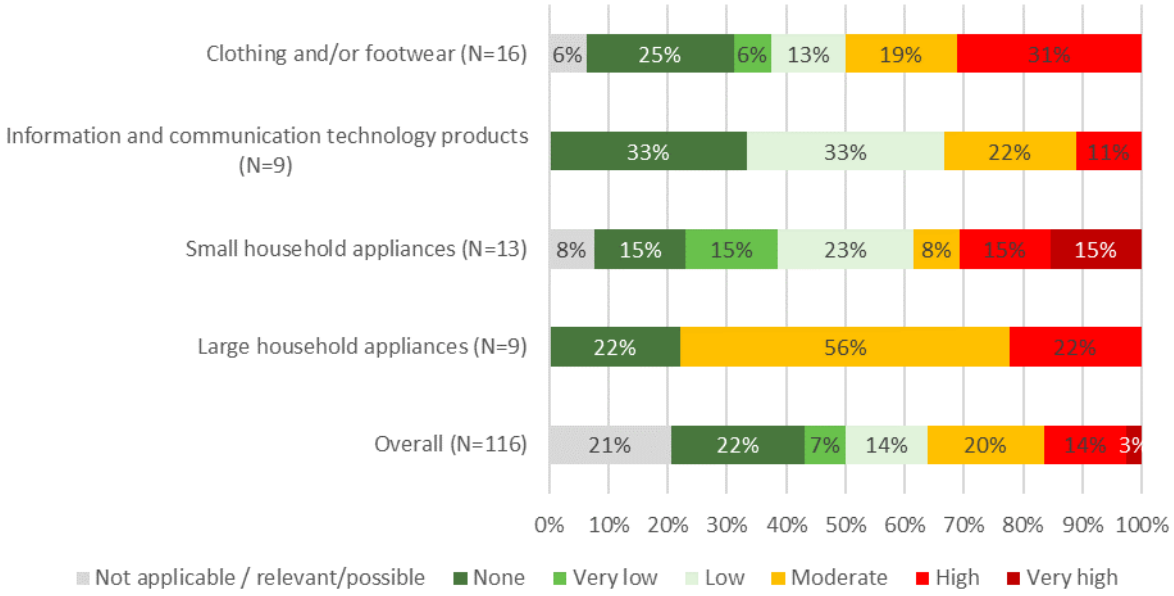


Figure A140. What would be the costs for your business of the following legal requirements: Obligation to provide information on the expected lifespan of products without repair for all products

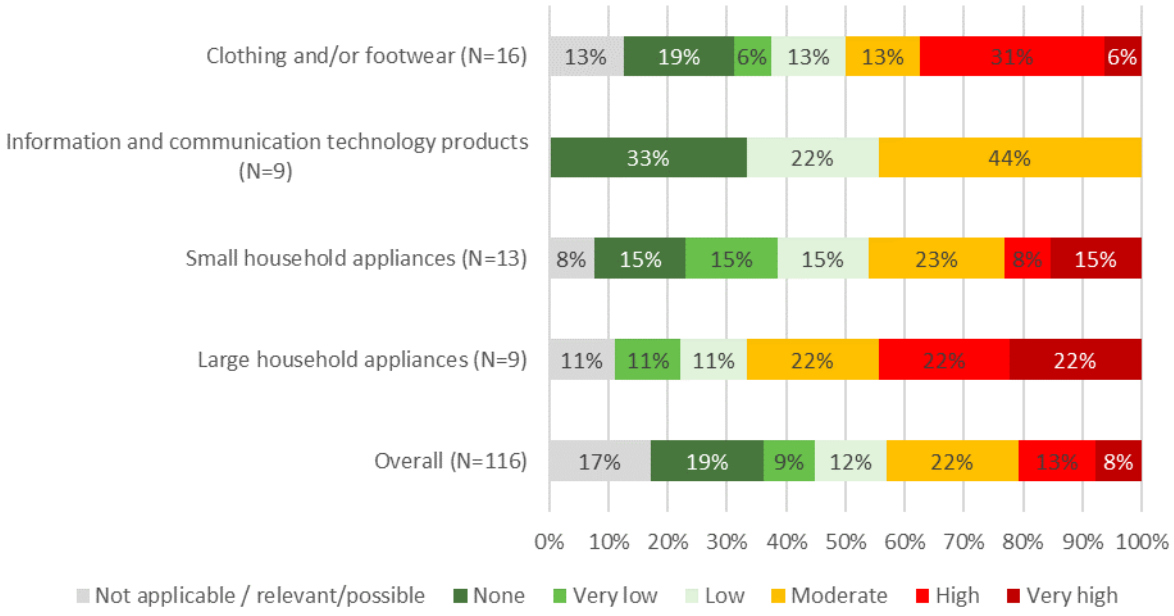


Figure A141. What would be the costs for your business of the following legal requirements: Obligation to provide information on the lifespan of products including (minor/ reasonable) repairs for all products

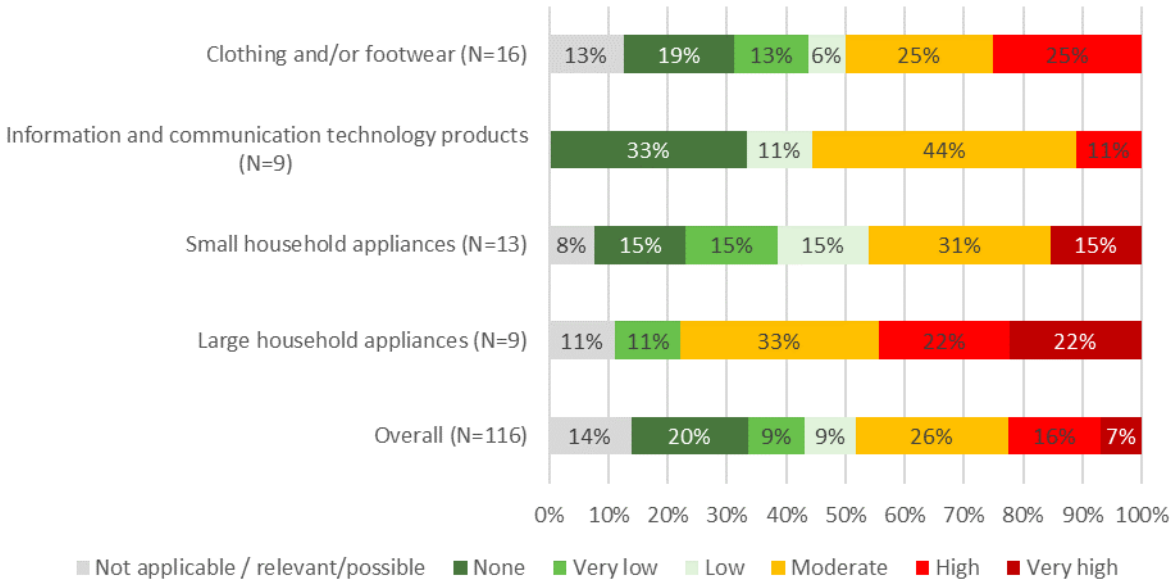


Figure A142. What would be the costs for your business of the following legal requirements: Obligation to provide information on aspects in the product's design that can cause its early failure (for example, by providing information on the occurrence of early failure in the history of the product sales to date)

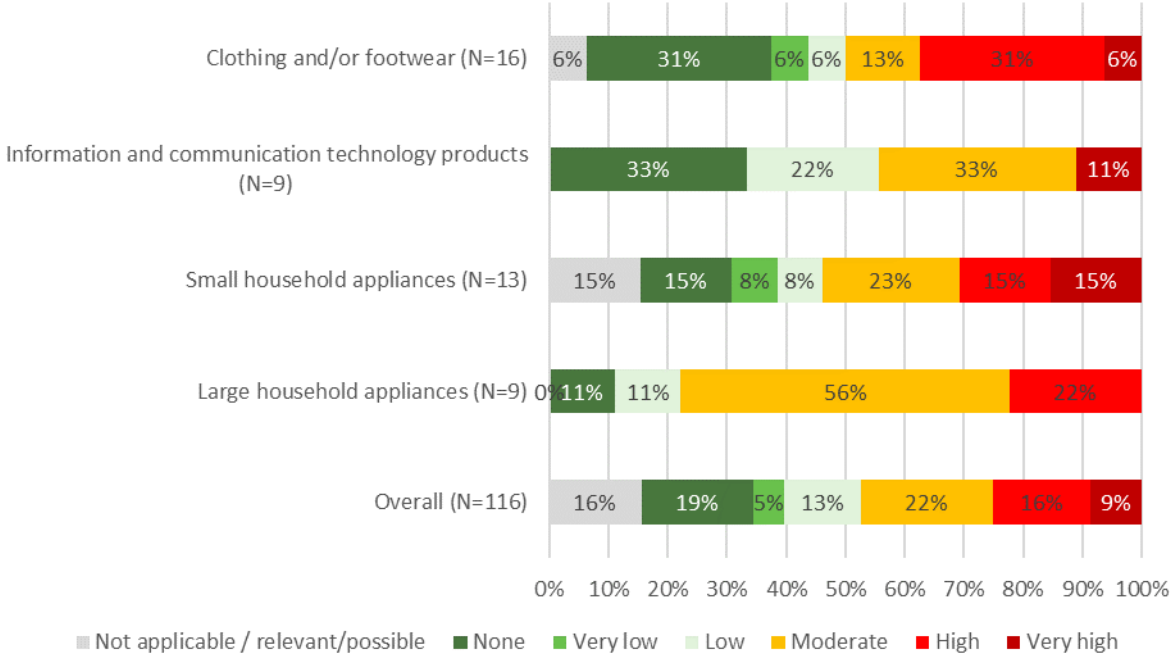


Figure A143. What would be the costs for your business of the following legal requirements: Obligation to provide information on the period in which spare parts will be available

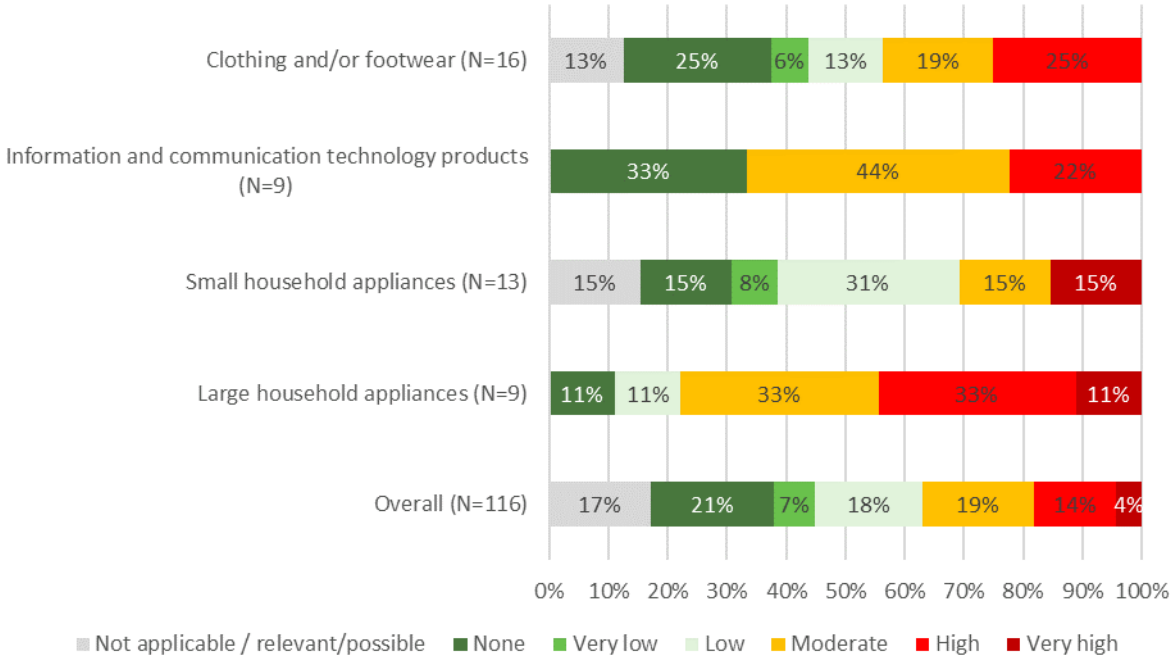


Figure A144. What would be the costs for your business of the following legal requirements: Obligation to provide information on maximum period to deliver spare parts upon request

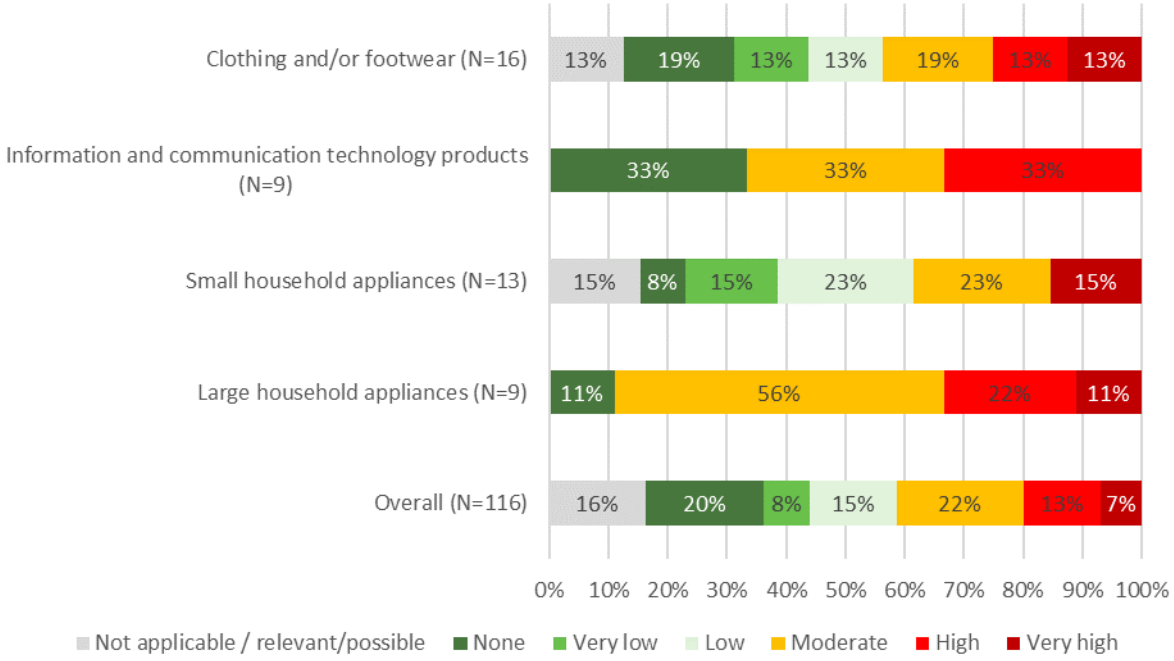


Figure A145. What would be the costs for your business of the following legal requirements: Obligation to provide information on software/updates policy and period

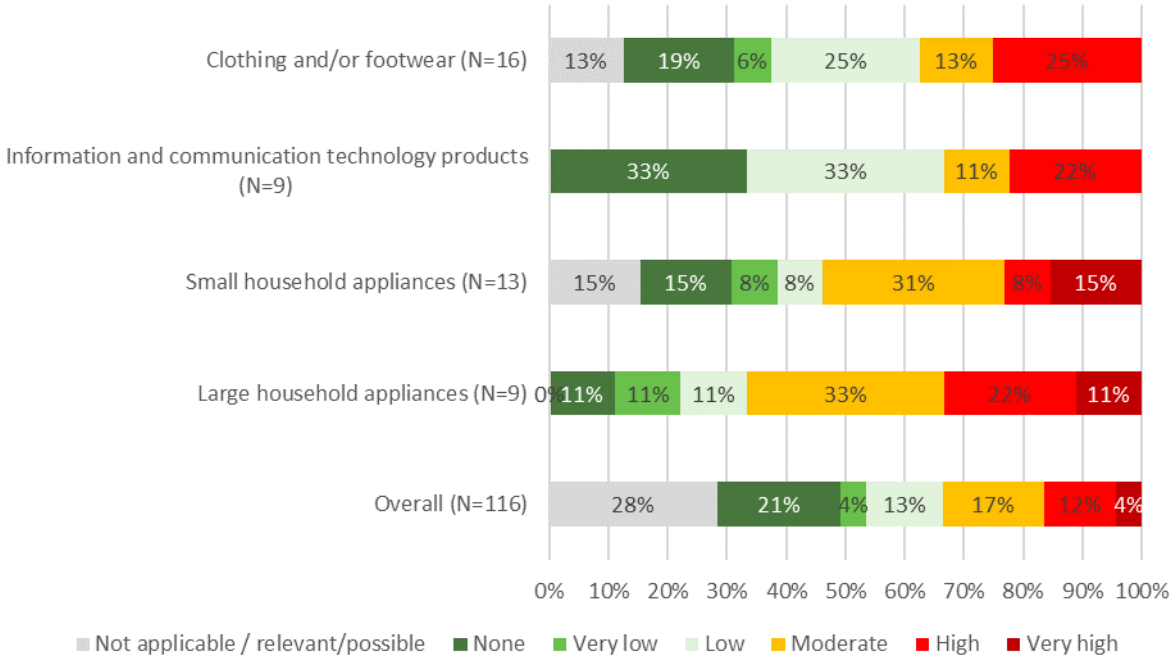


Figure A146. What would be the costs for your business of the following legal requirements: Obligation to provide information on availability of repair services

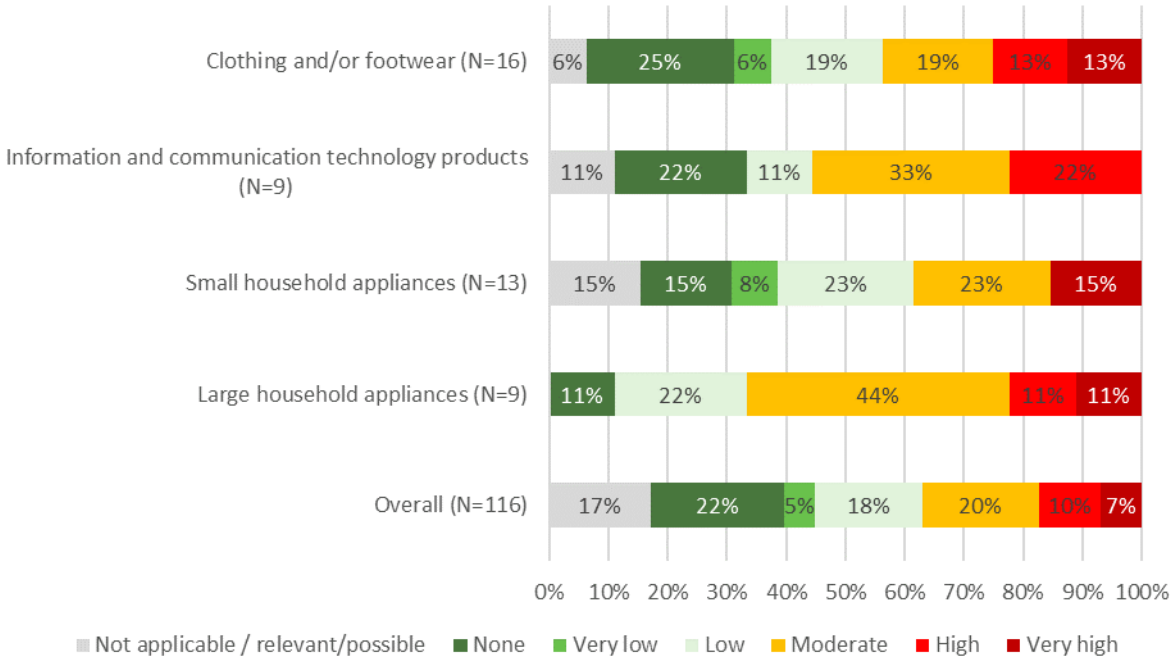


Figure A147. What would be the costs for your business of the following legal requirements - Availability of repair manuals

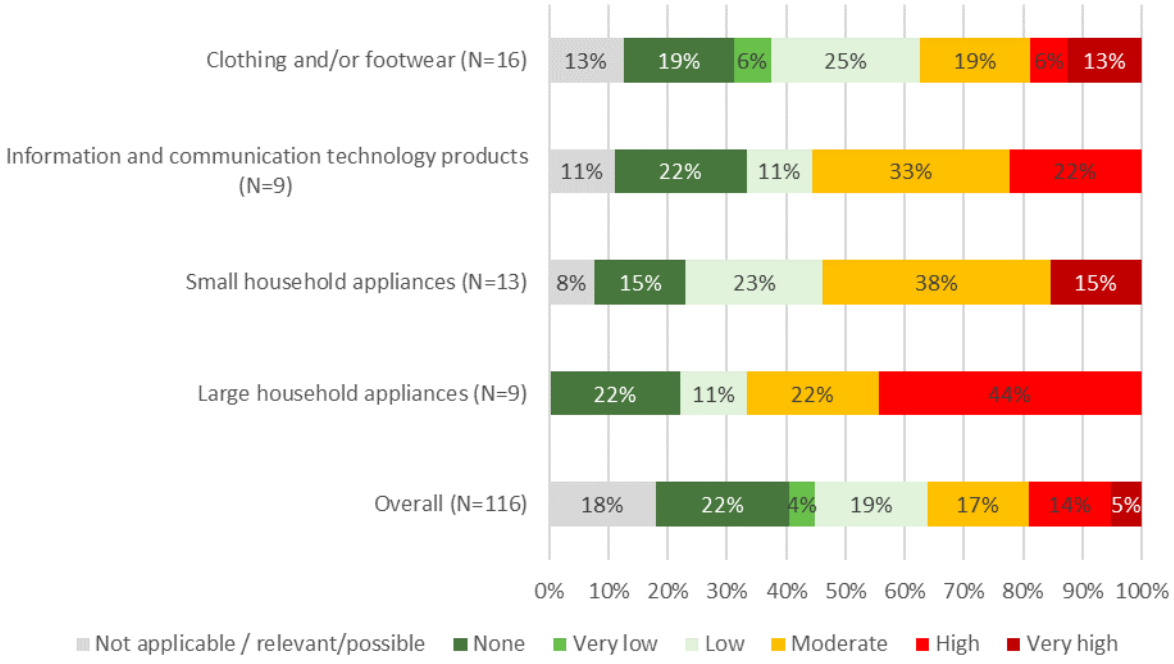
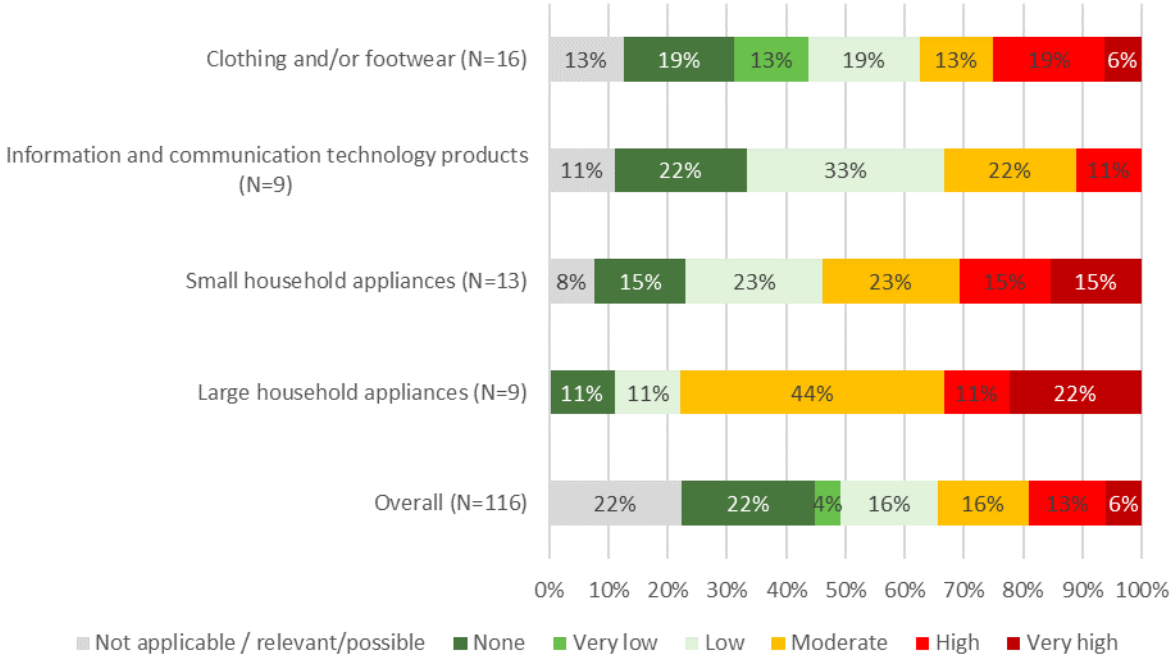


Figure A148. What would be the costs for your business of the following legal requirements - Stronger consumer protection against premature obsolescence practices



A8.7.2.3 Environmental performance and other sustainability aspects

This section of the survey was asked to all respondents.

Charts and tables in this subsection of the analysis are broken down to show, in addition to the overall result, five of the most commonly surveyed product or service groups; large household appliances, small household appliances, information and communication technology products, clothing and footwear and food and drinks.

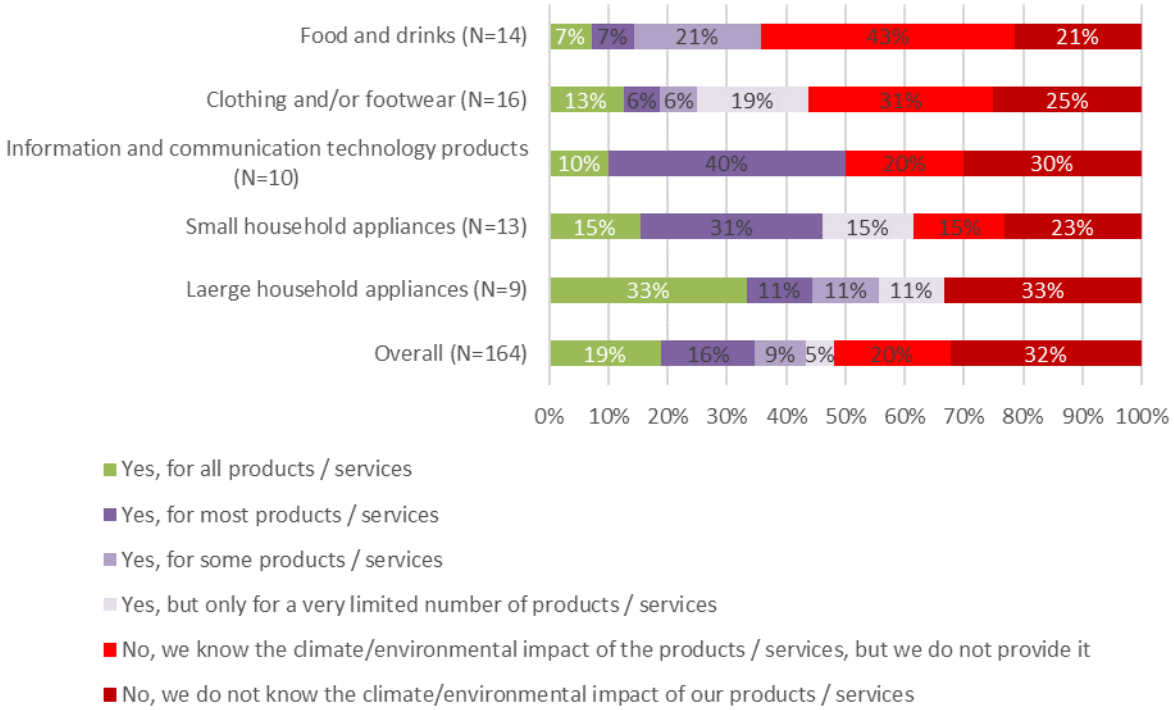
Firstly, in this section, respondents were asked if they provide information on the environmental impacts of their products or services. As shown in Figure A149, overall just under half (48%) of respondents reported providing this information for at least some products, but only a fifth (19%) reported doing so for all products.

The product or service category in which most respondents reported providing this information was large household appliances, where over half (67%) reported providing it for at least some products, and a third (33%) reported providing it for all products.

When it came to reasons for not providing this information, a third of respondents (32%) reported not having the information, while only a fifth (20%) claimed that they have the information but choose not to provide it.

The product or service category in which least respondents reported providing this information was large food and drink, where a third (36%) reported providing it for at least some products, and less than a tenth (7%) reported providing it for all products.

Figure A149. Does your company provide information on the climate/environmental impact of its products / services?



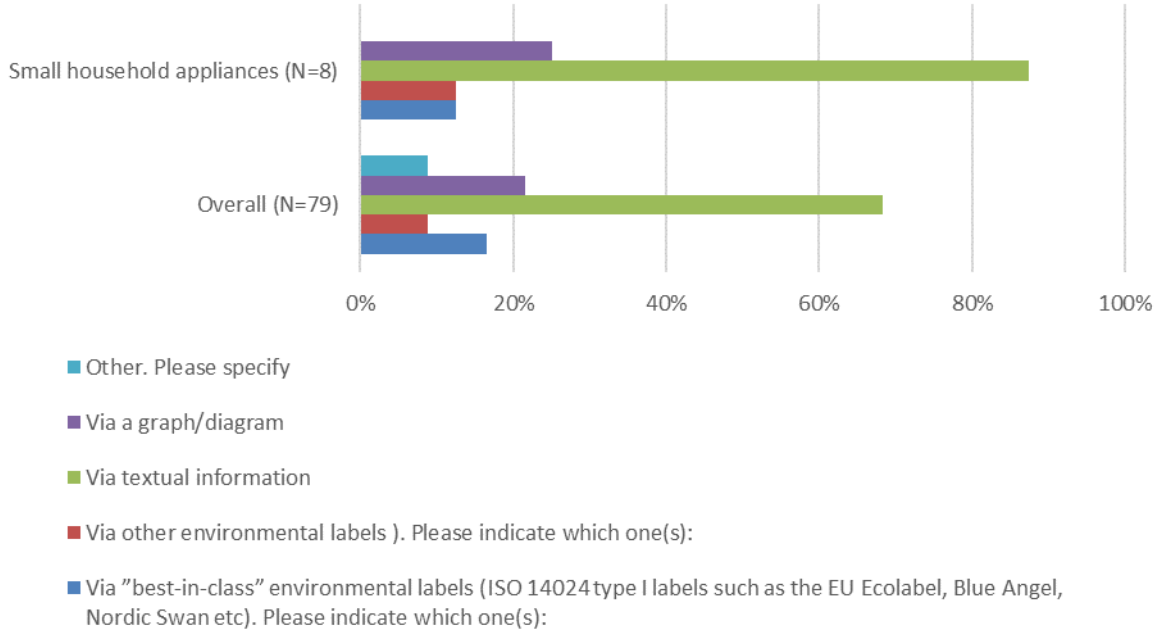
Respondents who reported providing this information were then asked an open-ended question asking what environmental information they provided to consumers. The most common information provided (25% of respondents who answered this question) was instructions for correct disposal or recycling of the product, followed by pollution/CO_2 emission data (18%).

Table A17. What kind of environmental information is provided? (N=79)

Write-in response	Proportion
Disposal/recycling instructions	25%
Pollution/CO_2 emissions	18%
Materials used in product	10%
Energy consumption of product	5%
Decomposition timeframe of product materials	3%

Next, respondents who reported providing this information where asked what methods they used to do so. As shown in Figure A150, the most commonly used method overall was textual information, used in almost three quarters (68%) of cases. The least commonly used method was non-ISO environmental labels, used in only a tenth (9%) of cases.

Figure A150. How do you provide information to consumers on this?



Respondents who provided this information were then asked an open-end question about the certification methods they used to ensure the information they provided was accurate. The only certification method mentioned by more than one respondent was ISO which was mentioned by 13% of respondents (N=77).

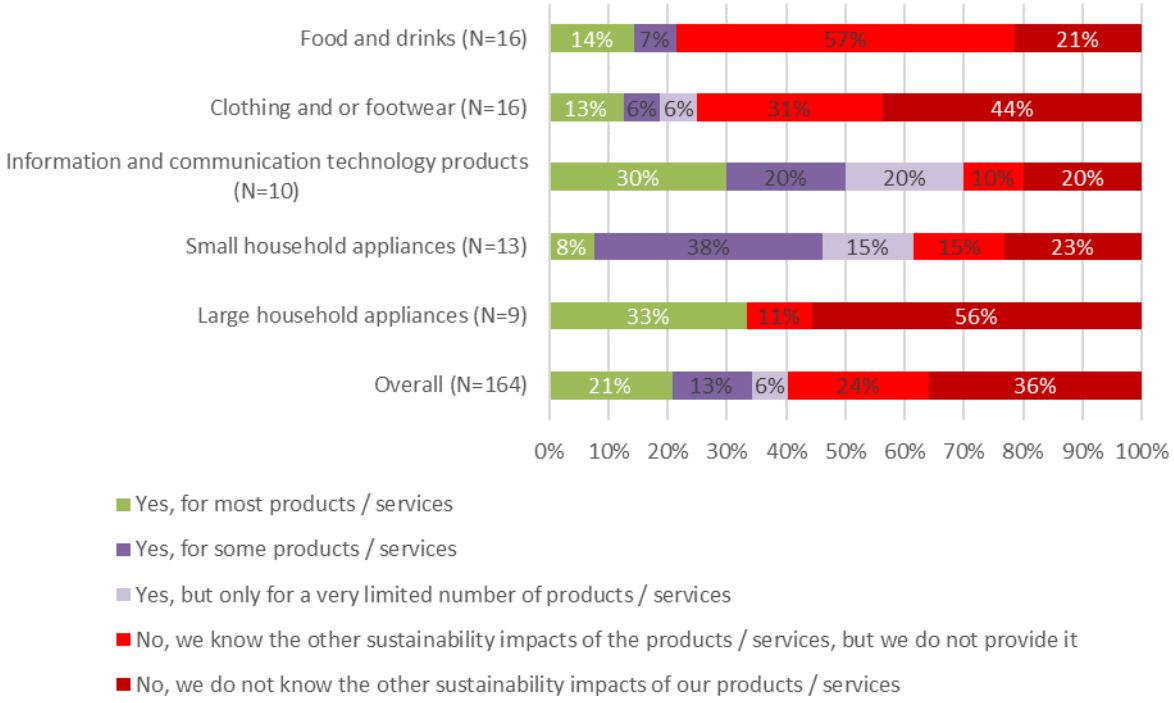
Respondents were then asked to estimate the initial setup cost per product/services and the ongoing annual cost per product of calculating the environmental impact of their products or services. Overall the mean estimate of the initial cost per product or service was €1,736.79 (N=26) and the mean estimate of the annual ongoing cost per product of service was €3,707.97 (N=26).

Respondents were then asked if they provided information to consumers on other sustainability aspects of their products or services. As shown in Figure A151, overall only two fifths (40%) of respondents reported providing this information about any products, and a fifth (21%) for all products.

In terms of reasons for not providing this information, a third (36%) of respondents reported not having this information, while only a quarter (25%) claimed to have this information but choose not to provide it.

In the categories of small household appliances and information and communication technology products, a higher proportion of respondents than the overall proportion reported providing this information for at least some products (62% and 70%).

Figure A151. Does your company also provide information on other sustainability impacts than environment (for example ethical or social aspects such as human rights, gender equality, labour conditions (child labour, worker's rights, decent wage), animal welfare, fair



Next, respondents were asked what the impact on their business would be of the introduction of various legal requirements, on a scale of no impact to very high impact. In order to facilitate comparison between these measures, each response option on the scale was assigned a score from 0 to 5, and a mean score calculated for each measure, as shown in Table A18 below:

Table A18. Scores assigned

Response	Score assigned
None	0
Very low	1
Low	2
Moderate	3
High	4
Very high	5

Not applicable responses were excluded from this calculation and the base. The calculated mean scores are shown in Table A19.

Overall, the legal requirement estimated to have the highest impact was obligation to provide information on environmental characteristics of products, with a mean response of 2.55, followed by setting minimum criteria for digital information tools that provide information on sustainability aspects of products to ensure their transparency and reliability with an overall mean response of 2.44. The least impactful measure was estimated to be banning vague environmental claims unless they are verified/certified by independent authority/ or based on recognised assessment methodology with an overall mean response of 1.83.

In the sector of large household appliances, measures with a higher than moderate estimated impact were setting minimum criteria for digital information tools that provide information on sustainability aspects of products to ensure their transparency and reliability (3.44) and setting minimum criteria for sustainability labels/ logos to ensure that consumers can trust and rely on them (3.11).

In the sector of small household appliances, measures with a higher than moderate estimated impact were providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services and obligation to provide information on environmental characteristics of products (both 3.27).

In the sector of food and drink the only measure with a higher than moderate estimated impact was obligation to provide information on environmental characteristics of products (3.18).

The full results of this question are shown in Figure A152 to Figure A158.

Table A19. What would be the impact on your business of uniform legal measure in all EU countries

Legal requirement	Overall mean response	Large household appliances mean response	Small household appliances mean response	Information and communication technology mean response	Clothing and footwear mean response	Food and drink mean response
Banning some practices related to greenwashing	1.91 (N=127)	2.13 (N=8)	2.60 (N=10)	2.00 (N=8)	1.92 (N=12)	2.56 (N=9)
Banning vague environmental claims unless they are verified/certified by independent authority/ or based on recognised assessment methodology	1.83 (N=136)	2.33 (N=9)	2.73 (N=11)	2.33 (N=9)	2.00 (N=13)	2.27 (N=11)
Setting in EU consumer law specific requirements for green claims	2.09 (N=133)	2.67 (N=9)	2.64 (N=11)	1.78 (N=9)	2.38 (N=13)	2.78 (N=9)
Providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services	2.27 (N=142)	2.44 (N=9)	3.27 (N=11)	2.70 (N=10)	2.00 (N=14)	2.60 (N=10)
Setting minimum criteria for sustainability labels/ logos to ensure that consumers can trust and rely on them	2.37 (N=141)	3.11 (N=9)	2.82 (N=11)	2.50 (N=10)	2.29 (N=14)	2.91 (N=11)

Legal requirement	Overall mean response	Large household appliances mean response	Small household appliances mean response	Information and communication technology mean response	Clothing and footwear mean response	Food and drink mean response
Setting minimum criteria for information tools that provide information on sustainability aspects of products to ensure their transparency and reliability	2.44 (N=141)	3.44 (N=9)	2.90 (N=10)	2.80 (N=10)	2.43 (N=14)	2.64 (N=11)
Obligation to provide information on environmental characteristics of products	2.55 (N=146)	3.00 (N=9)	3.27 (N=11)	2.70 (N=10)	2.64 (N=14)	3.18 (N=11)

Figure A152. What would be the impact on your business of uniform legal measure in all EU countries - Banning some practices related to greenwashing

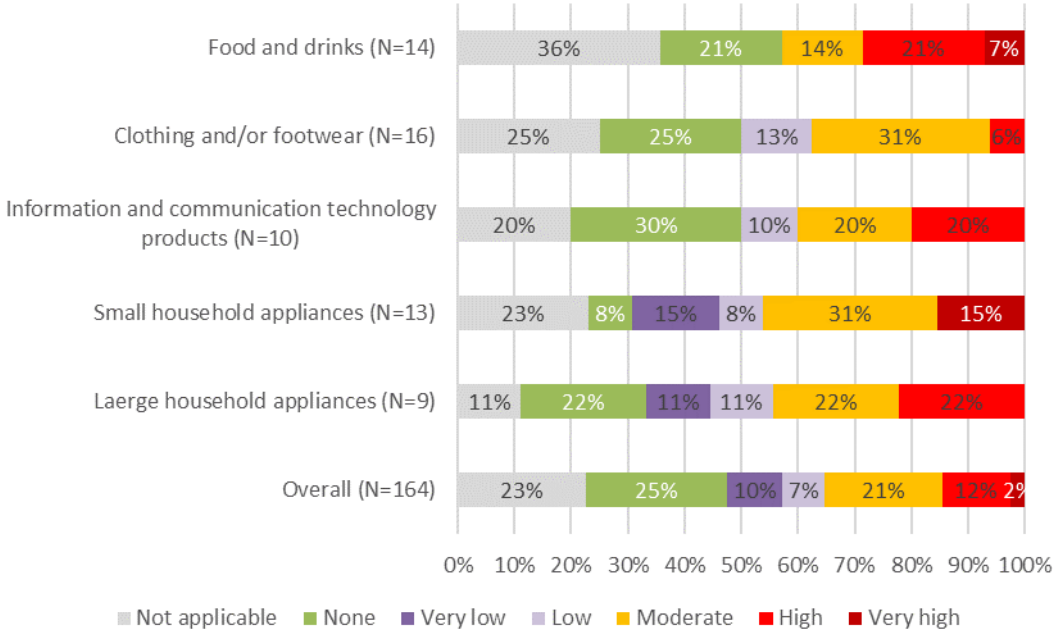


Figure A153. What would be the impact on your business of uniform legal measure in all EU countries - Banning vague environmental claims unless they are verified/certified by independent authority/ or based on recognised assessment methodology

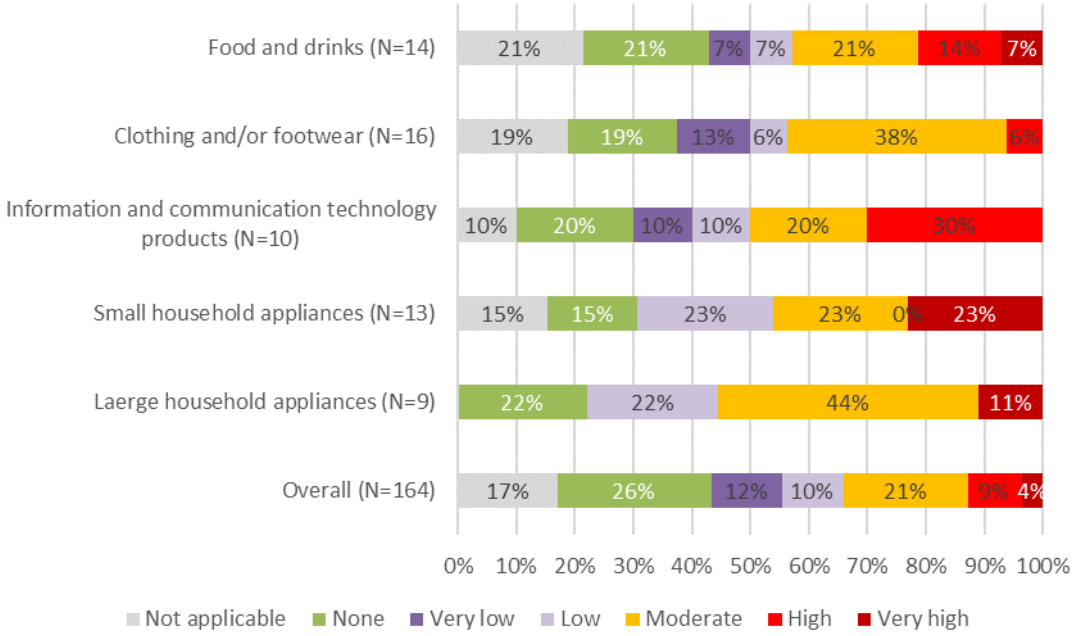


Figure A154. What would be the impact on your business of uniform legal measure in all EU countries - Setting in EU consumer law specific requirements for green claims

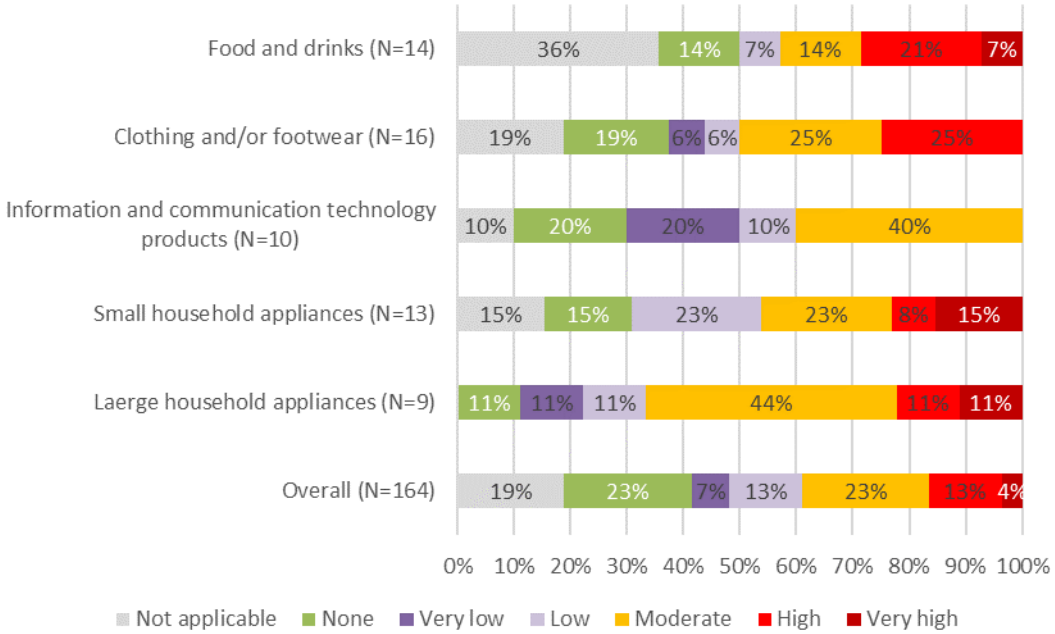


Figure A155. What would be the impact on your business of uniform legal measure in all EU countries - Providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services

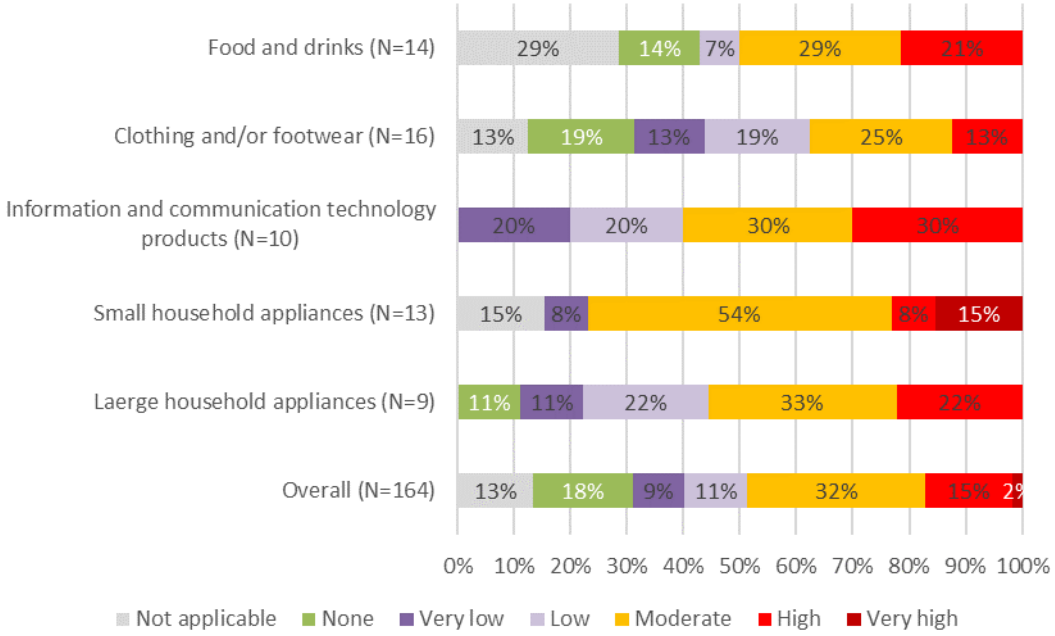


Figure A156. What would be the impact on your business of uniform legal measure in all EU countries - Setting minimum criteria for sustainability labels/ logos to ensure that consumers can trust and rely on them

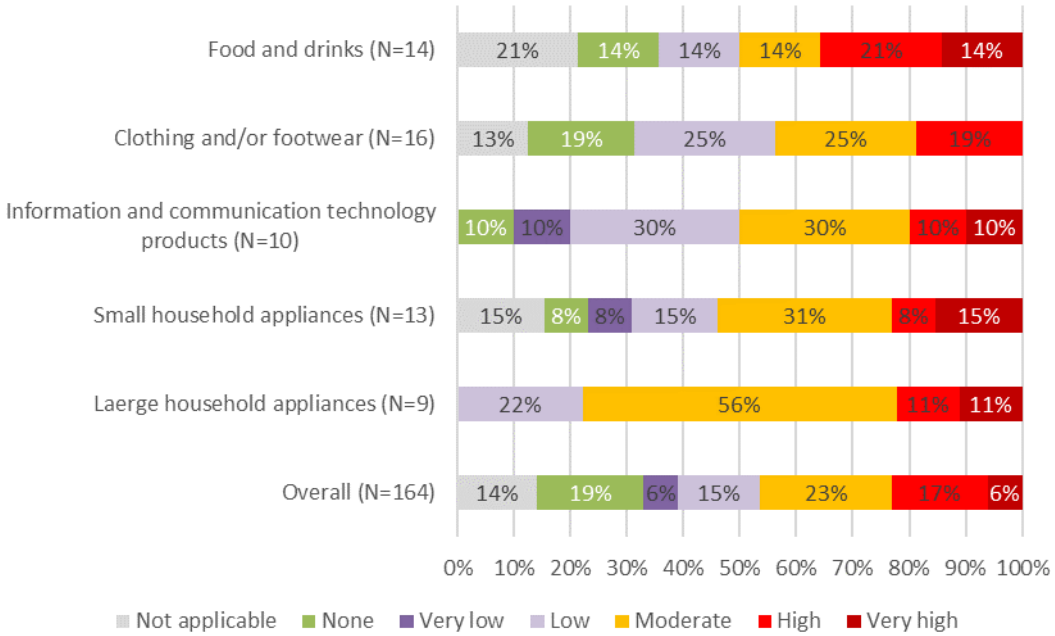


Figure A157. What would be the impact on your business of uniform legal measure in all EU countries - Setting minimum criteria for information tools that provide information on sustainability aspects of products to ensure their transparency and reliability

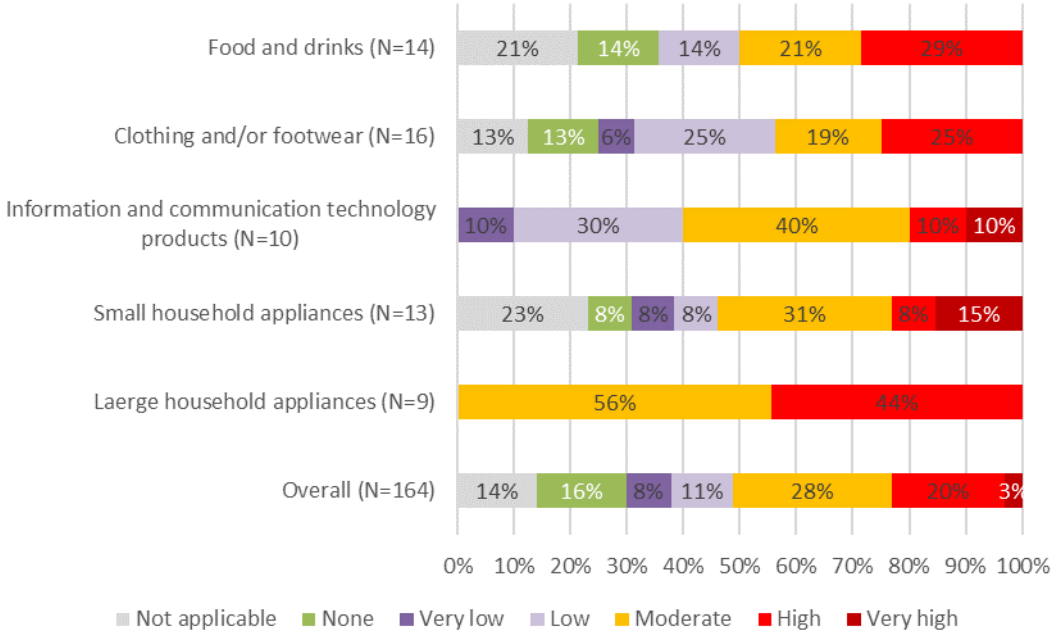
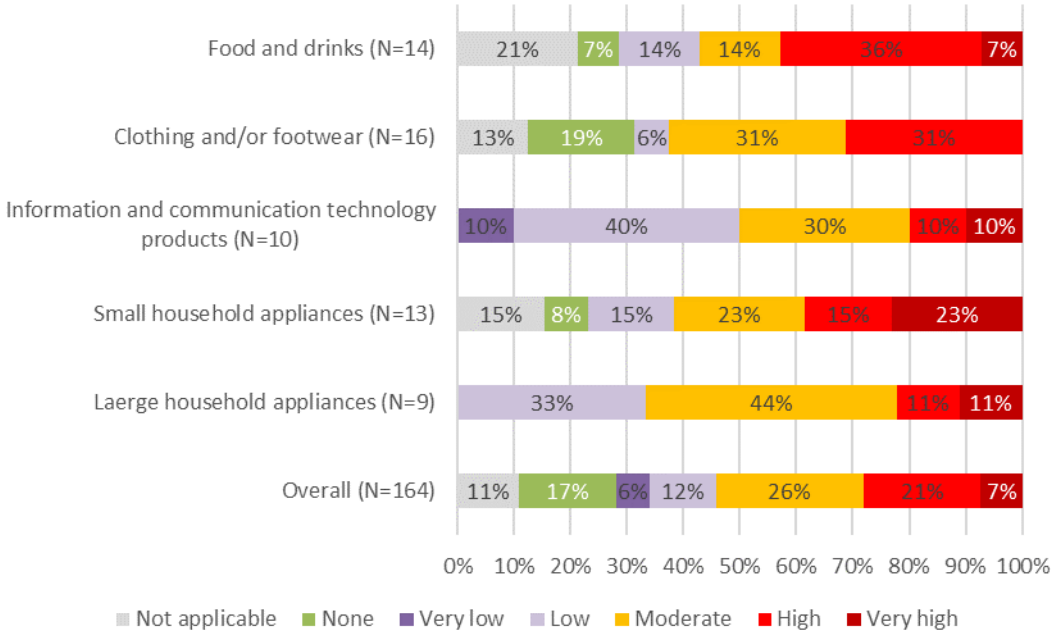


Figure A158. What would be the impact on your business of uniform legal measure in all EU countries - Obligation to provide information on environmental characteristics of products



Finally, respondents were asked what the cost for their business would be of the introduction of the same legal requirements, on a scale of no cost to very high cost. In order to facilitate comparison between these measures, each response option on the scale was assigned a score from 0 to 5, and a mean score calculated for each measure, as shown in Table A20 below:

Table A20. Scores assigned

Response	Score assigned
None	0
Very low	1
Low	2
Moderate	3
High	4
Very high	5

Not applicable responses were excluded from this calculation and the base. The calculated mean scores are shown in the table above.

Overall the legal requirement estimated to be the most costly was obligation to provide information on environmental characteristics of products, with a mean response of 2.75, followed by providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services with a mean response of 2.67. The least costly requirement was estimated to be banning some practices related to greenwashing, with a mean response of 2.08.

In the sector of large household appliances, the requirements estimated to have a higher than moderate cost were providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services (3.33) and obligation to provide information on environmental characteristics of products (3.22).

In the sector of small household appliances the only requirement estimated to have a higher than moderate cost was obligation to provide information on environmental characteristics of products (3.36).

The full results of this question are shown in Figure A159 to Figure A165.

Table A21. What would be the costs for your business of uniform legal measure in all EU countries

Legal requirement	Overall mean response	Large household appliances mean response	Small household appliances mean response	Information and communication technology mean response	Clothing and footwear mean response	Food and drink mean response
Banning some practices related to greenwashing	2.08 (N=118)	2.63 (N=8)	2.60 (N=10)	1.89 (N=9)	1.92 (N=12)	2.67 (N=9)
Banning vague environmental claims unless they are verified/certified by independent authority/ or based on recognised assessment methodology	2.17 (N=125)	2.88 (N=8)	2.64 (N=11)	2.20 (N=10)	2.23 (N=13)	2.56 (N=9)
Setting in EU consumer law specific	2.38 (N=127)	2.50 (N=8)	2.82 (N=11)	2.10 (N=10)	2.46 (N=13)	2.67 (N=9)

Legal requirement	Overall mean response	Large household appliances mean response	Small household appliances mean response	Information and communication technology mean response	Clothing and footwear mean response	Food and drink mean response
requirements for green claims						
Providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services	2.67 (N=137)	3.33 (N=9)	2.82 (N=11)	2.80 (N=10)	2.31 (N=13)	2.27 (N=11)
Setting minimum criteria for sustainability labels/ logos to ensure that consumers can trust and rely on them	2.61 (N=138)	3.00 (N=9)	2.75 (N=12)	2.60 (N=10)	2.69 (N=13)	2.46 (N=13)
Setting minimum criteria for information tools that provide information on sustainability aspects of products to ensure their transparency and reliability	2.54 (N=136)	3.00 (N=8)	3.00 (N=11)	2.60 (N=10)	2.54 (N=13)	2.18 (N=11)
Obligation to provide information on environmental characteristics of products	2.75 (N=138)	3.22 (N=9)	3.36 (N=11)	2.50 (N=10)	2.62 (N=13)	2.75 (N=12)

Figure A159. What would be the costs for your business of uniform legal measure in all EU countries - Banning some practices related to greenwashing

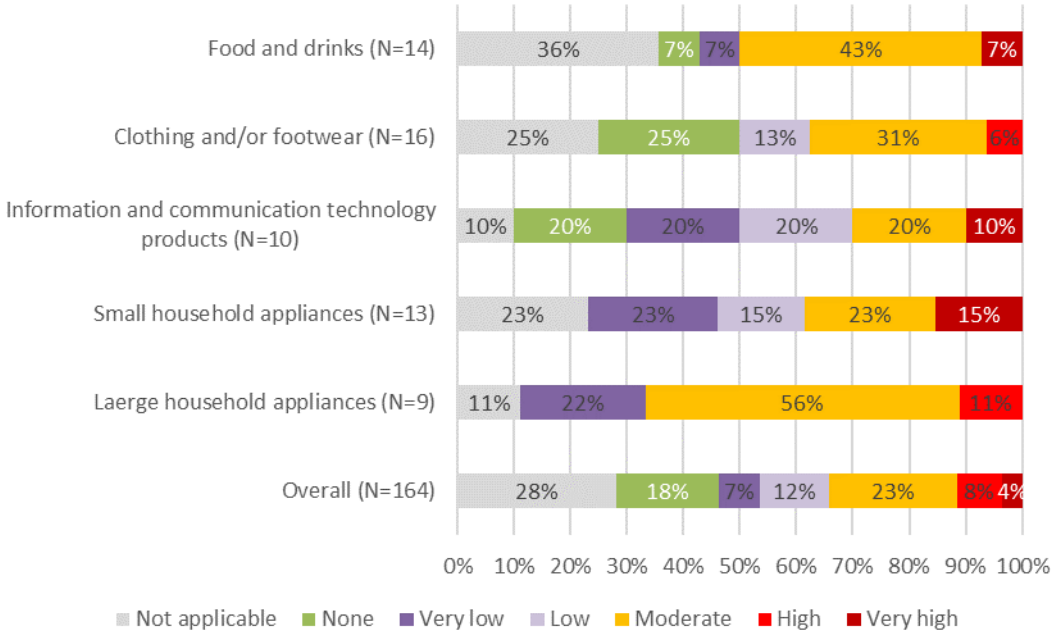


Figure A160. What would be the costs for your business of uniform legal measure in all EU countries - Banning vague environmental claims unless they are verified/certified by independent authority/ or based on recognised assessment methodology

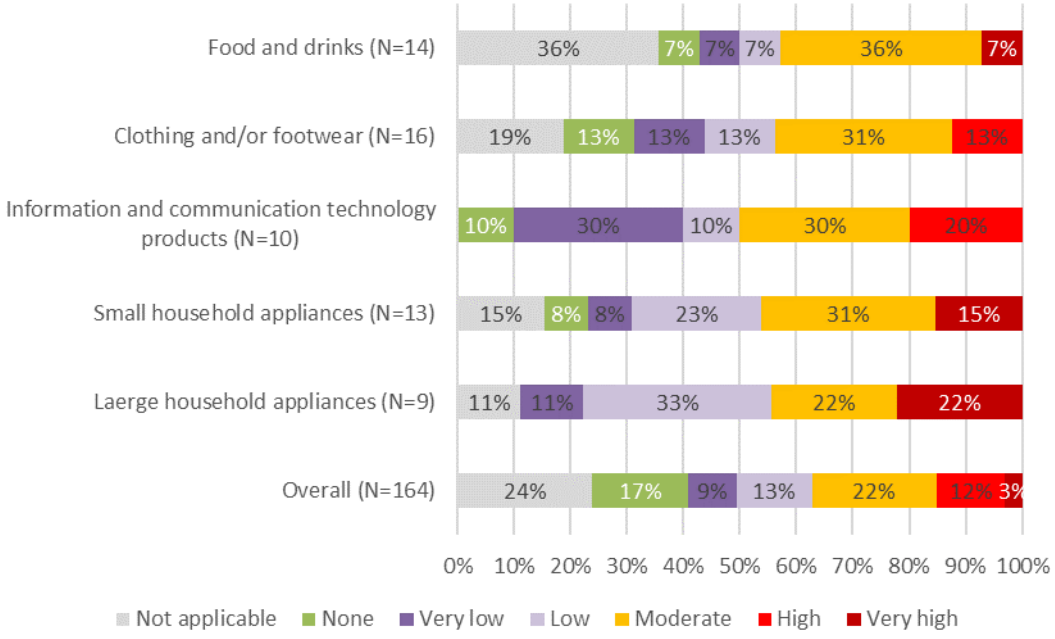


Figure A161. What would be the costs for your business of uniform legal measure in all EU countries - Setting in EU consumer law specific requirements for green claims

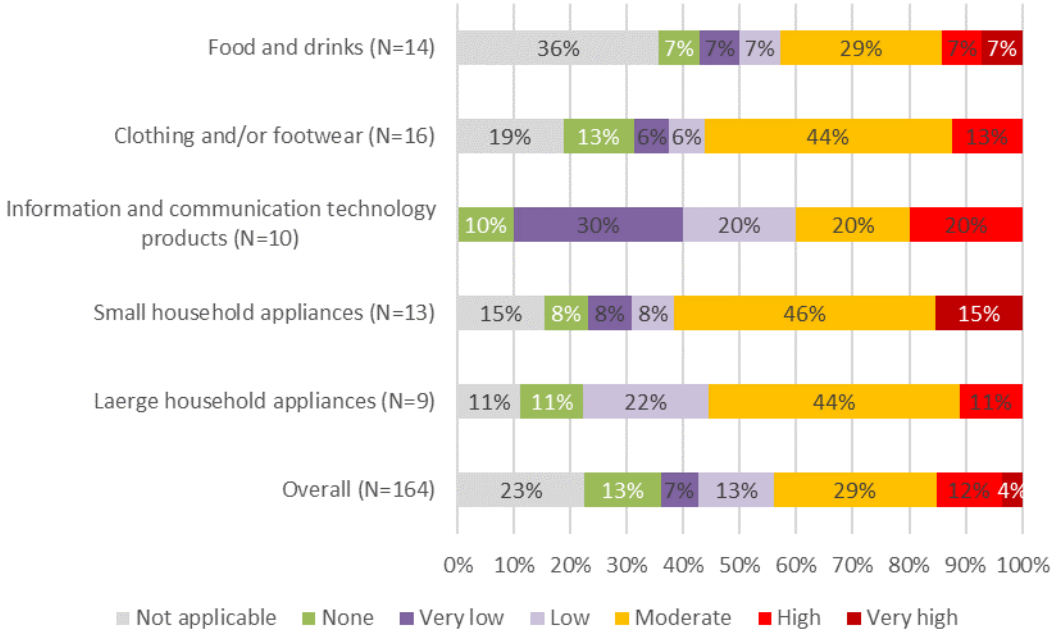


Figure A162. What would be the costs for your business of uniform legal measure in all EU countries - Providing tools and methodological guidance to support companies in calculating the environmental impact of their products and services

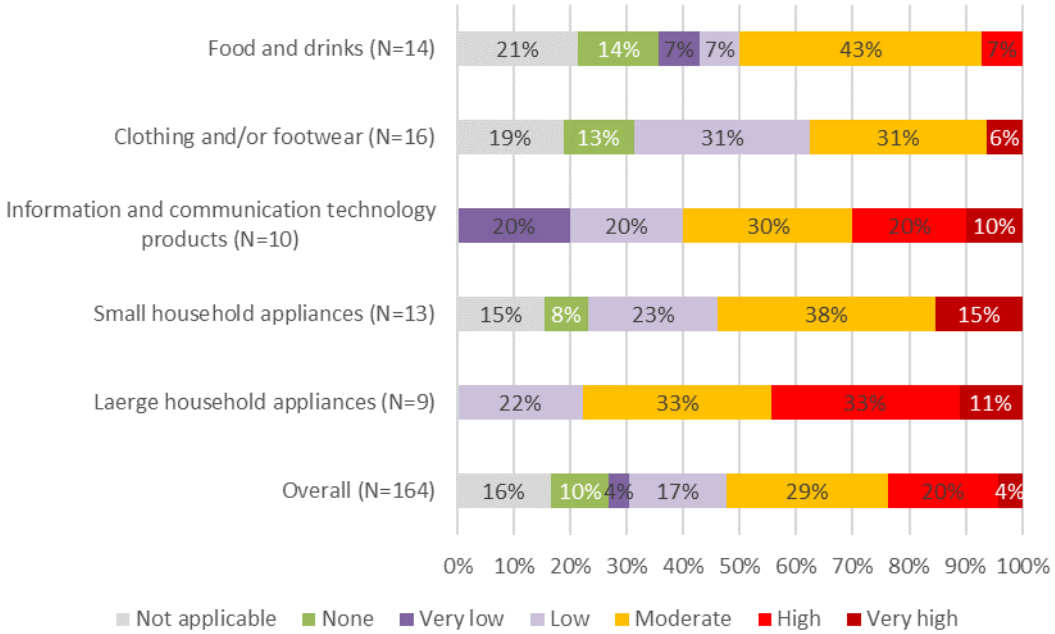


Figure A163. What would be the costs for your business of uniform legal measure in all EU countries - Setting minimum criteria for sustainability labels/ logos to ensure that consumers can trust and rely on them

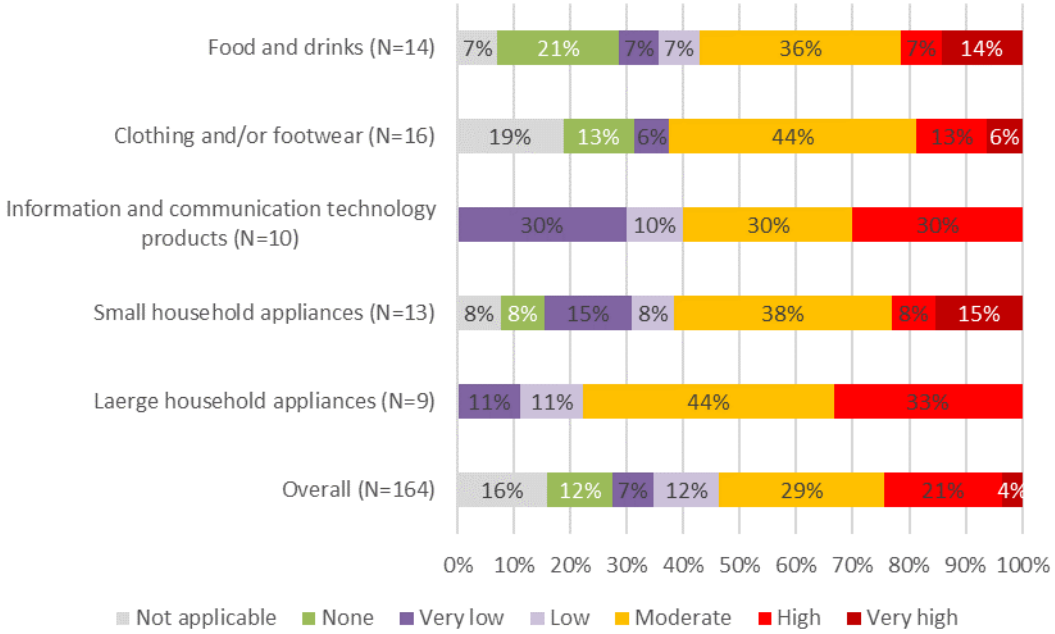


Figure A164. What would be the costs for your business of uniform legal measure in all EU countries - Setting minimum criteria for information tools that provide information on sustainability aspects of products to ensure their transparency and reliability

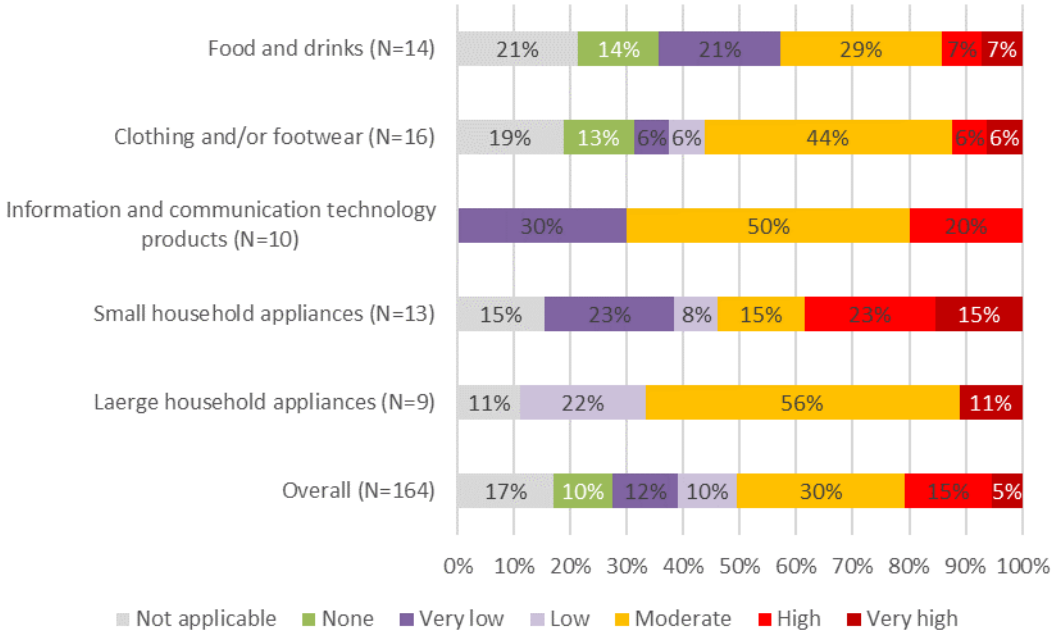
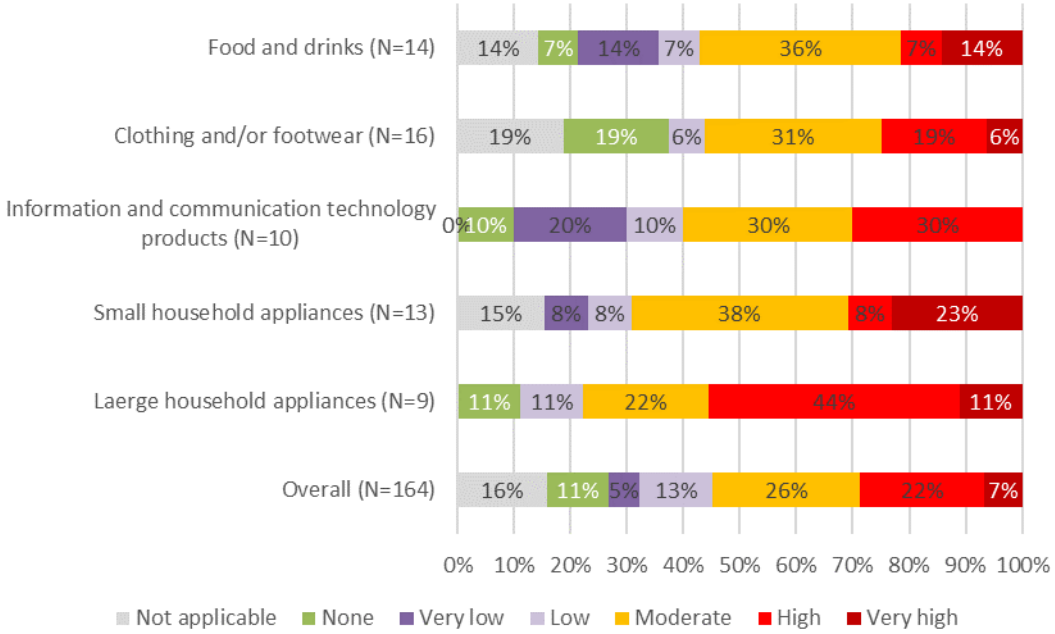


Figure A165. What would be the costs for your business of uniform legal measure in all EU countries - Obligation to provide information on environmental characteristics of products



A8.9 Consumer Survey

The following document provides an analysis of the results of the consumer survey:

A8.9.1 Sample Composition

The sample is representative of the EU27+UK population with 99% confidence level and a margin of error of 1.18%. The composition of the survey sample reflects the population of the EU27 plus UK in terms of share, age group and gender. The composition of the sample is shown in figures below.

Figure A166. In which country do you live? (N=11805)

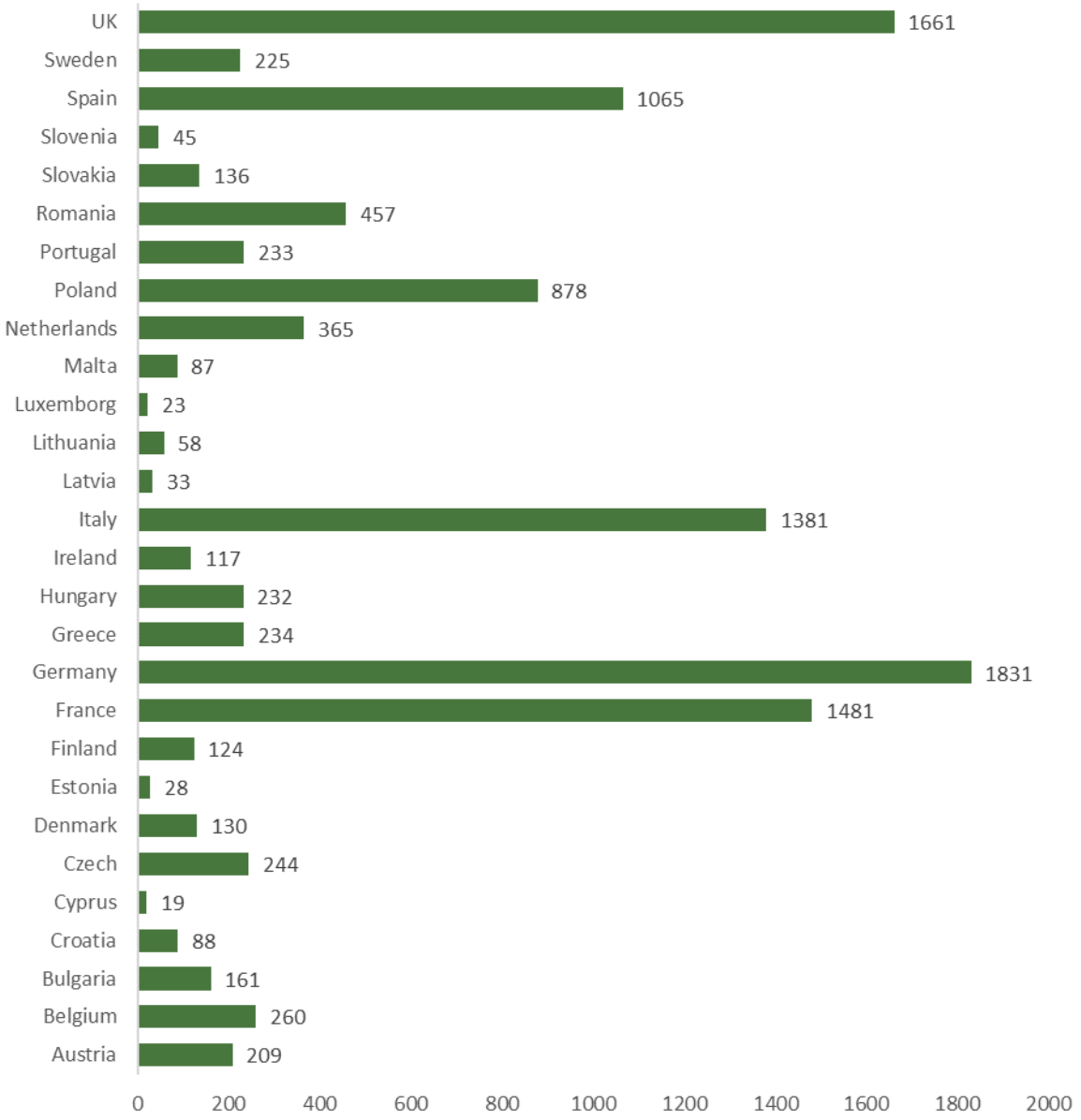


Figure A167. How old are you? (N=11805)

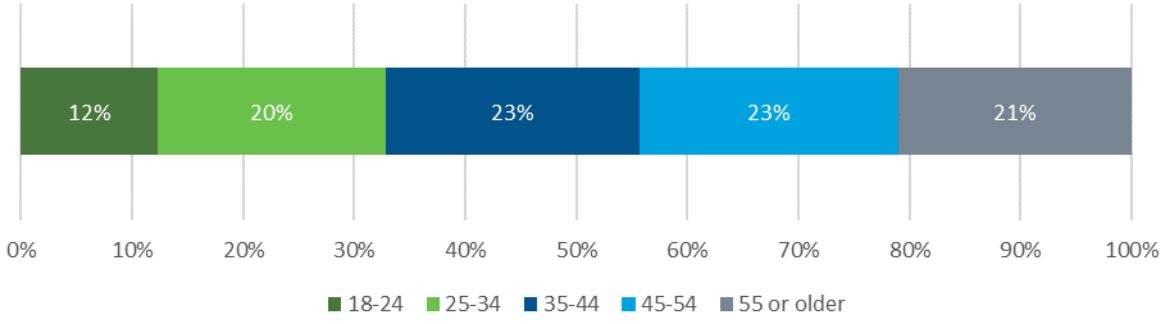


Figure A168. To which gender identity do you most closely identify? (N=11805)

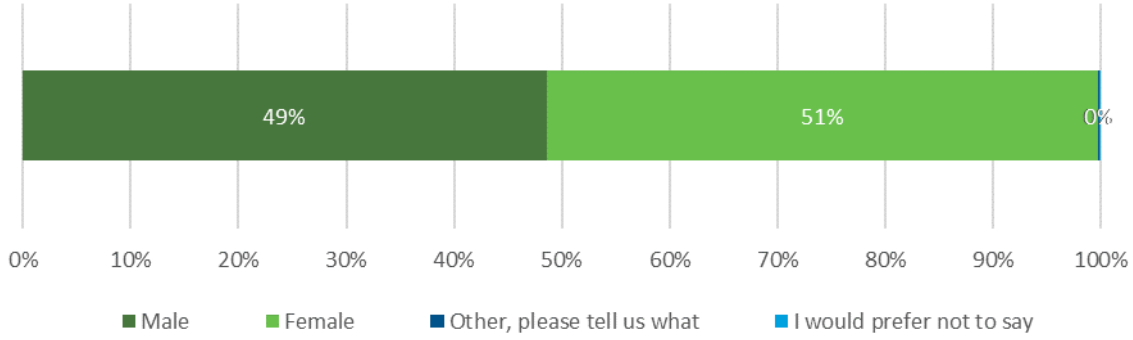
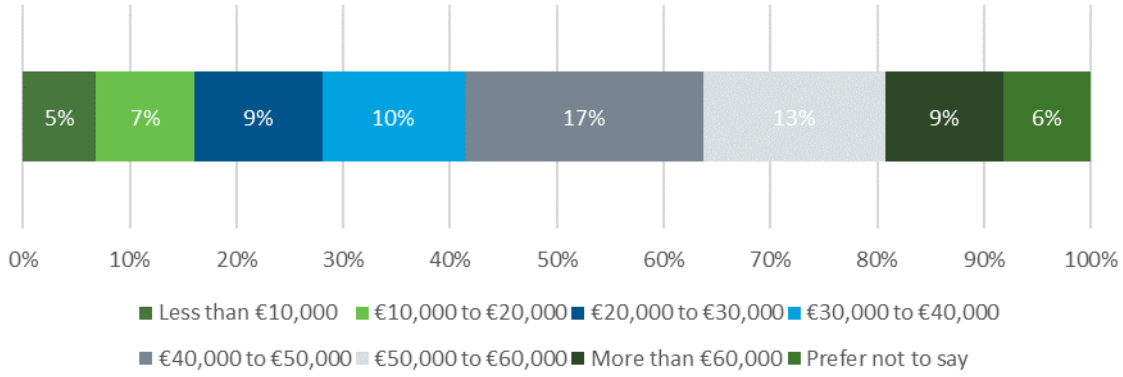


Figure A169. Please estimate your annual household net income? (N=11805)



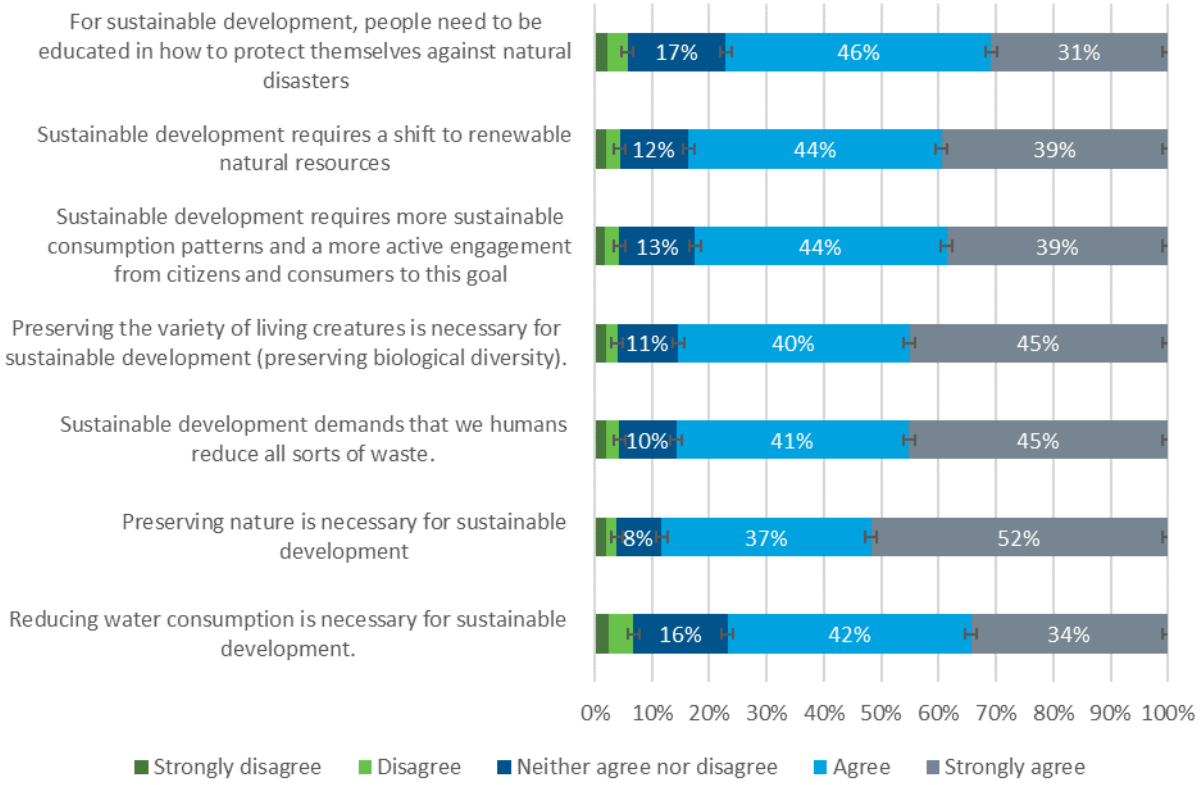
A8.9.2 Environmental Attitude Score

Respondents were asked if they agreed or disagree with various general questions about sustainability. Over three quarters of the respondents agreed with all of the statements suggesting that the sample was generally invested in sustainability. The full results of these questions are shown in Figure A170.

The answers to these questions were then used to calculate an Environmental Attitude Score[289] for each respondent, which can be used to segment respondents to determine their relative level of engagement in sustainability. The average Environmental Attitude Score across the sample was high of about 80%.

[289] In Gericke, N., Boeve-de Pauw, J., Berglund, T. and Olsson, D., 2019. The Sustainability Consciousness Questionnaire: The theoretical development and empirical validation of an evaluation instrument for stakeholders working with sustainable development. Sustainable Development, 27(1), pp.35-49.

Figure A170. To what extent to you agree with the following statements? (N=11805)



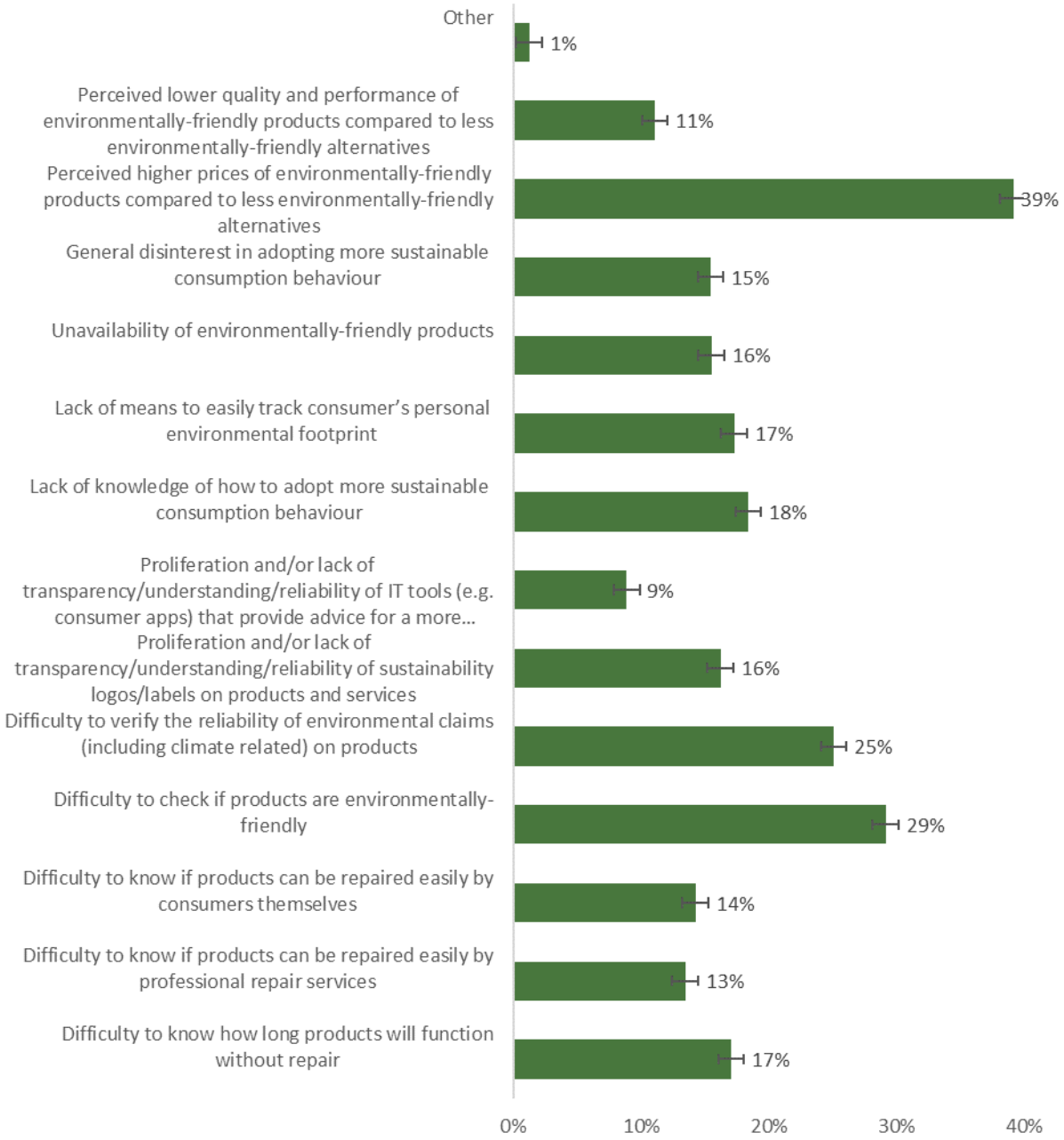
A8.8.2.1 General Questions

Respondents were asked what the major obstacles to engaging in sustainable behaviours. Respondents were limited to selecting no more than three options. Respondents selected an average of 2.4 options. The proportion of respondents that selected each option is shown in Figure A171.

By a wide (10%) margin, the obstacle selected by most respondents was "Perceived higher prices of environmentally-friendly products compared to less environmentally-friendly alternatives" (39% of respondents ±1%), but "Difficulty to check if products are environmentally-friendly" and "Difficulty to verify the reliability of environmental claims (including climate related) on products" were both chosen by about a quarter of respondents (29% ±1% and 25% ±1% respectively) indicating that uncertainty about environmental claims a concern.

The obstacle selected by the least respondents was "Proliferation and/or lack of transparency/understanding/reliability of IT tools (e.g. consumer apps) that provide advice for a more sustainable consumer behaviour" (9% ±1%).

Figure A171. Which of the obstacles in the list below prevent you from adopting more sustainable consumption behaviours? (N=11805. Respondents were limited to selecting 3 options or less.)

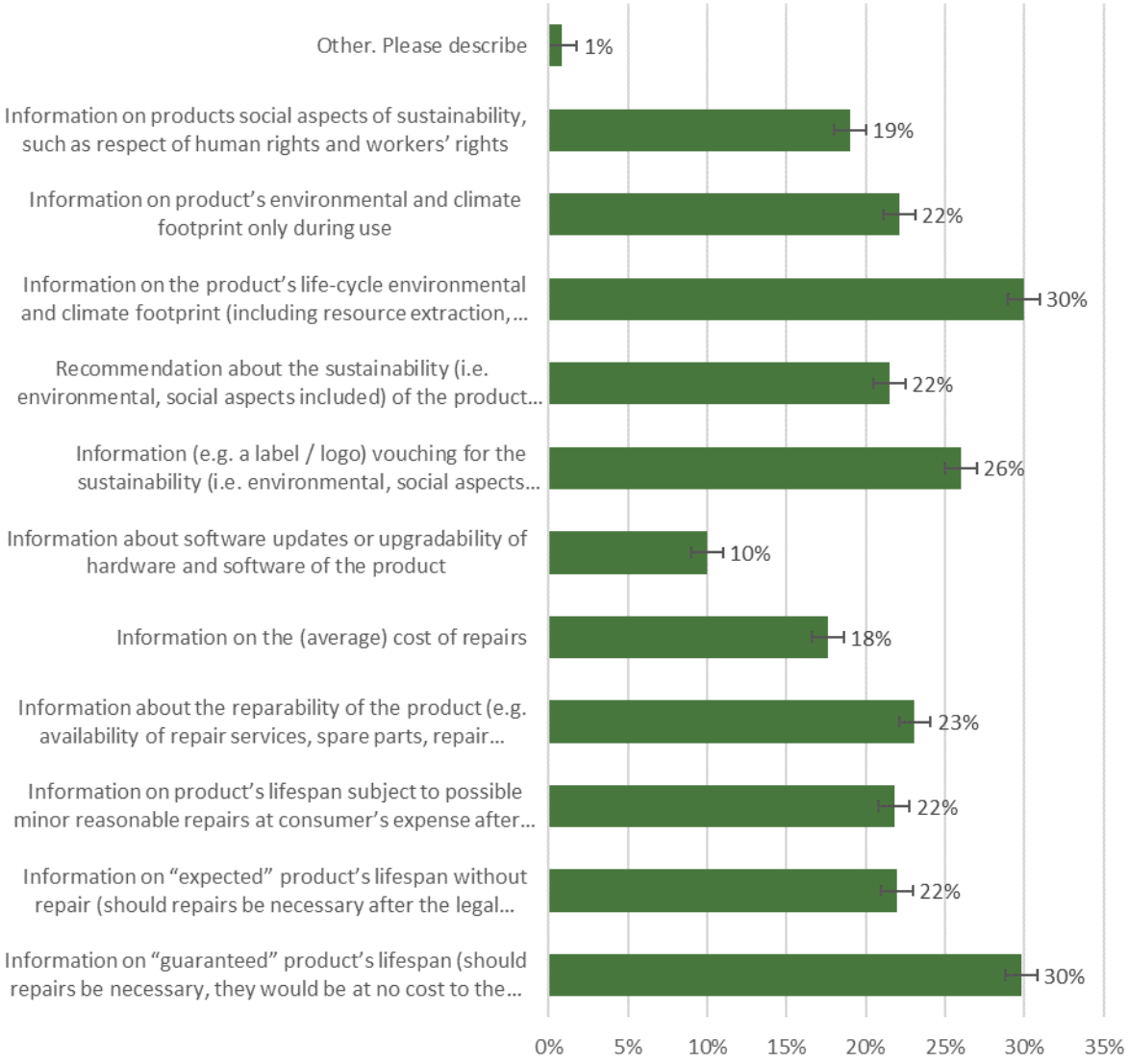


Respondents where then asked what information would be most useful to them when determining which products would be most environmentally sustainable. Again, respondents were limited to selecting no more than three options. Respondents selected an average of 2.4 options. The proportion of respondents that selected each option is shown in Figure A172.

The information selected as most useful were "Information on a 'guaranteed' product's lifespan" and "Information on the product's life-cycle environmental and climate footprint" (both 30% ±1%).

The information selected as least useful was "Information about software updates or upgradability of hardware and software of the product" (10% ±1%).

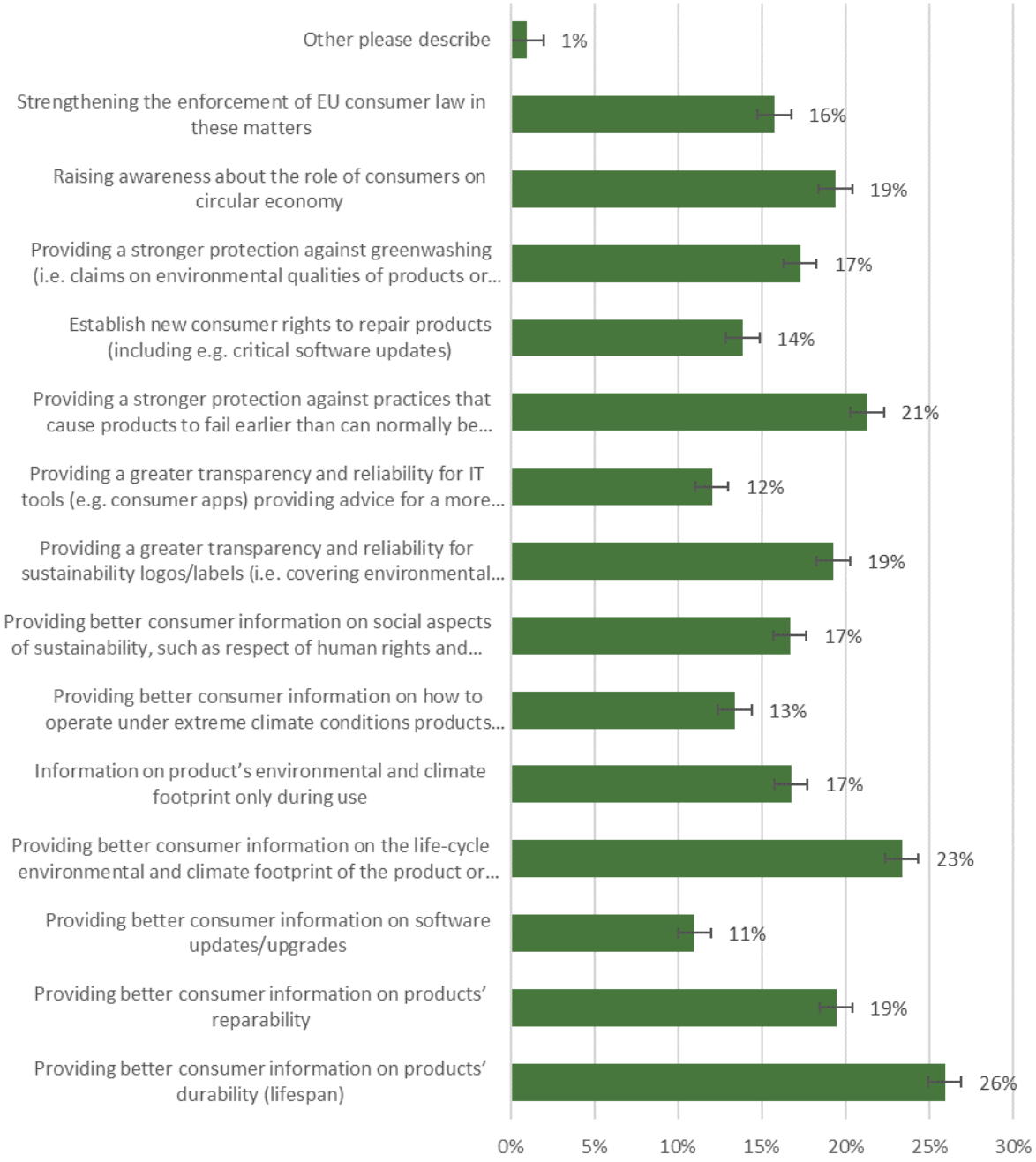
Figure A172. In your opinion, which of the following pieces of information could be most useful to help you choose sustainable products? (N=11805. Respondents were limited to selecting 3 options or less)



Respondents where then asked the most effective measure the EU could take to help them choose sustainable products. Once again, respondents were limited to selecting no more than three options. Respondents selected an average of 2.5 options. The proportion of respondents that selected each option is shown in Figure A173.

The top three measures selected were "Providing better consumer information on products' durability" (29% ±1%), "Providing better consumer information on the life-cycle environmental and climate footprint of the product or service" (27% ±1%) and "Providing a stronger protection against practices that cause products to fail earlier than can normally be expected" (21% ±1%).

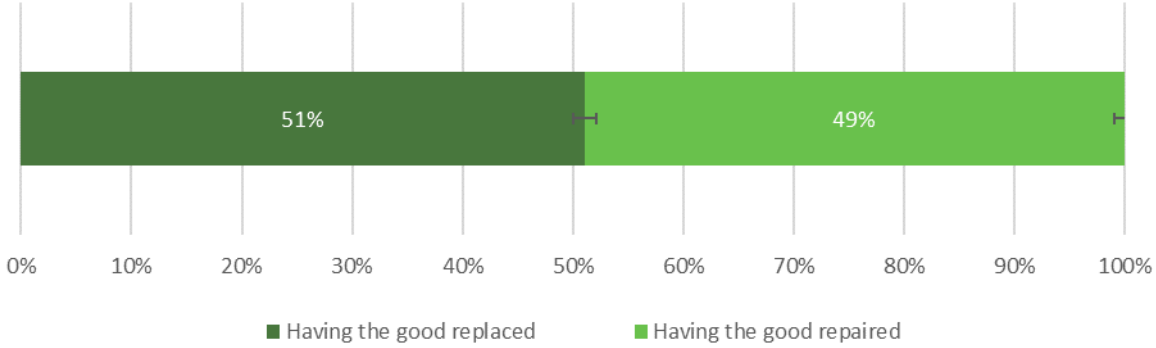
Figure A173. Which measures in the list below would you consider as most effective to help you choose sustainable products? (N=11805, Respondents were limited to selecting 3 options or less)



Respondents were asked whether they would prefer if the seller were to repair or replace a product that broke down when it was under guarantee. As shown in Figure A174, almost exactly half (51% ±1%) said they would prefer to have the product replaced, indicating a significant share of respondents would opt for the more sustainable consumption behaviour..

In fact, amongst those respondents with an above average Environmental Attitude Score (see section 0) only 42% (±1%) of respondents would prefer to have the product replaced, which is significantly ($p>0.01$) less than the overall sample proportion, indicating that as expected, preference for a product to be repaired rather than replaced is positively correlated with environmental engagement.

Figure A174. Imagine that a good you own breaks down within the legal guarantee period (which means that the seller must repair or replace it free of charge or give you a price reduction or a full refund). Given the choice between having the good repaired or replaced, which one would you prefer? (N=11805)



Respondents were asked to expand on the reasons for their choice, the responses to which are shown in Figure A175 and Figure A176.

Over half (54% ±1%) of respondents who would prefer to have a good replaced cited the risk of the product not being properly repaired as a reason for their choice. A large proportion (46% ±1%) cited concern about repaired products not lasting as long as new products.

Almost two thirds (63% ±1%) of respondents who would prefer to have a good repaired cited concern about environmental impact as a reason for their choice. Just under half (44% ±1%) cited fairness as a reason.

Figure A175. Please indicate why [You would prefer to have a good replaced rather than repaired]. (N=6028).

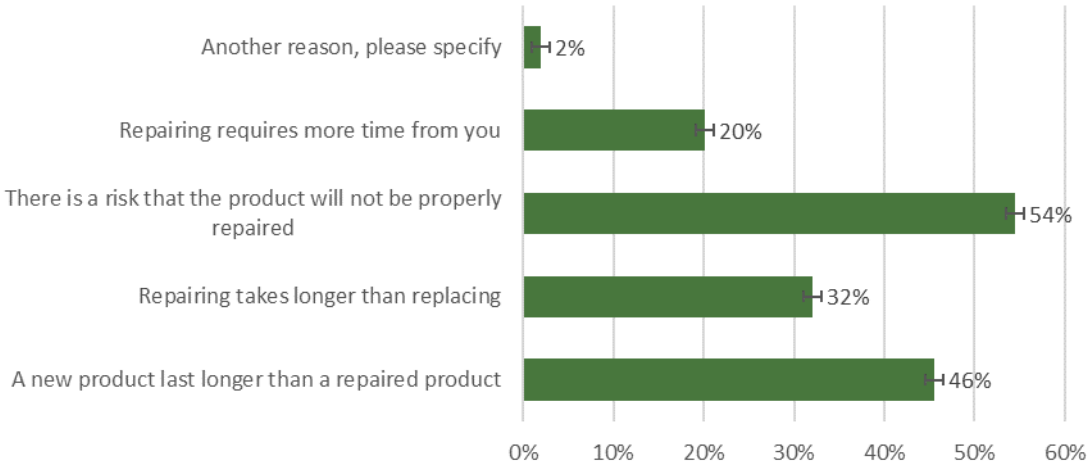
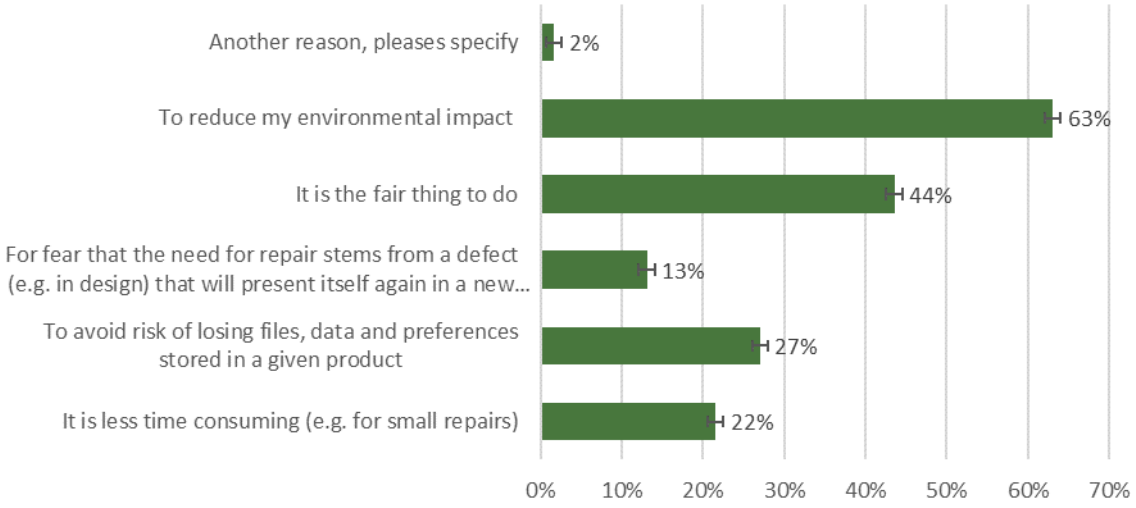
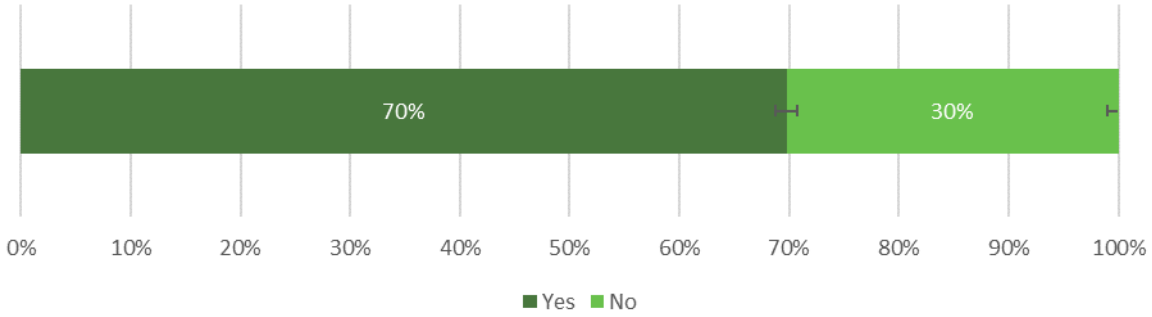


Figure A176. Please indicate why [You would prefer to have a good repaired rather than replaced]. (N=5777)



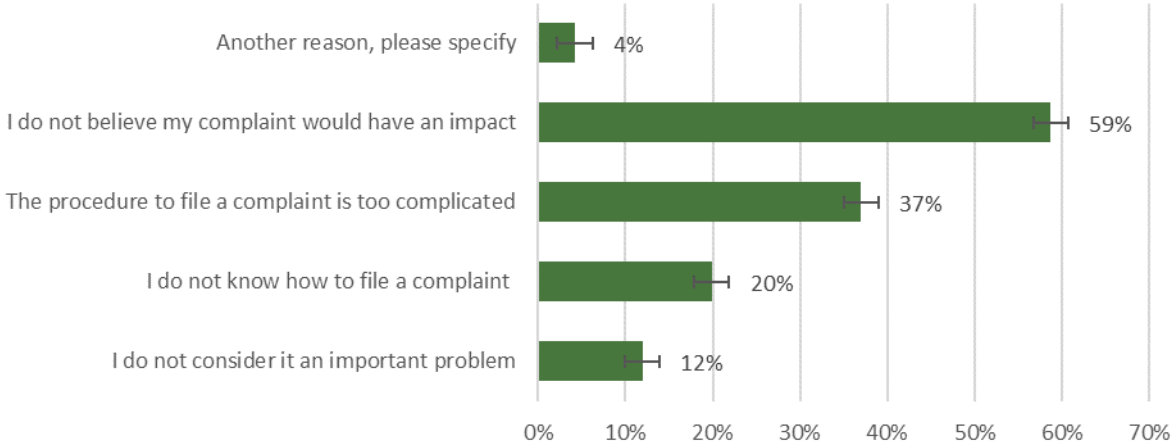
Respondents were asked if they would report a misleading or false claim about how environmentally friendly a product or service is. As seen in Figure A177 almost three quarters (70% ±1%) said they would report such an incident.

Figure A177. Imagine that you realise that a company is conveying a false impression or providing misleading information about how environmentally friendly a product or service is. Would you file a complaint? (N=11805)



Those respondents who said they would not report such an incident were asked for their reasons, the responses to which are shown in Figure A178. The most common reason cited (59% of those who would not report an incident ±2%) was scepticism about the complaint having an impact, but a significant number (37% ±2%) also cited the complexity of the claim process.

Figure A178. Why not [Report a false claim]? (N=3567)



A8.9.3 Incidence of problems

A8.9.3.1 Questions about products you own

To facilitate the targeting of questions in this section, respondents were asked which "durable goods", from a selected set,[290] they owned, and which products were older than two years (and thus not covered by a legally mandated commercial guarantee). The results of these questions are shown in Figure A179 and Figure A180.

Penetration of these products is quite high, with the highest being smartphones and refrigerators (both 92% of respondents ±1%) and the lowest being dishwashers (58% ±1%).

The category with the highest proportion of products owned by respondents that were over two years old was furniture (73% of products owned by respondents ±2%), and the category with the lowest proportion was electronics (54% ±2%).

[290] This category includes Large household appliances (namely, washing machines, refrigerators, microwaves/electric ovens, vacuum cleaners, dishwashers), small household appliances and tools (namely, coffee machines, irons, mixers, kettles, electric shavers/razors/trimmers, hair dryers), electronic and IT products (namely, smartphones, laptops, LCD televisions) and furniture (namely, sofas).

Figure A179. Which of the following types of product do you own? (N=11805)

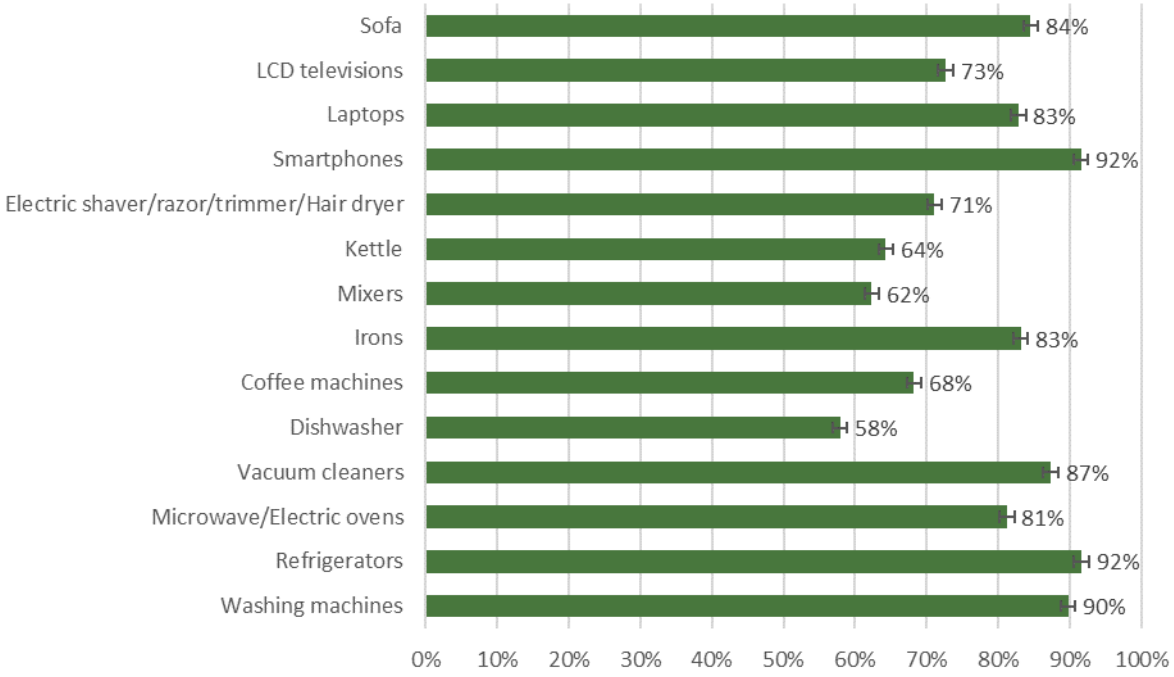
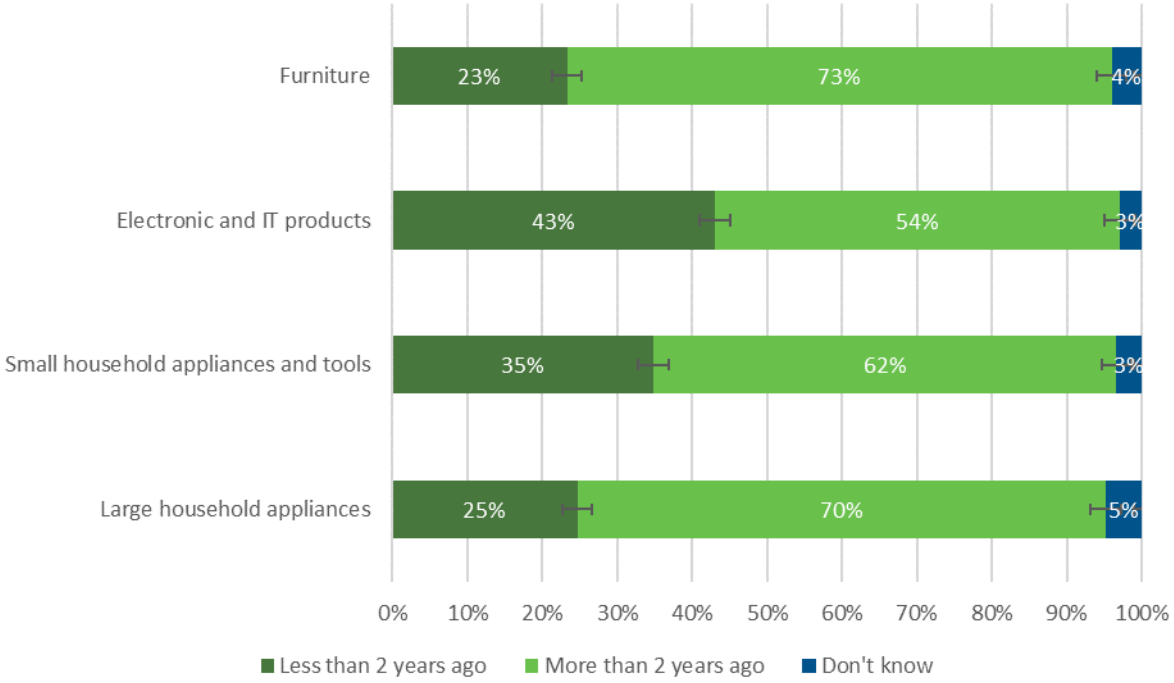
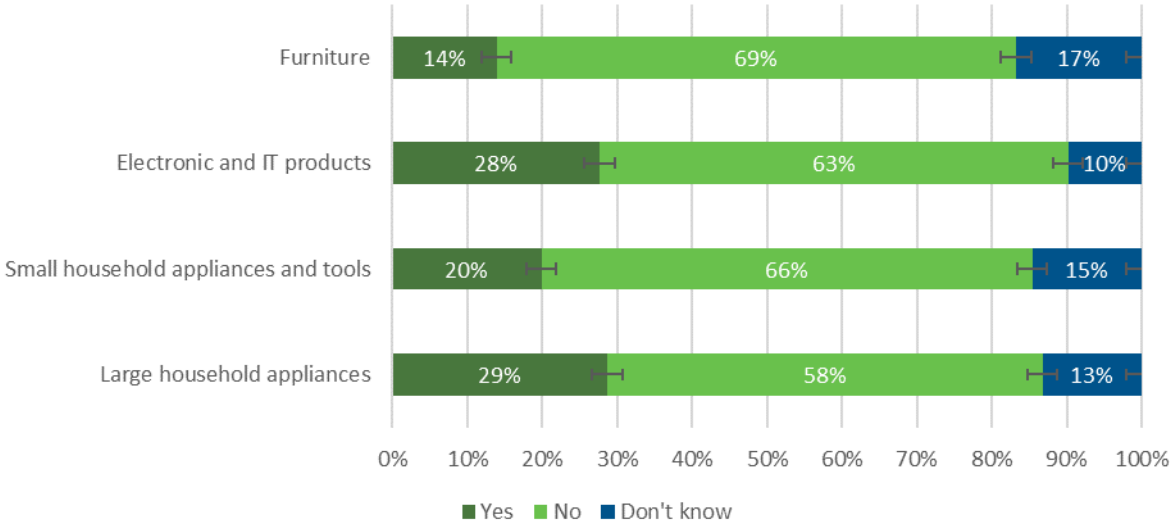


Figure A180. When did you buy the product?



Respondents were also asked if these products were covered by commercial guarantees beyond the legally mandated two years. As shown in Figure A181, in all product categories the proportion of products covered by a guarantee is less than a quarter, with the highest proportion being large household appliances (29% of products owned by respondents ±2%) and the lowest being furniture (14% ±2%).

Figure A181. Is this product covered by a commercial guarantee beyond the legally mandated guarantee?



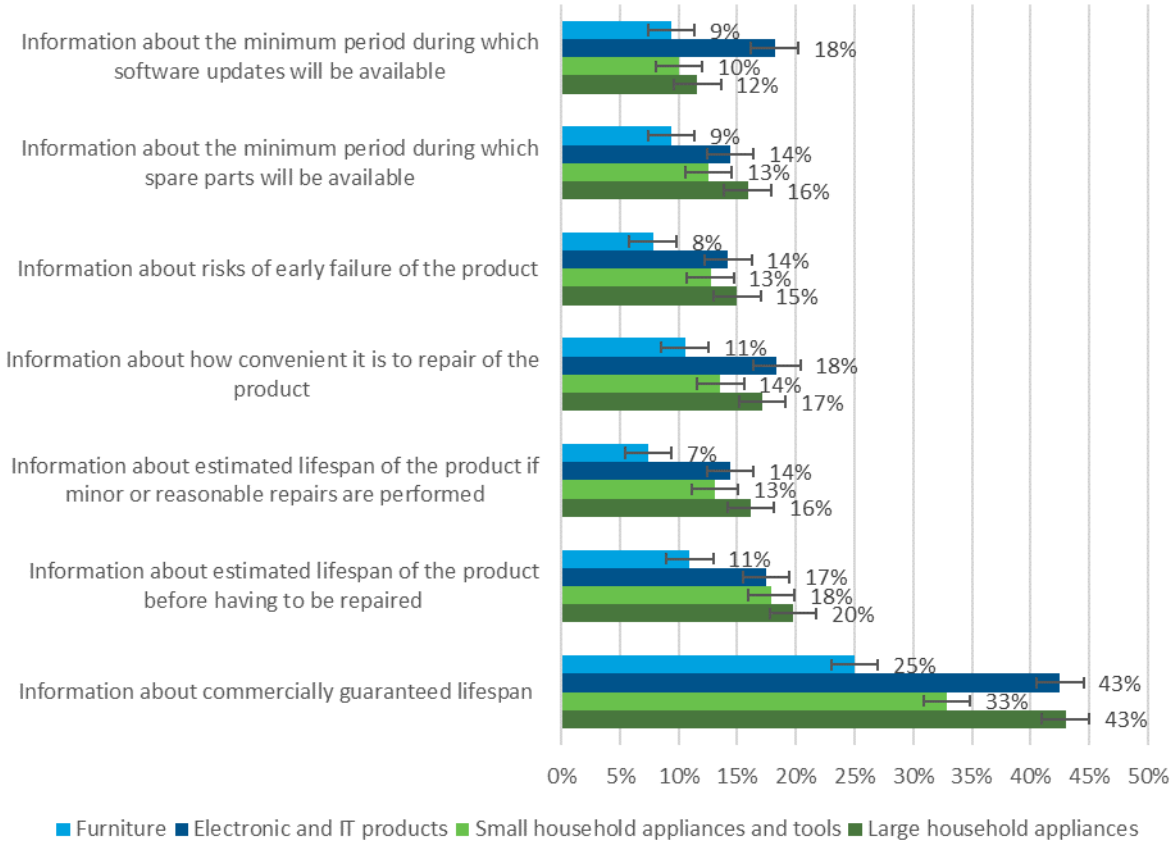
A8.9.3.2 Questions about the purchase process

Those respondents who owned products outside the legally mandated guarantee period were asked what information they received from the seller about the product's lifespan and durability. The results of this question desegregated by product group are shown in Figure A182.

The overwhelming majority of respondents did not receive information about the durability and reparability of the product. A minor exception is information about the commercially guaranteed lifespan of the product, which was provided to between a quarter or a half of respondents depending on product group (43% ±3% for large appliances, 33% ±3% for small appliances, 43% ±3% for electronics and 25% ±2% for furniture).

Furniture is consistently the product category where the least information is provided to purchasers, with less than 10% of respondents being provided with many pieces of information (7% ±1% for information about lifespan with minor or reasonable repair , 8% ±2% for information about risk of early failure, and 9% ±2% for both information about software updates and information about spare parts).

Figure A182. Please indicate whether you received the following information when you purchased the following products:

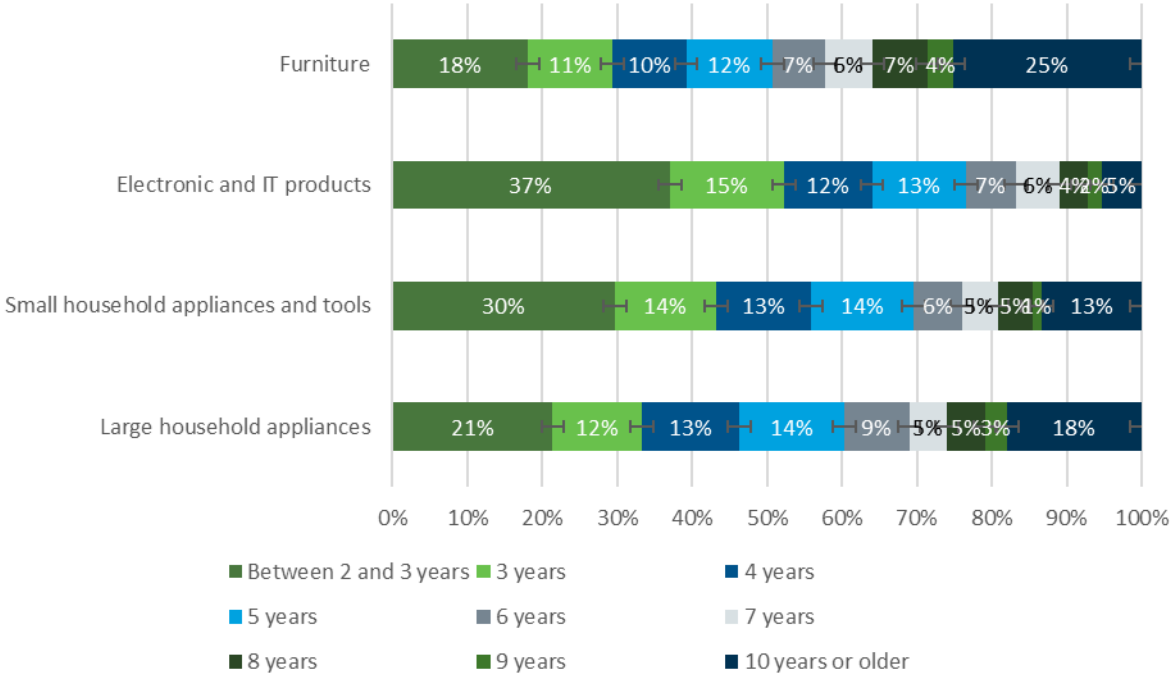


A8.9.3.3 Questions about the problems you have experienced with products

Respondents who owned these products were then asked about issues they experienced with these products that were not covered by legally mandated or commercially provided guarantees.

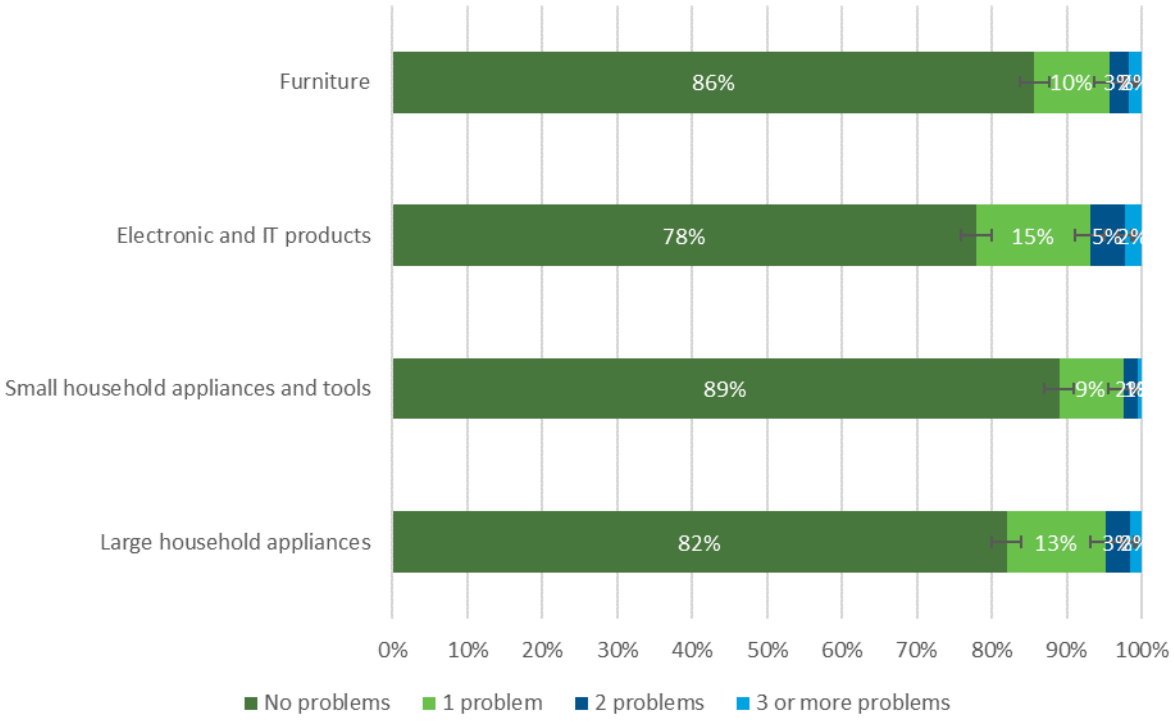
Respondents were first asked about the age of these products, as shown in Figure A183. The category with the highest proportion of older products was furniture, with a quarter (25% ±2%) being ten years old or older. The category with the highest proportion of newer products was electronics, with about a third (37% ±2%) being three years old or newer.

Figure A183. How old is the product?



Respondents were then asked if they had experienced a problem with these products while they were outside a legal or commercial guarantee. As shown in Figure A184 in most cases, respondents were not able to recall an issue, the highest proportion who could being in the category of electronics (22% ±2%) and the lowest proportion being in the category of small appliances (11% ±1%).

Figure A184. How many problems have you had with this product that were not covered by a legal or commercial guarantee?



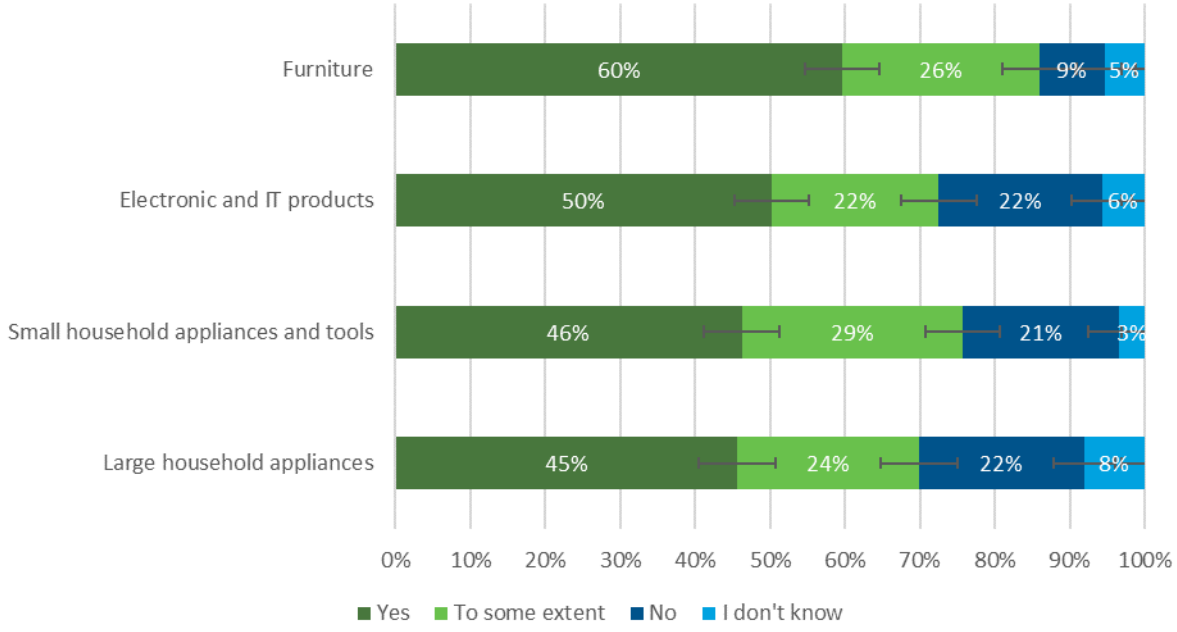
Respondents were then asked about the age of the product when they experienced the first of these problems. As shown in Table A22, most of these issues occurred in the first three years after purchase, particularly in the case of small appliances (66% ±5% of problems). The category with the least issues within the first three years after purchase was large appliances (44% ±5%).

Table A22. How old was the product when you had your first problem with it?

	Large household appliances	Small household appliances and tools	Electronic and IT products	Furniture
Between 2 and 3 years	44%	66%	59%	58%
3 years	16%	10%	16%	13%
4 years	11%	9%	5%	10%
5 years	11%	6%	10%	6%
6 years	6%	3%	3%	4%
7 years	3%	1%	4%	2%
8 years	2%	2%	2%	2%
9 years	2%	0%	0%	2%
10 years or older	5%	2%	0%	2%

Finally in this section, respondents were asked if they felt the product should have lasted longer before the first issue occurred. As shown in Figure A185, the majority of respondents felt this way to at least some extent. The highest proportion of this response occurred in the category of furniture (86% ±5%) and the lowest proportion in the category of large appliances (68% ±5%).

Figure A185. Do you consider that this [first] problem occurred too early and the product should have normally lasted longer?

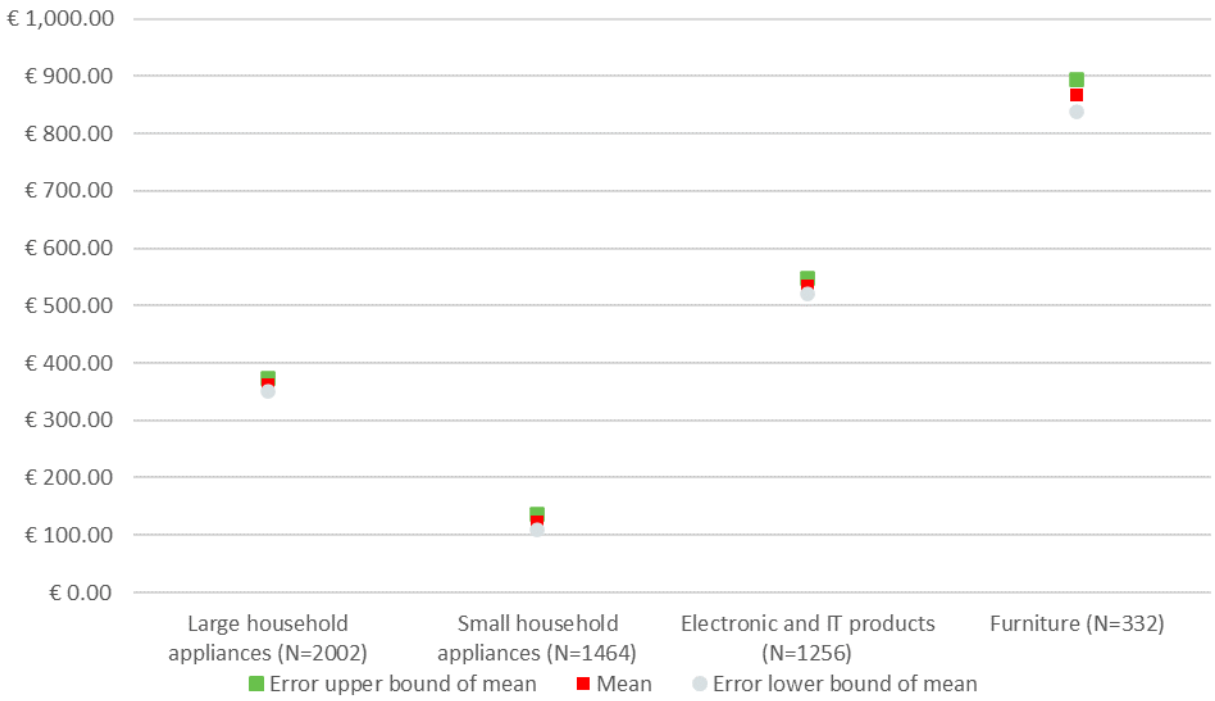


A8.9.4 Consumer detriment for one selected product category A not covered by a legal guarantee, commercial guarantee, or insurance

In this section of the survey, respondents were asked questions focusing on the first issue they had with one of the "durable good" they own that was not covered by a legal or commercial guarantee (based on answers to Section 0).

For context, respondents were first asked to estimate the original cost of the product, the mean responses to which are shown in Figure A186. The most expensive product category was furniture, where respondents with a mean price of € 866.44 (±€ 27.93) and the least expensive product category was small household appliance with a mean price of € 123.02 (±€ 13.30).

Figure A186. Please indicate the approximate value of the [PRODUCT] that you had a problem with



Following this, respondents were asked in more detail what information the seller provided about the lifespan and durability of the products. The answers to these questions are shown in Table A23 through Table A27.

Consistently, each piece of information asked about was provided only in roughly half the cases. The notable exception is information about the length of the commercial guarantee, which information was provided in roughly three quarters of cases. (72% of cases ±2% in the large household appliances category, 76% ±2% in the small household appliances category, 74% ±2% in the electronics category and 65% ±5% in the furniture category). We can speculate that this is because the length of the commercial guarantee is emphasised during the sales process.

Respondents were also asked a simple yes or no question as to whether the seller provided information about known weaknesses of the product that might cause it to fail prematurely. As shown in Figure A187, this information was provided only a quarter of the time (20% of the time ±2% in the large household appliances category, 30% of the time ±2% in the small household appliances category, 17% of the time ±2% in the electronics category, and 26% of the time ±5% in the furniture category.)

Table A23. Can you tell us what information the manufacturer or retailer told you about the [PRODUCT] when you purchased it?: The estimated lifespan of the product before having to be repaired

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
I did not receive this information	49%	45%	55%	51%
Between 2 and 3 years	15%	23%	16%	10%
3 years	7%	9%	7%	8%
4 years	4%	5%	4%	4%
5 years	7%	6%	6%	6%
6 years	2%	2%	1%	2%
7 years	1%	1%	0%	2%
8 years	1%	0%	0%	0%
9 years	0%	0%	0%	1%
10 years	3%	1%	1%	4%
Longer than 10 years	1%	0%	0%	3%
Don't know	10%	6%	9%	10%

Table A24. Can you tell us what information the manufacturer or retailer told you about the [PRODUCT] when you purchased it?: The estimated lifespan of the product if minor or reasonable repairs are performed

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
I did not receive this information	49%	45%	53%	48%
Between 2 and 3 years	10%	16%	11%	9%
3 years	7%	12%	7%	6%
4 years	6%	7%	7%	5%
5 years	6%	5%	7%	6%
6 years	3%	3%	3%	3%
7 years	2%	2%	1%	2%
8 years	2%	2%	1%	2%
9 years	1%	0%	0%	1%
10 years	2%	1%	1%	3%
Longer than 10 years	1%	1%	0%	4%
Don't know	11%	7%	10%	11%

Table A25. Can you tell us what information the manufacturer or retailer told you about the [PRODUCT] when you purchased it?: The length of the commercial guarantee

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
I did not receive this information	20%	19%	17%	25%
Between 2 and 3 years	43%	46%	52%	33%
3 years	10%	12%	9%	8%
4 years	5%	7%	4%	6%
5 years	7%	5%	5%	8%
6 years	2%	2%	2%	2%
7 years	2%	2%	1%	2%
8 years	1%	1%	0%	1%
9 years	0%	0%	0%	0%
10 years	1%	1%	0%	3%
Longer than 10 years	0%	0%	0%	2%
Don't know	8%	6%	9%	10%

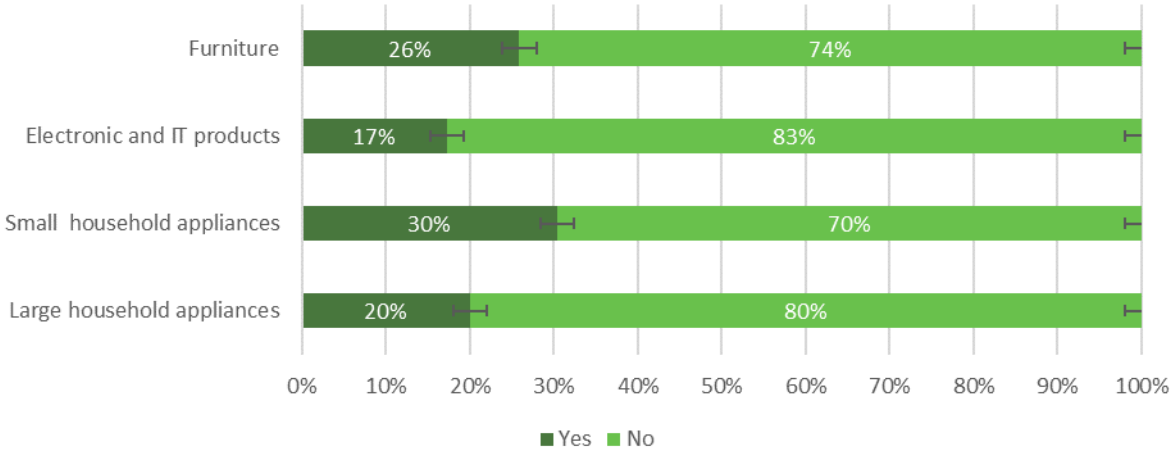
Table A26. Can you tell us what information the manufacturer or retailer told you about the [PRODUCT] when you purchased it?: How long spare parts would remain available

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
I did not receive this information	52%	48%	55%	50%
Between 2 and 3 years	9%	15%	12%	9%
3 years	7%	9%	6%	7%
4 years	5%	6%	4%	5%
5 years	5%	6%	4%	5%
6 years	2%	3%	2%	2%
7 years	2%	2%	1%	2%
8 years	1%	1%	1%	1%
9 years	0%	1%	0%	1%
10 years	1%	1%	1%	1%
Longer than 10 years	2%	1%	1%	2%
Don't know	15%	9%	14%	16%

Table A27. Can you tell us what information the manufacturer or retailer told you about the [PRODUCT] when you purchased it?: How long software updates/upgrades would be provided

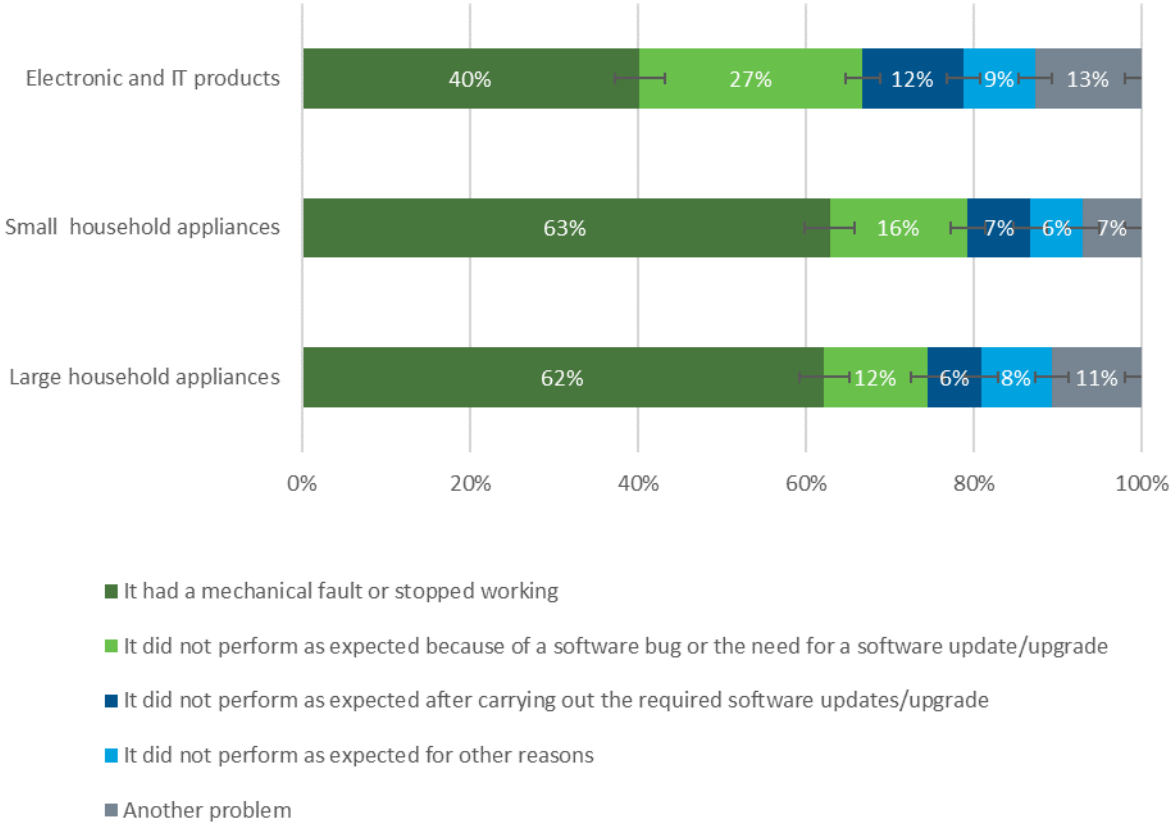
	Large household appliances	Small household appliances	Electronic and IT products
I did not receive this information	55%	49%	50%
Between 2 and 3 years	8%	13%	13%
3 years	6%	9%	7%
4 years	4%	6%	4%
5 years	3%	5%	5%
6 years	2%	3%	3%
7 years	2%	1%	1%
8 years	1%	1%	0%
9 years	0%	1%	0%
10 years	1%	1%	1%
Longer than 10 years	1%	1%	1%
Don't know	17%	12%	15%

Figure A187. When you bought the [PRODUCT] did the manufacturer/retailer give you information about known weaknesses of the product that could cause it to fail earlier than it could be reasonably expected?



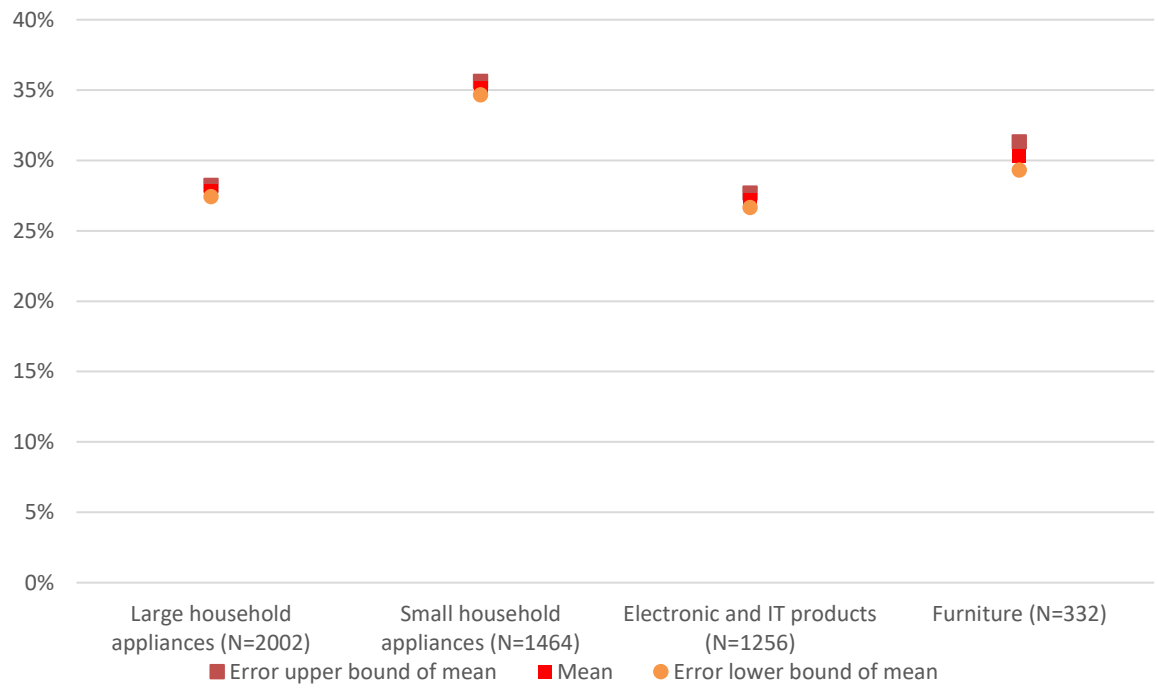
Respondents were then asked about the nature of the first problem they experienced with the product, the responses to which are shown in Figure A188. Across all categories the most common problem cited was mechanical failure (62% of cases ±2% in the large household appliances category, 63% ±2% in the small household appliances category, 40% ±3% in the electronics category, and 33% ±5% in the furniture category) but in the electronics category software bugs and the need for software updated were also a significant factor, forming over a quarter of cases. (27% ±2%).

Figure A188. What kind of problem did you experience with the [PRODUCT]?



Respondents were then asked to estimate what they expected the cost of having the product professionally repaired to be, as a proportion of the original product price. The mean results of this question across product category are shown in Figure A189. In all categories, respondents estimated the cost of repair to be roughly a third of the original product price (28% of product price ±0.4% in the large household appliances category, 35% ±0.5% in the small household appliances category, 27% ±0.5% in the electronics category, and 30% ±1% in the furniture category).

Figure A189. When the problem occurred, how much did you expect the professional repair cost to be? (Shown as % of product price)



In the following subsections of the survey, respondents were walked through the journey of attempting to have the product repaired or replaced, allowing them to relate the story of their experience. Respondents were routed to the appropriate section based on what they attempted to do to resolve the issue, in the order they attempted each resolution.

To facilitate this, respondents were first asked what they initially did to resolve the issue and directed to the appropriate subsection. The results of this question by product category can be seen in Table A28.

In the large household appliances and small household appliances categories, the most common initial response was to look for professional repair (35% ±2% and 32% ±2% respectively) closely followed by attempts to self-repair (30% ±2% and 27% ±2% respectively).

In the electronics category seeking professional repair was the clear most common initial response (37% ±3%).

In the furniture category, the initial responses were split between attempting self-repair (26% ±5%), disposing of the product without repair or replacement (24% ±5%), and seeking professional repair (22% ±4%), the difference between these proportions falling within margin for error.

Table A28. What did you first do when you realised that there was a problem with the [PRODUCT]?

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
I tried to have it repaired by a professional repair service/shop	35%	32%	37%	22%

	Large household appliances	Small household appliances	Electronic and IT products	Furniture
recommended by the manufacturer and/or retailer				
I tried to have it repaired by a professional repair service/shop which was not specifically recommended by the manufacturer and/or retailer	20%	16%	17%	17%
I tried to repair it myself (or asked a friend, acquaintance, relative to do it)	30%	27%	20%	26%
I tried to repair it in a Repair Café (or similar initiative)	2%	3%	2%	3%
I tried to install the update/upgrade to the product's software provided by the manufacturer (or asked a friend, acquaintance, relative to do it)	1%	1%	7%	2%
I replaced the product	4%	10%	4%	5%
I neither replaced nor repaired the product	7%	10%	13%	24%

A8.9.4.1 Professional repairs

This subsection was answered by those respondents who attempted to have a product repaired professionally based on their answers to any other subsection. Note that in the case of the furniture category the margin for error of this section is high due to the small number of contacted respondents who had furniture professionally repaired.

Respondents were first asked what problems they had encountered when attempting to have the product repaired professionally, the results of which can be found in Table A29.

In the large household appliances category the most common problem cited (20% of cases ±2%) was difficulty in finding information on how to get the product repaired, followed by a lack of availability of local repair services (16% ±2%) and expense (15% ±2%).

In the small household appliances category, there are a cluster of three common problems cited; difficulty in finding information on how to get the product repaired (27% ±3%), expense (26% ±3%) and lack of availability of local repair services (25% ±3%). This was followed by another cluster of three slightly less common problems; spare parts no longer being available (17% ±3%), expense of spare parts (15% ±2%) and time required for the repair (14% ±2%).

In the electronics category the most common problem cited by a considerable margin (6%) was lack of availability of local repair services (24% ±3%), followed by difficulty in finding information on how to get the product repaired (18% ±3%), then expense (14% ±2%).

In the furniture category, there were four issues cited most commonly within margin of error of one another; lack of availability of local repair services (25% ±7%), difficulty in finding information on how to get the product repaired (24% ±7%), expense (21% ±6%) and spare parts no longer being available (18% ±6%). This was followed by

another cluster of three slightly less common problems; time taken for the repair (14% ±6%), expense (14% ±6%), and expense of spare parts (12% ±5%).

Table A29. You indicated that you tried to organise a repair by a professional service. When you did so, did you experience any of the following problems?

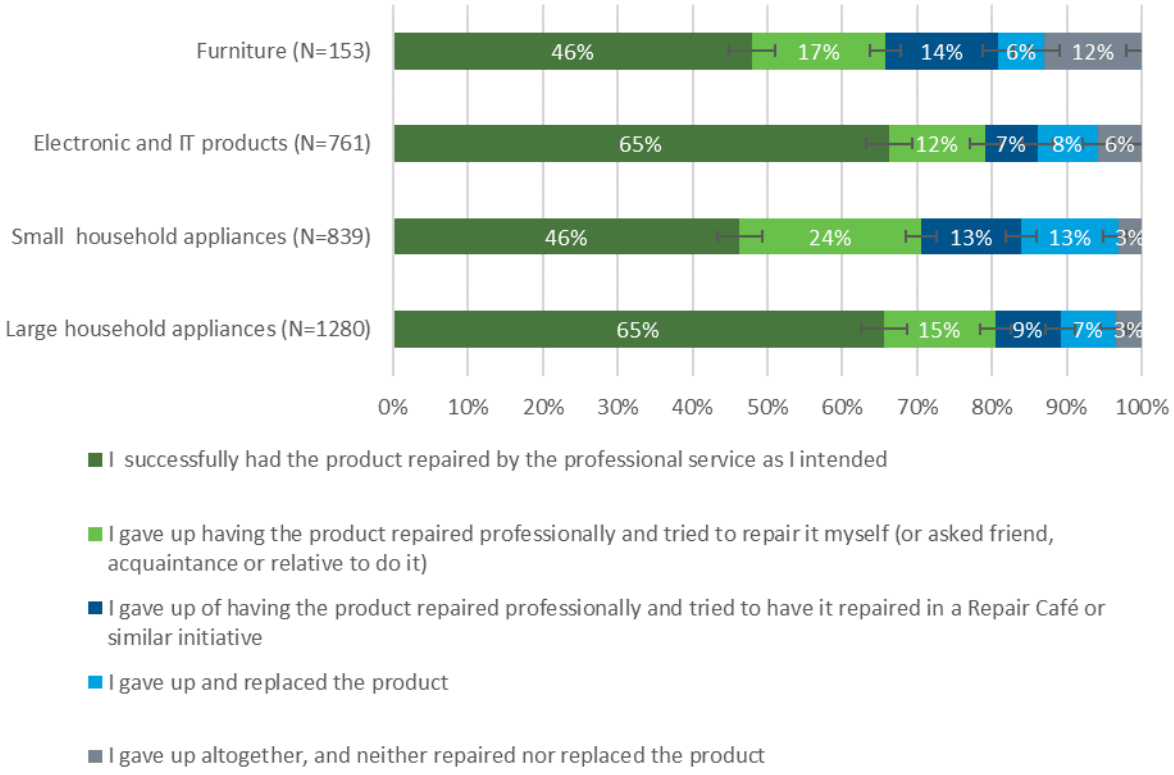
	Large household appliances (N=1280)	Small household appliances (N=839)	Electronic and IT products (N=761)	Furniture (N=153)
The repair was not available locally	16%	25%	24%	25%
It was not easy to find out if and where the product could be repaired	20%	27%	18%	24%
The repair service was too expensive/it was cheaper to replace the product	15%	26%	14%	21%
Spare parts of the product were no longer available	11%	17%	7%	18%
Software updates for this version of the product were no longer available	6%	11%	6%	8%
Spare parts would have taken too long to arrive	9%	12%	7%	9%
Spare parts were expensive	14%	15%	11%	12%
The repair would have taken too long	9%	14%	9%	14%
The repair service was too expensive	10%	12%	11%	14%
The failed component / the whole product was impossible to repair	6%	8%	6%	8%
The manufacturer/seller obliged me to take out an insurance policy (with standing order for several months) before they would do the repair	3%	5%	2%	4%
The repair service did not have the necessary information to perform the repair	5%	4%	4%	6%
The retailer wanted to replace the product instead of repairing it	3%	6%	4%	5%
Another problem	1%	1%	2%	3%

Respondents were then asked what the outcome of their attempt to have the product professionally repaired was, the results of which are shown in Figure A190. If respondents indicated they made another attempt to resolve the issue, they were routed to the relevant subsection of the survey after completing this subsection.

In the large household appliances and electronics categories, the majority of professional repairs were successful (both 65% of cases ±3%), however in the small household appliances and furniture categories, professional repairs were successful less than half of the time (46% ±3% and 46% ±8% respectively).

In all product categories, the most common action following a failed professional repair was to attempt self-repair (15% ±2% for large household appliances, 24% ±2% for small household appliances, 12% ±2% for electronics, and 17% ±6% for furniture).

Figure A190. After trying to organise the repair of the product by a professional service, what was the outcome?



Respondents were then asked to estimate both the time cost and financial cost to them of attempting to have the product professionally repaired, the results of which can be seen in Figure A191 and Figure A192.

Across all product categories, the majority of respondents spent less than a day of time attempting to have a product professionally repaired, and less than 15% of respondents spent more than a week.

In terms of financial detriment, the cost of professional repair to furniture is particularly high, with a mean response of € 163.03 ±€ 11.89. The lowest mean repair cost is that of small household appliances (€ 44.04 ±€ 4.17).

Across all categories except small household appliances, if we compare the mean professional repair cost to the mean initial product cost (given in Figure A186) the recalled cost of repair is considerably less than the respondent's initial estimates as to how much a professional repair would cost (given as approximately one third of the initial product price in Figure A189).

Figure A191. How much time did you spend on trying to get/having the product repaired professionally?

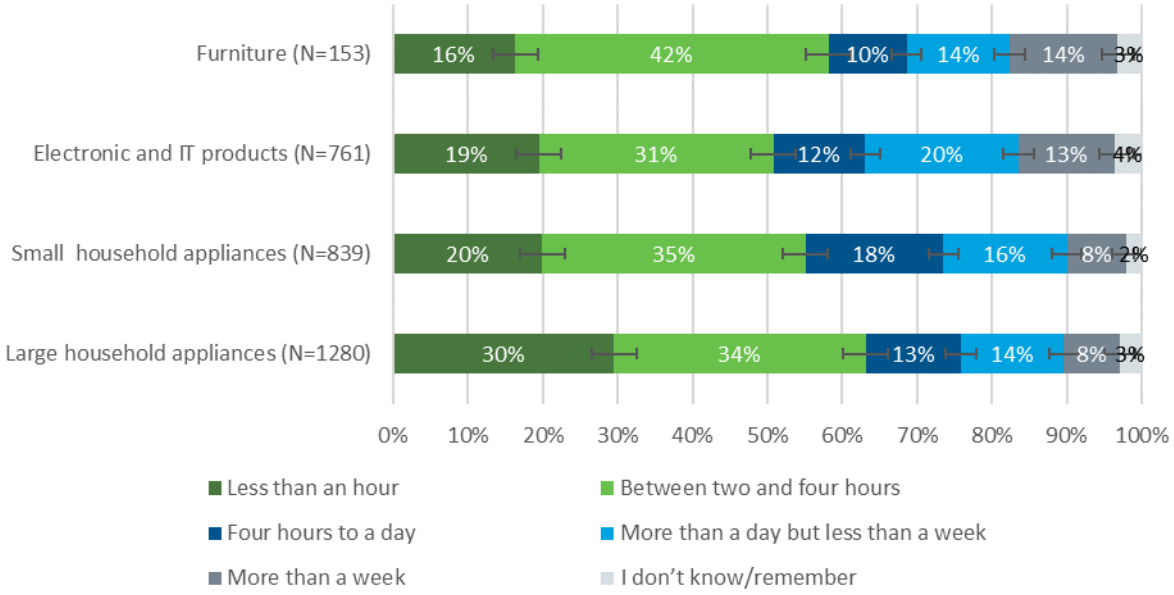
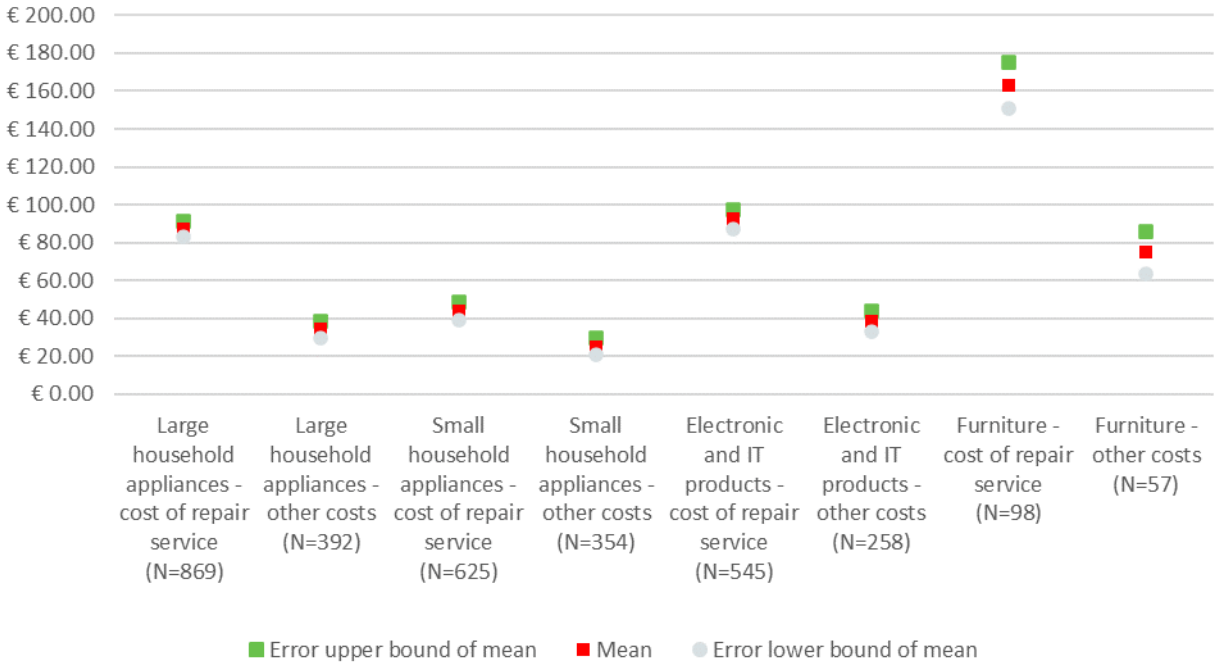


Figure A192. Now we would like you to estimate the total cost to you as a result of having/trying to have the [PRODUCT] repaired. These financial losses could include travel costs, cost of repairs, cost of expert advice, reduction in value of the product, etc.

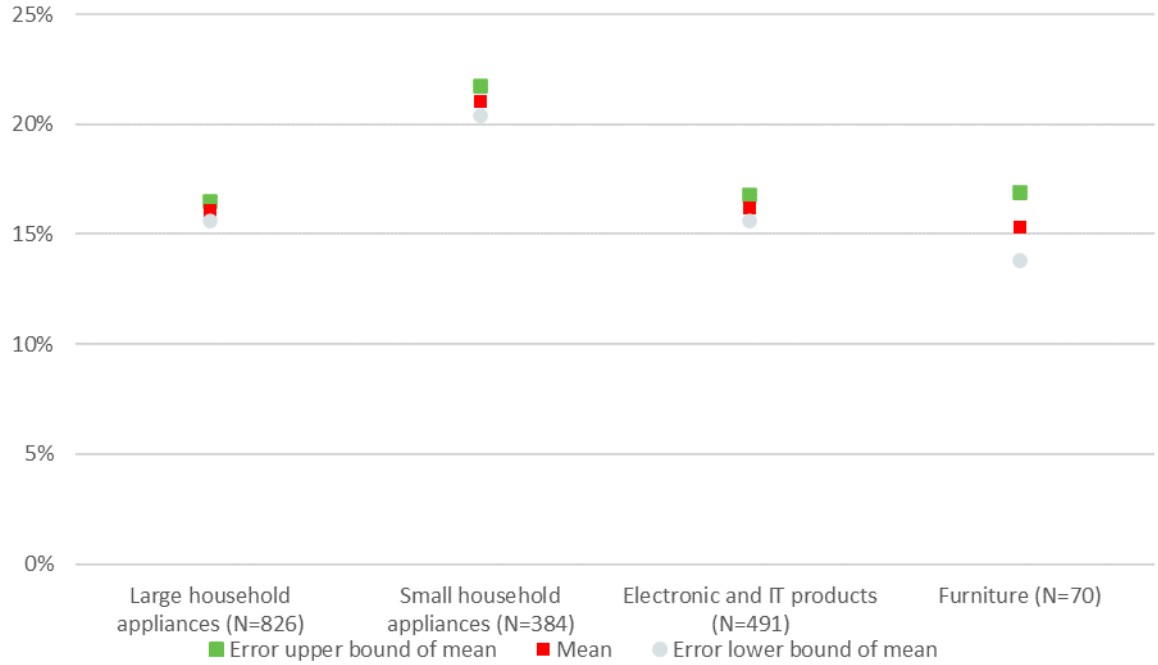


Finally in this subsection, respondents were asked how much extra they would be willing to pay for a professional repair if it came with a renewed commercial guarantee.

Across all categories respondents indicated they would be willing to pay approximately one fifth more than the normal price of professional repair if it came with such a guarantee (16% more ±0.5% for the large household appliances category, 21% more

±0.7% for the small household appliances category, 16% more ±0.6% for the electronics category and 15% more ±1.5% for the furniture category).

Figure A193. Please indicate how much you would be willing to pay for the repair service if it was guaranteed that the repaired product will function properly after repair [an appropriate number of] years (shown as % of the repair cost)



A8.9.4.2 Self-repair or Repair Café

This subsection was answered by those respondents who attempted to repair a durable product themselves, by an acquaintance or through a repair café based on their answers to any other subsection. Note that in the case of the furniture category the margin for error of this section is high due to the small number of contacted respondents attempting self-repair of furniture.

Respondents were first asked what problems they had encountered when attempting self-repair of this product, the results of which can be found in Table A30.

In the large household appliances category, the most common problem cited (21% of cases ±3%) was lack of knowledge of how to obtain spare parts, followed by the expense of spare parts (19% ±3%) then the lack of availability of spare parts (16% ±2%). Other significantly cited problems were inability to access or remove the failed component (15% ±2%), lack of availability of a repair manual (15% ±2%) and general difficulty of the repair (13% ±2%).

In the small household appliances category, the most common problem cited by a wide margin (8%) was lack of knowledge of how to obtain spare parts (28% ±3%), followed by inability to access or remove the failed component (21% ±3%), then the expense of spare parts (20% ±3%) and then the lack of availability of spare parts (19% ±3%). Other significantly cited problems were the software no longer being supported (16% ±3%) and the repair manual being unclear (12% ±2%).

In the electronics category, the most commonly cited problem was the software no longer being supported (20% ±4%) followed by lack of knowledge of where or how to obtain spare parts (17% ±4%). Other significantly cited problems included general

difficulty of the repair (15% ±3%), inability to access or remove the failed component (14% ±3%), lack of availability of spare parts (13% ±3%) and lack of availability of a repair manual (12% ±3%).

In the furniture category, there are a cluster of four problems most commonly cited; lack of knowledge of where or how to obtain spare parts (21% ±7%), lack of availability of spare parts (20% ±7%), inability to access or remove the failed component (19% ±7%) and general difficulty of repair (19% ±7%). Two other commonly cited problems were the expense of spare parts (16% ±6%) and the software no longer being supported (13% ±6%).

Table A30. You indicated that you tried to repair/update/upgrade the product yourself or via a Repair Café (or asked a friend or relative or acquaintance to do that). Did you experience any of the following problems when you did so?

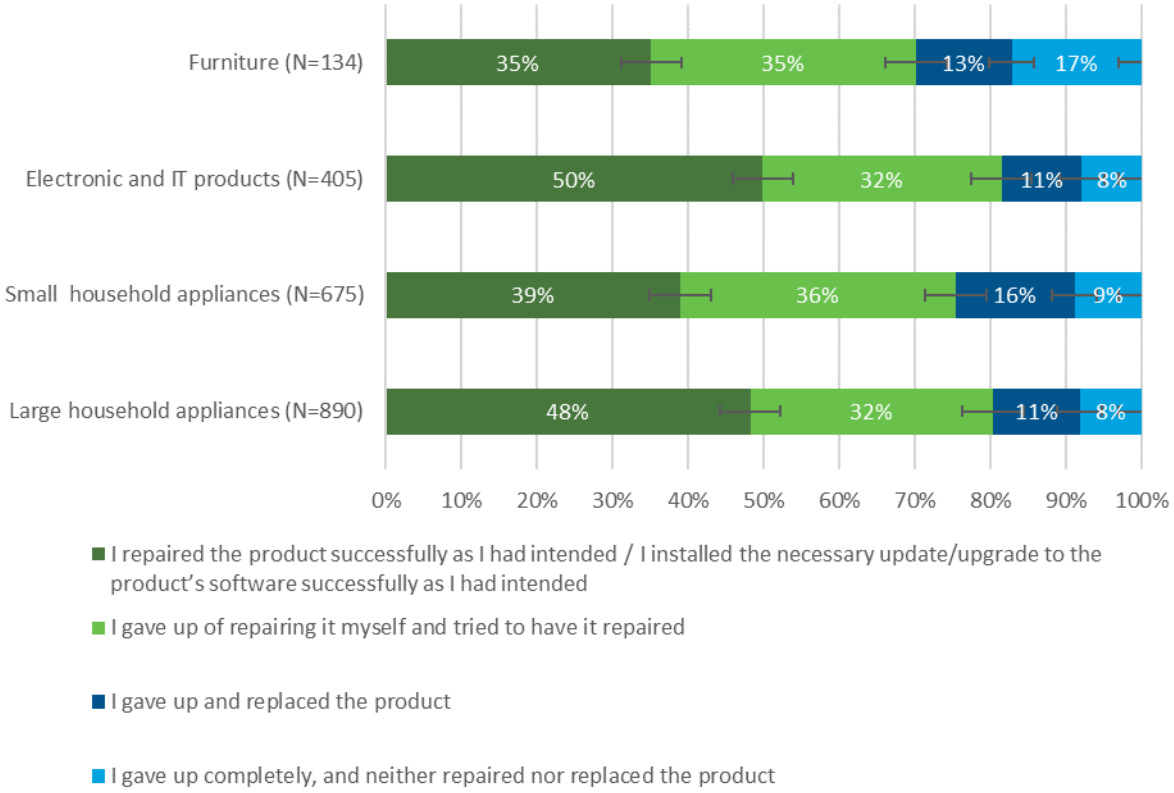
	Large household appliances (N=890)	Small household appliances (N=675)	Electronic and IT products (N=405)	Furniture (N=134)
The necessary spare parts were not available	16%	19%	13%	20%
The software/firmware was no longer supported	11%	16%	20%	13%
I did not know where or how to get spare parts	21%	28%	17%	21%
The price of spare parts was too high	19%	20%	12%	16%
I could not access/remove the failed component (this could be because the product could not be opened because e.g. it was glued shut or because special tools were needed to open it or get the component out, or any other reason you couldn't do this)	15%	21%	14%	19%
The repair manual was not available	15%	18%	12%	16%
The repair manual was not clear on what to do, or easy to understand	11%	12%	9%	5%
The repair turned out to be too difficult	13%	11%	15%	19%
The failed component was impossible to repair due to its product design	4%	5%	3%	9%
Another problem	2%	1%	3%	1%

Respondents were then asked what the outcome of attempting to self-repair the product was, the results of which can be seen in Figure A194. If respondents indicated they made another attempt to resolve the issue, they were routed to the relevant subsection of the survey after completing this subsection.

Mirroring the responses for the outcome of professional repair (given in Figure A190), self-repairs of large household appliances and electronics were successful approximately half of the time (48% ±3% and 50% ±5% respectively) but only a just over a third of the time for small household appliances and furniture (39% ±4% and 35% ±8% respectively).

Across all product categories, the most common response following a failed attempt at self-repair was to attempt to arrange a professional repair (32% ±3% for large household appliances, 36% ±4% for small household appliances, 32% ±5% for electronics and 35% ±8% for furniture).

Figure A194. After you tried to repair or upgrade the product yourself (or have a friend or relative do it) or used a repair Café, what was the outcome?



Respondents were then asked to estimate both the time cost and financial cost to them of attempting self-repair the product, the results of which can be seen in Figure A195 and Figure A196.

Across all product categories, the majority of respondents spent between two and four hours attempting self-repair (46% ±3% for large household appliances, 47% ±4% for small household appliances, 45% ±5% for electronics and 49% ±8% for furniture). Across all categories, the time cost of performing a self-repair is generally less than that of arranging a professional repair (given in Figure A191)

In terms of financial detriment, the cost of self-repair furniture is particularly high, with a mean response of € 76.11 ±€ 6.03 for spare parts and €47.12 ±€ 8.12 for other repair costs. The lowest mean cost is that of small household appliances (€ 26.60 ±€ 2.69 for spare parts, € 23.36 ±€ 3.27 for other repair costs).

Figure A195. Now we would like you to estimate the time spent on trying to repair/update/upgrade the product yourself or through a repair Café?

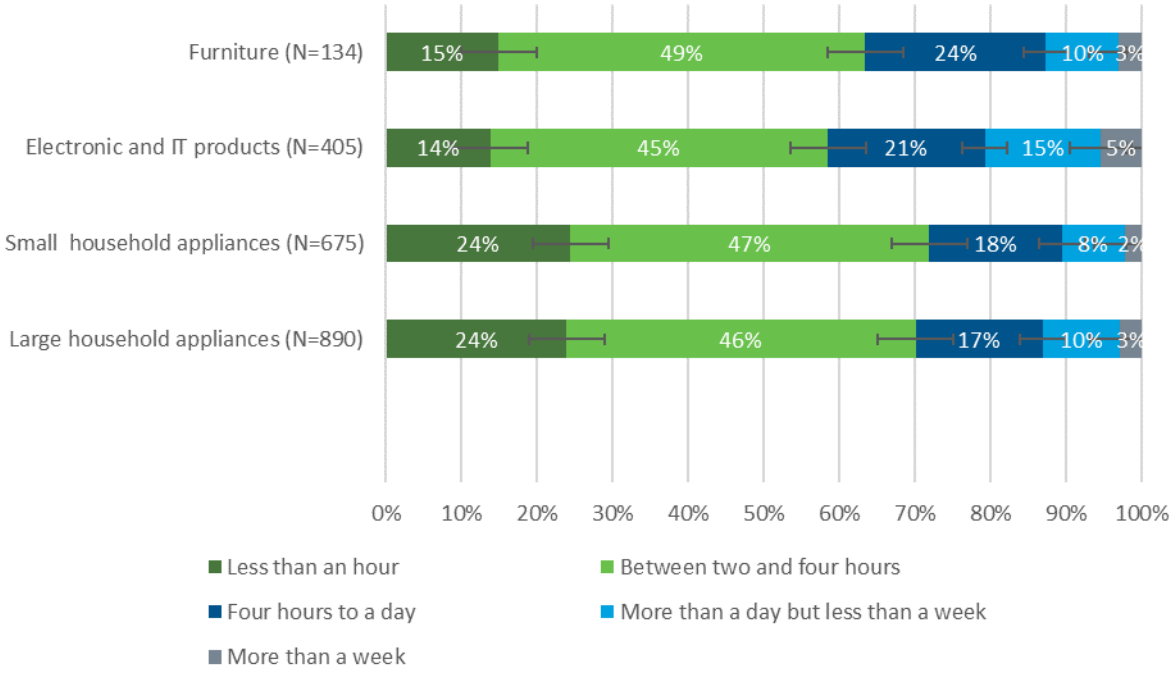
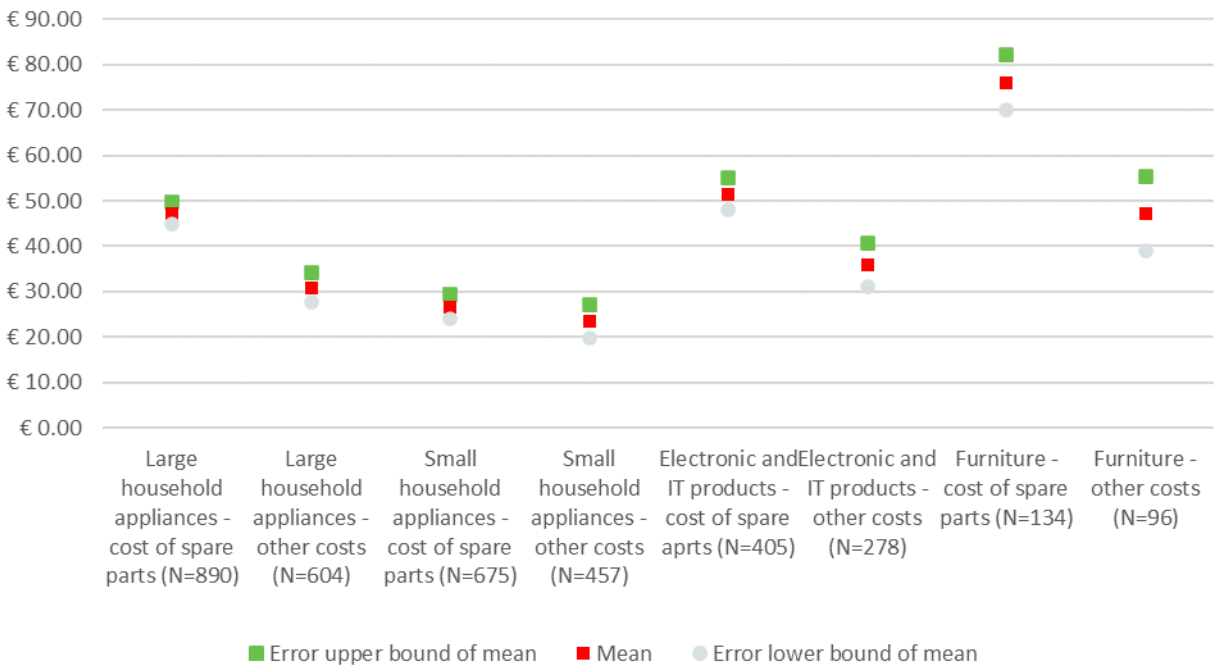


Figure A196. Now we would like you to estimate the financial losses to you as a result of trying to repair/update/upgrade the product yourself or through a repair Café

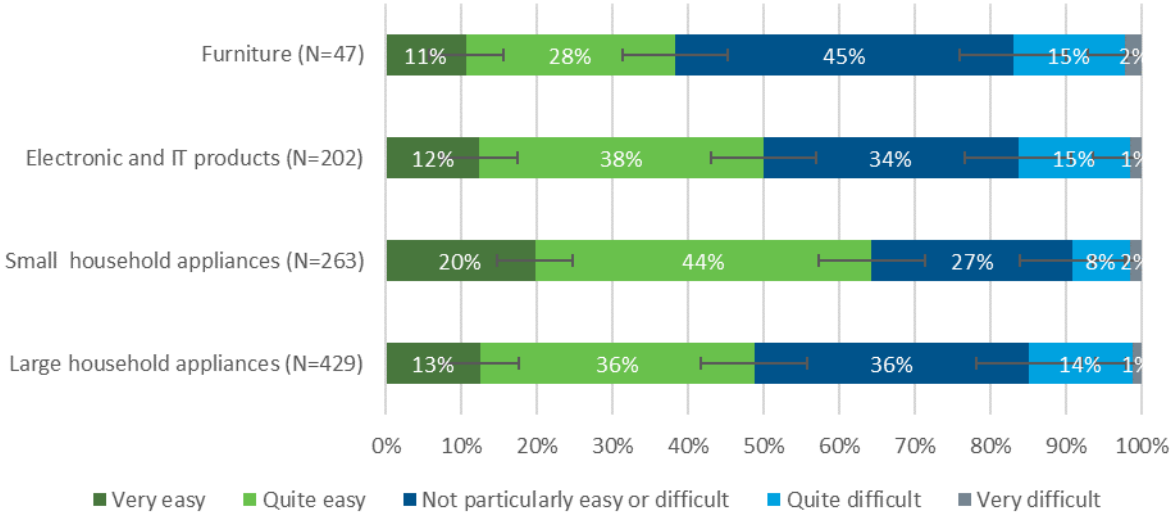


Finally in this subsection, respondents were asked to rate the difficulty of repairing the product themselves.

As shown in Figure A197 the most difficult product category to repair was electronics, with 16% (±5%) of respondents reporting it to be quite or very difficult, while the

easiest category was small household appliances, with only 10% (±3%) of respondents reporting the repair as quite or very difficult.

Figure A197. How easy was it to repair/update/upgrade the product yourself or through a repair Café?



A8.9.4.3 Replacement

This subsection was answered by those respondents who replaced a "durable good" based on their answers to any other subsection. Note that the margin for error of this section is high due to the small number of respondents replacing products, particularly in the case of the furniture category.

Respondents were first asked if a number of factors would have made them more likely to consider repairing the product rather than replacing it. The results of these questions are shown in Figure A198 through Figure A203.

The results of these questions are consistent across all circumstances named and across all product categories, as approximately 85% of respondents claimed each indicated measure would make them more likely to repair the product rather than replace it.

Figure A198. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you received information about the remaining estimated lifespan of the product after the repair, without the need for new repair)

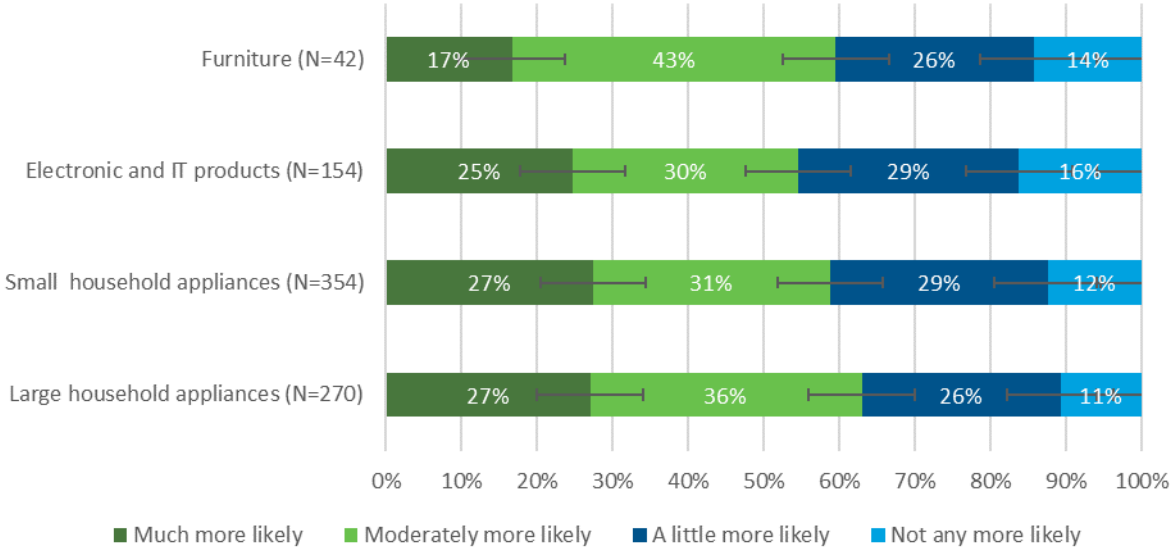


Figure A199. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you received information about the remaining estimated lifespan of the product after the repair, with the need for further minor/reasonable repairs

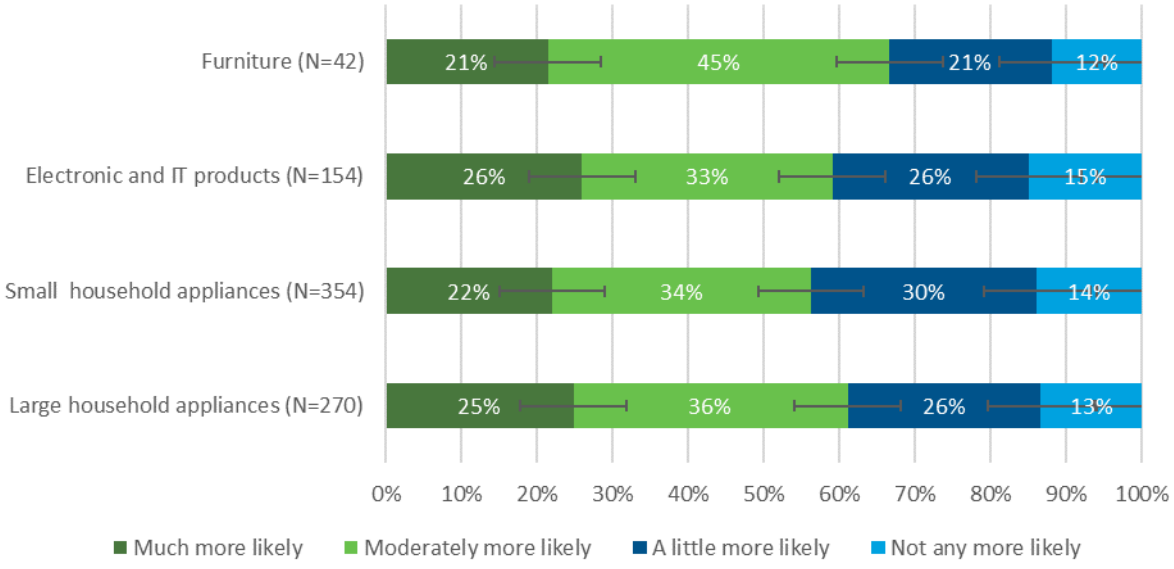


Figure A200. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you received information about the length of commercially guaranteed lifespan after the repair

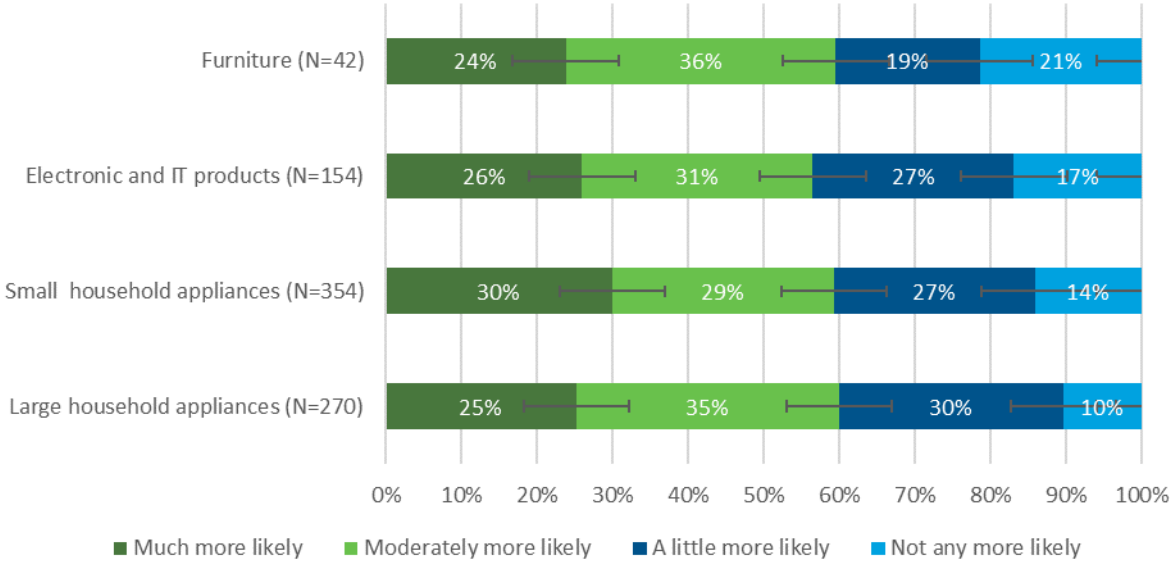


Figure A201. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you would have been guaranteed that the repaired product would function properly after repair for at least [0.5/1 -depending on the product] year

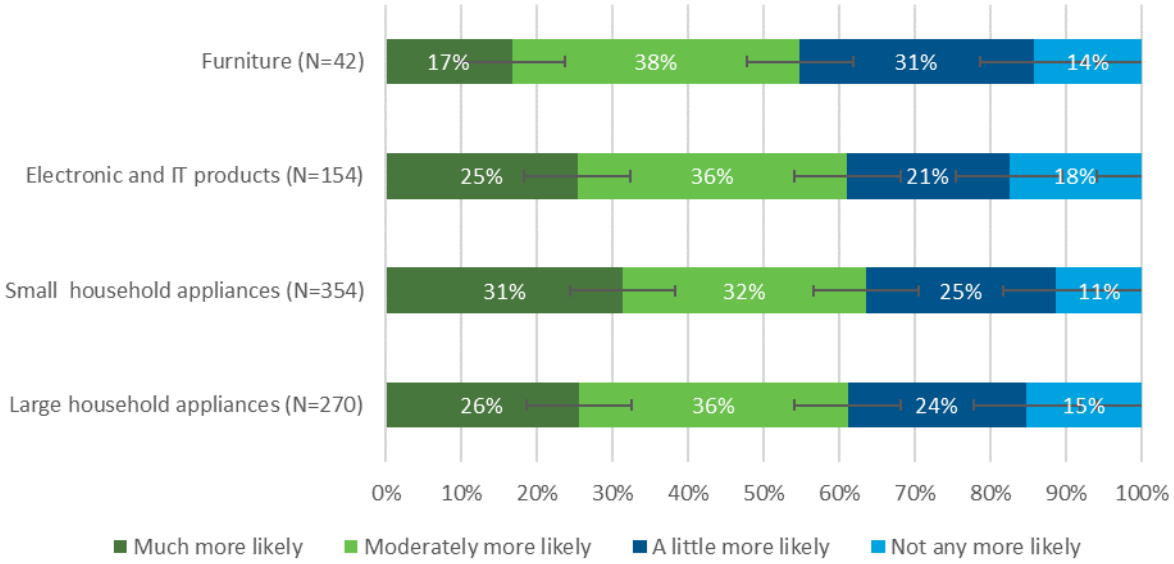


Figure A202. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you received a commitment that the spare parts would be available in no more than three working days

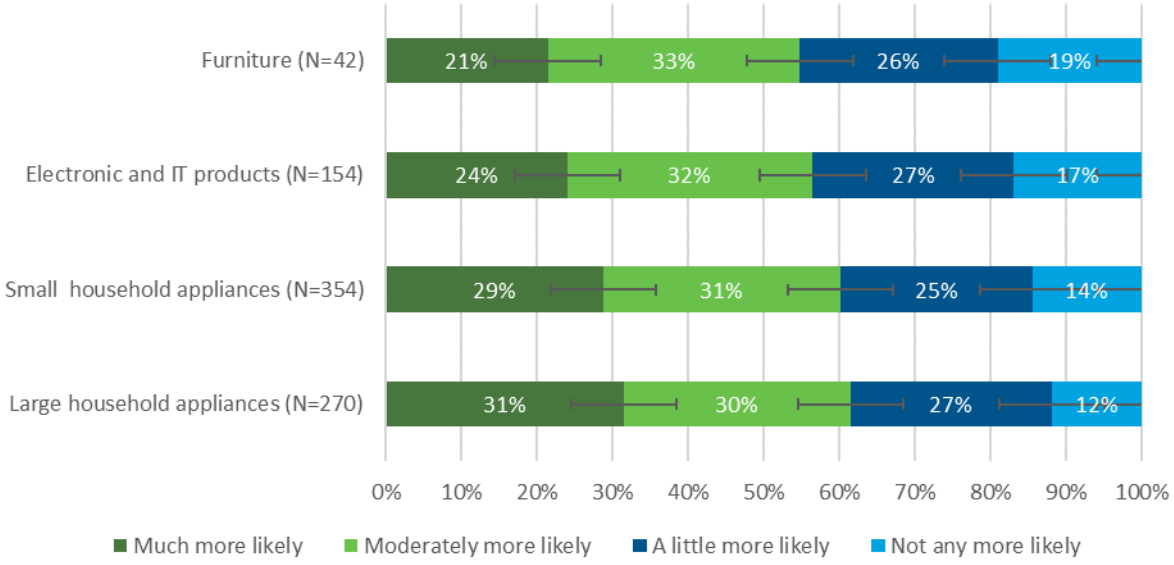
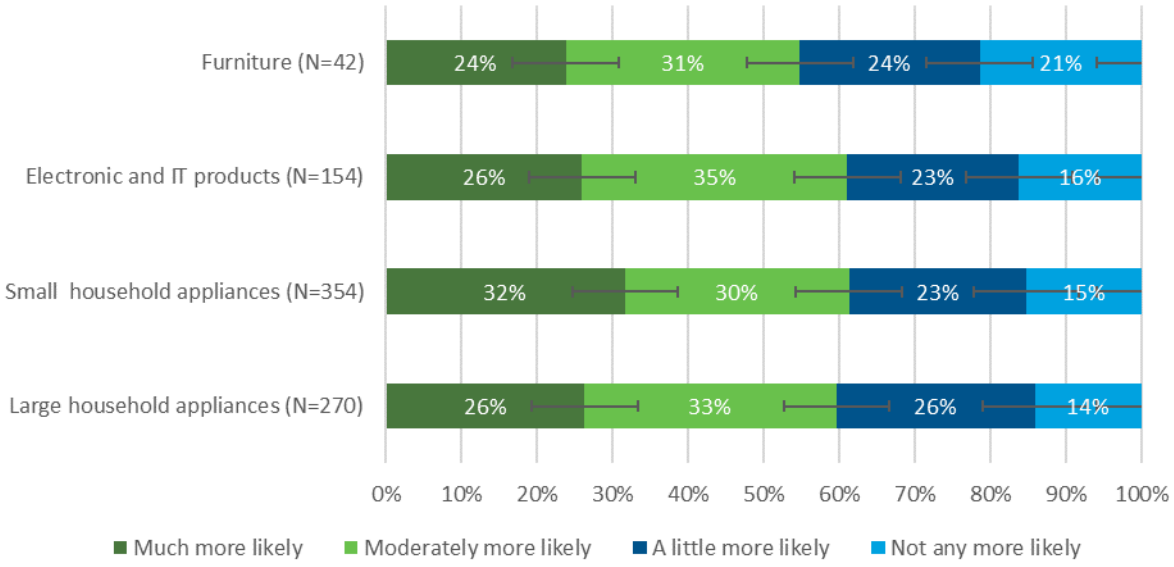


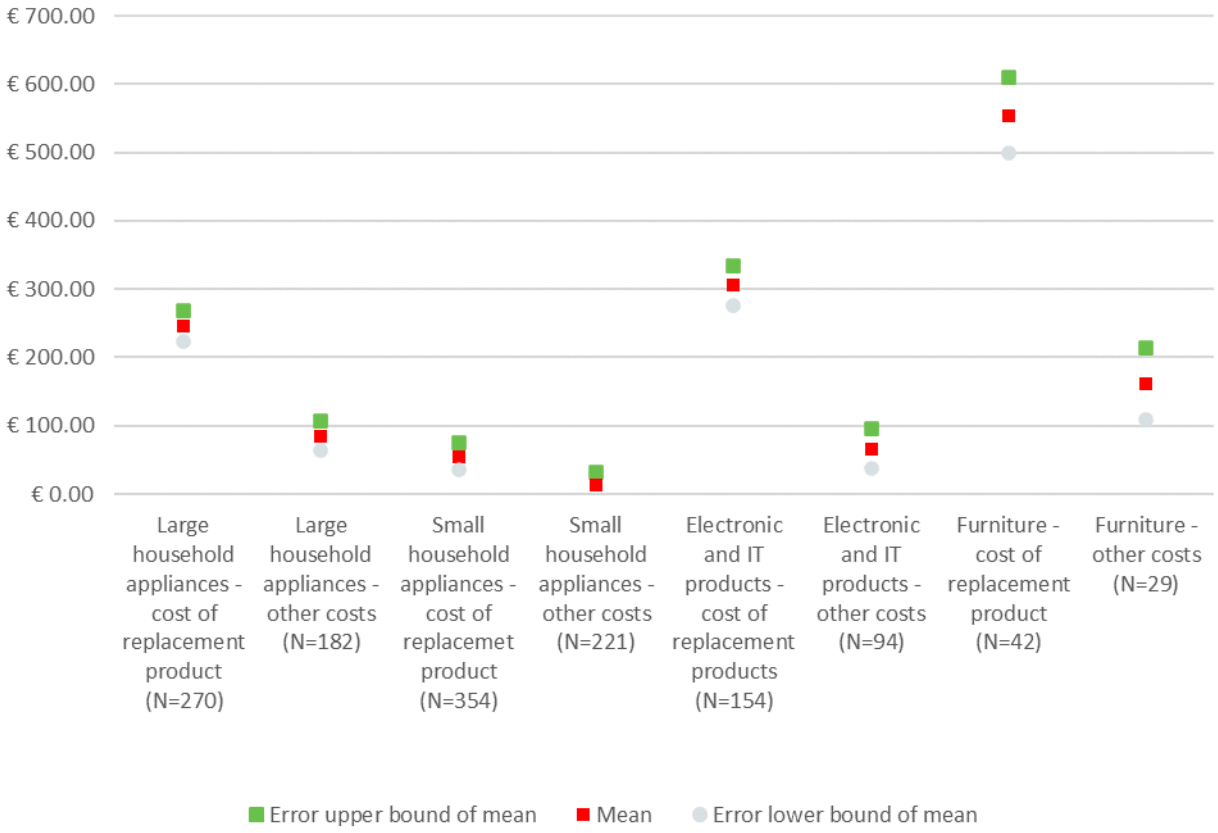
Figure A203. How much would the likelihood of you repairing the product (professionally or by yourself) increase if you received a commitment that the repair would not take longer than five working days



Finally in this subsection, respondents were asked to estimate and financial cost to themselves of replacing the product. The results of this are given in Figure A204.

The replacement cost of furniture is particularly high, with a mean response of € 554.17 ±€ 55.29, followed by €305.17 ±€ 28.87 for electronics. Across all product categories, the financial cost of replacement is considerably more than that of a repair (given in Figure A192 and Figure A196).

Figure A204. You have indicated you replaced the [PRODUCT]. Could you indicate how much you paid in total for the replacement plus any other financial detriment to you because of this



A8.9.5 Durability and reparability of Clothes and Footwear

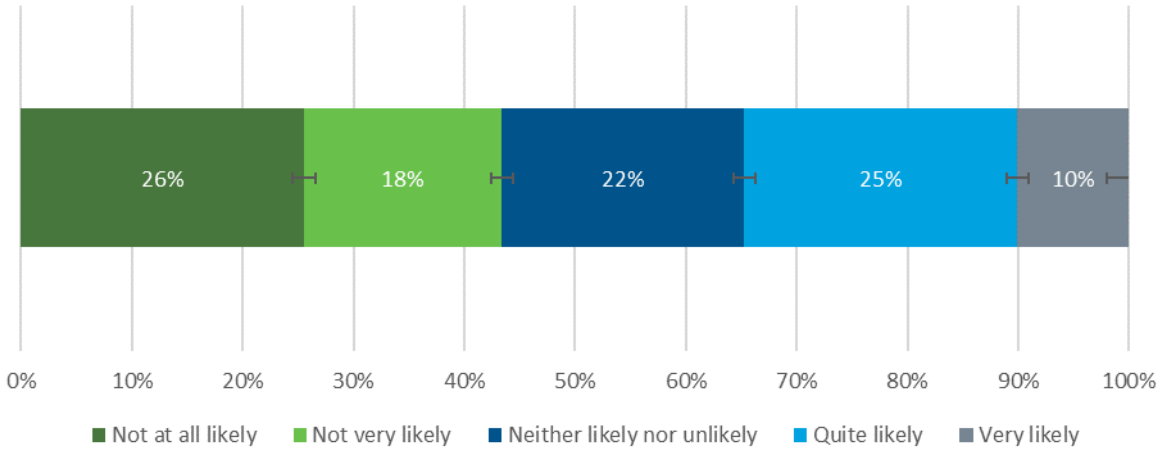
In this section, respondents were asked questions about the durability and reparability of clothing and footwear. Respondents were asked each question about several different type of products, but the results are presented here in aggregate form.

First, respondents were asked "Can you estimate what percentage of the clothes/shoes you have purchased in the last two years didn't last as long as you expected?". The mean response received was 35.89% (±3.55%, N=14997).

Respondents were then asked "Of the clothes/shoes you have purchased in the last two years, can you estimate for how many were you informed about their lifespan by the company?". The mean response received was 23.79% (±23.79%, N=19996).

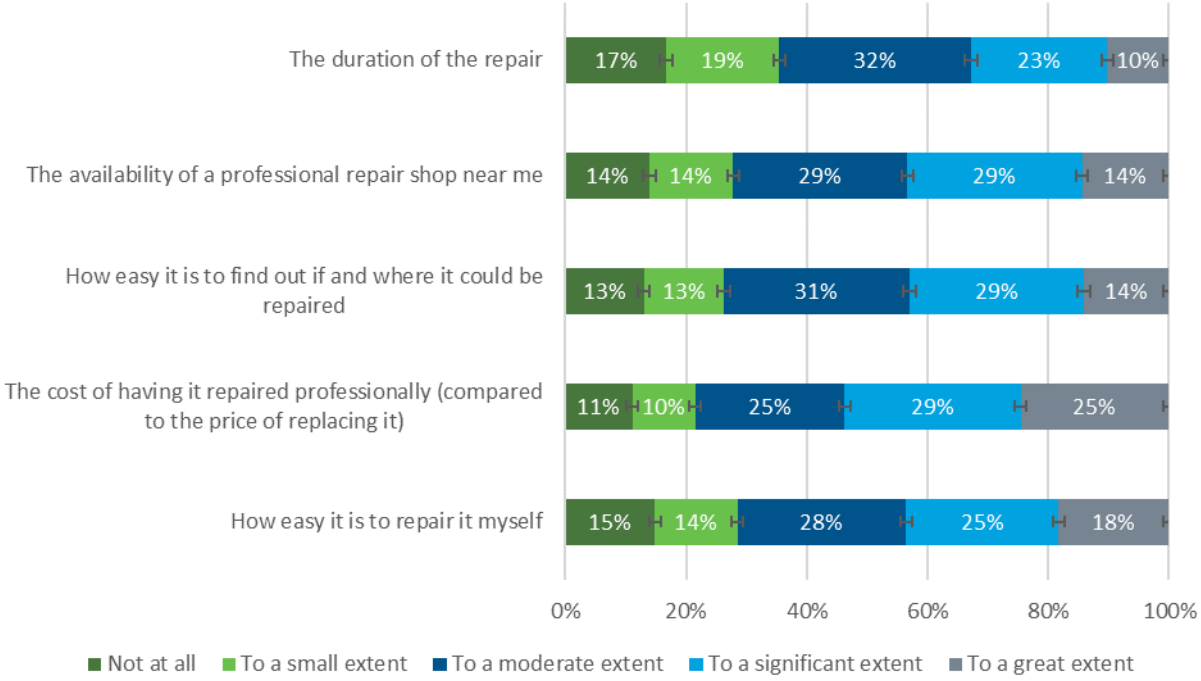
Respondents were then asked how likely they were to repair rather than replace clothing/footwear. The results of this question are shown in Figure A205. Approximately a third (35% ±1%) of responses indicated they were at least "quite likely" to repair clothing rather than replace it.

Figure A205. Please indicate to what extent the following factors influence your decision whether to repair clothes/shoes instead of replacing them (N=14997)



Respondents were the asked what factors would influence their decision to repair rather than replace clothing. As shown in Figure A206,the factor the largest proportion of respondents claimed would influence their decision was the cost of professional repair (89% ±1%), followed by the ease of finding information about if and where the product could be prepared (87% ±1%).

Figure A206. Please indicate to what extent the following factors influence your decision whether to repair clothes/shoes instead of replacing them (N=11805)



Finally in this section, respondents were asked an open ended question where they could submit their own reasons for replacing rather than repairing a product. Many respondents mentioned that they would be more likely to repair clothing products they had a sentimental attachment towards. Other factors that were mentioned included the

original price of the product, and if a replacement product of the same model would be available.

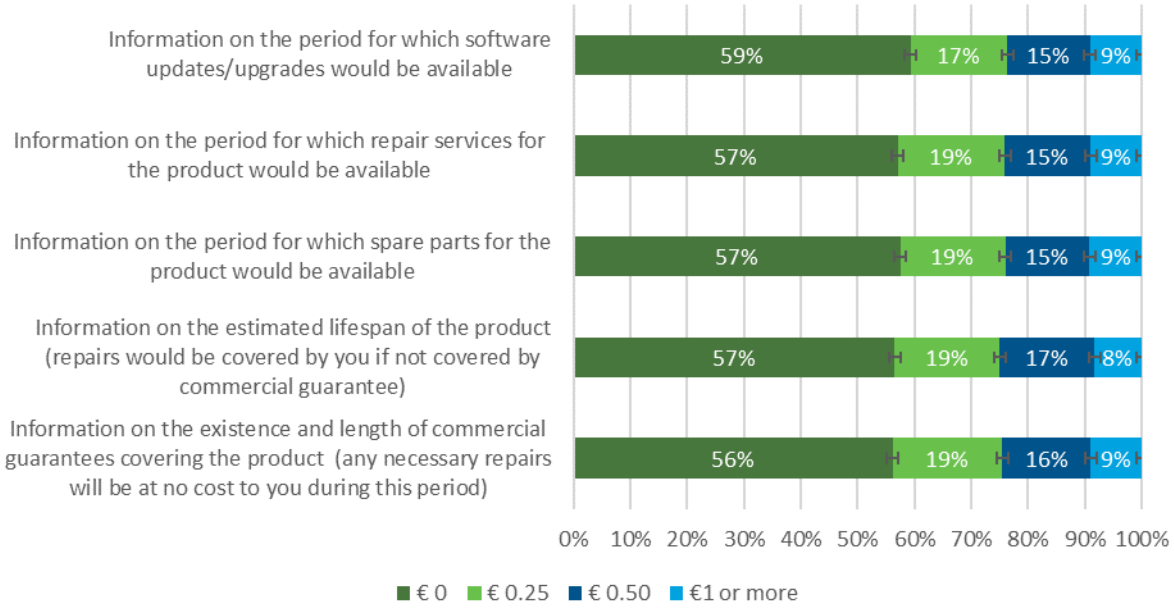
A8.9.6 Willingness to pay for information on durability and reparability: "durable goods"

Respondents were asked how much they would be willing to pay for a service or app that provided information on the durability and/or reparability of durable goods.

As shown in Figure A207, regardless of the exact information provided, over half of respondents were not willing to pay any amount at all (59% ±1% for information about how long software updated would be available, 57% ±1% for information about how long repair services would remain available, 57% ±1% for information on how long spare parts would remain available, 57% ±1% for information on the estimated lifespan of products and 56% ±1% for information on the existence and length of commercial grantees.).

Across all types of information, only a tenth of respondents who were willing to pay were generally not willing to pay more than € 0.50 (9% ±1% for all information types.

Figure A207. Imagine that there is a paid app or website that provides the following information on all household appliances, electronic goods and furniture on the market. How much would you be willing to pay per month for accessing each service? (N=11805)



For the remainder of this section, respondents were asked to consider a specific example of a randomly selected durable good. Respondents were presented with various scenarios where they were offered durability and reparability information and asked if they would be prepared to pay any more for the product due to this new information.

In the first two scenarios, shown in Table A31 and Table A32, respondents were asked about longer product lifespans, with and without the necessity for repair respectively. In both cases and across all product types, half of respondents (Without repair: 50% ±2% for large household appliances, 49% ±2% for small household appliances, 50% ±2% for electronics and 53% ±3% for furniture. With repair: 54% ±2% for large household appliances, 54% ±2% for small household appliances, 55% ±2% for electronics and 58% ±3% for furniture) were not willing to pay any more at all.

For those respondents who were willing to pay more, the majority (Without repair: 25% ±1% for large household appliances, 49% ±2% for small household appliances, 23%

±2% for electronics and 22% ±3% for furniture. With repair: 21% ±1% for large household appliances, 21% ±1% for small household appliances, 20% ±2% for electronics and 19% ±3% for furniture) were not willing to pay any more than an additional 5% of the product price.

Table A31. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): That will last X years longer without having to be repaired (with any necessary repairs paid by you)

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	50%	49%	50%	53%
I would be willing to pay up to 5% more than the product price	25%	23%	23%	22%
I would be willing to pay up to 10% more than the product price	14%	16%	14%	12%
I would be willing to pay up to 15% more than the product price	6%	6%	7%	8%
I would be willing to pay up to 20% more than the product price	3%	4%	3%	3%
I would be willing to pay up to 25% more than the product price	1%	1%	1%	1%
I would be willing to pay more than 25% more than the product price	1%	1%	1%	1%

Table A32. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): That will last X years longer with minor/reasonable repairs possibly required (with any necessary repairs paid by you)

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	54%	54%	55%	58%
I would be willing to pay up to 5% more than the product price	21%	21%	20%	19%
I would be willing to pay up to 10% more than the product price	12%	13%	12%	10%
I would be willing to pay up to 15% more than the product price	7%	6%	6%	6%
I would be willing to pay up to 20% more than the product price	4%	4%	4%	4%
I would be willing to pay up to 25% more than the product price	2%	2%	1%	1%

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would be willing to pay more than 25% more than the product price	1%	1%	1%	1%

In the third scenario, shown in Table A33, respondents were asked if they would pay more for a commercial guarantee longer than the legal guarantee period. Across all product categories, a third of respondents stated they would not be willing to pay any more than the normal product price. (32% ±1% for large household appliances, 37% ±2% for small household appliances, 36% ±2% for electronics and 38% ±3% for furniture.

For those respondents who were willing to pay more, the majority (24% ±1% for large household appliances, 24% ±2% for small household appliances, 25% ±2% for electronics and 22% ±3% for furniture) were not willing to pay any more than an additional 5% of the product price.

Table A33. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): Covered by a commercial guarantee of X years (with any necessary repairs at no cost to you)

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	32%	37%	36%	38%
I would be willing to pay up to 5% more than the product price	24%	24%	25%	22%
I would be willing to pay up to 10% more than the product price	21%	19%	18%	21%
I would be willing to pay up to 15% more than the product price	11%	9%	10%	9%
I would be willing to pay up to 20% more than the product price	7%	6%	6%	5%
I would be willing to pay up to 25% more than the product price	3%	3%	2%	3%
I would be willing to pay more than 25% more than the product price	2%	2%	2%	2%

In the next three scenarios; shown in Table A34, Table A35 and Table A36; respondents were asked if they would be willing to pay more for a commitment that spare parts, repair services or software updates will be available for a set period of time.

Across these three scenarios and all product groups just under half of respondents were not willing to pay any extra for these commitments (Spare parts: 44% ±2% for large household appliances, 49% ±2% for small household appliances, 49% ±2% for

electronics and 49% ±2% for furniture. Repair services: 41% ±1% for large household appliances, 45% ±2% for small household appliances, 46% ±2% for electronics and 46% ±3% for furniture. Software updates: 44% ±2% for large household appliances, 47% ±2% for small household appliances, 46% ±2% for electronics and 52% ±3% for furniture).

For those respondents who were willing to pay more, the majority (Spare parts: 23% ±1% for large household appliances, 21% ±1% for small household appliances, 20% ±2% for electronics and 22% ±3% for furniture. Repair services: 24% ±1% for large household appliances, 22% ±1% for small household appliances, 22% ±2% for electronics and 24% ±3% for furniture. Software updates: 21% ±1% for large household appliances, 20% ±1% for small household appliances, 21% ±2% for electronics and 18% ±3% for furniture) were not willing to pay any more than an additional 5% of the product price.

For these three scenarios, respondents were also split into two groups to determine if the responses changed if an additional year was added to the length of the commitment. Across all commitments and product groups, there was no appreciable change to the responses for after the addition of this extra year.

Table A34. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): With a commitment that spare parts will be available for X years

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	44%	49%	49%	49%
I would be willing to pay up to 5% more than the product price	23%	21%	20%	22%
I would be willing to pay up to 10% more than the product price	15%	14%	14%	12%
I would be willing to pay up to 15% more than the product price	8%	8%	9%	7%
I would be willing to pay up to 20% more than the product price	5%	4%	4%	5%
I would be willing to pay up to 25% more than the product price	3%	2%	3%	2%
I would be willing to pay more than 25% more than the product price	2%	2%	2%	2%

Table A35. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): With a commitment that repair service(s) will be available for X years

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	41%	45%	46%	46%

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would be willing to pay up to 5% more than the product price	24%	22%	22%	24%
I would be willing to pay up to 10% more than the product price	15%	15%	13%	13%
I would be willing to pay up to 15% more than the product price	9%	8%	9%	7%
I would be willing to pay up to 20% more than the product price	6%	5%	6%	6%
I would be willing to pay up to 25% more than the product price	3%	3%	2%	3%
I would be willing to pay more than 25% more than the product price	2%	2%	2%	1%

Table A36. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): With a commitment that any necessary software updates / upgrades will be available free of charge X years

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	44%	47%	46%	52%
I would be willing to pay up to 5% more than the product price	21%	21%	22%	20%
I would be willing to pay up to 10% more than the product price	16%	14%	14%	14%
I would be willing to pay up to 15% more than the product price	8%	8%	8%	6%
I would be willing to pay up to 20% more than the product price	5%	5%	5%	5%
I would be willing to pay up to 25% more than the product price	3%	3%	3%	2%
I would be willing to pay more than 25% more than the product price	2%	2%	2%	1%

In the final scenario, shown in Table A37, respondents were asked if they would be willing to pay any more for a commitment that the repair cost of the product would be 50% or less than its initial price.

This is the only scenario where the responses differed appreciably by product group. The category in which most respondents were not willing to pay any more was furniture

(55% ±3%) and the category where least respondents were not willing to pay any more was large household appliances (45% ±2%).

For those respondents who were willing to pay more, the majority (21% ±1% for large household appliances, 24% ±2% for small household appliances, 20% ±1% for electronics and 18% ±3% for furniture) were not willing to pay any more than an additional 5% of the product price.

Table A37. Please indicate how much more you would be willing to pay for an Identical Product (as a percentage of the product price): With a commitment that for the next X years the cost of any repairs will be less than half of the product's original price

	Large household appliances (N=4199)	Small household appliances and tools (N=4224)	Electronic and IT products (N=2517)	Furniture (N=865)
I would not be willing to pay any more.	45%	49%	50%	55%
I would be willing to pay up to 5% more than the product price	21%	20%	21%	18%
I would be willing to pay up to 10% more than the product price	15%	14%	11%	12%
I would be willing to pay up to 15% more than the product price	8%	8%	8%	5%
I would be willing to pay up to 20% more than the product price	6%	5%	5%	5%
I would be willing to pay up to 25% more than the product price	3%	3%	3%	3%
I would be willing to pay more than 25% more than the product price	2%	2%	2%	2%

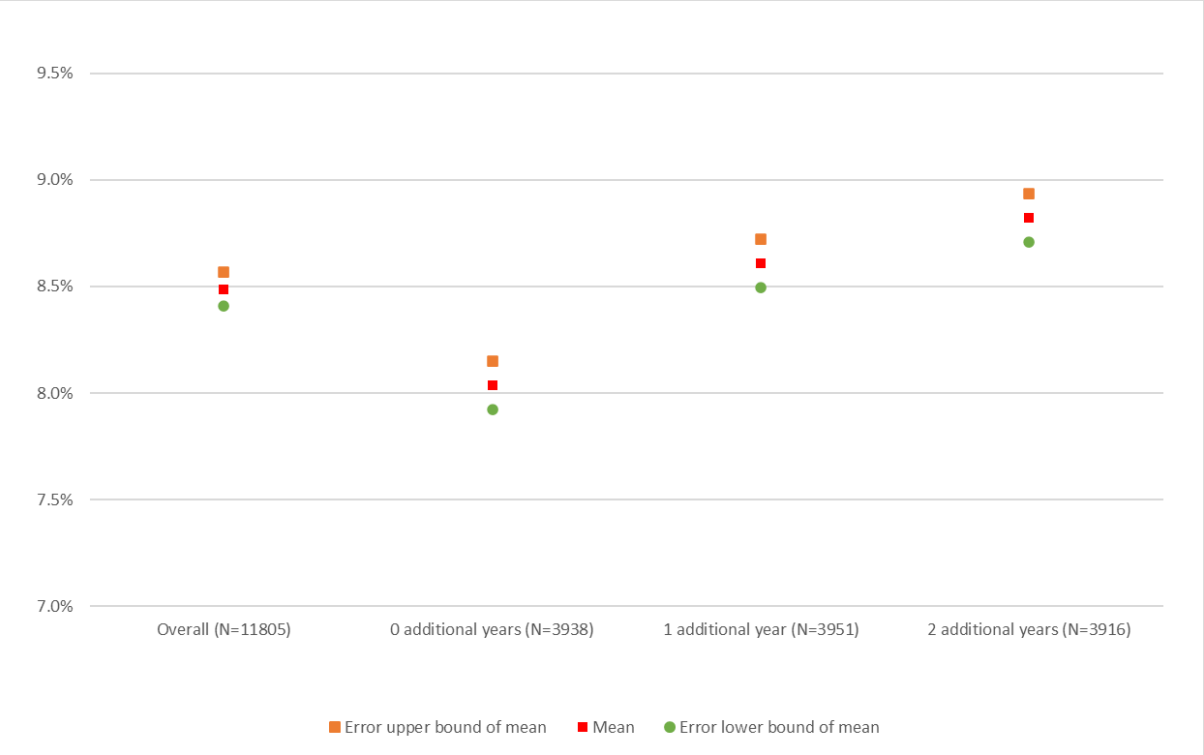
A8.9.7 Willingness to pay for reparability: clothing and footwear

For this section, respondents were asked to consider a specific example of a randomly selected Category B (clothing and household textiles) product. Results across all these randomly selected products are shown here in aggregate form.

Respondents were presented with a scenario where they were offered a commitment from the seller to repair the product without charge for a set number of years after purchase, and asked how much more they would be willing to pay for this commitment, in terms of the original product price. The mean response received was that respondents would be willing to pay 8.49% (±0.08%, N=11805) more than the initial product price.

In order to measure the significance of adding additional years to the length of this commitment, respondents answering this question were split into three groups which were asked about commitments of differing length, as shown in Figure A208. In the case of adding either one or two years, the change in response differed enough to be statistically significant ($p<0.01$).

Figure A208. The [PRODUCT] you are buying costs € X. How much more would you be willing to pay for a commitment from the company that they will repair it without any charge to you for the next X years (as a percentage of the product price).



A8.8.8 Willingness to pay for product information on environmental impact and social impacts

In this section, respondents were asked about a randomly selected product or service of any category. Due to concerns around the length of the survey, some respondents were asked to consider only a single product or service, while some were asked about a Category A[291] product, a Category B[292] product, a Category C[293] goods and a service[294].

Respondents were presented with a scenario where they were presented with a claim that the product was environmentally sustainable, with varying levels of validation; the claim could be unsupported, validated by a logo or label scheme, or validated by a trustworthy independent body. Respondents were asked if they would be prepared to pay any more because of this claim, in terms of proportion of the original product or service price. The results of this question are shown in Figure A209.

The category in which respondents were willing to pay the most additional cost for these claims was services (3.04% more ±0.18% for an unverified claim, 3.52% more ±0.17% for a logo or label and 4.19% more ±0.18% for an independently verified claim).

[291] This category includes Large household appliances (namely, washing machines, refrigerators, microwaves/electric ovens, vacuum cleaners, dishwashers), small household appliances and tools (namely, coffee machines, irons, mixers, kettles, electric shavers/razors/trimmers, hair dryers), electronic and IT products (namely, smartphones, laptops, LCD televisions) and furniture (namely, sofas).

[292] This category includes clothes and footwear (namely, Clothes – party, Clothes – children, Clothes – adult and Sport shoes)

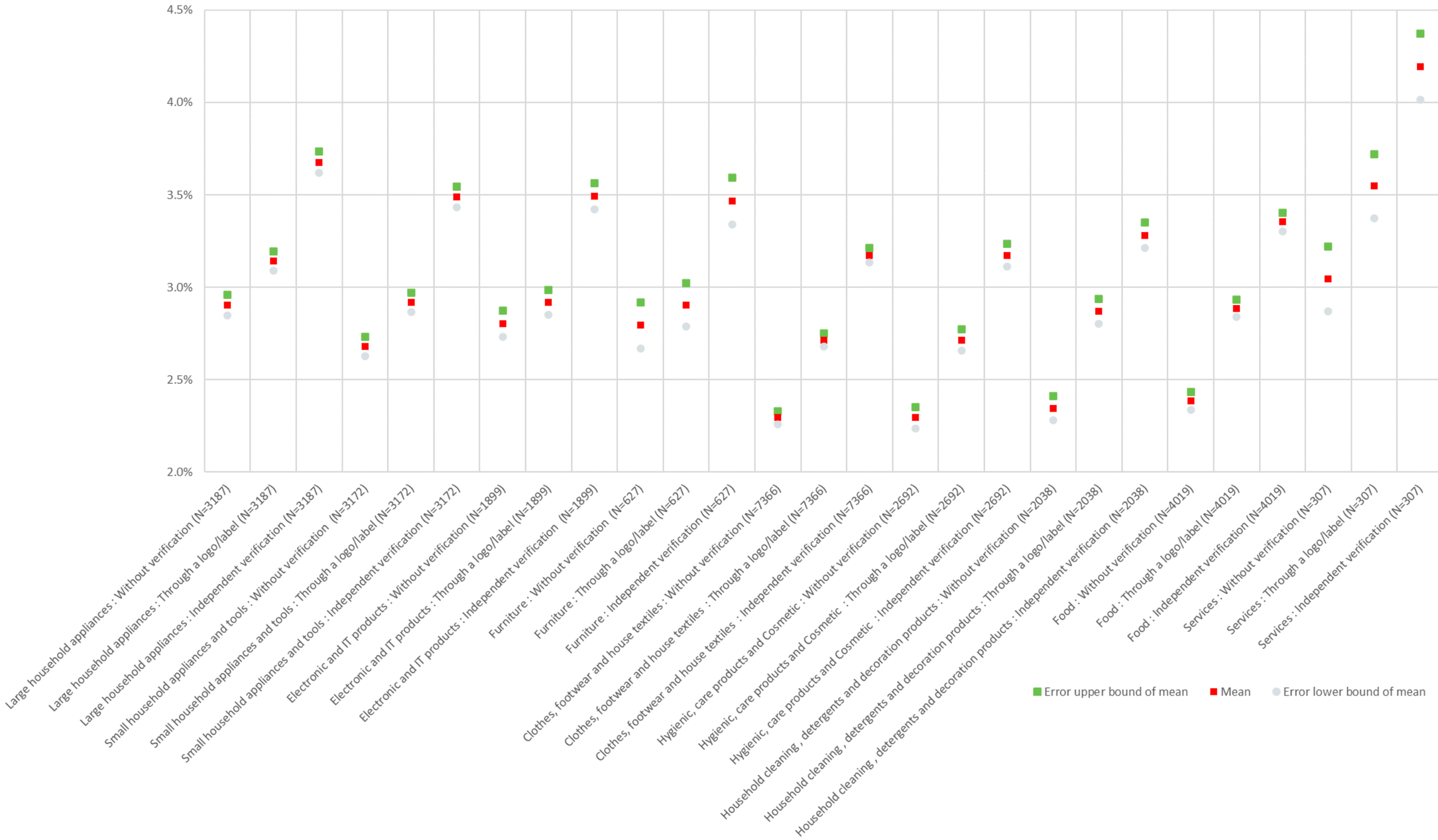
[293] This category includes Hygienic, Care products and Cosmetic (namely, shampoos, skin cream, toilet paper, perfume); Household cleaning, detergents and decoration products (namely, all-purpose cleaners, washing machine detergents, paint 2l) and Food (namely, meat (1kg), bananas (1kg), milk (1l), breakfast cereals (1 package), pre-prepared dishes (1 meal), mineral water (50cl bottle)).

[294] Namely, electricity services and parcel delivery.

The category in which respondents were willing to pay the least additional cost for these schemes was clothing and footwear (2.30% more ±0.03% for an unverified claim, 2.72% more ±0.03% for a logo or label and 3.17% more ±0.04% for an independently verified claim).

In both these contrasting categories however, the difference between each level of validation is statistically significant ($p<0.01$), indicating that the level of validation is indeed relevant to consumers when making purchase decisions.

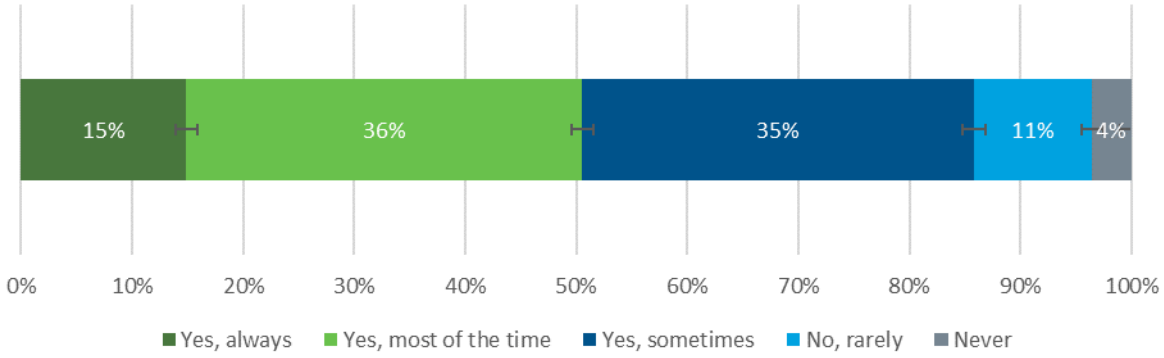
Figure A209. The [PRODUCT] you are buying costs €X and does not indicate whether it is produced in an environmentally sustainable way or not. How much more would you be willing to pay for an identical product which claims to be environmentally sustainable (as a percentage of the product price):



A.9.8.9 Behaviour regarding environmental and social impacts

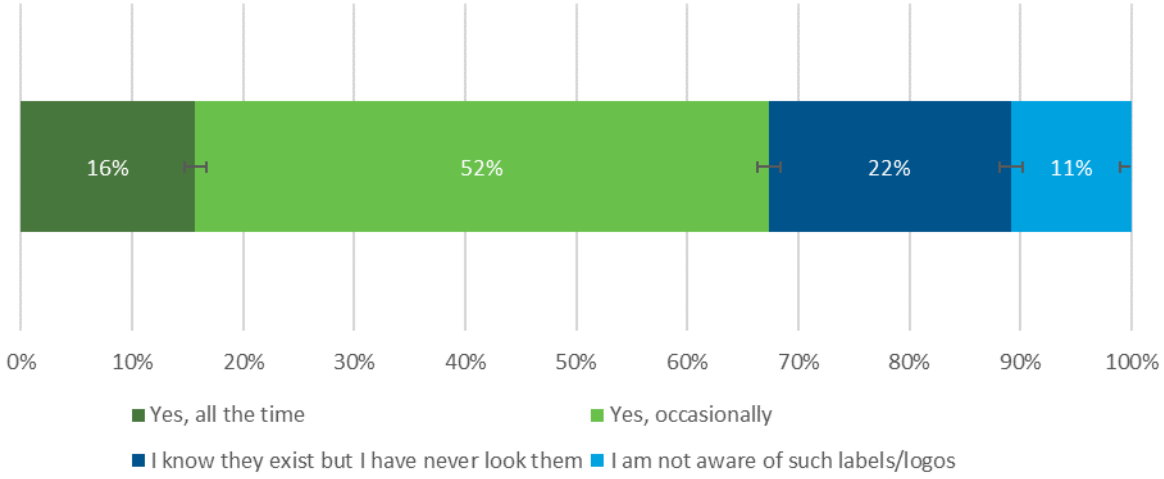
Respondents were asked if they attach importance to the environmental impact of goods that they purchase. As shown in Figure A210, almost 90% (86% ±1%) said they attached importance to this.

Figure A210. Do you attach importance to the environmental impact of goods that you purchase? (N=11805)



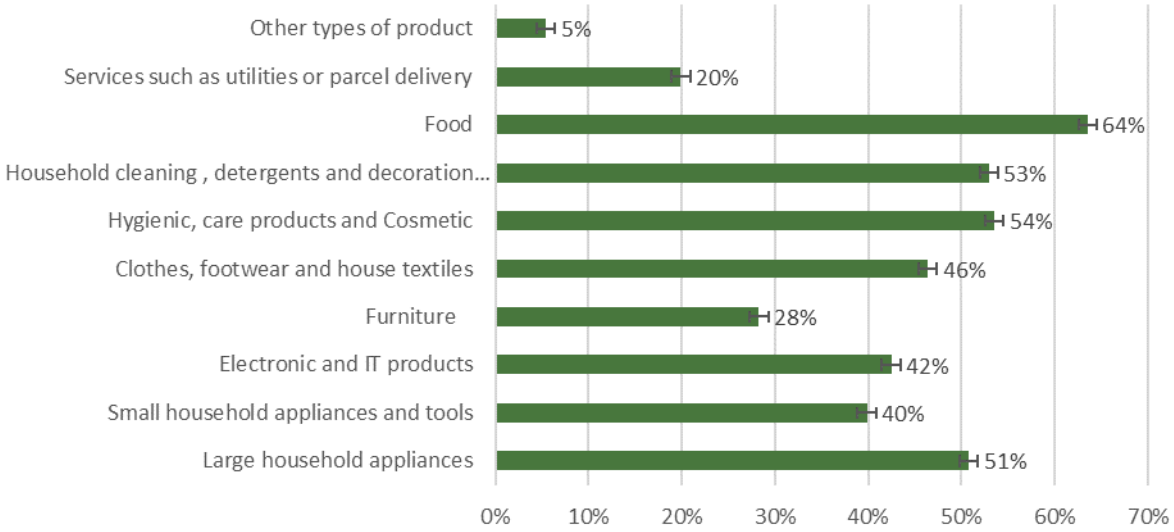
Respondents where then asked if they look for sustainability logos and labels when purchasing products. As shown in Figure A211, Over half of respondents (68% ±1%) said they looked for these logos and labels at least some of the time.

Figure A211. Do you look for sustainability logos/labels when you purchase products? (N=11805)



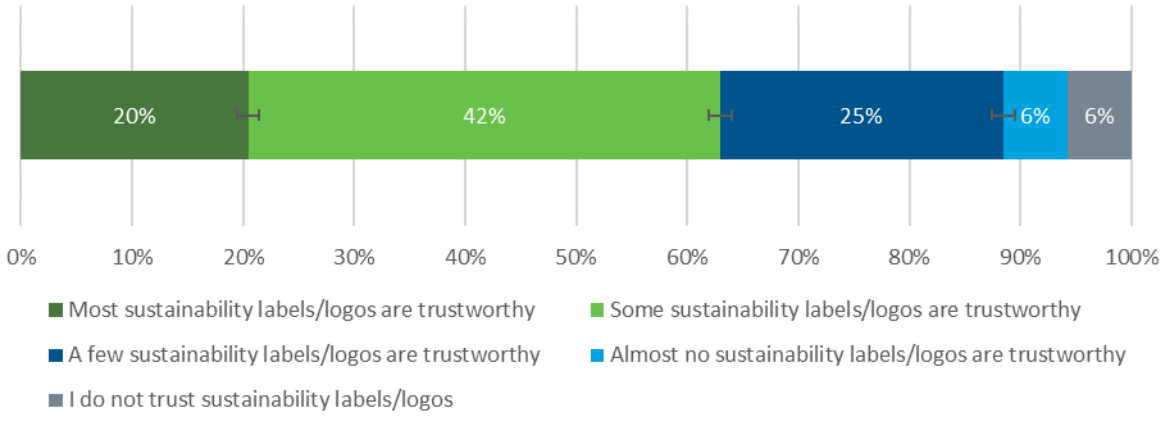
Those respondents who reported looking for sustainability logos and labels were then asked which product or service categories they looked for these logos and labels on. As shown in Figure A212, the category of product on which most respondents looked for these logos or labels was food (64% ±1%), and the category where these logos and labels were looked for the least was services (20% ±1%).

Figure A212. For which products do you look for these sustainability logos/labels on? (N=7949)



Respondents who were aware of sustainability logos and labels were then asked how trustworthy they considered these logos and labels to be. As shown in Figure A213 only a fifth (20% ±1%) of respondents considered most sustainability logos and labels to be trustworthy, and just over a tenth (12% ±0.4%) of respondents said that there were no or almost no sustainability logos or labels that were trustworthy.

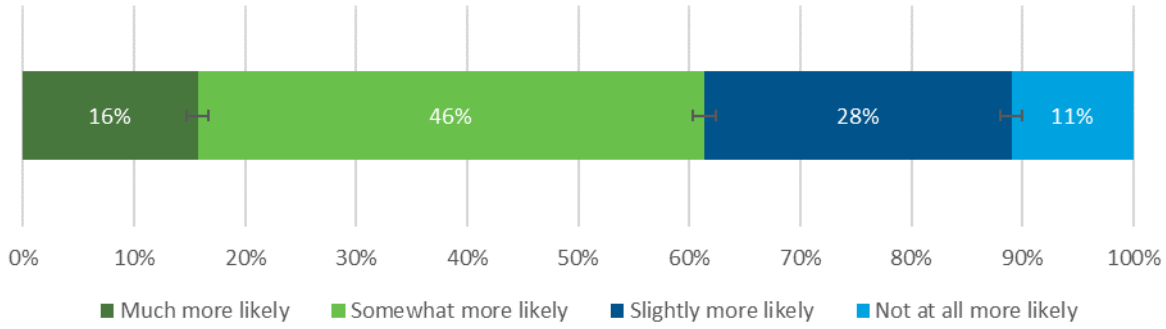
Figure A213. How trustworthy do you think sustainability labels/logos are? (N=10525)



Respondents were then asked an open ended question asking if they have any logos they particularly look for. Most respondents were not able to name a specific label, but some mentioned labels such as Fairtrade, marketing terms such as free from or a logo of an apple.

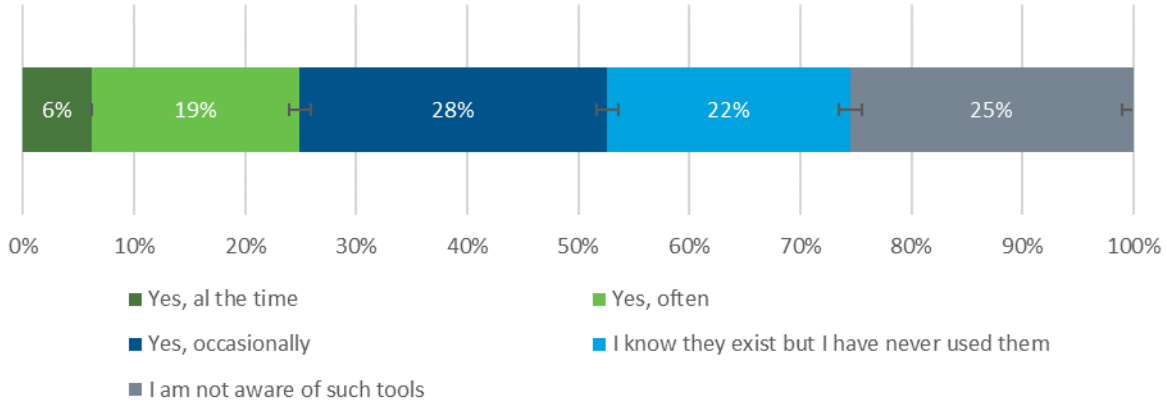
Respondents who did not consider sustainability logos and labels to be trustworthy were then asked if sustainability labels and logos being more trustworthy would make them more inclined to utilise these labels and logos when making purchase decisions. As shown in Figure A214, about 90% (89% ±1%) said that this would influence their decision at least slightly, but less than a fifth (16% ±1%) said it would make them much more likely to make use of these labels.

Figure A214. If you were confident that the information provided by sustainability labels/logos was trustworthy, would you be more likely to buy products/ services bearing those labels/logos? (N=3898)



Respondents where then asked if they make use of sustainability information websites or apps when purchasing products. As shown in Figure A215, Over half of respondents (53% ±1%) said they looked for these logos and labels at least some of the time, and a quarter (25% ±1%) said they used them often.

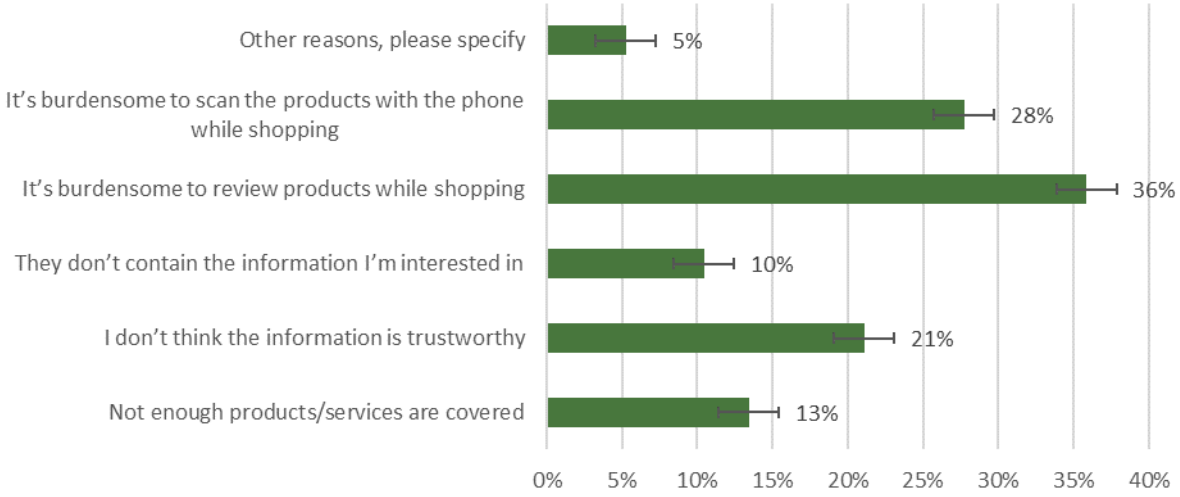
Figure A215. Do you use websites or apps where you find information or advice to adopt more sustainable consumption behaviour (e.g. to find information about the sustainability of products and / or services, advice how to reduce your environmental impact)? (N=11805)



Respondents were then asked an open end question asking which particular tools or apps they use for these purchase decisions. Most respondents mentioned using general information sources like google and amazon, but a few were able to mention specific tools like eco portal or TreeHugger.

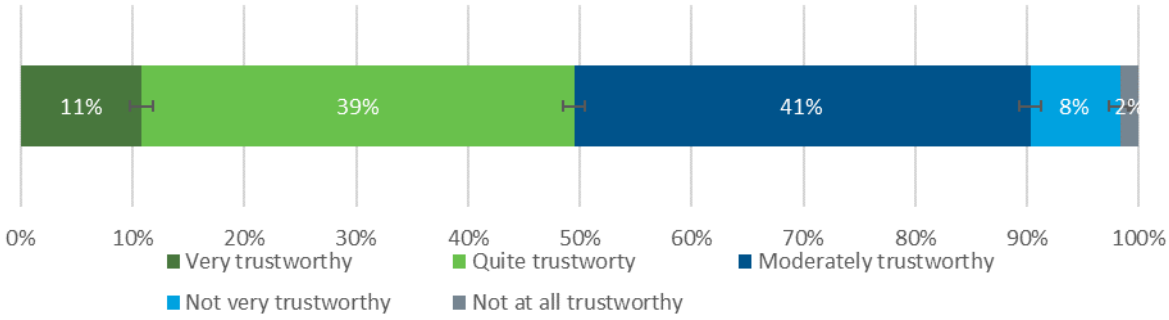
Those respondents who reported not using sustainability apps and web tools were then asked why they did not do so. As shown in Figure A216, the most commonly cited reason was the inconvenience of looking up products while shopping (36% of respondents ±2%), followed by the inconvenience of scanning the products with a phone while shopping (28% ±2%), and then perceived trustworthiness of the information (21% ±2%).

Figure A216. Why do you not use services like this? (N=2583)



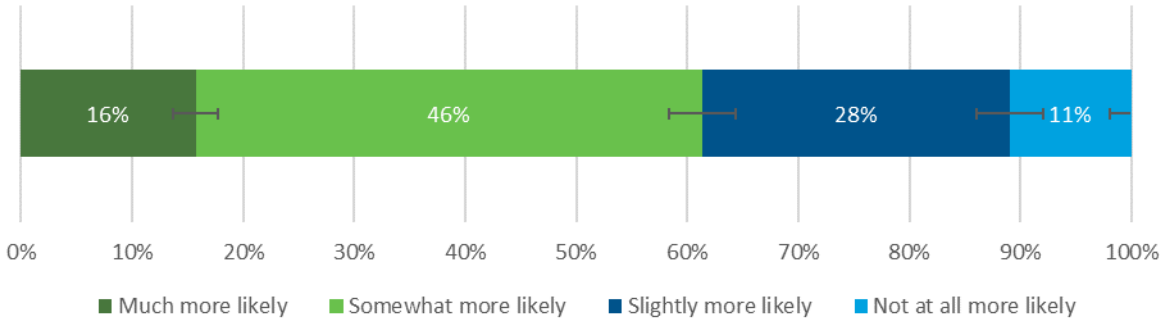
Respondents aware of sustainability web tools or apps where then asked how trustworthy they believe the information given by these tools is. As shown in Figure A217, half of respondents (50% ±1%) consider this information to be at least "quite trustworthy".

Figure A217. How trustworthy do you think the information provided in those websites and apps is? (N=8795)



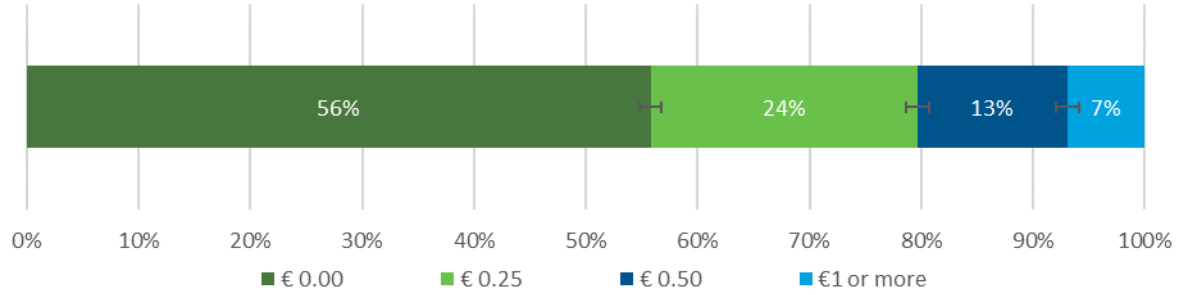
Respondents who did not consider sustainability web tools or apps to be trustworthy were then asked if sustainability web tools or apps being more trustworthy would make them more inclined to utilise these labels and logos when making purchase decisions. As shown in Figure A218, about 90% (89% ±3%) said that this would influence their decision at least slightly, but less than a fifth (16% ±1%) said it would make them much more likely to make use of these labels.

Figure A218. If you were confident that the information provided by those websites or apps was trustworthy, would you use those websites and apps more frequently? (N=1106)



Finally in this section, respondents were asked how much they would be willing to pay for a sustainability web tool or app. Over half (56% ±1%) of respondents said they would not be willing to pay anything, and less than 10% (7% ±0.5%) of respondents were willing to pay more than € 0.5.

Figure A219. How much would you be willing to pay per month for a trustworthy website/app that provides information about the environmental impact of products / services? (N=11805)

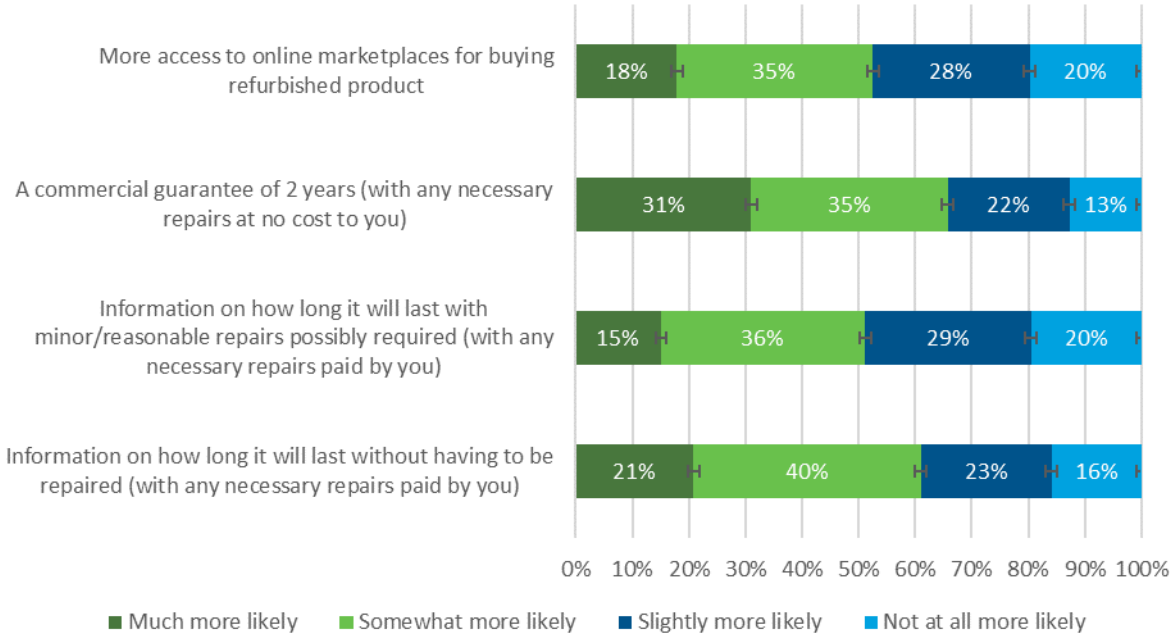


A8.9.10 Other Circular economy aspects

Respondents were asked if certain circumstances would make them more likely to purchase refurbished products. The results of this question are shown in Figure A220.

The scenario which most respondents considered would make them at least somewhat more likely to purchase refurbished products was if refurbished products came with a two-year commercial guarantee (66% of respondents ±1%) followed by if information were available on how long a refurbished product would last without repair (61% of respondents ±1%).

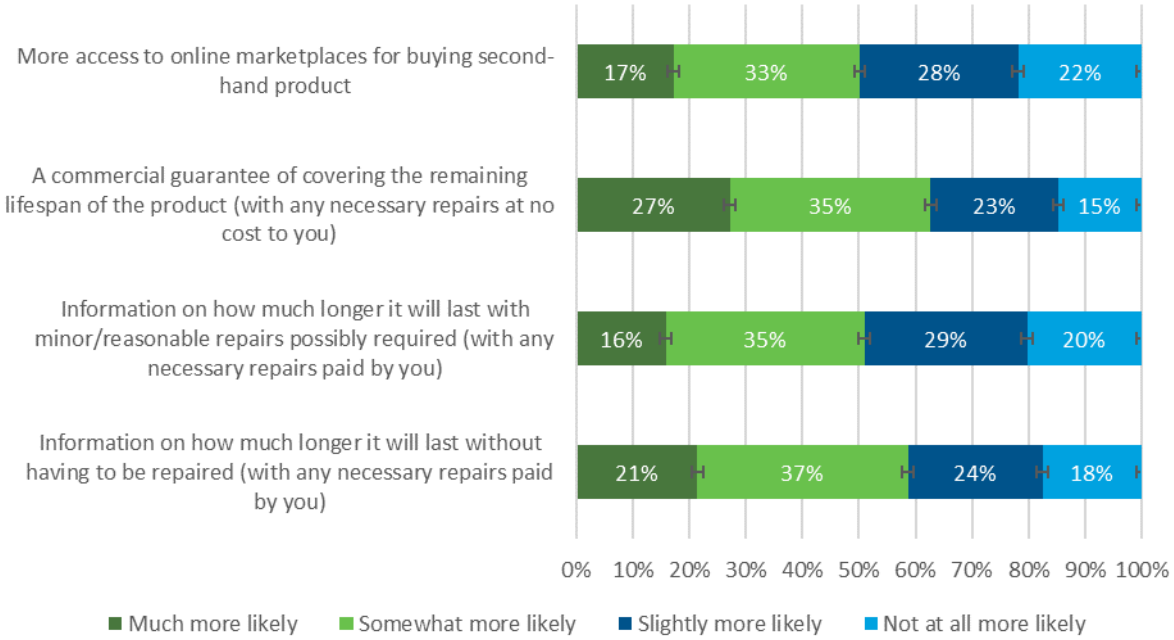
Figure A220. Would you be more likely to buy a refurbished product if you had… (N=11805)



Respondents were then asked the same question about purchasing second hand products, the results of which are shown in Figure A221.

The scenario which most respondents considered would make them at least somewhat more likely to purchase second hand products was if second hand products came with a two year commercial guarantee (62% of respondents ±1%) followed by if information were available on how long a second hand product would last without repair (48% of respondents ±1%).

Figure A221. Would you be more likely to buy a second-hand product if you had (N=11805)

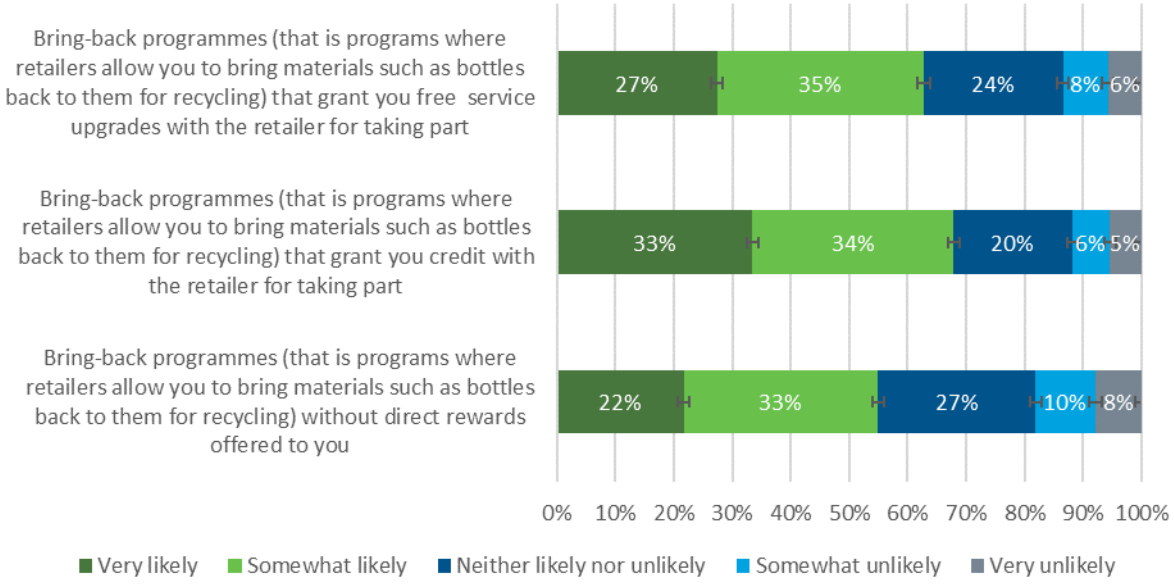


Finally, respondents were asked how likely they would be to use three different mode of bring-back program, should they become widely available.

As shown in Figure A222, the mode of bring-back programs that most respondents would be at least somewhat likely to use would be those that would grant the respondent credit with the retailer (67% of respondents ±1%).

The bring-back program fewest respondents would be at least somewhat likely to use would be one that offered the respondent no direct rewards (55% of respondents ±1%). Given that just over half or respondents would still use a bring-back program if it offered no rewards suggests that bring-back programs could still have relevant uptake even if no rewards to consumers were offered.

Figure A222.If the following services would be widely available, what would be the likelihood of you using them (N=11805)



Annex 9. Mystery shopping

The main objective of the mystery shopping was to gain a comprehensive and in-depth picture of the **i**nformation provided to consumers purchasing consumer products or services in Europe, regarding:

- Commercial guarantees
- Durability of products
- Reparability of products and
- Environmental impact of products and services

The mystery shopping focused in particular on:

- *What* information is provided
- *Where* the information is provided (e.g., on the products, product/service pages, FAQ)
- *How* the information is provided (e.g., logo / label, text)
- *Perceptions* regarding whether the information is clear, easy to understand and easy to find.

Three mystery shopping exercises were conducted across five Member States (Italy, Ireland, Germany, France and Poland) focusing on products and services:

- Exercise 1: 400 mystery shops of small and large household appliances and electric devices with a focus on commercial guarantees, information on durability and reparability and green claims and sustainability labels/logos (see table A).
- Exercise 2: 210 mystery shops to evaluate clothes, hygiene and care products, household cleaning and miscellaneous products and cars with a focus on green claims and sustainability labels/logos (see table B).
- Exercise 3: 15 mystery shops of electricity services and parcel delivery services with a focus on green claims and sustainability labels/logos.

In all exercises the mystery shopper simulated the purchase of a consumer product following the typical behaviour of a consumer.

Table A38. Product A

Large household appliances	Small household appliances	IT and electronic products
Washing machines	Coffee machines	Mobile phones
Refrigerators	Irons	Laptops
Microwave ovens	Toaster	LCD televisions
Vacuum cleaners	Mixers	Video cameras
Dishwasher	Kettle	
	Electric shaver/razor/trimmer	
	Hair dryer	

Table A39. Product B (only green claims and sustainability labels/logos)

Clothes and Footwear	Hygienic and care products	Household cleaning and miscellaneous	Transport
Clothing	Shampoos	Paints	Cars
Footwear	Skin cream	Hardwood floors	
Carpets	Toilet paper	All-purpose cleaners	
	Baby diapers	Washing machine detergents	
	Baby bottles		

The table below presents an overview of the segmentation of the mystery shops per products and services.

Table A40. Overview of products and services and number of mystery shops

Product	Number of mystery Shops	Aspect covered				
		Commercial guarantees	Information on durability	Information on reparability	Environmental claims	Overall perception
Large household appliances	**125**	•	•	•	•	•
Washing machines	25					
Refrigerators	25					
Microwave ovens	25					
Vacuum cleaners	25					
Dishwasher	25					
Small household appliances	**175**	•	•	•	•	•
Coffee machines	25					
Irons	25					
Toaster	25					
Mixers	25					
Kettle	25					
Electric shaver/razor/trimmer	25					
Hair dryer	25					
IT products	**100**	•	•	•	•	•

Mobile phones	25		
Laptops	25		
LCD televisions	25		
Video cameras	25		
Clothes and footwear	**60**	•	•
Clothing	20		
Footwear	20		
Carpets	20		
Hygienic and care products	**75**	•	•
Shampoos	15		
Skin cream	15		
Toilet paper	15		
Baby diapers	15		
Baby bottles	15		
Household cleaning and miscellaneous	**60**	•	•
Paints	15		
Hardwood floors	15		
All-purpose cleaners	15		
Washing machine detergents	15		
Cars	**15**	•	•
Electricity services	**15**	•	•
Parcel delivery services	**15**		

The briefing note, questionnaire and mystery shop individual reports are submitted as a separate file.

A9.1 Results: filtering products on the website

Only in one case it was possible to filter the available products (a laptop) to get only models/brands that offer a commercial guarantee. In this case commercial guarantees were available for about 38% of the laptops offered by the shop.

About 2.5% of the online shops provided a function to filter the products based on their environmentally friendliness. The percentage of environmentally friendly products per shop and per product type varied (average after removing outliers was 12%).

A9.2 Results: Commercial Guarantees

Did you find information about legal guarantees?

In 70% of the mystery shops, mystery shoppers found information on legal guarantees. There are some differences between the product groups considered as presented in the table below.

Table A41. "Did you find information about legal guarantees?" (per product group, N= 400)

	Large household appliances	Small household appliances	IT	Total
Yes	74%	65%	72%	70%
No	26%	35%	28%	30%

How many products were covered by one or more commercial guarantees and/or by one or more insurances?

In 66% of the mystery shops at least one commercial guarantee was available, while in 29% of them at least one insurance was available.

Table A42. "How many products were covered by one or more guarantees and/or by one or more insurances?" (per product group, N= 304)

	Large household appliances	Small household appliances	IT	TOTAL
Commercial guarantees	72%	59%	70%	66%
Insurances	32%	24%	33%	29%
Not covered by commercial guarantees no insurances	17%	31%	20%	24%

What kind of commercial guarantees and insurances are available?

Commercial Guarantees

Most of the commercial guarantees were sold against extra costs (62%) and in 16% of the cases the commercial guarantee covered a group of products (and not only the product the mystery shopper was buying).

Figure A223. What kind of commercial guarantees are available? (N= 325)

In the table below, we present the distribution of the three kinds of commercial guarantees for each product group.

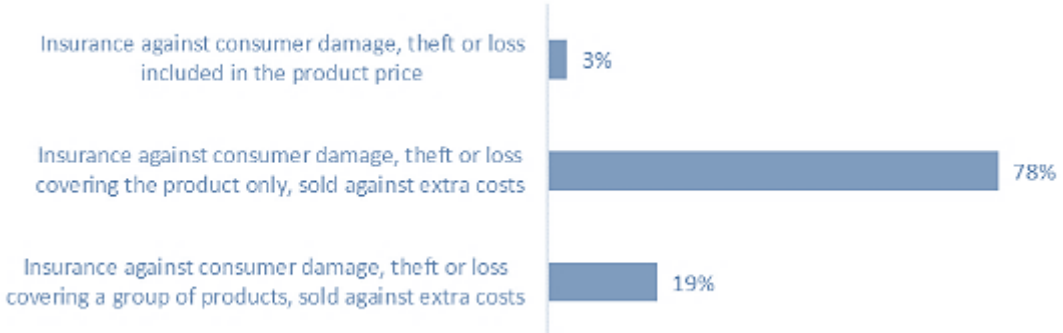
Table A43. Kind of commercial guarantee per product group

	Large household appliances	Small household appliances	IT
Commercial guarantee(s), included in the product price	32%	41%	42%
Commercial guarantee(s) covering the product only, sold against extra costs	48%	44%	46%
Commercial guarantee(s) covering a group of products, sold against extra costs	20%	16%	12%

Insurances

Regarding insurances, 97% were sold at an extra cost and 19% covered a group of products (and not only the product the mystery shopper was buying).

Figure A224. What kind of insurances are available? (N= 116)



In the table below, we present the distribution of the three types of insurances for each product group.

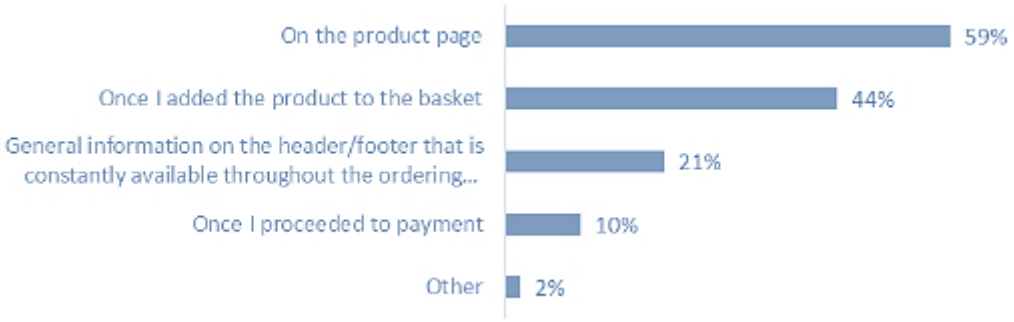
Table A44. Kind of insurances per product group

	Large household appliances	Small household appliances	IT
Insurance against consumer damage, theft or loss included in the product price	3%	2%	6%
Insurance against consumer damage, theft or loss covering the product only, sold against extra costs	80%	74%	79%
Insurance against consumer damage, theft or loss covering a group of products, sold against extra costs	18%	24%	15%

At what step of the purchase process were those guarantees and/or insurances made available to you? Please select all that apply. N=304

In most of the mystery shops (85%) the commercial guarantees and/or insurances were available on the product page (for instance, some retailers have a specific webpage dedicated to these legal provisions). In 64%, the guarantee/insurance was available once the product was added to the basket. In 30% of the cases general information about the available guarantees and/or insurances was displayed throughout the ordering process on the header/footer. In 14% the guarantees/insurance were available once they proceed to payment.

Figure A225. At what step of the purchase process were those commercial guarantees and/or insurance made available to you? (N=304)

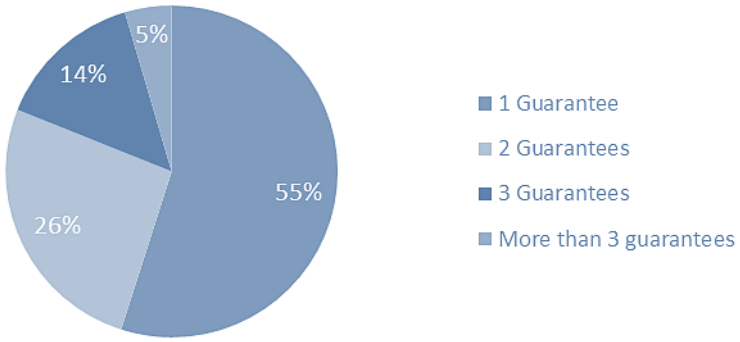


A9.2.1 Commercial guarantees (which could be considered as a proxy for information about 'guaranteed durability')

How many commercial guarantees were available to you?

In most of the mystery shops (55%) there was only one commercial guarantee available, while in 26% two commercial guarantees were offered and in 14% three commercial guarantees were offered. Only in 5% of the cases there were more than three commercial guarantees available.

Figure A226. How many commercial guarantees were available to you? (N=264)



The table below presents the percentage of commercial guarantees available per product.

Table A45. How many commercial guarantees were available to you? – per product type (N=264)

Number of commercial guarantees	Large household appliances	Small household appliances	IT	**Total**
1 Commercial Guarantee	56%	55%	54%	**55%**
2 Commercial Guarantees	22%	31%	24%	**26%**
3 Commercial Guarantees	14%	13%	17%	**14%**
More than 3 Commercial guarantees	8%	2%	4%	**5%**

The table below presents the percentage of commercial guarantees available per product.

Table A46. How many commercial guarantees were available to you? – per country (N=264)

	Germany	France	Ireland	Italy	Poland
1 Commercial Guarantee	65%	68%	57%	63%	25%
2 Commercial Guarantees	10%	26%	30%	13%	46%
3 Commercial Guarantees	22%	6%	2%	17%	27%
More than 3 Commercial guarantees	2%	0%	12%	7%	2%

What was the duration of the commercial guarantee (in months)?

The table presents the duration of the available commercial guarantees in months. The most common duration was 36 months (30%) followed by 24 months (24%). In about 3% of the cases, mystery shoppers did not find information about the duration of the commercial guarantee.

Table A47. The duration of guarantee in years (N=433)

Duration in years	Large household appliances	Small household appliances	IT	**Total**
1	8%	18%	20%	**15%**
2	17%	28%	28%	**24%**
3	29%	33%	29%	**30%**
4	7%	4%	8%	**6%**
5	29%	12%	13%	**18%**
6	1%	0%	0%	**0%**
10	8%	1%	0%	**3%**
Not found	1%	4%	3%	**3%**

How is the payment to be made?

Of the 433 commercial guarantees analysed in this question, 30% were included in the price of the products and 57% were to be paid in one-off payment.

Table A48. How is the payment to be made? (N=433)

	Large household appliances	**Small household appliances**	**IT**	**Total**
Included in the price	26%	31%	33%	**30%**
One-off	65%	51%	54%	**57%**
Monthly	3%	2%	1%	**2%**
Yearly	0%	0%	0%	**0%**
Not mentioned	5%	16%	12%	**11%**

How much was the commercial guarantee?

Table A49 presents the average cost of a commercial guarantees in function of the purchasing price of the product, per length of the commercial guarantee[295], and Table A50 presents the average cost of the commercial guarantees in euros (per length). The most expensive commercial guarantees (relative to the price of the product) were the ones for small household appliances.

As it is possible to observe, when analysed in aggregated terms the cost of commercial guarantees does not always increase with their length, which may be explained by the heterogeneity of the characteristics and costing policy of commercial guarantees offered by different retailers.

Table A49. What was the price of the commercial guarantee? Average cost of the commercial guarantee in percentage of the purchasing price of the product(N=252)

Length of the commercial guarantee (years)	Large household appliances	Small household appliances	IT	All
1	10%	20%	8%	15%
2	17%	24%	15%	19%
3	15%	37%	18%	25%
4	18%	9%	9%	14%
5	19%	39%	30%	26%
6	22%	N/A	N/A	22%

Table A50. What was the price of the commercial guarantee? Average in Euros (N=252)

Length of the commercial guarantee (years)	Large household appliances	Small household appliances	IT	All
1	17.46	20.78	61.94	30.91
2	65.18	25.45	67.84	50.09
3	53.06	23.18	64.52	44.05
4	66.89	29.45	36.79	52.61
5	69.90	30.34	85.47	62.43
6	59.00	N/A	N/A	59.00

[295] Please note that for the analysis outliers were removed.

The analysis of mystery shops where the same commercial guarantee was offered in different lengths allows to conclude that, as expected, the cost of the guarantee increases with its length and that on average, an additional year of commercial guarantee costed about 16.5 EUR.

Table A51. What was the price of the commercial guarantee? Average cost of an additional year of commercial guarantee (N=153 guarantees)

	Large household appliances	Small household appliances	IT	All
Average	17.35	13.48	18.99	16.53
Min	3.80	4.38	4.50	3.80
Max	36.00	35.00	37.38	37.38

Cost of commercial guarantees - examples

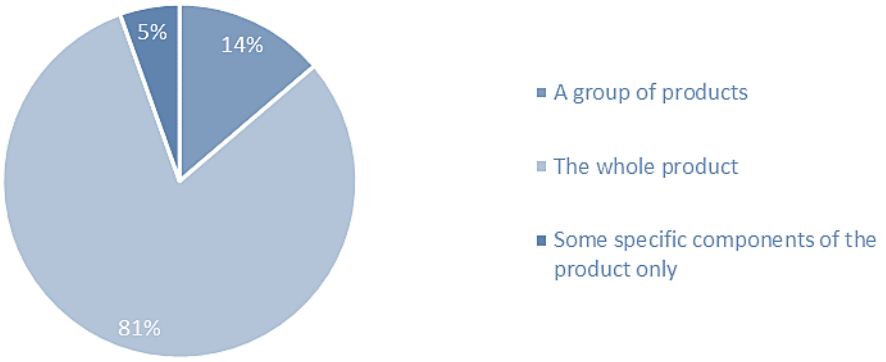
The following examples showcase the heterogony surrounding the costs of commercial guarantees:

- Washing machine, with purchasing price of €499: three commercial guarantees were available, one of 2 year with a cost of €60, another of 3 years with a cost of €80 and a third one of 4 years of €100. Consequently, the cost of each additional year of "guaranteed durability" is €20 and it is independent of the length of the commercial guarantee;
- Dishwasher, with purchasing price of €799: the exact same three commercial guarantees were offered, one of 2 year with a cost of €60, another of 3 years with a cost of €80 and a third one of 4 years of €100. Consequently, the cost of each additional year of "guaranteed durability" is €20 and it is independent of the length of the commercial guarantee;
- Coffee machine, with purchasing price of €1,241: three commercial guarantees were available, one of 1 year with a cost of €45, another of 2 years with a cost of €80 and a third one of 3 years of €115. Consequently, the cost of each additional year of "guaranteed durability" is €35 and it is independent of the length of the commercial guarantee;
- Coffee machine, with purchasing price of €699: three commercial guarantees were available, one of 3 year with a cost of €35, another of 4 years with a cost of €50 and a third one of 5 years of €70. Consequently, the cost of each additional year of "guaranteed durability" varies with the length of the commercial guarantee with an average of €17.5 per year;
- Video Camera, with purchasing price of €199: three commercial guarantees were available, one of 2 year with a cost of €40, another of 3 years with a cost of €50 and a third one of 5 years of €60. Consequently, the cost of each additional year of "guaranteed durability" varies with the length of the commercial guarantee with an average of €7.5 per year;
- Video Camera, with purchasing price of €200: two commercial guarantees were available, one of 3 year with a cost of €21.15 and another of 4 years with a cost of €31.75.

What does the commercial guarantee cover?

In 3% of the cases the mystery shoppers did not find the information. In those cases that information was found, the vast majority (81%) of the commercial guarantees offered covered the whole product, while in 5% only some components were covered. 14% of the commercial guarantees covered a group of products (including the whole product).

Figure A227. The modality of application of the commercial guarantee (N=422)



The table below presents the full results per product group.

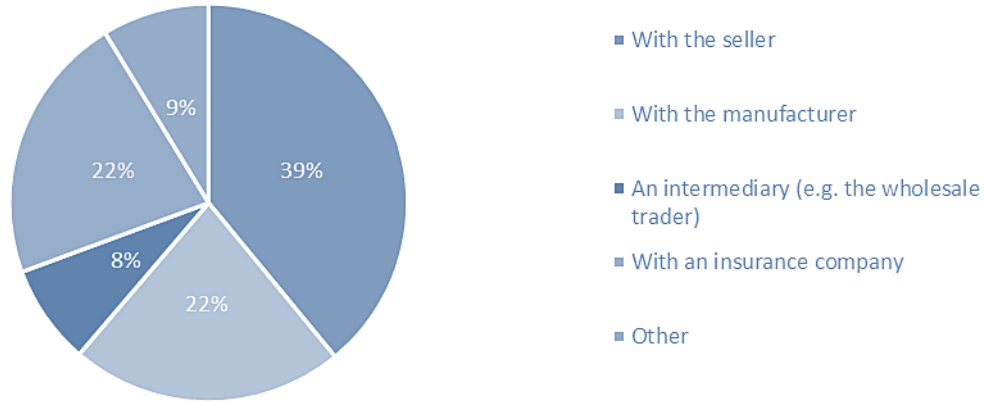
Table A52. The modality of application of the commercial guarantee (N=433)

Type of products	Large household appliances	Small household appliances	IT	Total
A group of products	17%	13%	9%	**13%**
The whole product	74%	79%	85%	**79%**
Some specific components of the product only	8%	4%	3%	**5%**
Could not find any information	1%	4%	3%	**3%**

With whom is the commercial guarantee to be concluded with?

For about 23% of the commercial guarantees, the mystery shoppers were not able to find this information. In those cases for which this information was available, most of the contracts would be concluded with the seller (39%). In 22% would be concluded with the manufacturer and in 22% with an insurance company.

Figure A228. With whom is the guarantee concluded with? (N=333)



The table below presents the full results per product group.

Table A53. With whom the commercial guarantee is conclude? (N=433)

Entity	Large household appliances	Small household appliances	IT	Total
With the seller	25%	28%	39%	**30%**
With the manufacturer	15%	15%	23%	**17%**
An intermediary	5%	8%	5%	**6%**
With an insurance company	21%	17%	10%	**17%**
Other	9%	8%	2%	**7%**
Could not find any information	25%	23%	21%	**23%**

1.1.1.1 Details on one selected commercial guarantee

The following questions were asked only about one of the commercial guarantees offered for each product.

What information was displayed about the commercial guarantee?

For 26% of the commercial guarantees, the mystery shoppers did not find specific information regarding its characteristics, remedies, maximum time to repair, the complaint handling policy nor its geographical coverage. The graph below presents what information was provided. For most of the commercial guarantees, information about its characteristics (63%) and information about the remedies (50%) was available

Figure A229. What information was displayed about the commercial guarantee? (N=264)

The table below presents the results per product group.

Table A54. What information was displayed about the commercial guarantee? - per product group (N=264)

	Large household appliances	Small household appliances	IT	Total
Main characteristics of the guarantee and its functionality (i.e. what is covered by the guarantee)	74%	56%	59%	**63%**
A reminder that the commercial guarantee does not influence your existing legal guarantee rights	30%	29%	24%	**28%**
Remedies (repair, replacement, refund, etc.)	60%	44%	44%	**50%**
Time it will take to perform the service (e.g. time needed for a repair)	9%	7%	4%	**7%**
Complaint handling policy	9%	6%	9%	**8%**
In which countries the commercial guarantee applies	12%	12%	9%	**11%**
Other	9%	6%	13%	**9%**
Could not find any information	17%	33%	27%	**26%**

What are the rights (remedies) under the commercial guarantee?

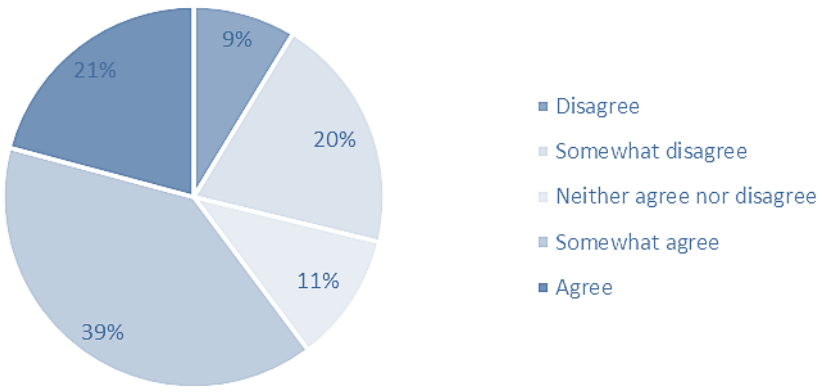
92% of the commercial guarantees for which information on remedies was provided would provide the right of repair and 60% the right to replace the product. Full reimbursement was provided in 19% of those commercial guarantees.

Remedies	Large household appliances	Small household appliances	IT	Total
Repair	89%	96%	90%	92%
Replace	57%	67%	52%	60%
Partial reimbursement of the price paid if repair and replace are not feasible	4%	15%	6%	8%
Full reimbursement of the price paid if repair and replace are not feasible	19%	26%	10%	19%
Other	9%	11%	0%	8%

To what extent do you agree with the following statement: "The information about the commercial guarantee was clear and easy to understand"?

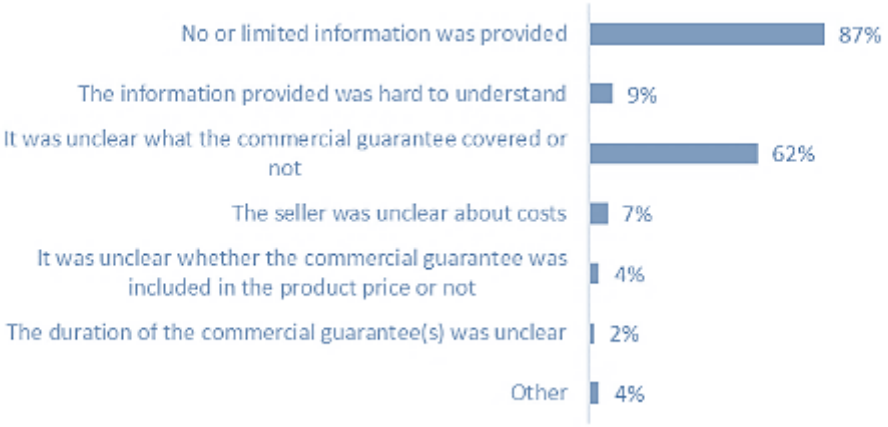
60% of mystery shoppers agreed to some extent that the information about the commercial guarantee clear and useful, while 29% disagreed to some extent.

Figure A230. "The information about the commercial guarantee was clear and easy to understand" (N=264)



Of those that did not agree with the statement, 87% indicated that there was no, or limited information provided and 62% that it was unclear what was covered or not by the commercial guarantee.

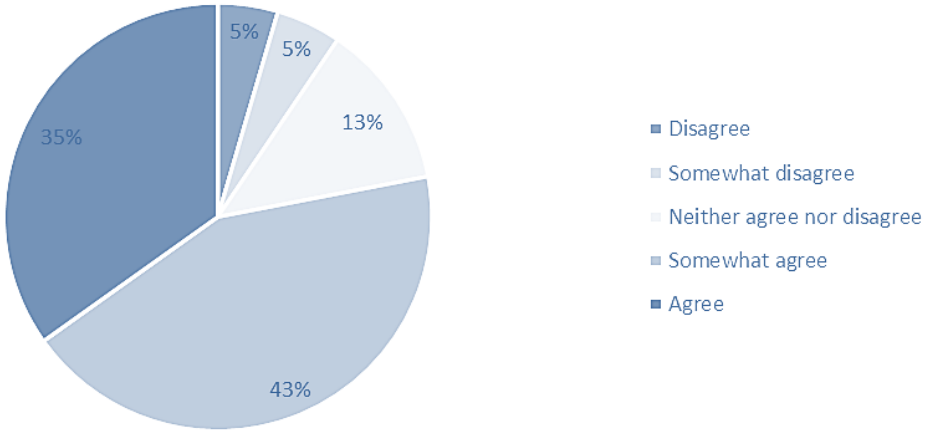
Table A55. Why didn't you find the information of the seller about the commercial guarantee that comes with the product clear and understandable? (N=105)



To what extent do you agree with the following statement: "The information about the commercial guarantee was easy to find"?

The vast majority of the mystery shoppers (78%) agreed to some extent that the information about the commercial guarantee was easy to find.

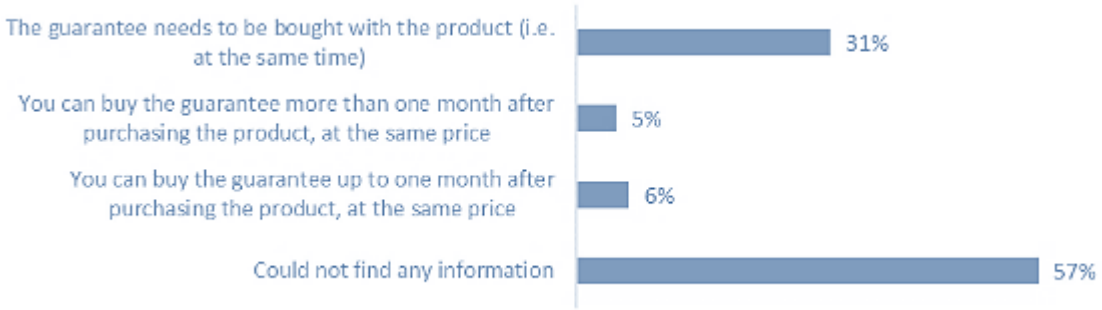
Figure A231. "The information about the commercial guarantee was easy to find" (N=264)



Is it possible to buy the paid-for commercial guarantee at a later stage (i.e. not at the same time as the product itself)?

In 57% on the cases, the mystery shoppers were not able to find if it was possible to buy the paid-for commercial guarantee at a later stage and 31% indicated that it was necessary to buy the commercial guarantee with the product.

Table A56. Is it possible to buy the paid-for commercial guarantee at a later stage (i.e. not at the same time as the product itself)? (N=264)

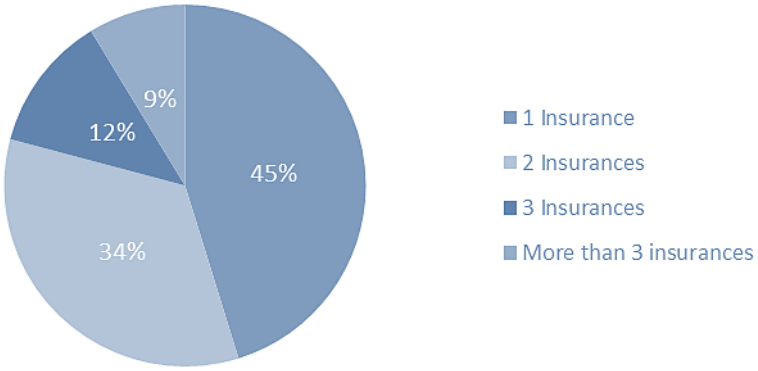


A9.2.2 Insurances

How many insurances were available to you?

In most of the mystery shops (45%) there was only one insurance available, while in 34% two insurances were offered and in 12% three insurances were offered. Only in 9% of the cases there were more than three insurances available.

Figure A232. How many insurances were available to you? (N=115)



The table below presents the number of insurances available per product.

Table A57. How many insurances were available to you? (N=115)

Number of insurances	Large household appliances	Small household appliances	IT	**Total**
1 Insurance	38%	43%	58%	**45%**
2 Insurances	43%	29%	30%	**34%**
3 Insurances	18%	14%	3%	**12%**
More than 3 insurances	3%	14%	9%	**9%**

What was the duration of the insurance (in months)?

The table presents the duration of the available insurances in months. The most common duration was 36 months (30%) followed by 60 months (27%). In about 1% of the cases, mystery shoppers did not find information about the duration of the insurance.

Table A58. The duration of insurance in months (N=205)

Duration in years	Large household appliances	Small household appliances	IT	**Total**
1	18%	13%	24%	**18%**
2	10%	12%	24%	**14%**
3	33%	41%	26%	**34%**
4	0%	8%	2%	**3%**
5	38%	22%	18%	**27%**
6	0%	4%	0%	**1%**
10	0%	0%	2%	**0%**
Not found	1%	0%	4%	**1%**

What is included in the "insurances against consumer damage, theft or loss"?

More than 93% of the insurances covered failures because of the misuse/ improper use of products by the consumer, 60% covered theft of the products and 16% covered loss of the products.

Table A59. What is included in the "insurances against consumer damage, theft or loss"? (N=205)

Coverage	**Large household appliances**	**Small household appliances**	**IT**	Total
Failures because of the misuse/ improper use of products by the consumer	89%	93%	98%	93%
Theft of the products	61%	58%	62%	60%
Loss of the products	14%	20%	12%	16%
Other aspects	24%	25%	22%	24%

How is the payment to be made?

Of the 205 insurances analysed in this question, only 0.5% were included in the price of the products, while 90% were to be paid in one-off payment.

Table A60. How is the payment to be made? (N=205)

	Large household appliances	Small household appliances	IT	Total
Included in the price	0%	0%	2%	0.5%
One-off	92%	92%	84%	90%
Monthly	8%	4%	10%	7%
Yearly	0%	0%	0%	0%
Not mentioned	0%	4%	4%	2%

How much was the insurance?

Table A61 presents the average cost of an insurance in function of the purchasing price of the product, per length of the insurance[296], and Table A62 presents the average cost of the insurance in euros (per length).

As it is possible to observe, when analysed in aggregated terms the cost of insurances does not necessarily increase with their length, which may be explained by the heterogeneity of the characteristics and costing policy of insurances offered by different retailers.

Table A61. What was the price of the insurance? Average cost of the insurance in percentage of the purchasing price of the product (N=186)

Length of the commercial guarantee (years)	Large household appliances	Small household appliances	IT	All
1	23%	50%	14%	28%
2	20%	55%	31%	35%
3	17%	42%	25%	29%
4	NA	63%	NA	63%
5	22%	54%	25%	32%
6	NA	65%	NA	65%
10	NA	NA	11%	11%

[296] Please note that for the analysis outliers were removed.

Table A62. What was the price of the insurance? Average in Euros (N=186)

Length of the commercial guarantee (years)	Large household appliances	Small household appliances	IT	All
1	32.32	23.93	56.13	38.33
2	35.23	38.29	99.67	63.43
3	54.75	32.30	85.08	49.87
4	NA	47.00	NA	47.00
5	95.61	44.33	70.90	76.38
6	NA	49.00	NA	49.00
10	NA	NA	89.00	89.00

The analysis of mystery shops where the same insurance was offered in different lengths allows to conclude that, as expected, the cost of the insurance increases with its length and that on average, an additional year of insurance costed about 15.7 EUR.

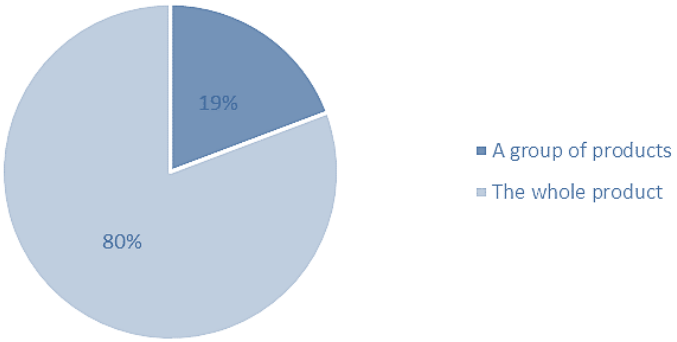
Table A63. What was the price of the insurance? Average cost of an additional year of insurance (N=114 insurances)

	Large household appliances	Small household appliances	IT	All
Average	14.40	11.90	27.40	15.70
Max	38.58	35.00	70.00	70.00
Min	3.00	4.38	4.50	11.70

What does the insurance cover?

In 1% of the cases the mystery shoppers did not find the information. In those cases that information was found, the vast majority (80%) of the insurances offered covered the whole product, while in 19% only some components were covered.

Figure A233. The modality of application of the insurance (N=205)



The table below presents the full results per product group.

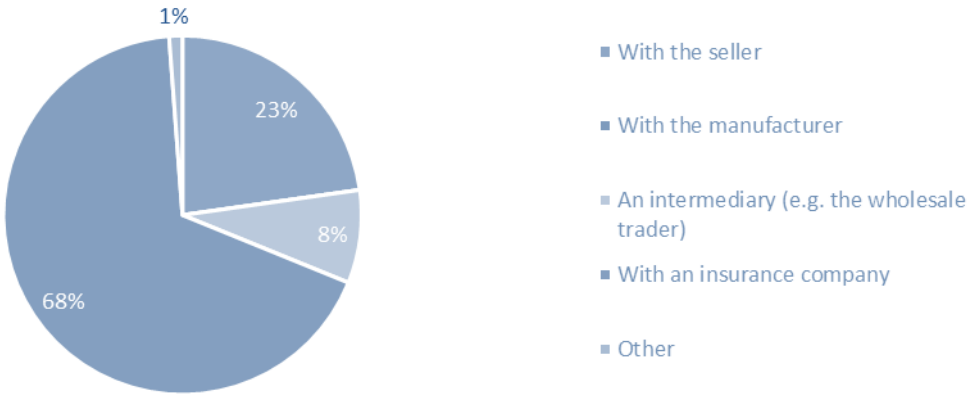
Table A64. The modality of application of the insurance (N=205)

Type of products	Large household appliances	Small household appliances	IT	**Total**
A group of products	19%	21%	14%	18%
The whole product	79%	76%	86%	80%
Some specific components of the product only	1%	0%	0%	0%
Could not find any information	0%	4%	0%	1%

With whom is the insurance to be concluded with?

For about 17% of the insurances, the mystery shoppers were not able to find this information. In those cases for which this information was available, most of the contracts would be concluded with an insurance company (68%). In 23% would be concluded with the seller and in 8% with an intermediary.

Figure A234. With whom is the insurance concluded with? (N=202)



The table below presents the full results per product group.

Table A65. With whom the insurance is conclude? (N=202)

Entity	Large household appliances	Small household appliances	IT	**Total**
With the seller	11%	19%	29%	**19%**
With the manufacturer	0%	0%	0%	**0%**
An intermediary	7%	5%	10%	**7%**
With an insurance company	62%	50%	57%	**56%**
Other	3%	0%	0%	**1%**
Could not find any information	18%	26%	4%	**17%**

A9.3 Results: information on durability

The results of the mystery shopping related to information on durability show that there is very limited information on the lifespan of products and that mystery shoppers found it very difficult to distinguish between guaranteed lifespan, lifespan without repairs, and lifespan with repairs in spite of the supporting information provided to them through a briefing and supporting material. Consequently, the results presented below are anecdotal and should be read with care.

Does this website contain any information on the lifespan (i.e., years of life, hours of use, number of operational cycles, etc) during which the product is expected to be usable WITHOUT repair needed? (N=400)

Only in 10 mystery shops out of 400 (2.5%) information on "lifespan WITHOUT repair needed" was provided, but in half of the cases the mystery shoppers considered the

information on guaranteed lifespan as information on "lifespan WITHOUT repair needed";

In 5 of those 10 mystery shops the information was in years (those were the mystery shops where information on guaranteed lifespan was considered by the mystery shopper to indicate the "lifespan WITHOUT repair needed"), in 3 mystery shops in points or index and in the other two mystery shops there was just a text claim stating that the product would last long;

Of those 10 mystery shops, 6 were of large household appliances, 2 of small household appliances and the other 2 of IT and electronic products;

In all 10 mystery shops the indicated lifespan was not conditional;

In 8 out of those 10 mystery shops, the manufacture did not make any commitment in case the product would fail before reaching the indicated lifespan. In one mystery shop the manufacturer indicated that they would repair, replace or partially/fully reimburse the consumer if the product would break before the indicated "lifespan WITHOUT repair"; in the other case the manufacturer indicated that they would repair the product.

Examples

Durability claims:

- *"Thanks to the durable inverter motor, you can rely on this washing machine to last longer, with less maintenance.",*
- *"The hair dryer will be working for many years."*
- Sustainability/Durability Index of "magarantie5ans.fr"

The logo/label identified:

Does this website contain any information on the lifespan (i.e., years of life, hours of use, number of operational cycles, etc) during which the product is expected to be usable WITH repair needed? (N=400)

Only in 6 mystery shops out of 400 (1.5%), information on the "lifespan WITH repair needed" was provided according to the mystery shoppers assessment. However, a detailed analysis of the results show that, as previously, some of the mystery shoppers considered that the duration of the commercial guarantee was the product's "lifespan WITH repair needed" and some mystery shoppers consider the information regarding the period during which spare parts would be available as the "lifespan WITH repair needed".

In all cases the information was in years;

Of those 6 mystery shops, 3 were of large household appliances, 1 of small household appliances, and 2 of IT and electronic products;

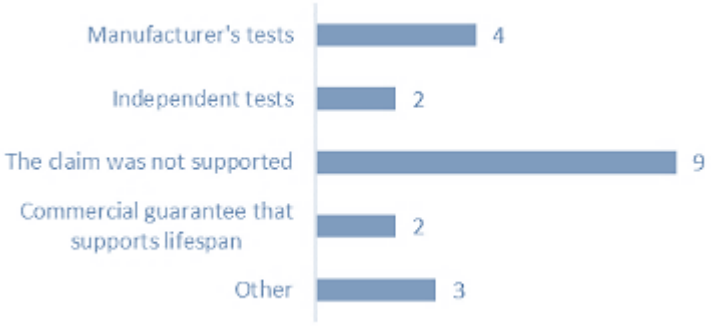
In all instances the indicated lifespan was not conditional;

In 4 cases the manufacturer did not make any commitment in case the product would fail before reaching the indicated lifespan. In one case the manufacturer indicated that they would repair the product and in another case the manufacturer indicated that spare parts would be available at a reasonable price during the indicated lifespan and that they would ensure the availability of repair services.

How are the claims regarding the indicated lifespan (with and/or without repair) of the product supported? (N=16)

9 of the 16 claims were not supported, while in two cases they were supported by a combination of manufacturer's tests, independent tests and consumer's assessment. See Figure below.

Figure A235. How are the claims regarding the indicated lifespan (with and/or without repair) of the product supported? (N=16)



To what extent do you agree with the following statement: "The information on the lifespan of the product was easy to find"? (N=16)

In all 16 cases in which mystery shoppers found the information, they agreed to some extent with the statement, of which 9 somewhat agree and 7 agree.

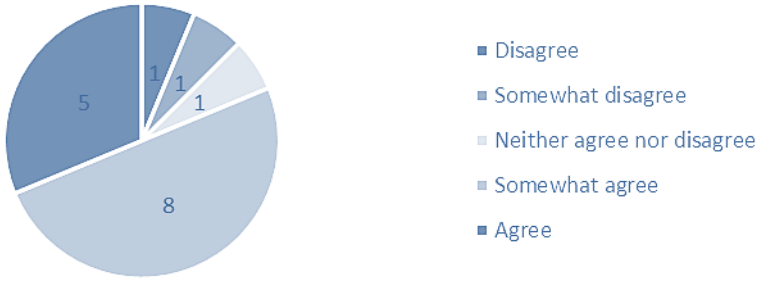
In which format was the information about the lifespan provided? (N=16)

1 mystery shop via a logo/label only; in 8 mystery shops via textual message only; in 6 mystery shops by both a textual message and a label/logo, and in 1 mystery shop by a textual message, a label/logo and a dedicated page.

To what extent do you agree with the following statement: "The information on the lifespan of the product was clear and easy to understand"? (N=16)

In 13 of the 16 cases in which the mystery shoppers found information agree to some extent that the information was clear and easy to understand, 2 mystery shoppers disagreed to some extent with the statement because they considered that the provided explanation was insufficient and / or that the claims were two general (e.g., "many years" or "long").

Figure A236. The information on the lifespan of the product was clear and easy to understand"? (N=16)



To what extent do you agree with the following statement: "The logo and/or label informing about the lifespan of the product was easy to understand"? (N=8)

In 5 out of the 8 cases, mystery shoppers somewhat agreed that the logo/label was easy to understand. In one case the mystery shopper agreed with the sentence and in 2 cases neither agreed nor disagreed.

Is there is a warning about known aspects in the product that can cause it to fail significantly earlier a) than it could be reasonably expected or b) than the majority of the other products in the same product group/category? (N=400)

In 15 mystery shops out of 400 (3.75%) the mystery shoppers found a warning related to the possibility of early failure.

Does the seller or manufacturer or a third party ensure the possibility to update and/or upgrade the product software within a certain period of time after the purchase (free of charge or against a fee)? (N=400)

In 5 out of 400 mystery shops (1.25%) updates and/or upgrades were ensured. In 1 mystery shop both updates and upgrades were ensured (1 mobile phone) and in the remaining 4 mystery shops (1%) only updates were ensured (1 washing machine, 2 mobile phones, 1 laptop);

In 1 case this was ensured by the seller and in the other 4 cases by the manufacturer

Only in one case the mystery shopper found information about the period of the commitment (i.e., 12months)

A9.4 Results: information on reparability

Does this website contain any of the following information about the reparability of the product in question? (N=400)

Only in 19% of the mystery shops information about reparability was available;

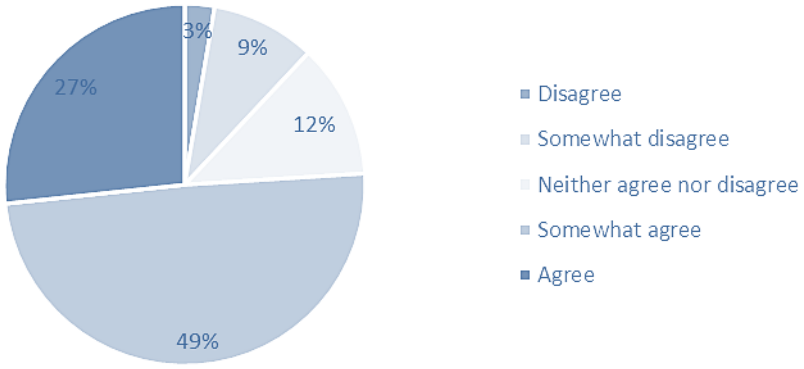
The table below show the information provided in those 75 mystery shops. In two cases the seller informed the mystery shopper that "Self-diagnosis" of the product would be available.

	Large household appliances	Small household appliances	IT	Total
Availability of spare parts	28%	29%	21%	27%
Cost of spare parts	2%	2%	0%	2%
The party that will supply the spare parts	2%	3%	0%	2%
The period of time after the purchase (e.g., years) during which the spare parts will be available	34%	26%	16%	27%
In which countries they will be available (E.g. Whole of EU, worldwide, etc.)	11%	13%	16%	13%
Average delivery time of spare parts	0%	0%	5%	1%
Availability of repair / service manuals	6%	5%	0%	5%
Availability of certified repair shops/services	0%	10%	5%	5%
Availability of non-certified repair shops/services	0%	3%	0%	2%
Price of repair services	4%	2%	5%	3%
Possibility to repair the product independently, existing support and indicative level of difficulty	0%	2%	5%	2%
Existence of a cap on the price of spare parts	2%	0%	0%	1%
Existence of a cap on the price of repair services	11%	2%	11%	6%
A score on the ability to repair (e.g., from A - easy to repair to E – not repairable or from 0 – 100%)	0%	0%	0%	0%
Other	0%	5%	16%	5%

To what extent do you agree with the following statement: "The information on reparability was easy to find"? (N=75)

In 57 mystery shops out of the 75 where the information was observed, the mystery shoppers considered that the information on reparability was easy to find to some extent, while 12% considered it difficult to find to some extent for a variety of reasons, including: there was limited information, there was too much information and the information was not highlighted or was in the footer and difficult to spot.

Figure A237."The information on reparability was easy to find"? (N=75)



In which format was the information on reparability provided?

In 76% of the mystery shops (of the 75 where the information was observed) the information on reparability was provided thorough a textual message only, in 4% thought a label/logo only and in the remaining 20% by both a textual message and a label/logo.

Only 20% of the labels had a reparability score or ranking.

Logos/labels to inform about reparability

To what extent do you agree with the following statement: "Overall, the information on reparability was clear and easy to understand"?

In 91% of the mystery shoppes where information on reparability was found, mystery shoppers considered the information clear and easy to understand, with none fully disagreeing with the statement.

To what extent do you agree with the following statement: "The logo/label was easy to understand"? (N=16)

In 8 shops, mystery shoppers agreed with the statement, in 7 they somewhat agreed and in 1 they neither agreed nor disagreed.

A9.5 Results: environmental claims

Mystery shoppers were asked to check whether the products selected contained any environmental claims and whether they found any environmental claims throughout the purchase process (of products and services).

The results show that almost half of products (49%) did not have a claim at all, and therefore, half of products (51%) did have a claim (either logo, label, text, image or embodied in the brand).

How many logo/label environmental claims did you find on the product? (N=595)

Note: this question was asked for products among the following product categories: Clothes and Footwear; Household cleaning and miscellaneous; Hygienic and care products; IT; Large household appliances; and Small household appliances.

Overall, the majority of products (78%) did not contain any environmental claims in the form of a logo or label (voluntary or mandatory) and 88% did not contain environmental claims in the form of a voluntary logo or label. Up to 7% of products had 1 voluntary logo/label environmental claim and 5% of them had 2 or 3 or more voluntary logo/label environmental claims. 10% had an EU Energy label.

An analysis per product category (see Table A66) reveals that almost all products under "clothes and footwear" (97%), "IT" (98%) and "small household appliances" (97%) had no environmental claims in the form of a voluntary logo/label. A large proportion of products without a voluntary logo/label is also present in all other product categories: "household cleaning and miscellaneous" (73%), "hygienic and care products" (63%), and "large household appliances" (86%).

It is observed that up to 13% of products under "large household appliances" include 1 logo/label. This is also found for 20% of products under "household cleaning and miscellaneous", and 12% of "hygienic and care products". Regarding the former, 12% of hygienic and care products present 2 claims in the form of voluntary logo/label whereas 13% of them have 3 or more voluntary logos or labels.

Table A66. Products containing environmental claims in the form of voluntary logos or labels, per product category (n=595)

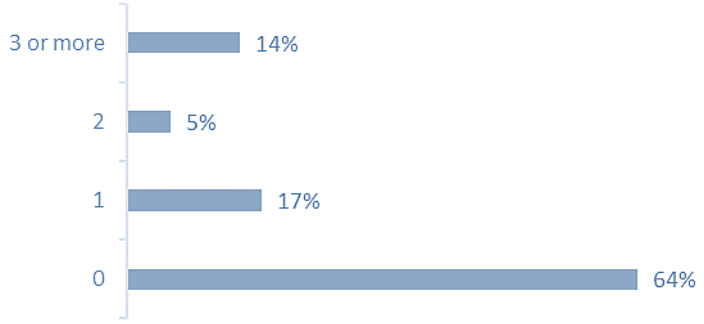
Number	Product category					
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances
0	97%	73%	63%	98%	86%	97%
1	0%	20%	12%	2%	13%	2%
2	3%	7%	12%	0%	0%	0%
3 or more	0%	0%	13%	0%	2%	1%

How many textual environmental claims did you find on the product?

Figure A238 shows that the majority of products (64%) contained no textual environmental claims at all. Whereas mystery shoppers found 1 textual environmental claim on 17% of products, 2 textual environmental claims on 5% of products and 3 or more text environmental claims on 14% of products.

When looking at specific product categories (Table A67), mystery shoppers did not find textual environmental claims in the majority of products under "clothes and footwear" (85%), "small household appliances" (81%), "IT" (74%), and "household cleaning and miscellaneous" (62%). On the contrary, up to 31% of "hygienic and care products" and 23% of "large household appliances" products presented 1 textual environmental claim. Additionally, products under the "large household appliances" category contained 2 textual environmental claims in 14% of the cases and 3 or more textual claims in 25% of the cases. Besides, 3 or more textual environmental claims were found in a quarter (25%) of "hygienic and care products" analysed, as well as in 22% of "household cleaning and miscellaneous" products.

Figure A238. How many textual environmental claims did you find on the product?(n=595)



Base: Clothes and Footwear; Household cleaning and miscellaneous; Hygienic and care products; IT; Large household appliances; and Small household appliances (n=595)

Table A67. Products containing environmental claims in the form of text, per product category (n=595)

Number	Product category					
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances
0	85%	62%	39%	74%	38%	81%
1	5%	15%	31%	12%	23%	14%
2	2%	2%	5%	4%	14%	2%
3 or more	8%	22%	25%	10%	25%	3%

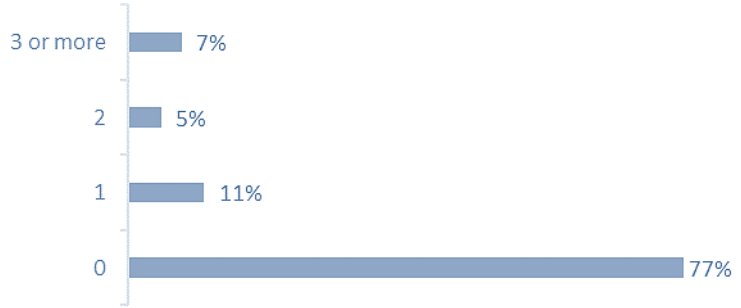
How many environmentally friendly images did you find on the product?

In view of the results shown in Figure A239, environmental friendly images were found in 33% of all products revised, and therefore, 77% of total products had no environmentally friendly images. More specifically, 11% of total products contained 1

environmentally friendly image; 5% of products had 2 environmentally friendly images; and 7% of them included 3 or more environmentally friendly images.

However, results differ among product categories as seen in Table A68. Around 9 in 10 products have no environmentally friendly images in "clothes and footwear" category (93%) and "small household appliances" (90%). Likewise, around 8 in 10 "large household appliances" products (81%) and around 7 in 10 "household cleaning and miscellaneous" products (72%) showed no environmentally friendly images. Compared with the rest of products, "hygienic and care products" and "household cleaning and miscellaneous" show the largest percentages of products with 1 environmentally friendly image, 32 and 18% respectively. Contrarily, "IT" products and "large household appliances" seem to be the ones with the largest presence of products containing 3 or more environmentally friendly images, this is 20 and 9% respectively.

Figure A239. How many environmentally friendly images did you find on the product? (n=595)



Base: Clothes and Footwear; Household cleaning and miscellaneous; Hygienic and care products; IT; Large household appliances; and Small household appliances (n=595)

Table A68. Products containing environmental claims in the form of environmentally friendly images, per product category (n=595)

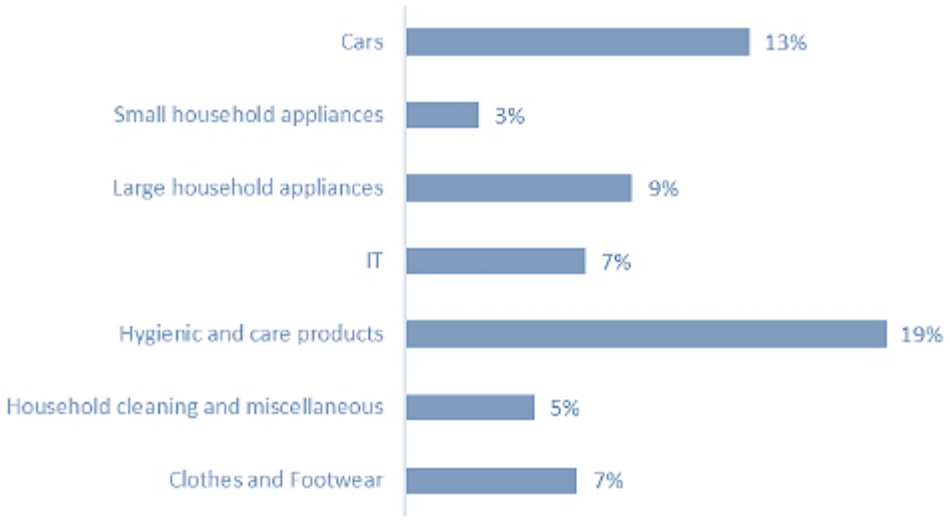
Number	Product category					
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances
0	93%	72%	49%	67%	81%	90%
1	5%	18%	32%	8%	7%	5%
2	0%	8%	13%	5%	3%	2%
3 or more	2%	2%	5%	20%	9%	4%

Was a green claim embodied in the brand and/or product name? (N=610)

The vast majority of products analysed (92%) do not contain a green claim embodied in the brand and/or product name.

8% of products presented an environmental claim embodied in the brand and/or product name[297], with some differences observed across product categories (Figure A240). A larger proportion of products with a green claim embodied in the brand and/or product name is observed in "hygienic and care products" (19%), in "cars" (13%),and in "large household appliances" (9%). As opposed to a lower presence of green claims embodied in the brand and/or product name in "household cleaning and miscellaneous" products (5%) and "small household appliances" (3%).

Figure A240. Products containing a green claim embodied in the brand and/or product name, per product category (n=610)



Indicate which logo(s)/labels(s) you noticed on the product

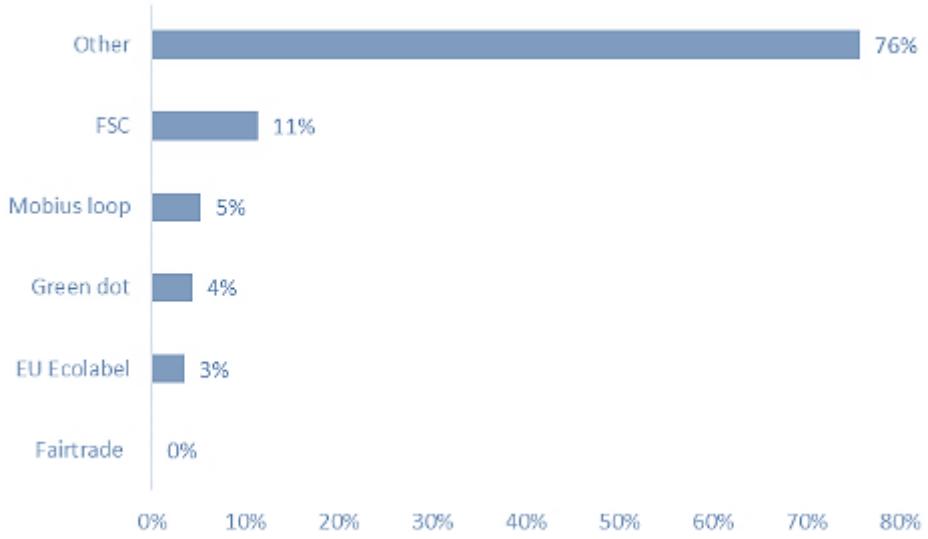
Please note that not all products are eligible to all voluntary labels/logos, therefore comparison between products and labels/logos has limitations

The FSC (11%) label is the most popular voluntary logo/label identified by mystery shoppers, followed by the Mobius loop (5%), the Green dot (4%) and the EU Ecolabel (3%)[298]. The Fairtrade label was not observed in any of the products analysed. The remaining 73% of the identified logo(s)/label(s) were of the category "Other".

[297] Example: Miele Complete C3 Pure Black Ecoline, Bosch ActiveWater Dishwasher 60cm Freestanding Silver SMS25AI00G, De Longhi Eco 311.R Icona, Planet Pure Detergente Bio Universale alla Lavanda, Eco by Naty Windel, Mango - Maglietta cotone biologico paillettes double-face, "OnlyBio"

[298] Please note that some of the product categories covered, such as household appliances, are not eligible under the EU.

Figure A241. Type of logo(s) and/or label(s) found on products, per product category (n=115)



Base: Clothes and Footwear; Household cleaning and miscellaneous; Hygienic and care products; IT; Large household appliances; and Small household appliances with at least one voluntary logo/label on the product (n=115)

A deeper analysis reveals some differences across different product categories. The vast majority of the voluntary logo(s)/label(s) found in "IT" products correspond to the Mobius loop (50%) or "Other" (50%). Similar picture is observed for "Large household appliances", where the majority of voluntary logo(s)/label(s) found are the Mobius loop (20%) and 80% "Other". Regarding "Small household appliances", 3 in 10 voluntary logo(s)/label(s) observed are Mobius loop (29%) and 1.5 in 10 are "Green dot" (14%) and the remaining 57% correspond to "Other" type of logo(s)/label(s).

The Green dot is only present in "Small household appliances" and "Hygienic and care products (9%). In the former category the majority of the voluntary label(s)/logo(s) observed are "Other" (62%), whereas 26% of them are FSC and 4% are EU Ecolabel.

All logo(s)/label(s) identified under the "Clothes and footwear" category belong to "Other" type of voluntary logo(s)/label(s). Similarly, up to 89% of label(s)/logo(s) found in "household cleaning and miscellaneous" products refer to "Other", whereas 7% of them are EU Ecolabel and 4% of them are FSC.

Table A69. Type of logo(s) and/or label(s) found in products, per product category (n=115)

Number	Product category					
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances
Fairtrade	0%	0%	0%	0%	0%	0%
EU Ecolabel	0%	7%	4%	0%	0%	0%
Green dot	0%	0%	9%	0%	0%	14%

Mobius loop	0%	0%	0%	50%	20%	29%
FSC	0%	4%	26%	0%	0%	0%
Other[299]	100%	89%	62%	50%	80%	57%

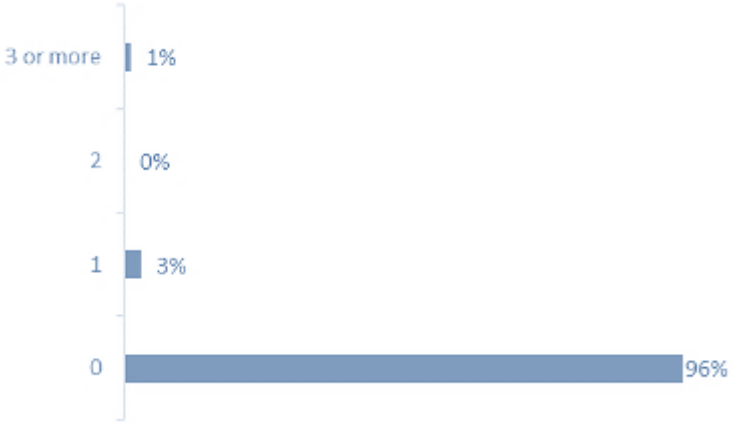
How many logo/label environmental claims did you find throughout the process of buying the product/service?

Please note that not all products are eligible to all voluntary labels/logos, therefore comparison between products and labels/logos has limitations

As shown by Figure A242, the vast majority of products and services did not present any environmental claims in the form of voluntary logo/label throughout the process of buying the product/service (96%). It is found that in 4% of the cases, products or services contain 1 voluntary logo/label throughout the shopping process. Whereas 3 or more voluntary logos/labels are present through the buying process only in 1% of the overall case. The number of products/services with 2 environmental voluntary labels/logos throughout the shopping process is insignificant.

Electricity services and large household appliances have a higher percentage of products with voluntary logo/label claims throughout the shopping process: up to 13% in electricity services and 4% in large household appliances. The former also show a higher proportion in products containing 1 voluntary logo/label claim throughout the shopping process (10%) – which is also the case for cars (20%) and electricity services (7%). No voluntary logo/label claims were observed throughout the shopping process of hygienic and care products and parcel delivery services.

Figure A242. How many voluntary logo/label environmental claims did you find throughout the process of buying the product/service? (n=640)



Base: All (n=640)

Table A70. Number of logo/label environmental claims found throughout the process of buying the product/service, per product category (n=640)

Number	Product category	Services

[299] Examples of "Other" labels/logos identified are "Le choix durable"; "Données Environnementales", "#Wear the Change", "Bio Cotton", "Austria Bio Guarantee", "GOODProduct", "Natrue", "Ecologo", "NatureTechnology".

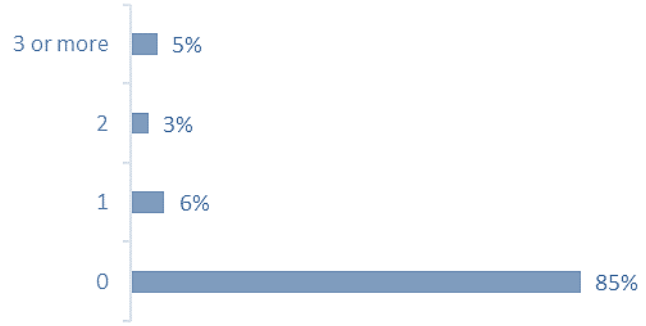
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances	Cars	Electricity Services	Parcel delivery
0	98%	95%	100%	98%	92%	97%	80%	80%	100%
1	0%	5%	0%	2%	4%	3%	20%	7%	0%
2	2%	0%	0%	0%	0%	0%	0%	0%	0%
3 or more	0%	0%	0%	0%	4%	0%	0%	13%	0%

How many textual environmental claims did you find throughout the process of buying the product/service?

The mystery shopping exercise reveals that 15% products or services analysed presented textual environmental claims throughout the buying process, therefore 85% of products/services did not have any textual environmental claims at all. In particular, 6% of products/services contain 1 textual environmental claim throughout the shopping process. Whereas 3% of them have 2 textual environmental claims and up to 5% have 3 or more textual green claims throughout the shopping process.

As shown in Table A71, cars and electricity services are the product categories with larger representation of textual environmental claims throughout the process of buying a product/service. Regarding cars, the majority of them show 3 or more textual green claims (67%) – whereas 14% of them have either 1 or 2 text claims. As to electricity services, 6 in 10 of them have 3 or more text claims (60%) and 2 in 10 contain 2 textual green claims (20%). Large household appliances show textual claims in 27% of the cases: 14% of them have 1 text claim, 5% contain 2 textual claims , and 9% present 3 or more textual claims throughout the shopping process.

Figure A243. How many textual environmental claims did you find throughout the process of buying the product/service? (n=640)



Base: All (n=640)

Table A71. Number of textual environmental claims found throughout the process of buying the product/service, per product category (n=640)

Product category	Services

Number	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances	Cars	Electricity Services	Parcel delivery
0	97%	95%	83%	95%	73%	94%	20%	20%	93%
1	2%	5%	11%	4%	14%	3%	7%	0%	0%
2	0%	0%	7%	1%	5%	3%	7%	20%	0%
3 or more	2%	0%	0%	0%	9%	0%	67%	60%	7%

How many environmentally friendly images did you find throughout the process of buying the product/service?

The large majority of products and services reviewed (93%) did not show any green claims in the form of environmentally friendly images throughout the process of buying the product/service (Figure A244). A proportion of 4% products/services had 1 environmentally friendly image and 2% of them had 3 or more environmentally friendly images throughout the shopping process. Only 1% of products/services throughout the buying process showed 2 environmentally friendly images.

The overall picture is quite representative in most of product categories (Table A72). However, significant differences appear in the case of cars, electricity services and parcel delivery services. Environmentally friendly images are present in the buying process of electricity services in 80% of the cases: 40% of electricity services have 3 or more environmentally friendly images, 13% of them have 2 environmentally friendly images and 27% have 1 environmentally friendly image. Likewise, up to 73% of cars reviewed contain environmentally friendly images throughout the shopping process – 27% of them have 3 or more environmentally friendly images and 47% of them have 1. In the case of parcel delivery services, more than half (53%) offer environmentally friendly images throughout the buying process.

Figure A244. How many environmentally friendly images did you find throughout the process of buying the product/service? (n=640)

Base: All (n=640)

Table A72. Number of textual environmental claims found throughout the process of buying the product/service, per product category (n=640)

Number	Product category							Service	
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household	Cars	Electricity Services	Parcel delivery
0	100%	100%	99%	97%	98%	98%	27%	20%	47%
1	0%	0%	0%	2%	2%	2%	47%	27%	33%
2	0%	0%	1%	0%	0%	0%	0%	13%	13%
3 or more	0%	0%	0%	1%	1%	0%	27%	40%	7%

Indicate which logo(s)/label(s) you noticed throughout the process of buying the product/service

Please note that not all products are eligible to all voluntary labels/logos, therefore comparison between products and labels/logos has limitations

75% of the 28 voluntary logos/labels observed throughout the shopping process relate to the "Other" category and 25% were the Mobius loop label. Throughout the process of buying the product/service, mystery shoppers did not find any Green dot, Fairtrade, EU Ecolabel or FSC label.

Table A73. Type of voluntary logo(s) and/or label(s) found throughout the process of buying the product/service, per category (n=28)

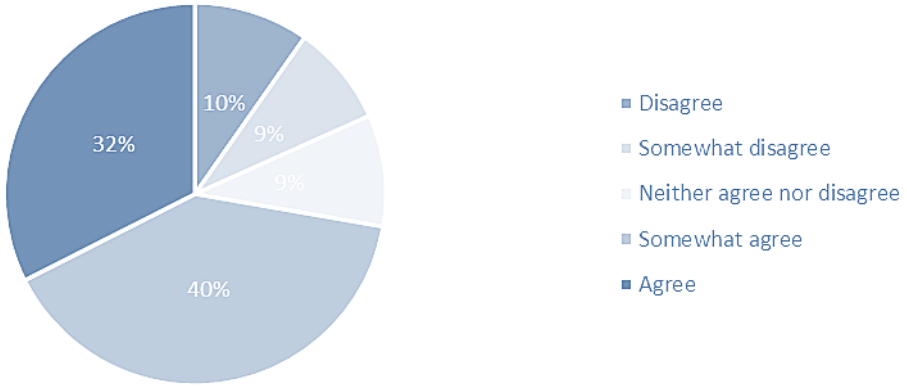
Number	Product category							Services	
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances	Cars	Electricity Services	Parcel delivery
FSC	0%	0%	0%	0%	0%	0%	0%	0%	0%
EU Ecolabel	0%	0%	0%	0%	0%	0%	0%	0%	0%
Fairtrade	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green dot	0%	0%	0%	0%	0%	0%	0%	0%	0%
Mobius loop	0%	0%	0%	50%	18%	80%	0%	0%	0%

Other[300]	100%	100%	0%	50%	82%	20%	100%	100%	100%

To what extent do you agree with the following statement: "The environmental claims appear to be based on evidence and I believe that I can trust these claims":

Among those mystery shoppers who found environmental claims (53%), 38% of mystery shoppers agree or somewhat agree with the statement that "The environmental claims appear to be based on evidence and I believe that I can trust these claims". On the contrary, 10% of mystery shoppers disagree or somewhat disagree with the previous statement – showing some mistrust towards the environmental claims they found. Table A74 shows a more detailed analysis by product category.

Figure A245. To what extent do you agree with the following statement: "The environmental claims appear to be based on evidence and I believe that I can trust these claims" (n=339)



Base: All (n=339)

Table A74. To what extent do you agree with the following statement: "The environmental claims appear to be based on evidence and I believe that I can trust these claims" , per product category (n=640)

Level of Agreement	Product category							Services	
	Clothes and Footwear	Household cleaning and miscellaneous	Hygienic and care products	IT	Large household appliances	Small household appliances	Cars	Electricity Services	Parcel delivery
Not applicable as I did not notice any	82 %	38 %	17 %	54 %	22 %	70 %	20 %	13 %	47 %
Disagree	2%	8%	7%	5%	2%	5%	0%	7%	33 %

[300] Example of "Other" logos/labels are: "eco-silence drve", "TRYB Eco", "Co2 Emissions", "Co2 Neutral – regreen"

Somewhat disagree	3%	10 %	17 %	2%	2%	1%	0%	7%	0%
Neither agree nor disagree	5%	17 %	4%	4%	2%	3%	7%	7%	13 %
Somewhat agree	2%	17 %	31 %	23 %	35 %	14 %	47 %	13 %	0%
Agree	7%	10 %	24 %	12 %	35 %	7%	27 %	53 %	7%

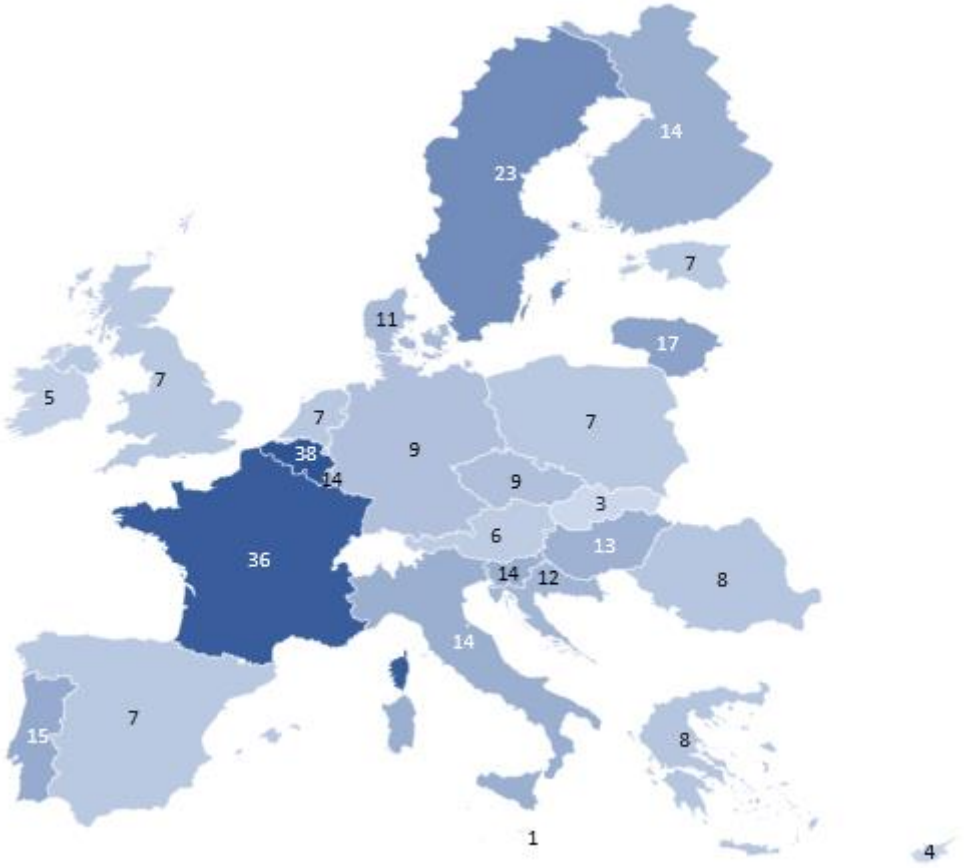
Annex 10. Mapping of national initiatives

This annex presents an overview of the result of the research conducted in 31 countries (the United Kingdom, the United States, New Zealand and South Korea) and describes in detail those considered most relevant.

A10.1 Overview

National researchers identified 346 regulatory and non-regulatory initiatives across 31 countries, including EU 27 Member States, the United Kingdom, the United States, New Zealand and South Korea. Figure A246 below shows the distribution of initiatives identified across EU Member States and the United Kingdom.[301] The distribution is relatively homogenous, with Belgium, France and Sweden the countries in which most initiatives were identified.

Figure A246. Map of relevant initiatives identified in the EU



The initiatives identified in non-EU countries were 18 in the United States[302], 9 in New Zealand and 7 in South Korea. As described elsewhere in this report, all initiatives, both from the EU and beyond, were categorised according to the following 3 groups:

- Group 1: Promoting more durable goods, preventing planned/premature obsolescence, supporting reparability of goods (including 'right to repair').
- Group 2: Preventing unfounded and unsubstantiated environmental claims, including ecolabels, and supporting clear and credible environmental information; and

[301] With the exception of Bulgaria and Latvia for which no initiatives were identified.

[302] At both federal level and in the states of Massachusetts and California.

- Group 3: Other interventions supporting consumers' active role in the green transition (including fiscal incentives, sharing, reinforced take-back schemes).

Most of the initiatives identified in the EU (40%) fell into group 3, followed by group 1 (29%) and group 2 (25%). For the extra-EU countries, most (50%) fell into group 2, with 10 (29%) falling into group 1 and 7 (21%) into group 3. Figure A247 provides a summary.

Figure A247. Number of initiatives identified per group and geographical area (out of total number of initiatives)

	Group 1	Group 2	Group 3	All groups
EU	89 (26%)	78 (23%)	145 (42%)	312 (90%)
Extra-EU	10 (3%)	17 (5%)	7 (2%)	34 (10%)
Total	**99**	**95**	**152**	**346**

The single most identified topic areas across the whole geographical scope of initiatives were those related to unfounded and unsubstantiated environmental claims, and 'reparability / information on reparability, followed by sustainability labelling and digital information tools.

Table A75 provides an illustration of the areas that initiatives focused on per group.

Table A75. Initiatives identified per group and topic area (EU and extra-EU)

Group 1				
Reparability (including labels)	Guarantees	Durability (including labels)	Prevention of obsolescence	**Total**
48 (14%)	27 (8%)	16 (5%)	8 (2%)	**99**
Group 2				
Preventing greenwashing	Labels and Digital information tools	Other information		**Total**
49 (14%)	42 (12%)	4 (1%)		**95**
Group 3				
Reuse	Labels and Digital information tools	Other		**Total**
9 (3%)	3 (1%)	149 (43%)		**152**

In different ways and to varying extents, the 346 initiatives identified by national researchers are related to the priority areas of this study. The country factsheets with a description of the identified initiatives are provided as separate files.

In the following sections we report on those initiatives considered sufficiently relevant to the study. About half of the initiatives have been excluded for the following reasons:

- Limited geographical and temporal scope and not adequate to be replicable and/or scalable at EU-level;
- Very limited impact on promoting sustainable consumption behaviours; or
- Weak alignment between the scope of the initiative and the material scope of the study.

The relevant initiatives are either regulatory or non-regulatory and their type and relevance to the priority area(s) are summarised in Table A76.

Table A76. Initiatives per Group and Type

Type of initiative	Priority Area	Countries
Group 1		
Law on promoting / informing on durability	Durability	AT, DK, FI, FR, HU, NL, SE, UK, USA (MA, CA)
Legislative proposal on promoting / informing on durability	Durability	BE, IT, PT
Law on promoting / informing on reparability	Reparability	AT, EL, ES, FI, FR, HU, MT, SI, South Korea, UK
Legislative proposal on promoting / informing on reparability	Reparability	BE, IT, PT, USA (MA)
Law prohibiting planned obsolescence	Obsolescence	FR
Legislative proposal addressing planned obsolescence	Obsolescence	BE, IT, PT
Website/toolbox informing on or promoting durability / reparability / obsolescence	Durability Reparability Obsolescence	BE, DK, ES, FR, IT, LU,
Consumer information: durability and reparability labels	Awareness	AT, BE, CZ, NL
National plan/programme/strategy	Reparability Other	BE, DE, LU, PT, SE,
Group 2		
Preventing misleading/unfounded environmental claims in marketing	Greenwashing	AT, BE, CY, CZ, EL, ES, FI, FR, HU, IE, IT, LU, PL, PT, RO, SI, South Korea, UK,
Consumer information: Sustainability Labels	Greenwashing Transparency and reliability of sustainability labels	AT, BE, CZ, DE, DK, EE, FI, FR, HR, HU, IT, LU, New Zealand, SE, South Korea,
Consumer information: Website providing information on labels	Transparency and reliability of labels	AT, BE, DE, IE,

Type of initiative	Priority Area	Countries
Group 3		
Initiatives promoting reuse	Reuse	EE, LT, LU, PL
Labels guaranteeing the quality of reused products	Reuse	BE
Fiscal policy incentivising sustainable behaviour (e.g. tax reductions)	Reparability	BE, LT, LU, PL
Comparison and simulator tools	Awareness	CY, FI, FR
Websites that provide consumers with information	Awareness	DK, FR, SI, SK

A10.2 Group 1: Promoting more durable and repairable goods and preventing planned/premature obsolescence

In this section we present the relevant national initiatives that aim to promote more durable and repairable products and to prevent planned/premature obsolescence. These are subdivided into:

- National plans, programmes and/or strategies: regulatory and non-regulatory policy initiatives at national level;
- Current and planned legislative initiatives informing consumers on the durability of products;
- Current and planned legislative initiatives promoting the reparability of products and / or informing consumers on the reparability of products;
- Legislative initiatives (current and planned) prohibiting planned obsolescence;
- Labelling schemes covering durability and / or reparability aspects of products; and
- Websites informing consumers on aspects related to durability, reparability and/or obsolescence with the objective of promoting more sustainable consumption behaviours (e.g., purchasing more durable products, repairing instead of replacing) and preventing obsolescence.

A10.2.1 National plan/programme/strategy

National policy commitments that often include a policy mix of regulatory and non-regulatory initiatives have been identified in the countries observed.

In one German initiative (Progress III),[303] the focus is on guarantees and on reparability. The initiative aims to strengthen the framework conditions for the repair of products, in particular through the availability of spare parts, repair instructions and tools. For electronic and electric goods, the timeframe should be for 10 years and be available to all types of repairers, not just official ones. The strategy also envisages the introduction of reparability scoring.[304]

The provisions included in the German initiative that focus on guarantees include the following recommendations:

[303] Available here.

[304] No further information is currently available.

- The introduction of a guarantee statement obligation of the manufacturers for their products. The improved information on the product guarantee is expected to encourage consumers to give greater weight to the aspect of durability when purchasing products.
- Extension of the 2-year legal guarantee to 'the expected life expectancy of products'.[305]
- Extension of the period of reversal of the burden of proof to 2 years.
- The introduction of a "functional guarantee" vis-à-vis the manufacturer/importer which establishes the conditions of a commercial guarantee, in other words, the liability of the manufacturer or producer offering to the consumer a commercial guarantee of durability for certain goods for a certain period of time. In those cases, the producer shall be liable directly to the consumer, during the entire period of the commercial guarantee of durability for repair or replacement of the goods

The general obligation to indicate a minimum lifespan is also part of the strategy.

Durability is the aspect that the Swedish national strategy[306] identified focuses on. The initiative foresees that the government set in motion a process through which to create 'product passports', first by gathering relevant information and then by establishing a regulatory framework for their implementation. The 'passports' may include general information on products as well as information on their lifespan and durability.[307] This possibility has been initially rejected but is still currently being discussed in parliament. There is currently no information on how the information in the passports would be made available to consumers in practice.

In other cases, national strategies have a wider scope. Two initiatives identified in Luxembourg[308] and Portugal[309] include a policy mix focusing on the promotion of reparability, durability and planned obsolescence.

The initiative identified in Portugal (Action Plan for Circular Economy in Portugal - Plano de Ação para a Economia Circular em Portugal)[310] proposes to develop life extension strategies, focusing on encouraging repair activity, supporting reuse networks, repair cafes and traditional repair services. It also aims to develop tools that communicate to consumers about the benefits of extending the useful life of goods, which may include guidance, ecolabelling and repair manuals. The Action Plan will be assessed by the end of 2020 against indicators such as the ratio of stores offering their own repair service compared to the total number of stores; the number of repair cafes and / or local actions carried out; the number of citizens using the services provided; the number of products repaired vs. new products sold (including reused manuals vs. manuals acquired); savings per student in relation to the price of the basket of manuals for each year of schooling; the number of partnerships with municipalities / distribution; and the number of awareness actions and their impact.

The plan in Luxembourg is part of a coalition agreement and aims to promote the repair, reuse and recycling of products by committing to legislation against planned obsolescence[311] and to set minimum standards for the repair of products. The envisaged initiatives concerning sustainable development are based on the 2030 Agenda for

[305] No further information available.

[306] Available here.

[307] As suggested in Motion 2019/20:3305, available here.

[308] Available here.

[309] Available here.

[310] Available here.

[311] As described in 3.2.2.6.

Sustainable Development with its 17 Goals and 169 targets, and on the Paris Agreement.

The government of Luxembourg has also released its 3rd Plan for Sustainable Development, which has 17 objectives, including:

- Ensuring access for all to reliable, sustainable and modern energy services at an affordable cost (Objective 7);
- Building a resilient infrastructure, promoting sustainable industrialization for the benefit of all and encouraging innovation (Objective 9);
- Establishing sustainable consumption and production patterns (Objective 12).

As recently as June 2020, The Council of Ministers of Spain adopted its own Circular Economy Strategy.[312] The strategy includes 10 objectives where the promotion of products that can be repaired or of the systematic disclosure of information on the durability or reparability of products is promoted. For the purpose of this report, it is worth highlighting the following objectives:

- The protection of the environment,
- The product life cycle approach which covers the implementation of:
  - eco-design criteria,
  - restricting use of harmful substances in manufacturing,
  - favouring products that can be repaired or re-used,
  - extending products' useful lives and enabling them to be valorised at their end; that is, maintaining the value of product, materials and resources within the economy for as long as possible.
- Sustainable consumption aiming to:
  - Promote innovative models for conscious and sustainable consumption, including products and services,
  - Promote the use of digital infrastructures and services,
  - Promote transparent information on the characteristics of products and services, including its duration, its capacity to be repaired and energy efficiency, using measures such as the ecolabel.

The strategy provides a series of actions lines based on the Commission's first Action Plan on Circular Economy which promotes durability of products and include:

- Production: conception, design, and manufacturing of a product that is easier to repair, with a longer useful life, which may be updated and which, at the end of its useful life, creates less waste or even recyclable (and of course free of harmful substances).
- Consumption: reverting the current trend towards excessive consumption and gearing towards a more conscious consumption model that includes accessible services; this is a precondition to further prevention and reduction of waste, and, when appropriate, to promote adequate recycling.

The practical aspects of the implementation of the Strategy have not been defined yet.

A10.2.2 Legislative initiatives informing about product durability

In terms of durability, only France has already a legislation in place that requires providing information on product durability. The French Circular Economy Law has established the creation of a **durability index** which is foreseen to be implemented in 2024;[313] as of this date, the following will be required:

[312] https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/economia-circular/estrategia/

[313] The work on the durability index is likely to start once the repairability index (see below section 0) has been launched and implemented.

Producers or importers of certain products will have to make the durability index available to retailers and any person who requests it, free of charge, for those products and the parameters based on which it was established.

Retailers of concerned products, as well as those using a website or any other online distribution channel, must inform consumers, free of charge, at the time of purchase of the product, by means of marking, labelling, display or any other appropriate means, of the durability index of these products, as well as of the parameters on which the index was established.

A Decree (not yet published) will specify the exact list of products to which this obligation will apply and how it will apply. (Article L541-9-2 of the Environmental Code). Based on the information provided by the DGCCRF, it seems that electrical and electronic equipment (already covered by the Reparability Index) will at least be covered.[314] However, L541-9-2 of the Environmental Code does not restrict the Durability Index to electrical and electronic equipment.

A10.2.3 Legislative proposals on informing about product durability

Two legislative proposals focusing on the provision of information on product durability have been identified in Belgium and Italy.[315] Both require the display of information on product lifetime.

The Belgium (19 November 2019) proposal would require information on durability to be included in a legible, apparent and unequivocal manner on the packaging or on the product itself by the producer. Lifespan can be expressed in hours, months or years or, where more relevant, in number of operating cycles. It proposes to include this information on advertisements for products as well.

The proposal in Italy would require that the information on the 'lifespan and guaranteed lifespan' of the product is provided as 'minimum content information'. This information must be displayed both on the packaging, on product itself and in advertisements in a clearly visible and readable way by the producer. Stakeholders interviewed[316] have raised some issues surrounding this concept, with the interviewee suggesting the use of 'presumable lifespan'. Other stakeholders[317] have however considered this latter term to be lacking in clarity. Furthermore, no methodology has been put forward to assess the concept of 'guaranteed lifespan' yet.

A10.2.4 Legislative initiatives informing on reparability

Information on reparability is regulated in three countries (FR[318], SI[319], FI) through legislations that focus on different elements.

In France, information on reparability is *directly* promoted with the Reparability Index. The Reparability Index, introduced by the Circular Economy Law in 2020, aims to inform consumers about the ability to repair electric and electronic devices by establishing a score based on a grade from 1 to 10. Starting from January 2021, it will be applicable only to five groups of products (televisions, smartphones, laptops, lawnmowers and washing machine). The Index will progressively be applicable to other types of electrical and electronic products.

In Slovenia and France, reparability is also promoted *indirectly* by ensuring that either producers or sellers, provide information on the supply of technical services for the maintenance and repair of these goods, as well as spare parts (and in France also

[314] Written answer to interview questionnaire sent by the DGCCRF.

[315] Available here.

[316] Competition authority - IT

[317] Industry - IT

[318] Available here.

[319] Available here.

information on their availability) as well as other information, for a specific period of time.

In France, a recent law[320] introduced amendments that include an obligation on manufacturers to inform retailers of the period of time during which updates to the software provided at the time of purchase of the products will remain compatible with normal use of the device. Retailers, in turn, must ensure that the consumer is informed of updates, including security updates, which are necessary to maintain the conformity of the product, of how those updates should be installed, and of the consequences of refusing to install them. This legislation goes beyond the requirements of EU law insofar as the 2 year guarantee for software update is unconditional for all retailers and not just 'where the sales contract provides for a continuous supply of the digital content'.[321] The same French law introduced changes[322] to the requirement on manufacturers to provide retailers with information on spare part. The changes will be applicable as of 2022 and include the following:

- Manufacturers and importers have the obligation to inform retailers of the availability or non-availability of essential spare parts and of the time period during which or the date until which they will be available. For certain categories of goods (electrical and electronic equipment and furniture), in the absence of information given to the seller by the manufacturer, this part is deemed to be unavailable.
- Manufacturers and importers of electric and electronic devices have the obligation to inform retailers and professional repairers (upon their request) of the details of their commitment to provide spare parts on a dematerialised medium. The retailers in turn must provide this information to consumers in a readable form, prior to the conclusion of the contract and at the moment of the purchase of the product.
- Manufacturers and importers have the obligation to provide the spare parts (for which a period of availability has been notified) within 15 working days to all retailers and repairers (approved or not) who ask for them.

These amendments were introduced to address the fact that, currently, manufacturers only have to provide information on the duration of spare parts availability if they are making spare parts available. The introduction of the new provision makes the information clearer, as there is an obligation on manufacturers to indicate whether spare parts are available or not, and if so, for how long.[323] In addition, the obligation to provide certain spare parts for a minimum duration (see below) and the fact that some spare parts can be presumed unavailable if no information is communicated will enable retailers to better inform consumers.

The Slovene Consumer Protection Act obliges the producer and/or seller, in case of obligatory conformity guarantee for certain types of technical goods, to provide information on the duration of services for maintenance of goods, spare parts, and supplementary devices (at least 3 years after the elapse of the guarantee). It also obliges the producer and/or seller, in case of obligatory conformity guarantee for certain types of technical goods324, to provide an assembly manual and a list of authorised services centres (at least 3 years after the elapse of the guarantee). This guarantee is provided on top of EU harmonised 2-year guarantee.

[320] The Circular Economy Law adopted in February 2020 modifying the Consumer Code Article L217-21; L217-22; L217-23.

[321] As of 2022, the environmental characteristics of products will have to be communicated but it is still unclear how. More details are provided below in 0.

[322] Amendments to Article L111-4 and D111-4 of the Consumer Code.

[323] Interview with HOP – Halte à l'Obsolescence Programmée.

[324] Household appliances, vehicles and similar products, machines for agricultural and small-area cultivation, information technology products, sport equipment, products in the field of radio communications, audio and video technology and devices connected thereto, electro-medical devices intended for personal use, fire protection devices and wastewater treatment plants.

Finally, in Finland, Consumer Protection Act introduced a ban to provide false or misleading information, including on the need or the *availability of maintenance, repairs or spare parts*. The provision transposes the UCPD's requirement on the prohibition of false or misleading information on the need of maintenance, spare parts and repairs, but it includes also a prohibition to give false information on the availability of the same, which goes beyond the UCPD.

A10.2.5 Legislative proposal on informing on reparability

Legislative proposals that address information on reparability have been identified in Belgium, Italy and Portugal. The three proposals have very similar objectives but different requirements.

The Portuguese proposal would require producers and traders to provide consumer with user manuals. Instead, the Italian one would introduce the obligation to inform consumer on the possibility of reparation at an accessible price. The Belgian proposal from November 2019 instead, requires including in the pre-contractual information, the reparability and non-reparability of products, as well as the length of time during which spare parts are available. It also obliges producers to provide information on the lifetime of the product and the possibility for repair, on the packaging, on the product itself and in the advertisements, in a legible, apparent and unequivocal manner. The lifetime of the product can be expressed in hours, month or years, or where relevant, in number of operating cycles.

Outside of the EU, an initiative worth highlighting is the legislative proposal on the digital right to repair in USA (Massachusetts). This proposal aims to provide consumers and independent repairers with access to diagnostic and repair information while also obliging manufacturers to guarantee the availability of spare parts to the product owner for a fair and reasonable price.

A10.2.6 Legislative initiatives addressing product obsolescence (including irreparability)

A10.2.6.1 Ban of obsolescence

Legislation prohibiting planned obsolescence was only identified in France.[325]

The definition of obsolescence adopted in French legislation reads as follows: '*the use of techniques whereby the person responsible for placing a product on the market deliberately aims to reduce its lifetime in order to increase its replacement rate*'.

This practice is thus forbidden in France and committing the act may lead to two years' imprisonment and a fine of EUR 300,000;[326] however, it is considered difficult to substantiate, as it requires to distinguish premature obsolescence from planned obsolescence and prove the intent of the manufacturer to reduce the lifetime of a product.

This was also the position of the Direction Générale de la concurrence, de la consommation et de la répression des frauds (DGCCRF), which has conducted investigations in this field. Interviewees explained that investigations quickly ran into problems in proving the offence of planned obsolescence because it required proving

[325] The Law on energy transition for green growth (2015). Available here.

[326] The fine may be increased, in proportion to the benefits derived from the offence, to 5 % of the average annual turnover, calculated on the basis of the last three known annual turnovers at the date of the facts. Natural persons can also be subject to additional sanctions including the temporary or permanent prohibition to hold a public service job, to engage in the professional or social activity in the exercise of which the offence was committed, to engage in a professional or industrial activity, or to run a commercial or industrial business. These sanctions can be cumulative as per article L454-6 of the Consumer Code.

both the intention to deliberately reduce the life of the product but also demonstrating that the purpose of this deliberate reduction is to increase the product replacement rate.

A10.2.6.2 Preventing irreparability

In France, the Circular Economy Law requires producers of household appliances, small IT and telecommunication equipment, as well as screens and monitors to make spare parts available for a minimum duration of 5 years since the date on which the last unit of the product concerned is placed on the market. This obligation will enter into force on January 2022.

Regarding the delays to provide spare parts, the Circular Economy Law has made the deadline for supplying the spare parts to the seller (Article L. 111-4) and the seller's one-month deadline for repairing the product under the legal guarantee (Article L. 217-10) consistent. From 1 January 2022, the seller who has to repair a good within a month (under the legal guarantee) will be able to obtain the parts from the manufacturer within 15 days, which was not the case before (the time limit was 2 months)[327].

So far however, implementation has not been fully observed[328]. There was an investigation by UFC – Que choisir[329] that showed that it was not very well implemented. And an investigation from DGCCRF showing that 248 shops out of 397 controlled were in breach of the obligation to provide information on the duration of spare part availability[330].

Similarly, in Greece, the Consumer Protection Law provides that producers and sellers of new consumer foods must ensure that consumers are consistently provided with technical services for the maintenance and repair of these goods, as well as the supply of spare parts for a period of at least 2 years from delivery.

In Spain, the General Law for the Protection of Consumers and Users establishes the consumer rights to an adequate technical service and to the existence of spare parts for household appliance for a minimum period of 5 years. These provisions are supported by establishing standards for repairers. These standards apply to repairers that have written authorization from the manufacturer.

In Slovenia the 1-year guarantee for specific products [331] requires that, for a period of at least three years after the expiration of the guarantee period for such new goods, manufacturers are obliged to provide for maintenance of goods, spare parts, and supplementary devices. These services can be provided either by manufacturers themselves or by an authorised service centres, with which they entered into a special service agreement. Moreover, in case of used/second-hand goods, the seller shall also provide the consumer with a letter of guarantee, the assembly manual as well as with a free of charge repair for the duration of the guarantee (only for motor vehicles, trailers and auxiliary motor vehicles (types of goods are listed in the special Regulation).

A10.2.6.3 Extension of the legal guarantee

In France, Greece, Slovenia and Spain, planned obsolescence is also *indirectly* promoted by *extending the legal guarantee*. However, the specific period and elements of this extensions differ between countries. The French Circular Law mentioned above, also

[327] Written answer to interview questionnaire sent by the DGCCRF.

[328] Interview with HOP – Halte à l'Obsolescence Programmée.

[329] UFC : https://www.quechoisir.org/actualite-disponibilite-des-pieces-detachees-de-la-bonne-volonte-mais-encore-un-manque-d-information-n22441/

[330] DGCCRF : https://www.economie.gouv.fr/dgccrf/information-des-consommateurs-sur-garanties-et-disponibilite-des-pieces-detachees-controle

provides that all products repaired in the duration of the legal guarantee benefit from a 6-months extension of guarantee. When the consumer chooses repair, but the repair is not carried out by the retailer, the consumer may ask for the product to be replaced, in which case the legal guarantee is renewed. The aim is to encourage repair instead of replacement.

In Greece, the Consumer Protection Law, provides the automatic renewal of the commercial guarantee in case of replacement of a product or spare part. The consumer is also entitled to request a temporarily replacement of the good in case the repair time exceed fifteen working days.

The Slovene Consumer Protection Act introduced a 1-year obligatory conformity guarantee on top of the EU harmonised 2-year legal guarantee for certain types of technical goods. This guarantee should be provided by the producer for at least one year, and by the seller for second hand/used goods for the period of at least one month.[332] Furthermore, in case of new goods, the producer shall, in addition to a letter of guarantee, provide consumers with a free of charge repair within the guarantee period either by an authorised service centres, with which they entered into an agreement on the supply of spare parts, or by themselves, and a right to repair during the guarantee period.

Finally, the Spanish General Law for the Protection of Consumers and Users establishes the consumer rights to an adequate technical service and to the existence of spare parts for a minimum period of 5 years from the date the product eases to be manufactured.

In three instances, prevention of premature obsolescence is implemented *indirectly* via the *interpretation of the minimum legal guarantee*. In Finland, in the Netherlands[333] and in Greece, rather than being a fixed period, the duration of the legal guarantee is considered to be the 'expected' durability of the product when it is in relation to "durable consumer goods."

The Dutch legislation does not provide for a specific way to calculate this period – it is stated that it depends on what can reasonably be expected of the product type. Example questions provided by the Consumer & Market Authority on their website to provide an indication include:

- How long does the product normally last?
- And what kind of information did the seller provide about the product? For example, a scooter lasts longer than a pair of children's shoes.
- You can expect an expensive television to last longer than a cheap one. For example, did your scooter break down after 3 years, while the salesman said it should last at least 5 years (which is not your fault)'?

In Greece, the 'expected lifespan' is the *reasonably expected time during which it can be used according to its destination, even after repair or replacement of spare parts, until the damage from regular use makes the product useless or its further use economically unprofitable.*[334] In Greek law, furthermore, a longer lifespan is promoted by ensuring the renewal of the commercial guarantee upon repair for the entire duration of the new good or of the spare part, unless otherwise specified.[335]

[332] The conformity guarantee of 1 year shall be issued for goods such as: certain types of white goods, automotive goods, agricultural machines and appliances, IT goods, sport equipment, radio communication, audio and video equipment, electro-medicinal devices, fire protection devices and sewage treatment plants; whereas the conformity guarantee for used goods only needs to be issued for three types of goods: road motor vehicles, trailers and auxiliary motor vehicles.

[333] Legislation related to Directives 1999/44/EC and 2019/771

[334] Consumer Protection Law 2251/1994, Article 5a(1) and (3). Legislation related to Directives 1999/44/EC and 2019/771. There is no further information on the assessment of the reasonable expected lifespan, which is a general term to be further defined in a case-by-case basis judicially.

[335] Consumer Protection Law 2251/1994, Article 5a (4). Legislation related to Directives 1999/44/EC and 2019/771

In Finland, the expected durability is "*what a consumer usually has reasonable expectation to assume in the sale of such products.*"[336] The preparatory material of the legislative amendment recognises that 'a reasonable expectation to assume' means in practice that the seller shall not be liable for a fault if it is caused by more than usual use than a consumer can reasonably assume for such a product to withstand. The assessment is not based on an individual consumer's idea, but rather on a more general standard. When assessing the fault, the price of a product may be of relevance. The differences in quality between different producers are often reflected in the price of the products. These variations in prices may be substantial and as such relevant to the assessment of the consumers reasonable expectations on quality.

In addition, and in parallel to an extension of the legal guarantee, the Swedish Consumer Sales Act allows a longer period for the consumer to notify any lack of conformity. The Swedish legislation extends the right to make a complaint about a good (legal guarantee) from two to three years. This extension is explained by the preparatory material of the amendment which specifies that "*a 2-year prescription time may have negative consequences for consumers when buying products which are expected to have a longer durability than 2 years*".[337] In parallel to the legal guarantee, the Consumer Sales Act provides that the lack of conformity shall be notified within a *'reasonable period'*. Whereas two months is usually considered a reasonable period, this can also be longer depending on the individual circumstances of the cases.

A10.2.6.4 Other

In two instances, planned obsolescence is *indirectly* addressed by introducing design obligations. In Austria indeed, the Waste Management Act obliges manufacturers to design products in such a way that are durable and repairable, and that the waste remaining after the intended use can be disassembled or certain components separated. The Finnish Consumer Protection Act establishes that a product must conform – with respect to durability and other requirements – to what a consumer has reasonable expectation to assume when purchasing the product. Legislative initiatives in Luxembourg and Sweden instead, *indirectly* promote reparability by either providing an extended legal guarantee or a tax deduction on reparation and maintenance services. The Value Added Tax in Luxembourg applies a reduced VAT rate to the repairs of bicycles, shoes, clothing and other fabrics and leathers. Instead, in Sweden, the Income Tax Act introduces a tax reduction on the repair of household appliances if the repair work in carried out at home. In addition, the Swedish Value Added Tax Act lowers the VAT rate from 25% to 12% on reparation services of bikes, shoes, leather products, clothes and household fabrics.

A10.2.7 Legislative proposals addressing product obsolescence (including irreparability)

A10.2.7.1 Banning obsolescence

Legislative proposals prohibiting the practice of planned obsolescence are being discussed in Belgium, Italy and Portugal. In Belgium and Italy, the draft legislation aims to tackle the issue directly through the overall prohibition of planned obsolescence.

The Belgian proposal from January 2020 tackles obsolescence and takes into account the issues raised by the French authorities above and adapted its definition of obsolescence accordingly defining it as 'organised obsolescence:

"*Any practice by which the lifetime or potential use of a product is artificially reduced from the time of its conception, in an obvious manner, by the producer in order to*

[336] Consumer Protection Act, Chapter 5, section 12, available here.

[337] Preparatory work for the Government Bill 2004/05:13 (Prop. 2004/05:13) pp.105. Available at: https://data.riksdagen.se/fil/D7DDFE59-FCD5-440C-8F46-5A6BF4153333

increase the rate of replacement without benefit to the consumer or the environment". It is in particular considered as organised obsolescence, the practice in which:

- *A device is introduced into the product, which renders the product unusable after a certain period of time or a certain number of uses;*
- *A device is introduced into the product which renders any repair of the product impossible or abnormally expensive;*
- *The batteries and accumulators of the product cannot be easily removed and replaced;*
- *An average percentage of failures of more than 10% of the products sold during the time period which can be considered as the normal lifetime of the product is caused*."

The Belgian Proposal from July 2019 introduces a definition of *planned* obsolescence in the Code of Economic Law (CEL) as follows: "*a set of techniques by which a producer deliberately reduces the lifetime of a product, without benefit to the user, in order to increase the rate of replacement*".

This Proposal would also include this practice among the unfair commercial practices within the CEL and it proposes to introduce criminal sanctions which could be a criminal fine of 500 to 100,000 EUR and/or imprisonment for one to five years.

In the Italian legislative proposal, the definition of planned obsolescence is: "*the complex of techniques and technologies through which the producer deliberately reduces the lifespan or the potential use of a product to increase its substitution rate*."[338]

The Article goes on to specify that the following practices fall within the notion of "planned obsolescence":

- The use of construction techniques or materials that have the effect of accelerating the wear of the product, of facilitating failures, breakages or malfunctioning, or the premature ageing of a product.
- The use of construction techniques or materials which make reparation or replacement of product components impossible, difficult, or excessively burdensome.
- The use of construction techniques or materials which have the effect that, when it is necessary to replace a single part, it is necessary to replace multiple parts.
- The use of systems that prevent the use of the product or make it necessary to replace a component after a certain period of time or a certain number of uses, even though the product or its component is still usable.
- The use of software components or operating systems having the effect of worsening the general conditions of the product and its functioning.
- A series of issues with the proposal were highlighted by stakeholders during the Parliamentary discussion.

Industry stakeholders[339] contested that the definition is too generic, given the lack of shared standards and tests to evaluate elements such as the potential lifespan of a product. Moreover, industry expects difficulties surrounding the intent required by the provision ("to increase the replacement rate" of the product). It has been underlined that it is unclear how a certain technological choice can be ascribed to the intent of

[338] Legislative proposal S.615 "Modifications to Legislative Decree 206/2005 and other provisions to fight the planned obsolescence of consumer products", Art. 1. Available here.

[339] Position papers available here.

increasing the replacement rate, and on the basis of what elements could this intent be demonstrated.

On the topic of software, industry mentioned that software updates are necessary for security reasons especially in an area where the pace of technological change is very fast. With regards to the time period during updates must be available, industry has further contested that these time limits are not in line with the criteria of Directive 2019/771.

The consumer stakeholder Adiconsum was also critical of the proposal, echoing the difficulties in demonstrating intent raised by industry.

In Portugal, the approach is to reduce the scope for planned obsolescence by promoting product durability through obligations on manufacturers in terms of their extended responsibility, developing life extension strategies and supporting repair and reuse.[340] One proposal[341] in Portugal also aims to prohibit programmed obsolescence but does not specify how, nor does it provide a definition of programmed obsolescence.

A10.2.7.2 Preventing irreparability

Three legislative proposals that address reparability have been identified in Portugal, Italy and Belgium.

The proposals in Portugal focus on a variety of reparability-related aspects, from product design to the promotion of repair services. The proposals aim to ensure that eco-design requirements allowing disassembling and replacing parts is promoted, and that spare parts and user's manuals are available, while local networks of repairers are supported. The availability of spare parts and user manuals and manuals for repair are to be guaranteed for 15 years.

The proposal in Italy[342] focuses more on the *availability* of spare parts and ensuring that they can be used, requiring that producers (or importers) guarantee an adequate technical service for the durable consumer goods manufactured (or imported) and the provision of spare parts during a minimum period of 5 years starting from when the product stops being produced.

For household consumer goods, which are to be understood as durable goods that in order to function use directly or indirectly any type of energy and transform it, the provision of spare parts shall be guaranteed for the following periods of time, starting from the cessation of production:

- for functional parts priced more than EUR 60: 7 years,
- for functional parts priced less than EUR 60: 5 years, and
- for aesthetic and not functional parts: 2 years.

The spare parts and exhaustible components of the consumer goods must have a cost that is appropriate and proportional to the value of the goods.

A number of issues with this proposal were raised during the Parliamentary discussion. The Italian Competition Authority has criticised the fact that, for household consumer goods, there are different regimes on the basis of price. The price of a spare parts is not considered to be an indication as to the indispensable (or not) nature of the component in order to restore the functionality of the product. Moreover, the distinction between aesthetic and functional part is considered not always be easy to draw in practice.

Industry representatives contested that Article 7 overlaps with the mandatory guarantee under the Consumer Sale Directive, which already provides for repair in case of lack of

[340] PT – Please refer to the third legislative proposal described in the previous section for more information.

[341] Available here.

[342] Legislative proposal S.615 "Modifications to Legislative Decree 206/2005 and other provisions to fight the planned obsolescence of consumer products. Available here.

conformity. Moreover, they stressed that this provision can lead to higher product prices. On the time period for the availability of spare parts, some industry stakeholders propose adopting a "product-by-product" approach on the availability of spare parts instead of using price as a parameter, and also distinguishing between spare parts that should be available only to professional repairers for safety reasons. Another issue concerns the relationship with the mandatory guarantee regime.

Industry stakeholders have furthermore mentioned that for producers, the costs for storage of spare parts could increase significantly and be unsustainable. This cost increase would then be reflected in higher product prices[343]

The National Confederation of Small and Medium Enterprises has also expressed concern, underlining that the obligations on the availability of spare parts can be satisfied without excessive difficulties by large enterprises, while smaller ones might find this unsustainable.[344]

There is another legislative proposal in Italy, which if passed would require producers to ensure the availability of software updates and relevant applications, as well as the necessary technical assistance for electric and electronic goods that need a software component to function correctly, for the whole commercialisation period and for a further period equal to the legal guarantee duration.

In Belgium, the Proposal from November 2019[345] provides the same definition of planned obsolescence of the Proposal from July 2019 mentioned above and it adds the definition of *premature* obsolescence. This would read as follows: "*placing on the market of products which life span is shorter than that announced pursuant to Article 1649 quater, § 1, of the Civil Code*" (i.e. two-year legal guarantee). The same sanctions are envisaged for planned obsolescence, while for premature obsolescence the sanctions envisaged are a criminal fine from 26 to 50,000 EUR. It would also require manufacturers and importers to guarantee the availability of spare parts (at a reasonable price), tools necessary for repair, and update software indispensable for the use of the goods.[346]

A10.2.7.3 Extension of legal guarantee

No national legislative proposal addressing the extension of the legal guarantee has been identified.

A10.2.8 Labels and indexes (durability/reparability)

Various initiatives that foresee the use of voluntary labels to promote durable products and inform consumers about reparability have been identified. In some instances, they are however private initiatives and as such quite limited but nonetheless important for the study.

[343] Please see for example Samsung's position here. Please see Confindustria's position here.

[344] Position available here.

[345] Proposal for a Bill amending the Civil Code and the Code of Economic Law, aimed at combating planned and premature obsolescence and increasing the possibilities of repair, 19 July 2019, available here.

[346] For a period at least equivalent to that set by royal decrees, in accordance with the European Union Commission's implementing regulations on ecodesign (if the product is not covered by an Ecodesign Regulation then spare parts should be available for two years).

One private initiative in Belgium includes a label and certification system that focuses on products purchased and tested in a specific reuse centre/shop – the 'OK Getest' label. The tested products receive a label and a 7-day period within which the product can be returned free of charge; the period is 14 days for second-hand bikes.

There are also initiatives with a wider scope. One nation-wide initiative in the Netherlands – the Stichting Duurzaam Repareren[347] (the sustainable repair foundation) - provides a quality mark called "GroenGedaan!" for repairs, maintenance and damage repair of motor vehicles and the mark is awarded to companies that either commit to repairing or that carry out sustainable repairs. This is described as 'a company that works taking into account the environment and the society'. No further details on what this entails are available on the website.

A similar initiative in Austria called the 'Sustainability logo',[348] awards a sustainability logo to electronic appliances that are considered reparation friendly and durable according to standards of the Austrian Standards International institute[349] which manages the logo. The products covered are 'white goods' and 'brown goods' i.e. large kitchen and washing machine appliances (fridges, washing machines, dryers, etc.), and entertainment appliances (TVs, radios, computers, etc.).

There are three levels for this standard, using the same logo: 'good', 'very good' and 'outstanding'. While the technical aspects of how a product can be considered under this logo are not freely accessible, the overall criteria are available and are the following:

- Durability,
- Access to spare parts for at least 10 years,
- Reparability (easy access to components for repair, possibility to reset to factory settings), and
- Environmentally friendly production.

A label in Czechia, managed by a national consumer association,[350] promotes durability by assigning the label to manufacturers[351] which declare the durability of products in a clear and understandable manner for the consumer. The criteria for awarding the label require that the manufacturer provide the declared durability (in the form of direct duration declaration in a unit of time or in cycles of use) and that they provide clarity and transparency of the declared durability conditions. The declaration of durability can be made by "direct declaration" or by replacement statement:

- A direct declaration means that the manufacturer unambiguously and explicitly declares the durability of the product in units of time or in cycles of use.
- A replacement statement is a form of extended right from a guarantee. This has to be at least at least 5 years,

[347] https://keurmerkenwijzer.nl/keurmerken/duurzaam-repareren/

[348] https://shop.austrian-standards.at/action/de/public/details/527823/ONR_192102_2014_10_01

[349] The ISO member for Austria

[350] Association of Czech Consumers (Sdružení českých spotřebitelů, z. ú.)

[351] Producing the following products: Large domestic appliances (white goods), furniture, automobiles and, dental implants, small electrical equipment (kettles).

The evaluation committee may consider and set a different time for the evaluated product (or group of products), depending on the nature product and consumer expectations.

The award decision will also take into account related information from the manufacturer or seller about the product, e.g. in the form of voluntary quality labels as well as the views and opinions of Czech consumers on the manufacturer's approach to product durability.

At the time of writing, 15 manufacturers were awarded the logo which included 21 products and 2 services in total.

Similarly, another initiative in Luxembourg provides a label, the Clever akafen,[352] that helps consumers identify products that are of good quality, durable, and economic. Durable products are described as products that are long-lasting/solid and have a low energy consumption.[353] Selected products are chosen according to the following general criteria:

- Environmentally friendly and recyclable packaging (plastic or marked metals)
- Products containing few or no polluting substances
- Durable products, i.e. solid and energy-efficient (energy consumption according to packaging)
- Products that can be subject after use to material or at least energy recovery

There are also specific criteria that recommended products have needed to meet. Examples of products and their criteria are the following:

- Rechargeable batteries and chargers.[354] The rechargeable battery must be capable of being recharged completely (100%) at least 25 times. During the 25th recharge cycle, the battery must dispose at least 40% of its initial capacity.
- Low energy consumption and long-life lighting.[355] The criteria, for luminaire/lamps assessed include lifetime and switch resistance; for luminaires, easy reparability / long life of luminaires. LED lamps must show on the packaging the lifetime in hours and the number of possible switching cycles.[356]
- School supplies and office materials.[357] Among the criteria are rechargeability and reliability.

A private initiative in France is the Longtime label.[358] This label was created in 2018 to identify products that have been designed to be robust, durable and repairable. It applies to a wide range of products:

- household appliances,
- Electronics,
- Tools,
- Leisure equipment, and
- Professional equipment.

The label is based on specifications that contain 41 criteria,[359] grouped around 4 main requirements: longevity, reparability, guarantee conditions (that have to be beyond the two-year legal guarantee) and quality of after-sales service (under and out of

[352] https://ec.europa.eu/environment/waste/prevention/pdf/Luxembourg_Factsheet.pdf

[353] https://www.sdk.lu/images/PDF/Broschuere/Clever-akafen-2019-07-FR-web.pdf

[354] https://www.sdk.lu/images/PDF/CA/Criteres_accus-chargeurs_2020.pdf

[355] https://www.sdk.lu/images/PDF/Broschuere/Clever-akafen-2019-07-EN-web.pdf

[356] https://www.sdk.lu/images/PDF/CA/Criteres-eclairage-f-ACTUALISES.pdf

[357]

[358] https://longtimelabel.com/longtime-the-label-for-products-designed-to-last/

[359] https://longtimelabel.com/specifications/

guarantee). The label and its criteria were developed in consultation with environmental associations, consumers, repairers and manufacturers and all 41 must be met to obtain the label.

- The audit of the application is carried out by an independent control body: either Apave Certification or Ecocert, two certification bodies that specialise in environmental standards. The label is awarded for a period of three years with a follow-up audit at the end of the validity period. There are currently 3 products that bear the label (only one of which is a common consumer product – a vacuum cleaner). Ethikis aims to cover 15 groups of products by the end of 2020 and 50 by 2022.[360]

In France there are 2 initiatives related to rep scoring systems, known as 'reparability indexes', which score the reparability of products.

One such initiative is established in the 2020 Circular Economy Law and will be rolled out in 2021.[361] According to the Draft Order,[362] the Reparability Index will include:

- A score from 1 to 10 (which may have one decimal place after the decimal point) affixed directly to the product or its packaging.
- Colour coding according to the score obtained: if the score is greater than or equal to 0 and less than or equal to 1.9, the Index will be red, if the score is greater than or equal to 2 and less than or equal to 3.9, the Index will be orange, if the score is greater than or equal to 4 and less than or equal to 5.9, the Index will be yellow, if the score is greater than or equal to 6 and less than or equal to 7.9, the Index will be light green, if the score is greater than or equal to 8 and less than or equal to 10, the Index will be dark green.
- A pictogram, in the colour corresponding to the score, the score, and the words "reparability index". The font size of the score must be at least equivalent to the font size of the price.

The Index is calculated based on five main criteria:

- A score (1 to 20) on the availability of technical documentation and advice on use and maintenance from producers, repairers and consumers
- A score (1 to 20) relating to the ease of disassembly of the equipment: number of disassembly steps, characteristics of tools required and fixings between spare parts
- A score (1 to 20) on the duration of availability of spare parts on the spare parts market and delivery times to producers, spare parts distributors, repairers and consumers
- A score (1 to 20) relating to the ratio between the manufacturer's or importer's selling price for parts and the manufacturer's or importer's selling price for equipment
- A score (1 to 20) relating to criteria specific to the category of equipment concerned. (Article 1 of Draft Decree introducing Art. R.544-6 of the Environmental Code).

Each criterion also has sub criteria:

- Technical documentation

[360] https://www.electroguide.com/label-longtime-pour-des-produits-durables-et-reparables

[361] Initially only for five groups of products for a test phase: televisions, smartphones, laptops, lawnmowers and washing machines.

[362] Draft Order relating to display methods, signage and general parameters for calculating the reparability index. Available here.

  - Duration of availability of technical documentation and instructions for use and maintenance

- Ease of disassembly, access, tools and fixings
  - Easy disassembly of the 3 to 5 spare parts (depending on the group of products concerned) that break down most frequently. This list if fixed by Order for each type of product.
  - Necessary tools
  - Characteristics of fixings between parts (i.e. the 3 to 5 spare parts that break down most frequently and the 10 other parts (maximum) which good condition is necessary for the operation of the equipment – all of them fixed by Order for each group of products)
- Availability of spare parts
  - Duration of availability of the 3 to 5 spare parts that break down most frequently
  - Duration of availability of the 10 parts which good condition is necessary for the operation of the equipment
  - Delivery time for the 3 to 5 spare parts that break down most frequently
  - Delivery time for the 10 parts which good condition is necessary for the operation of the equipment
- Price of spare parts
  - Ratio of prices of the 3 to 5 spare parts that break down most frequently to new equipment

There are also criteria that are specific to each group of products. For instance, the specific criteria for smartphones concern:

- information on the nature of the updates,
- free remote assistance,
- possibility of software reset.

The Reparability Index will be integrated into the Durability Index from 2024 onwards. This new index will include, in addition to reparability, new criteria such as the reliability and robustness of the product. According to the DGCCRF,[363] the expected results of this measure are an increase in consumer demand for these products, in order to avoid the too rapid renewal of products that use scarce metals/resources and/or produce waste that is difficult to recycle .

A similar private initiative is the LaboFnac Reparability Index[364] which was created in 2018 by Fnac in collaboration with the NGO HOP[365] and the agency ADEME[366]. It currently applies to computers and is presented as a grade based on 100 points - see Figure A248**.**

[363] Written answer to interview questionnaire sent by the DGCCRF

[364] https://labo.fnac.com/guide/indice-labofnac-reparabilite-ordinateurs/

[365] Halte à l'Obsolescence Programmée

[366] French Environment Agency

Figure A248. Fnac Reparability index

The score is attributed according to the following criteria:

- **Accessible documentation to users**: the documentation must include dismantling instructions that are in French and that make it possible to perform self-repairs (10 points). These instructions must allow access to items such as storage, RAM, battery, keyboard and display. In addition, the documentation must provide a diagnostic aid, for example by proposing scenarios of frequent and easily identifiable failures (10 points). Finally, the documentation must provide maintenance advice and best practices (5 points).
- **Modularity and accessibility**: this takes into consideration the simplicity of disassembling the computers, i.e. the number of steps and the type of power supply (10 points). Another criterion is the modularity of the computer's main components, i.e. their ability to be replaced individually without interfering with the operation of another component or requiring the replacement of a larger module (10 points). Another 5 points is attributed to the simplicity of repair – i.e. whether a private individual can carry out the operation themselves, without specific tooling or the need for it to be performed in a particular environment.
- **Availability of spare parts**: the availability of spare parts counts for 10 points. The rating is calculated according to a precise scale, which is worth 10 points for brands promising more than 6 years of availability; 8 points for an availability of more than 4 years, and 4 points if it is more than 2 years. If availability is less or if the manufacturer does not communicate on the subject, no points are awarded to the product. Another 10 points are added to the above points if the manufacturer guarantees that no spare part costs more than half the purchase price of the product. 5 points are dedicated to the use of standardised part – i.e. the parts of a computer that can be changed (processor, graphic electronic circuit, modem and WiFi card, screen...) have a standard interface or type of connector. At least two manufacturers must use them so that they are not considered as proprietary interfaces or connectors.
- **Software reinstallation**: the integration of a recovery solution (partition on the hard disk, delivery on an external media (USB key, disk), or offered as a free download) is worth 10 points. This allows the computer to recover its original configuration. the compatibility of the computer with free operating systems, such as Linux and Ubuntu, is also worth 10 points. Finally, 5 points are awarded if the reinstallation of the operating system on the computer includes the updates recommended by the manufacturer.

A similar index (based on the same criteria as above) has also been developed by LaboFnac for Smartphones,[367] with the addition of a criterion on the price of spare parts.

A10.2.9 Websites informing on or promoting durability / reparability / obsolescence

Several initiatives identified in Belgium, Spain, France, Denmark, Luxembourg and Italy aim to provide consumers with clear information on certain topics, fighting premature obsolescence being the most common.

Websites gathering information on premature obsolescence have been established in Belgium,[368] France,[369] Italy[370] and Spain,[371] either as part of EU projects such as PROMPT, or as individual initiatives. These websites are managed by consumer organisations and follow similar formats and layout. They gather information submitted by consumers with the aim of both collecting data on the phenomenon and informing other consumers on the issue of premature obsolescence, on product durability and reparability.

In Belgium, the website is called 'Trop Vite Use' and is hosted by Test Achat. The website allows consumers to provide information on goods that in their opinion have failed prematurely. The link is included on the websites homepage as illustrated in Figure A249

Figure A249. Trop vite use – report obsolescence home page

[367] https://labo.fnac.com/guide/indice-labofnac-de-reparabilite-smartphones-disponible-point-criteres-evalues/

[368] https://www.test-achats.be/trop-vite-use

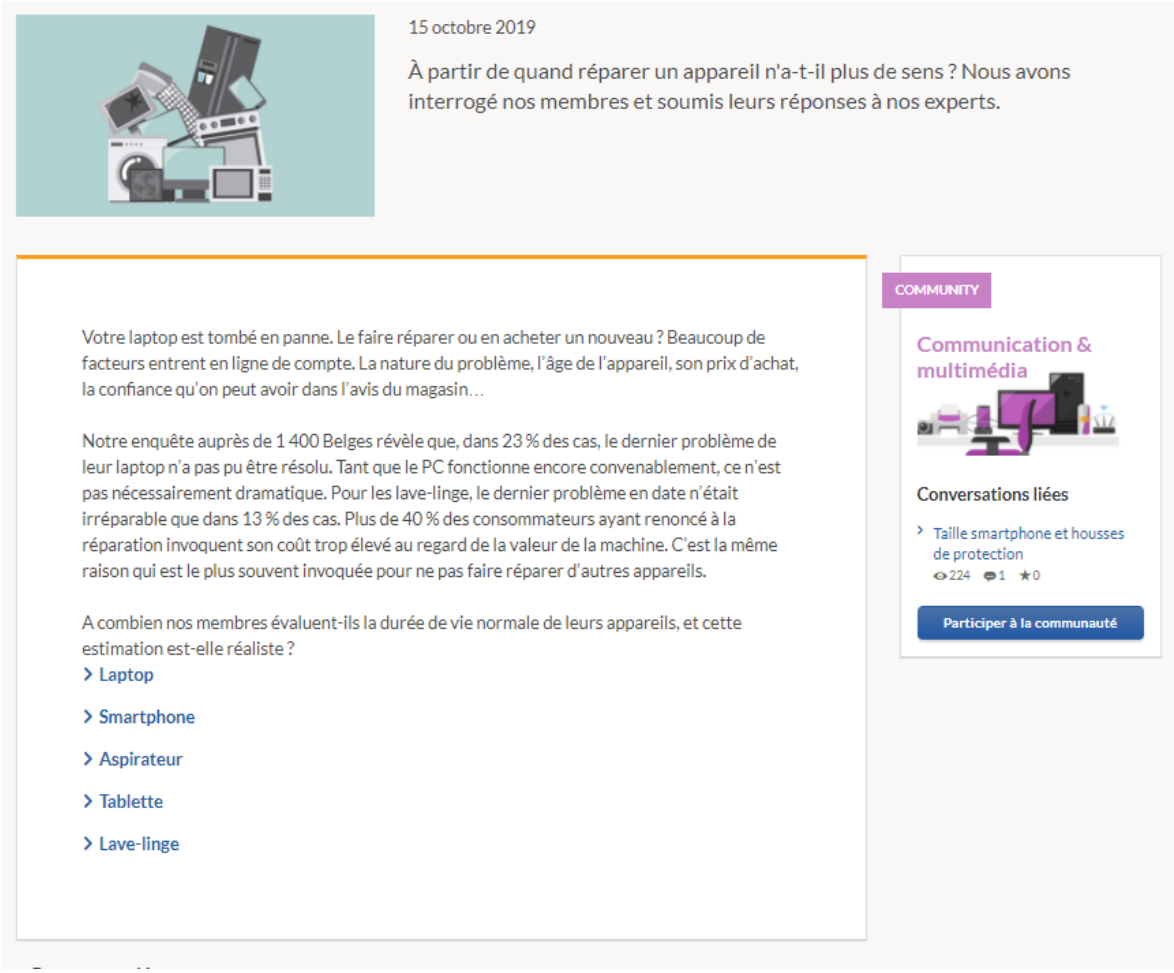
[369] https://www.quechoisir.org/observatoire-des-pannes-n71927/

[370] https://www.altroconsumo.it/obsolescenza-programmata

[371] https://www.ocu.org/barometro-de-obsolescencia-prematura

The website also provides consumers with information such as the 'average expected lifespan of products[372] - see Figure A250.

Figure A250. Information on average product duration



68% of the products notified to the platform have less than 3 years of use and 82% of attempts to repair failed.[373] According to a press release from Test-achats in 2017, related to the first results of the platform, the product for which the highest number of complaints was received on the platform was smartphones (battery, defective touchscreens, devices that constantly shut down, and problems installing operating system updates). In those cases, repair was possible in only 10% of cases. Other products for which a high number of complaints was received were printers and washing machines.[374]

The website in France is called the 'Observatory of product failures' and is a service created by the consumer organisation UFC, to support consumer handling cases of premature or planned obsolescence. UFC collects and keeps a record of complaints from consumers about specific product failures and supports consumers individually. Early failures can be reported directly on the homepage – see Figure A251.

[372] https://www.test-achats.be/electromenager/lave-linge/dossier/duree-de-vie

[373] https://www.test-achats.be/trop-vite-use

[374] https://www.test-achats.be/action/espace-presse/communiques-de-presse/2017/update-meldpunt

Figure A251. UFC report obsolescence homepage

UFC also provides consumers with information on obsolescence as shown in Figure A252.

Figure A252. UFC – webpage on programmed obsolescence

The NGO HOP – Halte à l'Obsolescence Programmée, in France, also hosts a website[375] called 'Produits durable' through which consumers can score the durability of products – see below Figure A253.

Figure A253. Produits durable homepage

[375] https://www.produitsdurables.fr/

Based on the consumer's scoring as well as that of experts, the website provides a comparative evaluation of different brands, with a grading system, based on 3 criteria:

- **Durability**: the overall build quality of the product (weighted at 50%).
- **Support / After sale service**: the quality of the manufacturer / distributor's after-sales service (weighted at 25%).
- **Reparability**: assesses the ease with which the device could be repaired (weighted at 25%).

For each expert opinion, a second weighting is then added according to the size of the sample or the degree of expertise of the authors of the data:

- The opinion of a single repairer will be weighted 1.
- A survey covering a few dozen to a hundred data will be weighted 10.
- A survey covering hundreds, or thousands of data will be weighted 100.

All expert opinions are then aggregated to define the average "Experts" rating of 1 to 5 stars.

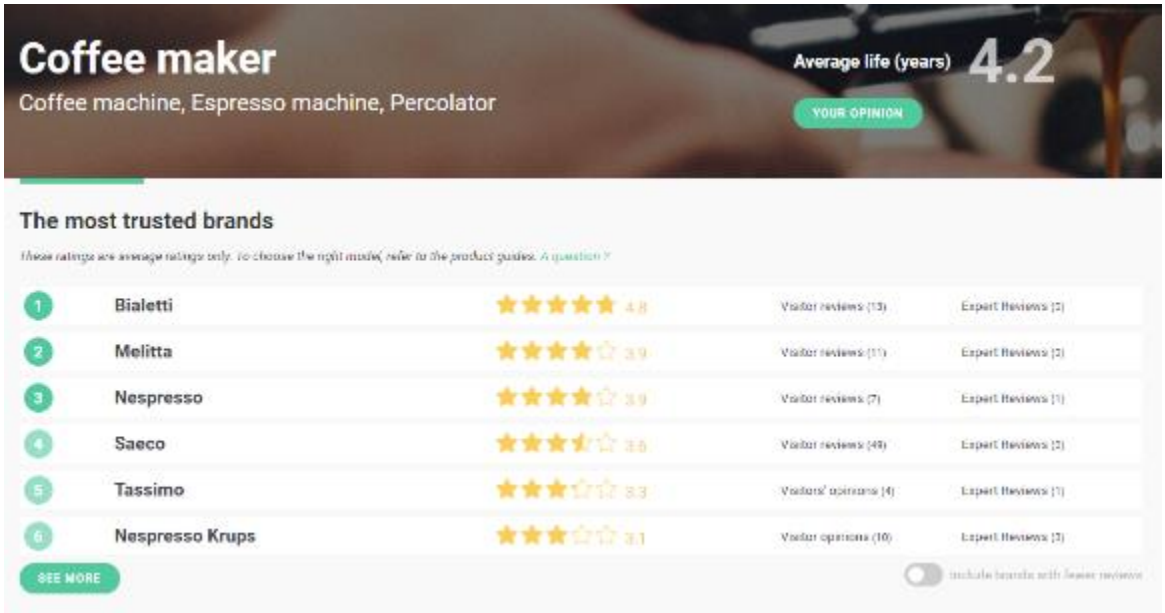
To prevent a user from "faking" the results, several mechanisms are in place:

- Verification of the e-mail address (activation link).
- Monitoring of IP addresses (in case of multiple notices).
- Monitoring of abnormal values (excessive lifespan, consistently high score).

Finally, around 50% of visitors come from the commentreparer.com site following a breakdown, which increases the proportion of opinions that can be considered "legitimate".

An example of scored products – in this case coffeemakers - is provided in Figure A254

Figure A254. Produits durable webpage – trusted brands



The Italian consumer organisation, Altroconsumo, has also created an online platform where consumers can report early failures. This reporting system will make it possible to create an 'inventory' of planned obsolescence cases, which will allow Altroconsumo to guide the consumers in their purchases and to push producers to manufacture longer-lasting products. – see Figure A255.

Figure A255. Altroconsumo homepage

The website also provides consumers with information on programmed obsolescence – see Figure A256.

Figure A256. Altroconsumo webpage – planned obsolescence

As of August 2020, the website reported 624 failures reported by consumers. No 'inventory' is currently publicly available.

The Spanish consumer organisation, OCU - Organización de Consumidores y Usuarios, also provides the opportunity to report products that have failed prematurely as well as providing consumers with information on planned obsolescence. See Figure A257 and Figure A258.

Figure A257. OCU homepage

Figure A258. OCU – information on obsolescence webpage

In Denmark the website identified is managed centrally by the consumer authority and is structured differently. It includes slightly more general information on 'consumer rights in the broader' sense of the term together with useful information on consumer related matters, including repair and repair manuals.[376]

In Luxembourg, the website is called Flécken a Léinen[377] and is managed by the SuperDrecksKëscht® in close cooperation with the Environment Administration, the Chamber of Crafts, the Chamber of Commerce, Ecotrel and Oekozenter Pafendall. The focus of the website is promoting repair and the aim is to provide consumers with information that can support them in choosing to repair rather than to replace products.

[376] https://www.forbrug.dk/artikler/forbrug/test-og-raad/forbrugerleksikon/brugsanvisninger/?rn=22814

[377] https://www.flecken-a-leinen.lu/

The platform provides persons who want to repair or borrow a product information about companies around them that provide the required service. The following categories are covered:

- electronic devices;
- housing;
- clothes, shoes, and jewellery;
- medical devices and cosmetics;
- furniture;
- vehicles;
- cameras;
- household appliances;
- music instruments;
- toys and recreational products;
- garden and plants appliances;
- party products.

In France, a website set up by the Environment and Energy Agency (ADEME)[378] helps consumers identify professional repairers for a wide range of products in their surroundings. While there is no assessment of the quality of the repairers, there is a possibility of selecting only those that are certified by the scheme called Répar'Acteurs.

There is also a private initiative providing a 5-year guarantee on all the large household appliances they sell which includes the 2-year legal guarantee. The company is called MaGarantie5ans[379] and it provides consumers with full and free support:

- for the replacement of defective parts;
- of the labour; and
- transportation to the consumer's home.

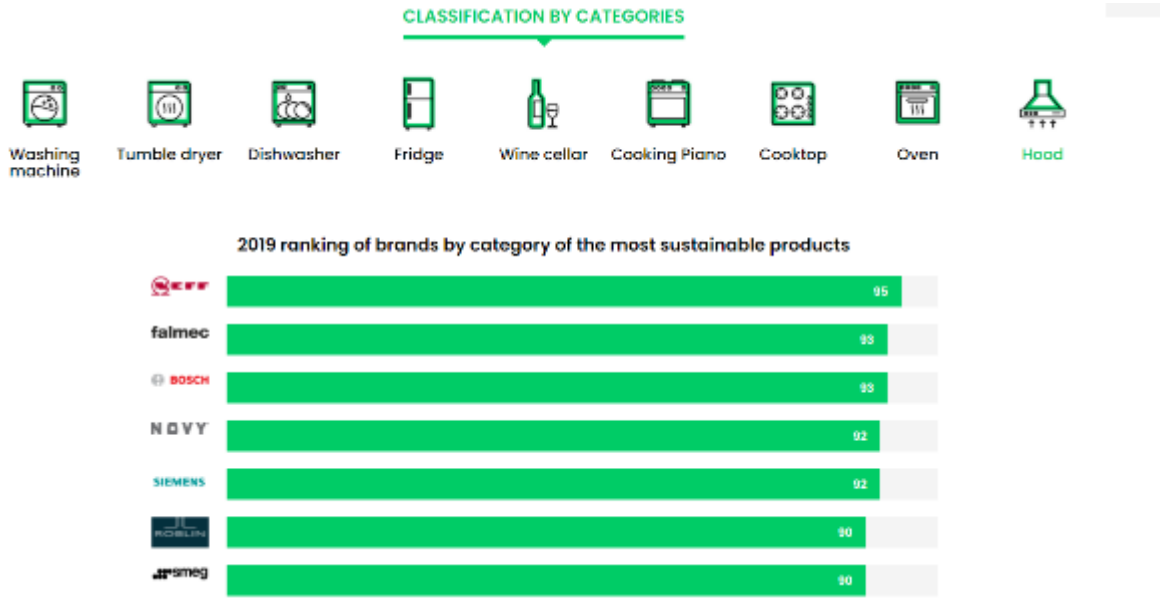
This private initiative also provides its own durability assessment of products.[380] The durability index is a score of 100 points spread over 4 criteria that allow to assess the sustainability of brands and products sold by the company as illustrated in Figure A259.

[378] https://www.annuaire-reparation.fr/

[379] https://www.magarantie5ans.fr/

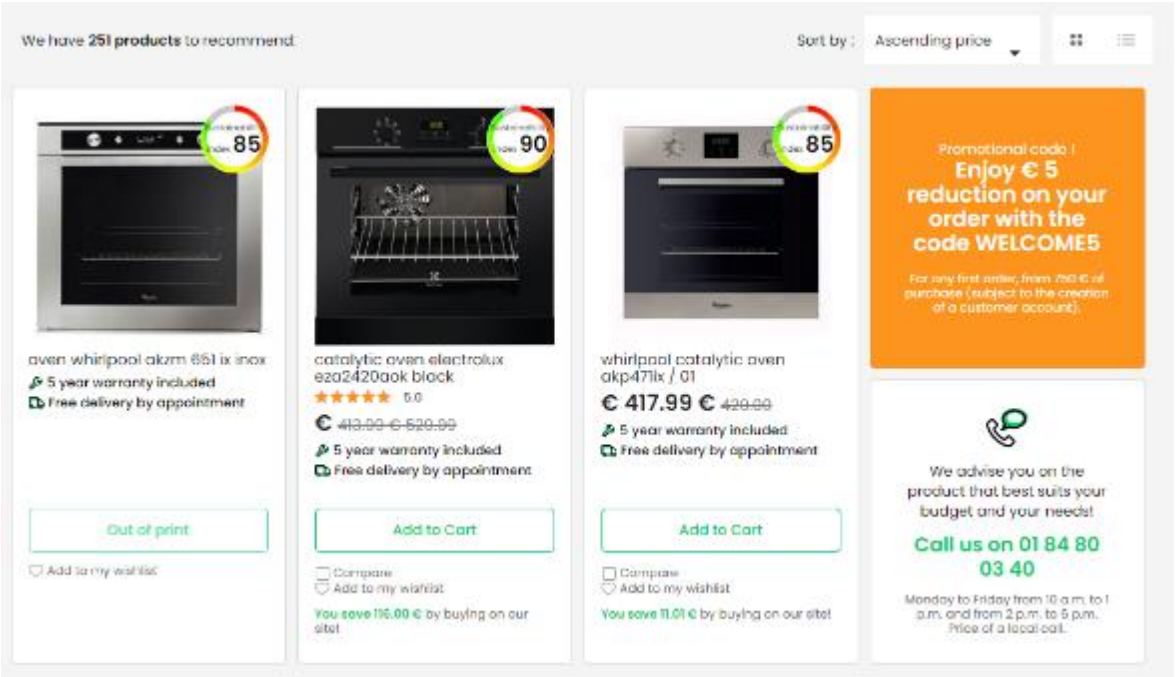
[380] https://www.magarantie5ans.fr/content/24-selection-de-marques-et-produits-durables

Figure A259. MaGarantie5ans - durability index brand and product



The score can also be viewed directly on the product being purchased as shown in Figure A260.

Figure A260. MaGarantie5ans - specific products



The four criteria are the following:

- **The failure rate**: this is based on a database of after-sales service on the products sold. MaGarantie5ans keeps a history of repairs made which enables them to provide a breakdown rate by brand and by product category. The criterion looks at failures occurring after the second year of the product's life.
- **The availability of spare parts**: the information is collected directly from the manufacturers of our products and the criterion foresees that only products

whose parts are available for at least 5 years and up to 11 years will be sold by MaGarantie5ans.

- **Expert assessment**: MaGaranite5ans uses the score assigned by UFC-Que Choisir to select its products and only tested and approved products will be offered to consumers. The score is established by experts based on independent laboratory tests and criteria based on consumer use.
- **Consumer rating**: This criterion was included recently based on the feedback questionnaire distributed on its website and social networks since September 2018, collecting information on the lifespan of products. On this basis MaGarantie5ans calculates an average lifespan for each product category.

The website also provides a classification of brand durability according to product categories

A10.3 Group 2: Preventing unfounded and unsubstantiated environmental claims

In this section we present the relevant national initiatives that prevent unfounded and unsubstantiated environmental claims and promote more transparent information about environmental impacts. These are subdivided into:

- Environmental labels and digital information tools;
- Websites helping consumers understand environmental labels, logos and claims; and
- Regulatory and non-regulatory initiatives preventing misleading/unfounded environmental claims in marketing.

A10.3.1 Sustainability labels and digital information tools

Sustainability claims are often conveyed to consumers through labels and logos placed directly on products and a number of relevant initiatives implemented and managed at both national and regional level have been identified by researchers. There are many national ecolabels and here we focus on the ones covered by the national research.

The identified environmental labels often apply to a wide range of product groups, to services or in some cases, to both. The following are ISO 14024 Type I ecolabels.

The Austrian environmental ecolabel[381] covers a wide variety of markets, including the sale of products in the fields of:

- Construction and habitation,
- Office supplies,
- Paper and printing,
- Energy,
- Film production,
- Financial products,
- Gardening,
- Housekeeping, and
- Shoes and textiles

and services, including:

- Tourism,
- Schools and education institutions,
- Events and meetings, and
- Banking.

[381] https://www.umweltzeichen.at/de/home/start

The label is awarded for a period of 4 years and is managed by the Federal Ministry for climate protection, environment, energy, mobility, innovation and technology. The criteria on which awarding the label is based are specific to each product category and focus on raw materials, toxicity of the materials, emissions, recyclability, packaging, sale and transport, quality and security, durability and reparability.

According to the Federal Ministry, 56% of Austrians are aware of the Austrian Environmental Label.

The German Blue Angel label[382] is managed by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). The label certifies both products and services but does not focus solely on environmental issues but also on health and performance characteristics. Criteria are developed for each individual product group and are updated every 4 years.

The development of the award criteria is based on the institutional structure which includes a supervisory body that enables stakeholder's contribution:

- The Federal Environment Agency which develops the technical criteria or Basic Award Criteria (stated in the inspection order).
- The Label's Technological Progress Committee.
- The Environmental Label Jury, an independent decision-making body composed of various stakeholders[383] which decides on the products and services to be eco-labelled as well as on the underlying Basic Award Criteria and the respective compliance verifications.

Products and services satisfying the Blue Angel criteria are considered to cause less damage to the environment and to people's health by:

- Saving resources during their production,
- Being manufactured from sustainably produced raw materials,
- Using less resources during their use or disposal because they are, for example, particularly energy efficient,
- Reducing the proliferation of dangerous substances for the environment or people's health or limiting them to a minimum,
- Being especially durable and easy to repair,
- Being easy to recycle, and
- Causing low emissions to the soil, water and air, as well as low noise emissions.

An external agency (RAL gGmbH) is in charge of verifying conformity with the criteria and compliance is verified by an accredited certifier. All applications received are double checked by desk research but not by physical inspections. The duration of the certification is 12 to 24 months and conformity is assessed on a pass/fail basis.

Around 12,000 environmentally friendly products and services from around 1,600 companies have been awarded the Blue Angel since 1978.

[382] https://www.blauer-engel.de/en

[383] Environmental and consumer associations, trade unions, industry, trade, crafts, local authorities, science, media, churches and federal states.

The Nordic Swan Eco-label[384] was established in 1989 by the Nordic Council of Ministers and is found in Denmark, Finland and Sweden.[385] The environmental requirements cover all relevant phases of a product's life cycle, and criteria differ from product to product. There are specific criteria for each of the over 70 product groups containing more than 200 different product types and more than 25 000 different products. Monitoring visits are compulsory for manufacturers awarded the Nordic Swan label. Criteria include reparability and durability. For example, it must be possible to replace a computer battery and a replacement battery must be available as an option or spare part. It should be possible to replace the battery at a repair shop. The computer must also be easy to upgrade, dismantle and recycle. An example of durability criteria can be found in relation to furniture and to the colour stability and shrinkage requirements for textiles.

The producers using or applying for the Nordic Swan ecolabel need to pay an application fee and an annual fee. These prices vary between different product categories. The prices for the application phase are generally around 3000 – 5000 euros and for the annual fee of around 0, 03 % to 0,3 % of annual sales turnover for the product in question.

In Hungary where there are only few overlaps between the products covered by the national 'Hungarian Ecolabel'[386] and those covered by the EU Ecolabel. The Hungarian label covers packaging (paper-based and rigid containers), building materials (stone-like building materials, road surface with bituminous binding agent), household appliances (automatic forced draught burners for gaseous fuels, gas-fired central heating boilers, solar collectors), stationery (renewed printer cartridges), oil filtering equipment (oil trap containing selective filter), paper products (Household sanitary papers), personal care (Rinse-off cosmetic products), services (cleaning services, food retail stores, restaurants) and cleaning products. The criteria differ according to each group. Based on the information available, 11 products (and services) of 7 business entities are currently using the Hungarian Ecolabel.

According to the Ministry of Agriuculture,[387] the Hungarian Ecolabel is not widely used by producers and/or known by the consumers. The main issue identified was the confusion generated by the multitude of different labels on the products themselves.

The criteria for awarding the Environmentally Friendly label[388] in Croatia are similar to those of the EU Ecolabel, as are the products covered. 24 products have been granted the authorisation to use the label, including detergents i.e., cleaning products in general, especially products which are widely used in public services since public services are subject to the green public procurement programme which increasingly requires EU ecolabel or national ecolabel products.

Those bearing the label are only expected to bear the cost of the initial study of compliance with criteria as required to apply for the label. There are no further costs.

Other labels which are not ISO Type I have also been identified at national level. These focus on a restricted number of products and/or services.

[384] http://www.nordic-ecolabel.org/

[385] As well as Iceland and Norway which are however outside the scope of this study.

[386] http://www.okocimke.hu/ökoc%C3%ADmke, http://njt.hu/cgi_bin/njt_doc.cgi?docid=29655.333606

[387] Interview conducted by national researcher.

[388] https://narodne-novine.nn.hr/clanci/sluzbeni/2016_10_91_1940.html

The Luxembourg Ecolabel,[389] was created by the Ministry of Economy in 1999 and focuses on services such as hotels, rural lodges, group accommodations and campsites and the criteria for its award focus on energy, water, purchasing policy, and waste.

The label was created with the aim of promoting and developing sustainable tourism in Luxembourg and it is today the reference label in force at the national level. The Ecolabel criteria define the standards that certified establishments undertake to respect and cover all sectors relevant to a tourist establishment: communication and ecological management, purchasing policy, energy, water and waste management, gastronomy, and mobility. The credibility of the label is guaranteed by frequent audits and individualised support for member establishments.

The process of certification label is as follows:

- self-evaluation based on a list of criteria.
- consultation with Oekozenter Pafendall, which will provide guidance, advice, and follow-up to help companies comply.
- auditing by an external and independent auditor to assess whether the company complies with the criteria of the label.
- depending on the results of the audit, the company may or not obtain the Ecolabel certificate, which is valid for 3 years. After that period, there will be another control.

To obtain the Ecolabel certificate, companies must comply with mandatory and optional criteria. These criteria apply to environmental management, energy, water, purchasing policy, and waste.

Some criteria are relevant here, such as:

- Existence of a defined an environmental policy (mandatory criterion),
- The office appliances have labels such as 'Blue Angel' or 'Energy Star' (mandatory criterion),
- Measures are in place to avoid heat loss (mandatory criterion),
- Limitation of water flow for showers and sinks to 9L per minute (mandatory criterion),
- Existence of a place where guests can repair their bikes, and/or availability of a repair kit (optional criterion), and
- Durability of construction materials and furniture, and possibility to repair them (optional criterion).

Rather than focusing on a wide range of product groups, other national labels are product specific.

The Green button label in Germany[390] is managed by the Federal Ministry for Economic Cooperation and Development (BMZ). The label has both a social and an ecological dimension which are assessed through the 46 criteria that textiles must meet to be awarded the label and is subject to state accreditation (based on EU Accreditation Regulation).

Roughly half of the criteria concern the company and focus on aspects such as human rights and transparency, while the other half concern the product and focus on hazardous substances, biodegradability, thresholds for effluents and similar aspects.

[389] https://www.ecolabel.lu/

[390] https://www.gruener-knopf.de/

In Estonia, the Ministry of Rural Affairs is responsible for awarding the 'Estonian Eco-label'[391] to products that have used no artificial mineral fertilizers, plant protection products, preservatives or food colouring to produce their goods. Use of the label use is under the supervision of the Estonian agricultural board (Põllumajandusamet).

Similarly, in France, the 'High environmental Value'[392] label is managed by the Ministry of Agriculture and awarded to producers applying environmentally friendly agricultural practices, such as the limitation of the use of plant protection products, fertilizers, energy, ensuring the protection of water resources and the protection of ecosystems and soil quality. The certification is organised in three levels:

- level 1: Compliance with the essential practices of environmental regulations.
- level 2: The adoption of techniques with low environmental impact.
- level 3: measurement of environmental performance thresholds in terms of biodiversity and low dependence on inputs.
- The certification covers all of the farm's activities: cultivation, breeding and the environment of the plots and animals and lasts for three years, after which an evaluation is performed in order to renew it. In 2020, 5399 have been certified, the vast majority of which (4,532) in viticulture.

In Italy, a new label was introduced by the Italian Ministry for Environment in 2018 called 'Made Green in Italy'.[393] which has yet to be implemented that will also cover food production among others. Criteria for its award have not yet been developed nor are the product groups finalised however the product groups are expected to be broad, encompassing food, cosmetics and other products such as window frames. The only restriction that is currently in place is on the place of production. Only products that are qualified as "Made in Italy" pursuant to Art. 60 of EU Regulation 952/2013 (Union Customs Code) will be allowed to participate in the scheme.

The aim of the scheme is for PEF to become a common methodology for Italian products and new Product Category Rules will be developed with the support of the LIFE MAGIS project.[394] Only one has been published so far and it concerns multi-use PE bags.[395]

The Good Environmental Choice (Bra Miljoval)[396] label is managed by the Swedish Society for Nature Conservation, a non-profit environmental organization. The label has in place since 1988 and covers the following 11 product groups and services:

- Insurance,
- Textiles,
- Grocery shops,
- Chemical products,
- Cosmetics,
- Biofuel

[391] https://www.agri.ee/en

[392] https://hve-asso.com/la-hve/

[393] https://www.minambiente.it/pagina/made-green-italy

[394] https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=7228

[395] https://www.minambiente.it/pagina/rcp-corso-di-validita

[396] https://www.naturskyddsforeningen.se/bra-miljoval/det-har-ar-bra-miljoval

- Freight transport,
- Passenger transport,
- Mobile subscriptions,
- Electricity supply, and
- District heating

The criteria for the ecolabel are different for each product group or type of service and are developed through consultations with a number of relevant stakeholders (industry experts, retailers and, manufacturers). Before the criteria for a group of products are drawn up, an assessment of the environmental impact of the product is carried out. In this assessment, the entire life cycle of the product is considered, including the raw materials, the manufacturing process, and what happens to the product when it has been used and discarded.

National environmental labels have also been identified in South Korea and New Zealand.

In New Zealand, the Environmental Choice eco label[397] is managed by the Ministry for the Environment and applies to both products and services, including:

- Building and construction,
- Recycled products and services,
- Toiletry and personal hygiene products,
- Flooring products,
- Office products and services,
- Cleaners and detergents.
- While the criteria for the use of the ecolabel do not refer explicitly to durability or reparability, for electrical waste it puts emphasis on reuse, and it states that it should be prioritised before recycling

Another label in New Zealand,[398] called the Water Efficiency Labelling Scheme (WELS) is manged by the Ministry of Business, Innovation, and Employment and focuses specifically on water efficiency applying to 6 classes of product:

- washing machines,
- dishwashers,
- lavatories,
- showers,
- taps, and urinals.
-
- The water efficiency label displays two main pieces of information: The star rating shows you how efficient the product is compared to others - the more stars, the more water efficient – while the water consumption or water flow figure tells you how much water the product uses.

In South Korea, there are not only labels focusing on goods but also those focusing on retailers, indicating the stores that facilitate the supply of green products to consumers and strive to improve the overall environmental management.

[397] https://environmentalchoice.org.nz/

[398] https://www.mfe.govt.nz/publications/fresh-water/new-zealand-water-efficiency-labelling-scheme

The Korea Eco-Label[399] is state-certified and in place since 1992. The certification criteria are defined for each product category separately and take into account both environmental performance and product quality. Environmental criteria are set to attain the top 20-30% of environment-related standards among products of the same category. It considers factors such as water and energy conservation, recycling, reduction of toxic substances emission, and biological safety. Each product is required to achieve quality equivalent to or higher than the Korean Industrial Standards. It is the Korea Environmental Industry and Technology Institute (KEITI) is responsible for the implementation of the eco-labelling including establishment and revision of criteria per product; certification of eco-label and follow-up management of eco-labelled products; and promotion of eco-labelling and certified products

According to the Ministry of Environment, in 2018, 3,825 companies and 14,698 products were Korea Eco-Label certified[400] and confidence in eco-label certified products was at 90.3%.[401]

The Green store certification[402] in South Korea indicates a store that facilitates the supply of green products to consumers and strives to improve the overall environmental management. The Green Store Program, was designed and supervised by the MoE as a response to the low level (38%) of green consumption actions by the public, despite their high interest (81%) in green purchases as revealed by a nationwide survey conducted in 2010.[403]

The following criteria should be satisfied in order to be certified as green store:

- Establishment of an environmental management system, including environmental goals
- Formulation of ways to supply green products, including sales expansion and promotion of green products
- Eco-friendly operation of stores, including measures to reduce pollution and conserve energy
- Development of customer-oriented environmental management schemes, including sharing vision on environmental management with customers and encouraging customer engagement.

The reported number of green stores according to the Korea Environmental Policy Bulletin was 350 in 2016.[404] By 2018, the number of green stores had increased to 528.[405]

A10.3.2 Websites helping understand environmental labels and claims

What has emerged from our desk research and the interviews conducted so far is that the current proliferation of labels can create confusion for consumers. It can be difficult to understand what exactly each label is communicating but it can also be hard to distinguish between legitimate and misleading labels as well.

[399] http://el.keiti.re.kr/enservice/enindex.do

[400] KEITI website, http://www.keiti.re.kr/site/eng/02/10203010000002018121306.jsp

[401] *Ibid*. Keiti Sustainability Report, p. 13.

[402] http://www.edp.or.kr/

[403] Global Green Growth Institute, Korea's Green Growth Experience: Process, Outcomes and Lessons Learned, 2015, https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/Koreas-Green-Growth-Experience_GGGI.pdf

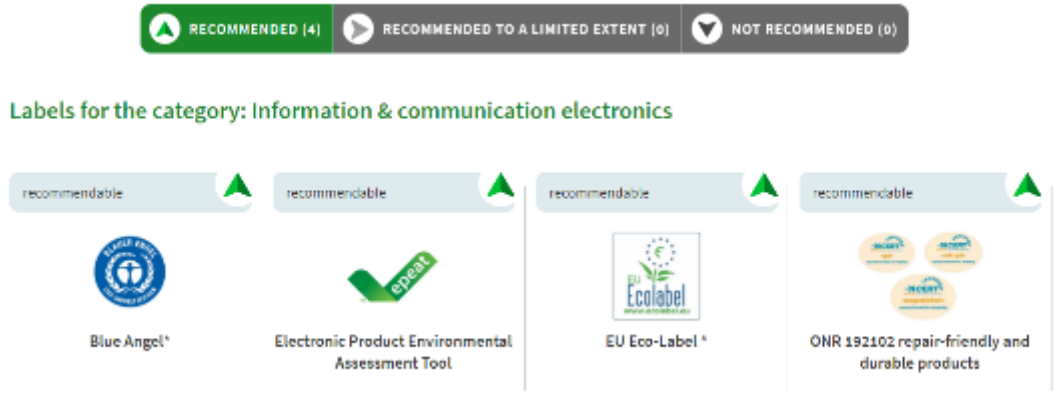
[404] Ministry of Environment, Korea Environment Institute, Eco-Label Certification System (ECS) in Korea, in Korea Environmental Policy Bulletin, 2016, p. 7.

[405] KEITI website, http://www.keiti.re.kr/site/eng/02/10203020000002018121306.jsp

Initiatives have been identified that aim to help reduce this confusion among consumers. An Austrian website - Buy consciously[406] - is managed centrally by the Federal Ministry for climate protection, environment, energy, mobility, innovation and technology and focuses on environmental standards and covers a variety of product groups, including food and drinks, housekeeping products, electronic appliances, construction materials, energy, plants and gardening products (incl. pesticides), hygienic products, cosmetics, clothing and toys. The website has a section called the 'label compass'.

The label compass allows users to search labels according to the product group and presents them with the available labels and an assessment which is communicated as either 'recommended', 'recommended to a limited extent' or not recommended' as illustrated in Figure A261.

Figure A261. Buy consciously recommendation page



Up until the first half of 2020 the website also hosted a database of 2500 products which considered sustainable by the Federal Ministry. This feature was discontinued however as it was too expensive to maintain. No information is available on the extent to which the website has been used by consumers.

The German website – Label Clarity[407] - is also managed centrally by the relevant Ministry evaluates the reliability of labels used by manufacturers, either scoring their credibility or recommending the ones that are considered the most robust across the following product groups:

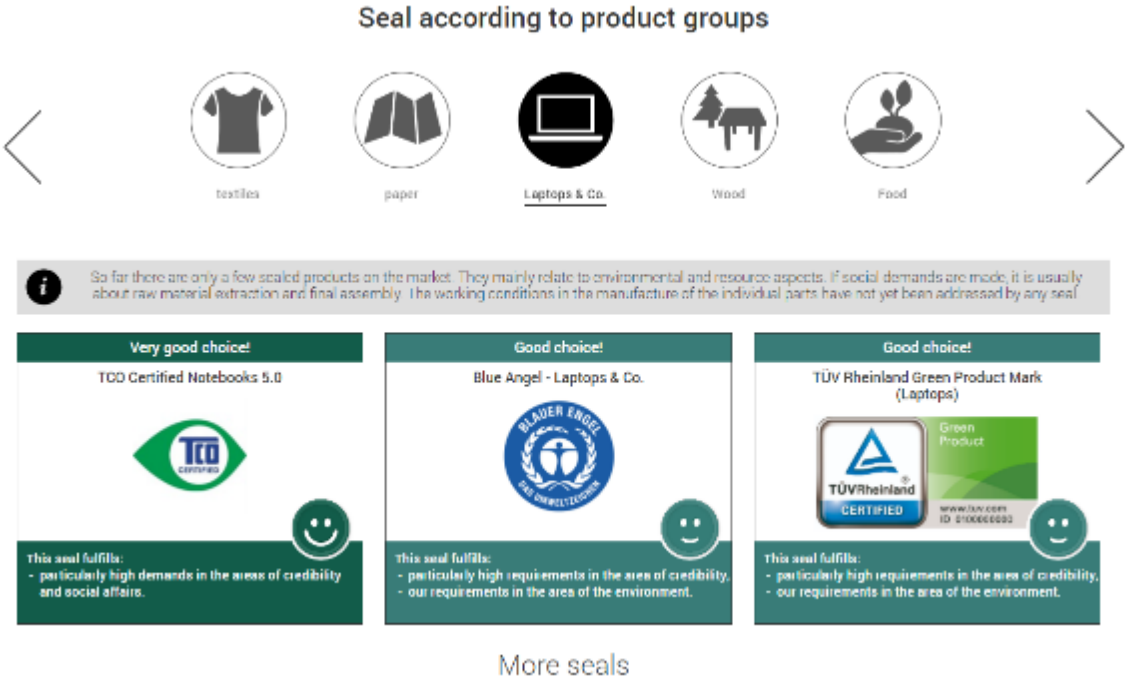
- textiles
- agricultural products
- fish
- Wood and paper products
- electronic equipment
- cosmetics
- laundry detergent

The label will be categorised as either a 'very good choice!' or a 'good choice!' as illustrated in Figure A262.

[406] https://www.bewusstkaufen.at/

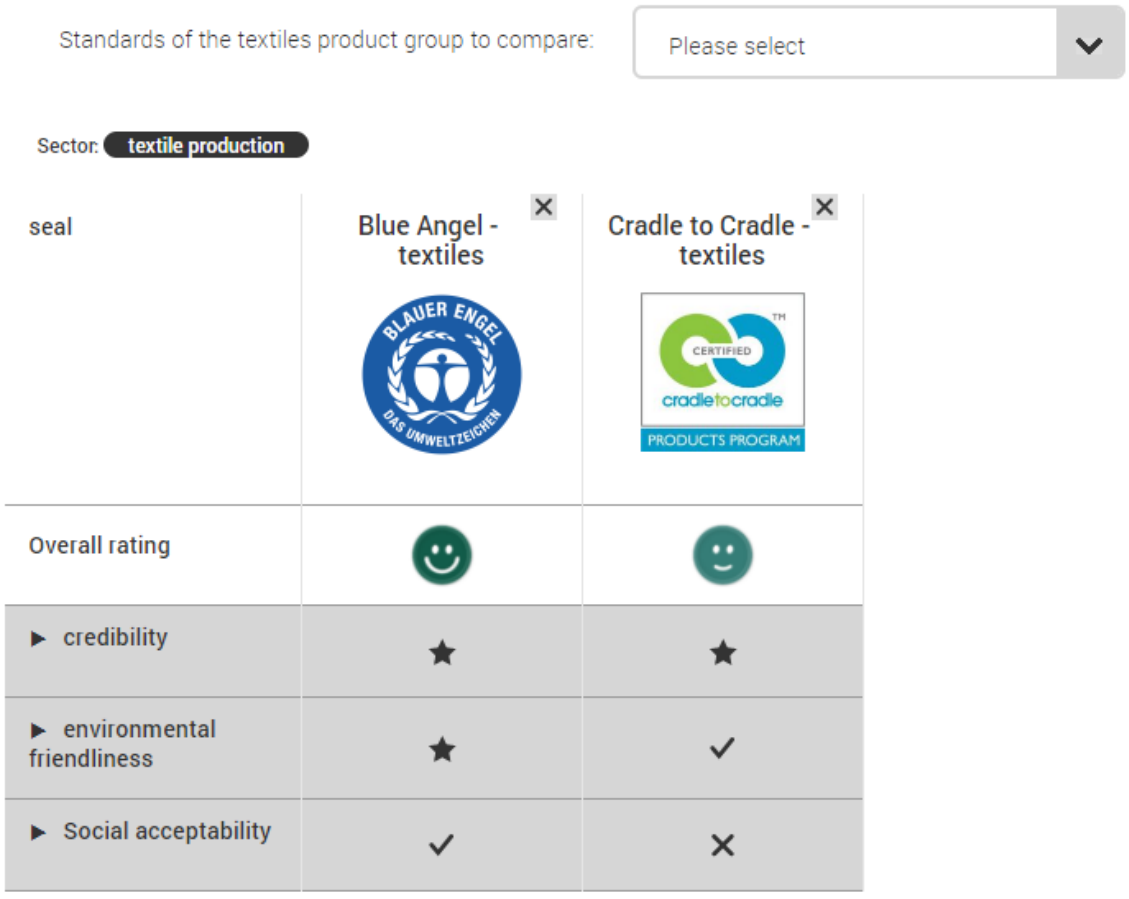
[407] https://www.siegelklarheit.de/

Figure A262. Label clarity product page



The website also allows to compare labels according to their credibility, environmental friendliness and social standards, as illustrated in Figure A263.

Figure A263. Label clarity comparison page



The labels are analysed by Independent reviewers and government agencies and the analysis takes place in two stages:

3. Does a seal meet the minimum requirements of the federal government? These ensure that:
   a) the seals address the most important social and ecological challenges in their product group and
   b) they are secured by a credible implementation system.
   c)
4. If a seal meets the minimum requirements in the areas of credibility as well as environmental friendliness and / or social compatibility, it is examined which of our around 200 additional requirements it meets.

In the areas of environmental friendliness and social compatibility, it is also checked how binding and demanding the requirements that the seal giver places on the seal recipient are.

In the area of credibility, they examine how the seal giver ensures that the seal recipients comply with their requirements and how transparent the implementation system is.

Label Clarity has also developed an application[408] that can be used to assess labels by scanning them with one's phone. See Figure A264.

Figure A264. Label Clarity App

The App displays the overall and detailed evaluation of the seal immediately but can also be used to search for labels according to a specific product group, allowing

[408] https://play.google.com/store/apps/details?id=de.siegelklarheit

consumers to know in advance which labels may be relevant for the goods they intend to purchase.

The organisation running the label informed that the website is currently undergoing a major review, which will culminate in a relaunch in autumn 2021. In this context, the presentation of the assessments and the assessment methodology will be revised in order to make them more transparent and easier for users to understand. They are also working with the International Trade Center (ITC)[409] to harmonise the evaluation criteria of Siegelklarheit with those of the ITC Sustainability Map. They already use their database for a large part of the data on Siegelklarheit. The collection of the relevant label data will be carried out by ITC as an independent UN organisation, which will further strengthen the independence of the assessments.

Currently the website is not used very much. The use rate for July 2020 was of 6,423 visits; a decrease in comparison to July 2019 which saw 9,830 visits. The highest number was reached in January 2020 (13,524 visits).

According to the organisation running the label, the low use is mainly since there is currently no active public relations work due to the current revision. In addition, the attractiveness of the portal is limited by the fact that the food sector is currently not yet covered. However, this is to be done in coordination with the Federal Ministry of Food, Agriculture and Consumer Protection (BMEL) and other departments before the relaunch of the portal. A catalogue of requirements is already being developed. A continuous expansion of the product groups covered and the inclusion of additional seals within the product groups is planned.

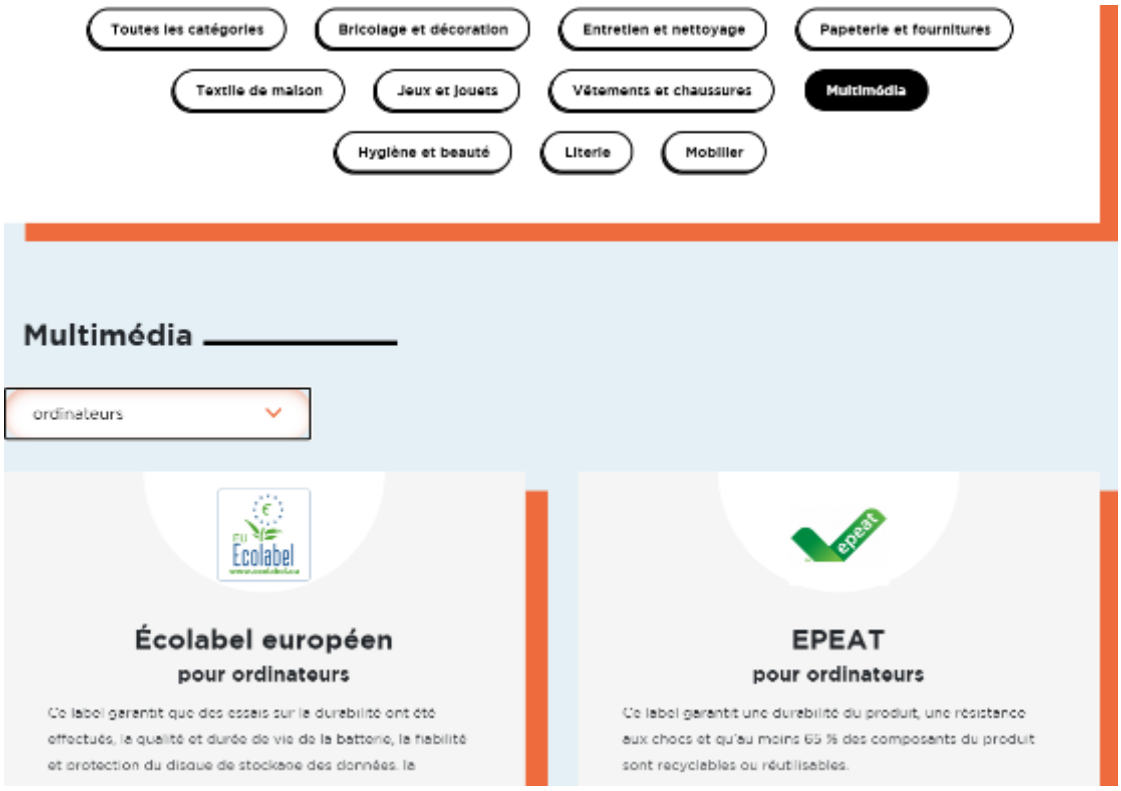
There are other initiatives that have been identified in Belgium, Ireland and France which do not provide an assessment of the environmental labels but rather act as databases of labels and provide guidelines explaining what the labels are relevant for.

In France, the website 'Longue Vie Aux Objets'[410] is a governmental project which aims to promote more sustainable lifestyles by providing information to consumers. The website also provides some information on labels and suggests which ones to look out for when purchasing certain products as illustrated in Figure A265.

[409] https://www.intracen.org/

[410] https://longuevieauxobjets.gouv.fr/

Figure A265.'Longue Vie Aux Objets' label page



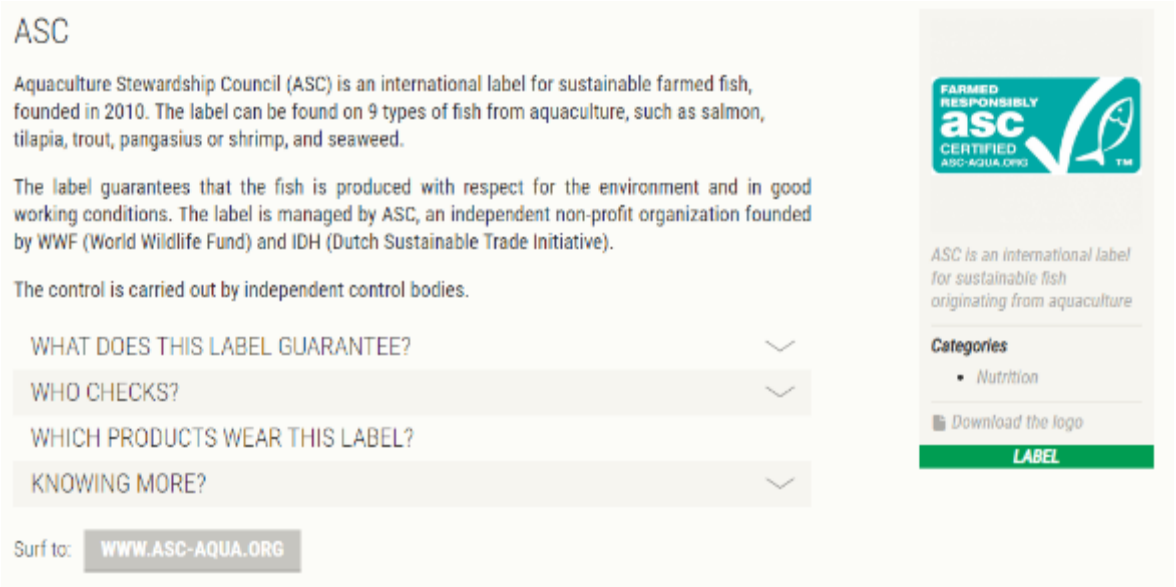
The Belgian website Labelinfo[411] provides a description of 106 labels in the fields of:

- Organic/Fair trade
- Foodstuffs
- Packaging
- Paper
- Homecare and maintenance products
- Lifestyle (textiles, tourism, cosmetics, financial products)
- Construction material (paint, carpets, wood, heaters)
- Horticulture
- Electrical appliances

The website explains what the labels guarantees, which body certifies it and on which products it can be found. See Figure A266 for an example.

[411] https://www.labelinfo.be/

Figure A266. Label info description page

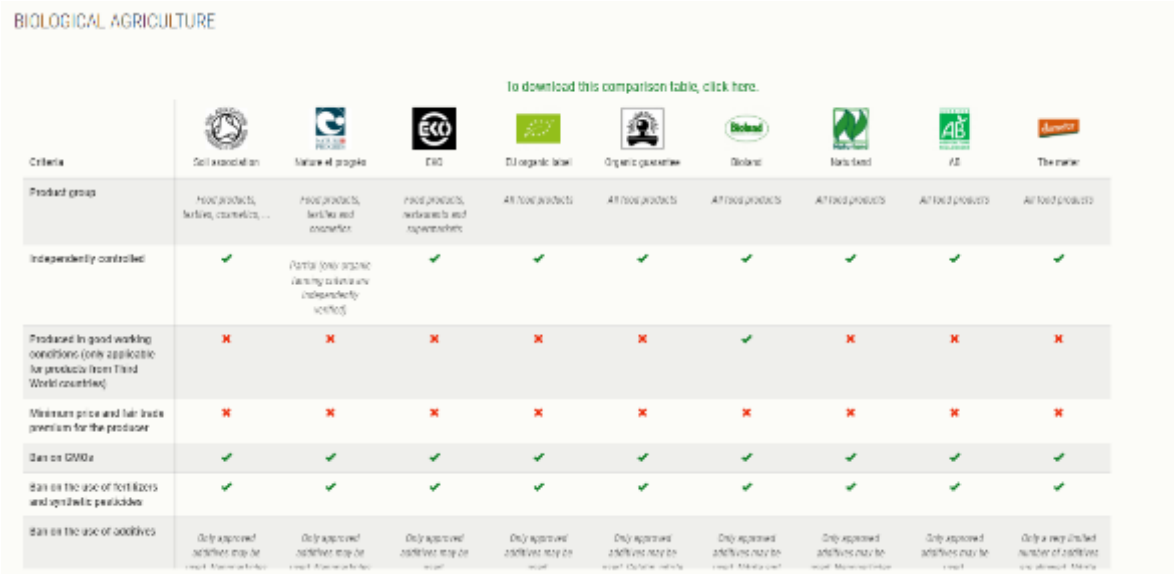


Labelinfo also provides comparison tables of labels from the same product group, including whether the label satisfies certain criteria which will change according to the product group. In the case of fair-trade labels for example the criteria are the following:

- Independently controlled
- Produced in good working conditions (only applicable for products from Third World countries)
- Minimum price and fair-trade premium for the producer
- Ban on GMOs
- Ban on the use of fertilizers and synthetic pesticides
- Percentage of labelled ingredients in the final product
- Origin of the products
- Other specific criteria

Figure A267 provides an illustration of how this is set up on the website using the example of biological agriculture.

Figure A267. Label info comparison page



The Green labelling guide[412] prepared by Consumer Choice in Ireland can be found on their website and provides a generic overview of a small selection of labels, such as the Marine Stewardship label, the Forest Stewardship Council label and the Recycling label. The guide explains very briefly what the label stands for but does not go into much detail. The guide has also not been updated since 2011.

A10.3.3 Preventing misleading/unfounded environmental claims in marketing

National researchers identified 20 initiatives prohibiting unfounded or misleading green claims

As per the UCPD,[413] misleading claims are prohibited in the EU and the guidance[414] provided in 2016 provides a legal basis to ensure that traders do not present environmental claims in ways that are unfair to consumers.

The UCPD has been transposed into national legislation in all Member States, however there are some examples worth mentioning. The French legislation[415] reflects the UCPD as well as its Guidance, making the provisions contained in the latter document binding. According to the impact assessment of the Circular Economy Law, investigations from the DGCCRF identified many misleading environmental claims, including for instance, the claim '100% biodegradable'. The report from the sustainable development commission of the French parliament adopted during the legislative procedure of the Circular Economy Law further mentions that these sort of claims (biodegradable, compostable) generate wrong waste sorting habits leading to increased pollution.[416]

[412] http://thecai.ie/wp-content/uploads/2011/10/Greenlabellingjuly08.pdf.

[413] Directive 2005/29/EC on Unfair Commercial Practices (UCPD)

[414] Guidance on the implementation/application of Directive 2005/29/EC on Unfair Commercial Practices SWD (2016)163

[415] The Circular Economy Law,

[416] Report from the from the sustainable development commission related to the Circular Economy Law: http://www.assemblee-nationale.fr/dyn/15/rapports/cion-dvp/l15b2454-t1_rapport-fond#_Toc256000054

The provisions of Guidance (2016)163 are also binding in Finland[417] and Hungary.[418] Finnish legislation also includes an explicit ban on misleading information on the provision of spare parts.

Swedish legislation also provides a specific prohibition of misleading green claims in its Marketing Act (2008:486),[419] according to which it is prohibited to make misleading statements about a 'product's origin, uses and risks such as impact on health or environment'.[420] This has been reiterated in Swedish case law such as Case MD 2015:9[421] in which the court argued that environmental claims are of importance to consumers in their purchasing decisions. The court continued to rule that it is therefore important that truthful information which can be substantiated by facts is being used in such transactions.

In Estonia, greenwashing, and intentionally providing misleading information regarding the sustainability of products and services is prohibited under chapter 16 of the Consumer Protection Act which bans the use of unfair commercial practices. In Greece, the Advertising – Communication Code is provided by Law 2863/2000[422] and is monitored by the Communication Control Council. The code provides the basic principles of advertising and communication including, in Art. 8, a provision on substantiation of claims. In particular, any descriptions, claims and illustrations used in advertisements must be able to be proven. Substantiation should be available without delay as soon as it is requested by the two Committees that are responsible for the implementation of the Code.

From what has been identified at national level, the Guidance has been mostly incorporated in non-regulatory and voluntary initiatives regulating the marketing of products.[423] In Austria, for example, the code was adopted by the Austrian Council of Advertisement and establishes the following rules:

- Representations or statements must be supported by factual information.
- If the production of a good does not have detrimental effects on the environment, it cannot be represented as being environmentally friendly.
- The comparison of different product groups or materials with respect to their environmental effects (e.g. plastic vs paper) is not be permitted, especially if the complexity of the subject matter from a technical perspective may mislead the consumer.
- Scientific terminology should be avoided unless absolutely essential or not misleading.
- The use of environmental symbols and seals is not allowed if they are not generally recognized.

According to the statistics of the Council of Advertisement, no complaint has been raised so far on the ground of environmental claims in 2020. There were 3 out of 338 in 2019.[424]

In Belgium, the Advertising Ethics Jury created a voluntary code[425] containing 14 articles providing general principles surrounding communication related to the environment. The principles specific to environmental claims are the following:

[417] https://www.finlex.fi/fi/laki/ajantasa/1978/19780038

[418] Act XLVII of 2008 on the Prohibition of Unfair Business-to-Consumer Commercial Practices - Prohibition of misleading information on environmental performance of products - Article 6(1)(b)(bi)

[419] https://lagen.nu/2008:486

[420] Sec.10, para.2

[421] https://lagen.nu/dom/md/2015:9

[422] http://www.see.gr/%ce%ba%cf%8e%ce%b4%ce%b9%ce%ba%ce%b1%cf%82/

[423] AT, BE, CY, EL, ES, FI, HU, IE, IT, LU, PT, RO, SE, SI, UK and South Korea

[424] https://werberat.at/statistik.aspx

[425] https://www.jep.be/sites/default/files/rule_reccommendation/milieu_fr.pdf

- Advertisements may not abusively refer to environmental concerns.
- Advertisements may not contain misleading information on the characteristics of the product.
- Advertisements should not encourage behaviours or actions going against the protection of the environment.
- Terms such as '*good for the environment*' or '*environmentally sound*' or any term implying that a product does not have any impact on the environment are forbidden.
- Signs or symbols related to environmental impacts should not be misleading or create confusion with regards to their meaning or falsely claim an official approval.
- The advertiser should be able to justify all claims without delay.

The Netherlands Authority for Consumers and Markets (ACM) has drawn up five rules of thumb for sustainability claims to support business in informing consumers more correctly and properly about environmental and sustainability aspects of their products and services. The five ruled of thumb for business are:

- Make clear what sustainability benefit the product offers
- Substantiate your sustainability claims with facts, and keep them up-to-date
- Comparisons with other products, services, or companies must be fair
- Be honest and specific about your company's efforts with regard to sustainability
- Make sure that visual claims and labels are useful to consumers, not confusing
- These rules are better explained using different examples in a guideline document published by the ACM.

The Advertising Control Agency in Cyprus is a self-regulatory body which drafted the voluntary Cypriot Code of Conduct for Communication,[426] setting out the rules of professional ethics and ethical conduct in respect of the consumer by all those involved in advertising. The chapter focusing on environmental claims contains the following provisions:

Article 1:

- Advertising should be formulated in such a way that does not exploit the consumers' interest in the environment or their ignorance of environmental issues.
- Advertising should not include any statement or visual presentation that may mislead the consumers in any way about the environmental dimensions or the advantages of the products, or about the actions of the advertiser for the benefit of the environment.
- Corporate advertising can refer to specific products or activities but should not unreasonably indicate that they relate to the overall performance of a company, an association or an industry.
- An environmental claim should refer to a specific product being promoted and relate only to the dimensions that already exist or are likely to occur during the lifespan of the product.
- Environmental claims must be up-to-date and where appropriate, re-evaluated with reference to relevant developments.
- Unclear or non-specific claims about environmental benefits, which can be interpreted in several ways by consumers, should only be made if they are valid without need for clarification in all circumstances that are reasonable to predict.

[426] http://www.fed.org.cy/fed/page.php?pageID=7

- If this is not applicable, the general environmental claims shall be either clarified or avoided. In particular, claims, such as "*environmentally friendly*" or "*ecologically safe*" implying that a product or activity has no effect - or only has a positive effect - on the environment should not be used unless there is evidence of the truth, which comply with very strict standards. As long as there are no decisive, generally accepted methods for measuring sustainability or for determining its achievement, it should not be claimed that it has been achieved.

Article 4:

- Environmental claims shall not be presented in a way that implies that they relate to more stages of a product's life cycle or to more of its properties than are documented on the basis of existing data.
- When a claim refers to the reduction of components or elements that have a negative environmental impact, it should be clarified what exactly has been reduced.
- The environmental claims should not be based on the absence of any part, component, characteristic or impact that has never been associated with that product category in the past. By analogy, general characteristics or components that are common to all or most of the products in a category should not be presented as being unique or notable features of the product being promoted.
- Claims that a product does not contain a specific ingredient or component, e.g. that the product is "x-free", should only be used if the level of the substance in question does not exceed that of an approved pollutant or diffusion level in the environment.

According to the Director of the Agency, by year 2017, the Agency had handled more than 75 complaints. Most of the complaints are submitted by consumers, as well as by companies. Many times, the complaints are resolved immediately on the initiative of the advertising company.[427]

The Danish Consumer Ombudsman has prepared guidance[428] on ethical and environmental statements in marketing. It includes the following provisions:

- Environmental claims must be updated continuously as needed.
- General statements such as '*gentler to the environment*' must be documented in relation to the entire product lifecycle, i.e. manufacturing, use, and the product's environmental impacts after use/discarding.
- Ethically reasoned claims must be explained as accurately as possible in order not to be classified as misleading.
- General ethical claims such as '*for a better world'*, can be misleading if they do not explain what aspects for the product or activity the ethical claim is about. Therefore, the company must be able to document form the entire product life cycle that it is significantly better than similar products
- Companies that profile themselves as particularly ethical or environmentally conscious should do so through specific advertising and other forms of marketing rather than generally pointing out that the company is concerned with the environment. For example, specific initiatives that the company plans for the environment will be more informative than vague and unclear statements about commitment and values, such as: "*We work for a fairer world*".
- Labelling schemes, symbols and certification must be explained. This can be done on the packaging, by way of advertisement, and on other material where the product is marked.

[427] https://www.philenews.com/koinonia/anthropoi/article/435741/pente-lepta-me-ti-christiana-paschalidoy

[428] https://www.forbrugerombudsmanden.dk/media/46475/2016-miljmssige-og-etiske-udsagn.pdf

- Greenwashing is a form of misleading marketing of activities or product in a more environmental or sustainable way than they are. The marketing must not be exaggerated. E.g. Labels and certifications must not be used for a full range of products if only one is certified.

The Spanish Ministry of the Environment, together with Autocontrol,[429] has created a voluntary code setting rules to guide companies in the development, execution and dissemination of their advertising messages that include environmental claims and references. It recognises certain principles to be respected such as the principle of legality, fairness of commercial practices, social responsibility, truthfulness and objectivity of the information in environmental claims in the sense of being verifiable, sufficiently precise, concrete, pertinent, and non-ambiguous.

Breach of the Hungarian Code of Advertising Ethics will be considered an unfair commercial practice as per Act XLVII of 2008[430] and the Code reflects the provisions contained therein.

In Ireland, the Advertising Standards Authority established a code[431] for its members sets out rules on communication, including environmental claims. The voluntary code sets out that environmental claims should not be used without qualification unless advertisers can provide substantiation and that absolute claims should be supported by a high level of substantiation. Qualified claims should also be capable of substantiation. Furthermore, divisions in scientific opinion must be reflected, the basis of the claim must be explained clearly, the claim should be based on the full life cycle unless otherwise specified, and claims should not give the impression that a product that never caused damage has been changed.

Italy's advertising standards authority regulates advertisements to ensure that the information imparted to consumers is correct and that businesses compete fairly. The rules, which are adhered to voluntarily, are set forth in its Code of Advertising Self-Regulation[432] which reflects the UCPD and its Guidance and are enforced by the Review Board and Jury. Article 12 establishes that advertising, claiming or suggesting environmental or ecological benefits must be based on truthful, pertinent and scientifically verifiable evidence. Such advertising must ensure a clear understanding of which aspect of the product or activity the claimed benefits refer to.

The rules of the Italian Code are enforced by the Jury, the Review Board and a Control Committee. The following is an example of a case reviewed:

- Case 30/2015. A commercial on detergents was found to violate Art. 12. The detergents were described as "organic". The basis of the claim was that the product contained a powerful cleaning agent that would be able to reduce the amount of product used and, therefore, reduce pollution. This was considered insufficient to substantiate the "organic" claim, and therefore the commercial was found to violate Art. 12.

The Luxembourg Commission for Ethics in Advertising was set up by the Advertising Council of the Grand Duchy of Luxembourg, a non-profit organisation whose purpose is the promotion, enhancement and defence of advertising and its freedom, as well as the implementation of advertising self-discipline. The Commission set up the voluntary 'Code of Ethics for Advertising in Luxembourg'[433] which has specific provisions related to environmental claims:

[429] The independent advertising self-regulatory organisation

[430] *Op. Cit*,

[431] https://www.asai.ie/asaicode/section-15-environmental-claims/

[432] https://www.iap.it/codice-e-altre-fonti/il-codice-il-codice-di-autodisciplina-della-comunicazione-commerciale/

[433] http://www.clep.lu/code-de-deontologie/

- Advertising must refrain from encouraging irresponsible environmental behaviour on the part of the consumer and must not compromise or discredit the consumer's ecological and sustainable development efforts.
- Advertising must refrain from suggesting behaviour or referring to human or industrial activities that would be deemed contrary to environmental protection and sustainable development.
- Advertising using environmental assertions or claims of an ecological nature must not mislead the consumer and must not have as its main purpose to attract his or her attention or that of the public or to increase their expectations.

The Association of Advertising Self-Regulation in Portugal has established the voluntary Advertising Self-Regulation Code of Conduct in the field of Advertising and other forms of Commercial Communication[434] which also has a dedicated chapter on environmental claims. This chapter promotes environmental claims which are true and honest,[435] based on scientific evidence[436] and not of general nature such as "*green product*" or "*environmentally friendly*". The code also requires that environmental claims be very clear when providing information concerning the product's life cycle.

In Poland, the Code on Ethics in advertising is managed by The Advertising Council[437] and infringements are dealt with by the Advertising Ethics Commission.[438] This voluntary code provides for general rules, such as

- 'Advertisements cannot exploit the lack of knowledge of their recipients in the area of natural environment protection',
- 'Advertisements cannot contain a message which might mislead the consumers as to environmental protection, including but not limited to the use of misleading information on characteristics of products or on activities undertaken by the advertiser for environmental protection',
- 'An environmental claim must relate to the characteristics of the advertised product and must refer to such characteristics of such product that exist throughout the product life or periodically, but in the latter case the advertisement must inform the recipient thereof.'

Proceedings in cases concerning the violation of the provisions of the Code are carried out before the Advertising Ethics Commission, however since this Commission is not a formal public enforcement body, its decisions can be only voluntarily implemented by the parties to the proceedings (there is no formal enforcement procedure).

The Romanian Advertising Council has published the voluntary Code of Advertising Practice.[439] The code provides that:

- Communication must not encourage actions against the law or the generally accepted rules of respect for the environment.
- Signs or symbols relating to environmental protection or collection systems, as well as messages relating to the environment and the reduction of pollution, may be used in the communication only if their source is clearly indicated or

[434] https://auto-regulacaopublicitaria.pt/wp-content/uploads/2018/01/Cod.-Conduta_ARP.pdf

[435] I.e. they should not exploit the concerns of the consumers or their lack of knowledge, they should not induce consumers in error in respect to environmental benefits and actions of the producer in favour of the environment, they should not exaggerate eventual environmental benefits or misuse statistics and data; they should be specific and detailed, particular in terms of the elements of the product and the phase of the product lifecycle to which they apply; they should not make abusive comparisons.

[436] I.e. they can use scientific terminology but this should be adapted to the general public; in case of claims concerning health or safety, the scientific claims should be particularly trustworthy

[437] An independent organization that regulates the advertising market

[438] A body of the Advertising council appointed to adopt resolutions on the compliance of activities covered by the Code of Ethics of Advertising

[439] https://www.rac.ro/ro/cod/codul-de-practica-in-comunicarea-comerciala

identifiable, there is no risk of confusion as to their meaning and must be substantiated by the advertiser.
- These signs and symbols shall not be used in such a way as to suggest formal approval or certification by third parties if such approval or certification does not exist.
- Environmental claims should not suggest that they refer to more stages in the life cycle of a product or to more of the properties of the product than can be supported by evidence. The advertiser must clearly specify which of the stages or properties he refers to in the communication.
- When a statement refers to the reduction of components or elements that have an impact on the environment, the announcer must clearly specify which components or elements have been reduced.

An ethics committee is tasked with ensuring compliance with the provisions of the voluntary code in Romania, however as the measures are non-binding the Committee can only invite parties to rectify their behaviour.

The Slovenian Code of Advertising Practice[440] is a voluntary advertisement industry code that sets rules for environmental claims. Article 17 of the Code covers environmental claims and sets out the following provisions:

- Advertising that contains environmental claims should be prepared in a way that does not abuse the consumers' concern for the environment and does not take advantage of their potential lack of understanding of environmental issues.
- Unjustifiable claims related to environmental protection should not be used.
- Comparison is only acceptable when advertisers are able to objectively prove that the product represents an improvement in the environmental sense when compared to another product.
- Claims and comparisons are considered misleading if they omit important information.
- When scientific opinions on the matter differ considerably or evidence is not conclusive, this should be clearly evident from the advertisement.
- If a given product cannot be considered harmful to the environment, advertising should not imply that its composition was changed to make it more environmentally friendly.
- The use of specialized language or pseudo-scientific jargon should be avoided.
- Broad definitions of frequently used environmental claims are found in the International Chamber of Commerce Consolidated Code of Advertising and Marketing Practices.[441]

The 2010 UK Code of Non-broadcasting Advertising, Sales Promotion and Direct Marketing also reflects the UCPD and its Guidance.

A French initiative that will come into force in 2022[442] will require the communication of the environmental characteristics of products:

- Manufacturers and importers of waste-generating products must inform consumers, by means of marking, labelling, display or any other appropriate means, about their environmental qualities and characteristics, in particular the incorporation of recycled material, the use of renewable resources, durability, compostability, reparability, reusability, recyclability and the presence of hazardous substances, precious metals or rare earths, in line with European Union law. These qualities and characteristics are established by giving priority to an analysis of the whole life cycle of products. In addition, the consumer should

[440] http://www.soz.si/sites/default/files/soz_sok_slo.pdf

[441] https://cms.iccwbo.org/content/uploads/sites/3/2018/09/icc-advertising-and-marketing-communications-code-int.pdf

[442] Circular Economy Law, adopted in February 2020, creating L541-9-1 and 4 of the Environmental Code

be informed of the bonus and penalties given to the manufacturer within the extended producer responsibility system. All this information should be visible and/or accessible to the consumer at the time of purchase, and available by electronic means. Centralised access to these data may be set up by the administrative authority in accordance with the conditions that will be specified by Decree.[443]

- Each claim will be subject to a Decree that will further specify the definition of environmental qualities and characteristics, the procedures for establishing them, the categories of products concerned and the procedures for informing consumers.[444]
- Where reference is made to recycled material in a product, the percentage of recycled material actually incorporated must be specified.[445]
- Administrative penalties in case of breach of this obligation have also been introduced.[446]

This reason for introducing this initiative is the low effectiveness of the Regulation on environmental claims.[447] According to the Sustainable Development Commission of the French Parliament, no implementing measures have been taken on the basis of the Regulation, because of its extremely general character and because of questions of compatibility with European law, as such pre-contractual information is not provided for by European law'.[448] As such, the additional requirements listed above were introduced. As no decree has yet been published, there is no detailed information on how this initiative will function in practice.

The General Audiovisual Communication Law 7/2010 In Spain prohibits claims that are actively promoting damaging behaviours to the environment.

A similar ban exists in Hungary[449] however no decision of the national courts applying this regulatory measure was found. Outside of the EU, misleading or unfounded green claims are prohibited also in the State of California (USA) and in South Korea.

In the State of California,[450] the Business and Professions Code[451] provides that 'Any person who represents in advertising or on the label or container of a consumer good that the consumer good that it manufactures or distributes is not harmful to, or is beneficial to, the natural environment, through the use of such terms as "environmental choice," "ecologically friendly" […] "green product," or any other like term, must keep the following information and documentation and provide it to any member of the public upon request:

- The reasons supporting the claim;
- Any significant adverse environmental impacts directly associated with the production, distribution, use, and disposal of the consumer good;
- Any measures taken by the person to reduce the environmental impacts directly associated with the production, distribution, and disposal of the consumer good;

[443] L541-9-1 of the Environmental Code

[444] *Ibid*. Environmental Code

[445] *Ibid*. Environmental Code

[446] *Ibid*. Environmental Code

[447] Article 90 of the 2015 Law on Energy Transition for green growth

[448] Report from the from the sustainable development commission related to the Circular Economy Law: http://www.assemblee-nationale.fr/dyn/15/rapports/cion-dvp/l15b2454-t1_rapport-fond#_Toc256000054

[449] Act XLVIII of 2008 on the Basic Requirements and Certain Restrictions of Commercial Advertising Activities - Article 7(2)

[450] To be noted that there are also FTC guidelines at Federal level which can be found here: https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-issues-revised-green-guides/greenguides.pdf

[451] Business and Professions Code (Div 7, Part 3, Chapter 1 – advertising, Art. 7 Environmental representations)

- Violations of any federal, state, or local permits directly associated with the production or distribution of the consumer good; and
- Whether or not, if applicable, the consumer good conforms with the uniform standards contained in the Federal Trade Commission Guidelines for Environmental Marketing Claims for the use of the terms "recycled," "recyclable," "biodegradable," "photodegradable," or "ozone friendly." (paragraph 17580 of the Business and Professions Code).'
- The impact that this legislation has had can be denoted from the cases that have been brought against companies. As noted by Kronenberger Rosenfeld LLP:[452]
- "[…] *over the past couple of years, District Attorney's Offices have targeted companies making consumer-facing "environmental" claims* […] *requesting substantiation for "environmental" advertising claims for consumer goods, such as statements that goods are "environmental choice," "ecologically friendly," "earth friendly," "environmentally friendly," "ecologically sound," "environmentally sound," "environmentally safe," "ecologically safe," "environmentally lite," or "green product*."

[…].*District Attorney's Offices often request evidence to substantiate advertising claims, including claims that (1) purport to be based on factual, objective, or clinical evidence, (2) compare the product's effectiveness or safety to other brands, or (3) purport to be based on any fact.*

- An example of a case is the 2017 Walmart settlement. The company paid nearly $1 million to settle a claim brought by 23 California district attorneys alleging that Walmart sold plastic products that were misleadingly labelled "biodegradable" or "compostable".[453]
- These California laws also refer to Federal Trade Commission Guidelines for Environmental Marketing Claims ("FTC Guidelines").[454]

In South Korea, the prohibition[455] on unfair labelling or advertising includes a reference to environmental facts in its Guidelines for the examination of labelling and advertising with reference to the environment.[456] The Korean Fair Trade Commission is responsible for determining whether a business entity or labelling and advertising with reference to the environment on goods supplied by the business entity has committed a violation on the basis of the Guidelines which focus on the following elements:

- Accuracy: whether the content is based on facts and is clear and accurate and unlikely to mislead consumers.
- Correlation: whether the environmental properties or effects of goods purported in the labelling and advertising are presented in a way that will not be distorted by consumers.
- Substantiation: whether the content of the labelling or advertising with reference to the environment shall be provided based on the most current objective and scientific grounds which are accurate and reproducible.
- Lifecycle: whether impacts on the natural environment throughout the entire life cycle of goods are considered in the labelling and advertising.
- Specificity: whether it is clear in the labelling or advertising that the environmental benefit refers to the whole product or just a specific aspect of the products.

[452] In *Recent Enforcement by California District Attorney's Offices*, January 2019, available here.

[453] https://www.jdsupra.com/legalnews/sustainability-in-advertising-law-94753/

[454] https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-issues-revised-green-guides/greenguides.pdf

[455] http://www.ftc.go.kr/eng/contents.do?key=510

[456] http://ftc.go.kr/eng/cop/bbs/selectBoardList.do?key=1495&bbsId=BBSMSTR_000000002442&bbsTyCode=BBST11

The guidelines also regulate specifically 2 types of advertising:

- Comparative advertising: It is important that the labelling or advertising has conveyed certain elements, such as the details of comparison, grounds for comparison, the point in time the comparison is conducted and methods of comparison, based on facts.
- Advertising conveying far-reaching environmental properties or effects: This shall always be accurate in all cases where the expression may be interpreted; or the business entity shall explicitly explain the details of such labelling and advertising. Where the expression in the labelling or advertising may be interpreted in various ways, the general criterion shall be the interpretation of an ordinary and reasonable consumer.

In New Zealand, the prohibition to make unsubstantiated claims about products or services does not specifically mention environmental claims.

A10.4 Group 3: Other initiatives supporting the active role of consumers in the green transition

This category includes initiatives promoting reuse (e.g. through specific laws and non-regulatory initiatives, such as product labels, and other initiatives aimed at the wider promotion of repairs, refurbishment or reconditioning, and second-hand products). Many of these initiatives specifically focus on the provision of information on sustainability to consumers via websites and/or other digital tools.

A10.4.1 Legislative proposals aimed at promoting product re-use

In Italy, there are numerous legislative proposals being discussed. These are particularly aimed at supporting second-hand markets. Four such proposals are currently being discussed in the Parliament's Chamber of Deputies ("Camera dei Deputati") and one has been presented in the Senate, though discussions have not yet started.[457]

The proposals put forward seek to provide definitions of "second-hand goods" and "second-hand operators". An important objective is to recognise activities carried out by "second-hand operators" by attributing a specific code to such activities under the Italian "ATECO" system (which identifies codes for each economic activity for statistical and tax purposes). The proposals also foresee the establishment of entities (referred to as "working tables" or "national consortia"). They would be composed of representatives of the second-hand sector and ministerial representatives. These entities would:

- provide opinions on reuse and second-hand markets to the government,
- participate in the update of the national programme for waste prevention,
- promote differentiation in waste management to allow second-hand operators an easier access to reusable goods; promote the second-hand sector,
- organise campaigns to promote reuse by consumers; and organise professional training.

In addition, the proposals would introduce tax benefits in the sector of reuse and sale of second-hand products. Other measures foreseen include better education tools for the general public as regards the second-hand sector.

Legislative proposals have also been forward in Poland. The document entitled "Road Map: Transformation towards a circular economy," published in September 2019 by the Council of Ministers, states that, over the period 2019-2021, the Polish government will conduct an analysis of the possibility of introducing changes to the tax system that would allow increasing the competitiveness of enterprises contributing to the transition to a more circular economy. So far, the analysis has evidenced the need for adopting certain measures to deal with the challenges identified for reaching the circular economy

[457] The Italian Parliament is composed of two houses: the Chamber of Deputies (*Camera dei Deputati*) and the Senate of the Republic (*Senato della Repubblica*).

objectives. The analysis resulted in proposals for regulatory changes that would be capable of creating incentives to conduct business activities focused on the reuse of products, repairs, sharing (e.g. movables, real estate, production tools, transport), rentals, and the improvement of product quality.

A10.4.2. Second-hand product markets

Initiatives **promoting reuse of second-hand or refurbished products** often focus on specific types of products and on incentivising consumers to reuse them.

Three initiatives identified, two in Estonia[458] ("Humanaee" and "Uuskasutuskeskus") and one in Poland focus on the reuse of goods (mainly clothes) and provide the physical space for second-hand markets to function, giving people the possibility to donate and purchase second-hand clothes. It is however important to note that the Estonian-based Uuskasutuskeskus initiative also focuses on other consumer items. Its objective is to put used things back in circulation and to make re-use and re-design easily accessible in Estonia. The ultimate aim is to have one million re-users in the country.

Two private initiatives in Lithuania encourage the re-use of products. In one case,[459] the initiative focuses on electrical and electronic equipment, textiles (with the exception of clothing), furniture, toys and other household items and establishes sharing stations. The stations operate as stopping points for sharing items that are no longer needed but are still in good condition and some consumers will leave an item while others will pick up one up. These initiatives are managed by private stakeholders. The second initiative is an online platform, which allows the consumers to buy, sell or give away used clothes, shoes, accessories and lifestyle items, share ideas with the wider community through its iOS and Android apps.[460]

A10.4.3 Repairs

Various initiatives have also been identified in Germany[461] and France respectively. These are specifically aimed at **promoting and supporting repair networks.**

In Germany, the initiative, the "Network of Repair Initiatives," brings together consumers to repair defective everyday objects. The repairs are carried out during regular events and focus predominantly on the following products: electrical and mechanical household appliances, consumer electronics, textiles, bicycles, and toys. The charitable trust "anstiftung" is currently coordinating the network. The number of active repair initiatives currently stands at over 1,000[462]. Events are generally supported by volunteers and repairers who offer their knowledge and skills voluntarily and free of charge. The events and/or the initiatives (deriving from the Network) are more widely aimed at avoiding waste and saving resources, thereby protecting the environment and testing sustainable lifestyles in practice. In addition, the initiatives seek to discourage obsolescence strategies and prolong the useful life of consumer goods through repairs.

Another private initiative, based in Germany[463] but serving all EU countries, is IFixit.[464] The company operates through a wiki-based site that teaches people how to fix a wide variety of electronic products through freely accessible repair manuals. The website also sells repair tools.

[458] Humanae and Uuskasustuskeskus

[459] DĖK'UI', 'Dalinkimės'

[460] Vinted

[461] www.reparatur-initiativen.de

[462] Source : www.reparatur-initiativen.de

[463] Originally set up in the USA.

[464] https://eustore.ifixit.com/pages/ifixit-in-europe

Similarly, repair is supported by the Spareka[465] network in France, an internet platform specialised in spare parts retail. The aim of the platform is to encourage self-repair. In addition to providing spare parts, the website offers many tutorials for diagnosis and repair, online diagnosis tools, and other tools such as exploded-view drawings. Purchased spare parts are delivered with the relevant tutorials and the platforms takes back the spare parts if the buyer has not succeeded in repairing the product.

Moreover, a 'Directory of professional repairers' is available to consumers by French association ADEME. The Directory is intended to help consumers identify professional repairers for a wide range of products in their neighbourhood / city / area. While there is no assessment of the quality of the repairers, there is a possibility of selecting only those who are certified by the certification scheme "Répar'Acteurs."

In Slovenia, reuse centres and reuse corners have been established within the premises of waste collection centres. These are aimed at recovering and reusing waste at the regional level, where possible. Research conducted by an NGO ("Ecologists Without Borders") indicates that, as of 2019, 19 reuse centres are operating in Slovenia. Collectively, they have reused a total of 185,000 products. The reuse centres also engage in the sale of refurbished products.

A10.4.4 Digital information tools

Digital information tools also play an important role in encouraging product re-use. In Finland, the 'Lifestyle test website' aims at collecting behavioural data and supporting consumer action towards a circular / green economy. The published test helps people to assess the environmental impacts of their own habits. In addition, the test provides specified ideas to save time, money and to enhance the quality of life. The test is backed up by an initiative proposing a network model in which data from different countries, products and areas can be collected and reviewed together. The 100 smart ways to live sustainably- project is best manifested in a website, which visitors can use to explore 100 concrete measures for achieving more sustainable daily living. Anyone can use the tips to reduce their carbon footprint while at the same time saving money and time or improving their health.

In Sweden, the service "Hello Consumer" hosted by the Swedish Consumer Agency offers information to consumers in relation to product reuse, sharing / rental options and other ways to achieve sustainable consumption. The information relates to a number of topics, including *inter alia*:

- "cars and the environment," whereby consumers can find information on car-pooling or how to choose an environmentally-friendly car;
- "ecolabelling," whereby consumers can find information about what an ecolabel is, along with a list of ecolabels in use in Sweden (such as the EU Ecolabel, Fair Trade, etc.);
- "food," which offers information on eco-labelled food products; how to buy food in an environmentally-friendly way, and about locally-produced food;
- "sustainable shopping," which contains general information on alternatives to buying new products (e.g. by renting, buying second-hand products, etc.);
- "sustainable living," which offers information on how to save energy or to sort waste; and
- "travel," which covers topics such as sustainable travelling.

[465] https://www.spareka.fr/

In Slovenia, a dedicated webpage from the NGO Ekologi brez meja ("Ecologists without borders") aims at raising awareness around greener and more sustainable consumption. It focuses on the following three main topics:

- A map of stores, allowing consumers to find shops that use minimal or no packaging for their products.
- A map of repair 'masters,' from which consumers can find craftsmen, organisations, businesses, etc. who repair, refurbish, recycle, redeem, repurchase, or borrow used products.
- An 'events calendar' that allows consumers to identify and select events (in the form of garage sales, exchanges, workshops, seminars, etc.) during which they can learn how to repair, refurbish or recycle used products.

A10.4.5 Product labels / logos

Informing consumers is an aspect that often categorises the initiatives identified in this group; their focus is however different to the labels discussed thus far. Two initiatives in Belgium, for example, provide **labels guaranteeing the quality of refurbished / reconditioned / reused products** with the aim of increasing trust in second-hand products. One initiative is called ElectroRev[466] and the other is Rec'Up.[467] Both initiatives focus on guaranteeing the quality of products and services offered by social economy enterprises active in the collection, sorting, reuse, recovery and recycling of goods.[468]

The Electrorev label has been designed to guarantee the quality of household appliances that have been upgraded or reconditioned by social economy operators in the regions of Wallonia and Brussels. The label can be awarded to reuse centres (that are reconditioning collected appliances) and repair service providers. To date, six reuse centres, mainly focused on bike repairs / refurbishment, have obtained the label. Operators wishing to obtain the electroREV label are required to comply with common principles (such as traceability of repairs, staff training, quality and safety controls, etc.). Any product carrying the electroREV label is guaranteed for one year and resold, on average, at a third of the price of new appliances.

The Rec'Up label guarantees the quality of products and services offered by social economy enterprises active in the collection, sorting, reuse, recovery and recycling of goods. To get the label, companies have to comply with terms of references containing 120 standards, including:

- Standards for collection (client services, organisation of rounds and handling of collected goods, management of collection points)
- Standards for reuse (sorting, cleaning / fixing, treatment of non-reusable goods)
- Standard for selling reused products.

Operators with the label are regularly audited to check they comply with the standards. There are 51 operators with the label in Wallonia and Brussels. According to the yearly report produced by Ressources[469], in 2018, operators with the Rec'Up label processed 31,185 tonnes of end-of-life objects and reused 7,570 tonnes. There are however no data available on the usage/success of the label towards users.

A10.4.6 Comparison and simulator tools

Comparison and simulator tools provided by public bodies are another type of initiative to inform consumers. These have a more general focus on sustainability and do not focus on reuse or sharing nor on helping consumers compare specific products

[466] https://www.res-sources.be/fr/electrorev/

[467] https://www.res-sources.be/fr/recup/

[468] Currently, only few operators are part of the initiative.

[469] Ressources, Observatoire de la réutilisation, Edition 2019 : https://www.res-sources.be/fr/2020/02/20/lobservatoire-de-la-reutilisation-ed-2019/

based on their sustainability (as do "digital information tools" as defined in the context of this study). One initiative in Finland consists of a tool through which to assess the environmental impacts of one's lifestyle choices.

One initiative in Slovenia, called 'Less is More'[470] is a website run by the NGO 'Ekologi brez meja'. The website focuses on providing consumers with the following information:

- Map of stores without packaging,
- Map of repairers, second-hand shops and renting businesses, and
- Information on reuse and refurbish events

The NGO also hosts workshops to learn how to use less disposable packaging.

A10.4.7 Fiscal incentives

There are also initiatives among those identified that include provisions supporting sustainable activities through **fiscal incentives**.

One initiative in Lithuania supports repairing defective vehicles by reducing the taxable income of residents incurring these expenses (regular maintenance is excluded from this initiative).

Another initiative in Poland,[471] which is still in its draft stage, aims to provide fiscal incentives for the reuse of products, repair services or sharing. The road map of the initiative, which was published in September 2019 by the Council of Ministers, evidenced the need for adopting certain measures to overcome the challenges identified for reaching the circular economy objectives. It provides that, in 2021-2022, the Polish government will conduct analysis of the possibility of introducing reporting and control tax reliefs for entities applying environmental standards (for example EU Eco-label, EMAS, ISO, etc.) and for entities entered in the Polish Register of Cleaner Production and Responsible Entrepreneurship.

In Hungary, Government Decree 326/2011 has been adopted by the Hungarian government. Its provisions allow for the use of a "green plate" for 'electric cars' as determined by KöHEM Decree 6/1990. According to Article 2(6),(7) and (8) of KöHEM Decree 6/1990, 'environmentally sound' cars are electric cars and zero-emission cars. Cars bearing a green plate can enjoy several benefits, such as being exempt from levies, road taxes, company car taxes as well as being entitled to free parking in certain cities (e.g. in Budapest) if permissible by the governing decree of the local municipality. Critics however remark that the current legal definition of "electric car," set out in KöHEM Decree 6/1990, also extends to car types which may not necessarily be considered as "environmentally sound," such as 450 horsepower luxury crossovers (with V-8 engines and electric motors with a range of 25 km or 50 km). Such vehicles can release more CO2 emissions compared to several cards with petrol motors and cars with diesel motors. Critics estimate that, as of 2019, there were more than 16,000 cars with green plates, of which less than half were purely electric cars.

Some initiatives[472] include or plan to include tax relief for certain businesses or VAT reductions on minor repair services as applicable according to articles 98 and 99 of Directive 2006/112/EC (including mending and alteration) of bicycles, shoes and leather goods.

In Belgium, the Programme Act (2011) makes the application of a reduced VAT rate of 6% on the following repair services permanent:

- Bicycle repair,
- Repair of shoes and leather goods, and

[470] https://manjjevec.si/

[471] https://www.gov.pl/web/rozwoj/rada-ministrow-przyjela-projekt-mapy-drogowej-goz

[472] BE, LU, PL, SI, SE

- Repair and alteration of clothing and household linen.

In Luxembourg, a reduced VAT rate is currently applicable to the repair of:

- bicycles,
- shoes,
- clothing, and
- other fabrics and leathers.

As part of the focus on increasing the efficiency of resources, the Government of Sweden lowered the VAT rate from 25 percent to 12 percent on reparation services of

- bicycles,
- shoes,
- leather products,
- clothes, and
- household fabrics.

As part of its work on the circular economy, the Government proposed, in its 2016 budget proposition[473] to introduce a tax deduction on the repair of household appliances if the repair work is done inside the home. Household appliances were interpreted to be those larger household appliances usually found in a home,[474] such as a washing machine, dryer and drying cabinet, fridge, freezer, dishwasher, stove, cookers and built-in ovens, as well as microwave. This applies regardless of whether the appliances are built-in or stand-alone. Multi-function devices are also included (e.g. washing machine with dryer function or combined refrigerator and freezer). Kitchen fans and cookers should also be attributed to appliances.[475]

One of the points in the January Agreement that formed the current Swedish Government is a tax deduction on the rental of products, on used products and the repair of products, called a 'hyber' tax deduction. The deduction is briefly discussed in Government Bill 2019/20:65.[476]

In Poland, there is a regulatory initiative planned called the 'Road Map'[477] which proposes regulatory changes that will provide tax incentives for businesses focusing on the reuse of products, repair services or the sharing economy. The same initiative also proposes tax reliefs for entities applying environmental standards (for example EU Eco-label, EMAS, ISO, etc.) and for entities entered in the Polish Register of Cleaner Production and Responsible Entrepreneurship.

Slovenian tax legislation[478] provides special arrangements for selling of second-hand goods such as vehicles. 'Second-hand' goods shall be understood as movable items which are suitable for continued use, or after repair, with the exception of works of art, collections or antiques and other precious metals or precious stones. In the event of a second-hand good sale, a tax base is determined based on the difference in price achieved by the seller minus the amount of VAT relating to the difference in price. In principle, the VAT in cases of selling of second-hand goods is calculated from the price difference. In some cases, supply of such second-hand goods and art pieces is exempted from VAT.

[473] Prop. 2016/17:1

[474] *Ibid.* Prop. 2016, p.201

[475] Installations such as air heat pump, hot water heater or radiators do not constitute household appliances. Nor are devices such as vacuum cleaners, irons, coffee machines, toasters or blenders or mixers considered as household appliances.

[476] Prop. 2019/20:65

[477] https://www.gov.pl/web/rozwoj/rada-ministrow-przyjela-projekt-mapy-drogowej-goz

[478] http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4701

Annex 11. Multinational initiatives

This annex briefly describes the multinational initiatives identified through desk research or as a result of the consultations with stakeholders.

Initiative	Area	Market(s)	Product(s)	Description	Link
EU funded projects					
Potential scoring System on Reparability	Repair	Various	Various	Potential scoring system to rate the ability to repair and - where relevant - upgrade products. This is being explored and studies by the Commission's Joint Research Centre (Directorate B, Circular Economy & Industrial Leadership Unit)	
Central Europe Repair & Re-use Centres and Networks (CERREC)	Repair Reuse	Not Various	Various	Project implemented between 2007-2013 seeking to foster the implementation of regional repair and re-use centres and networks. Among other results, pilot actions (i.e. re-use collection days) were carried out in several municipalities in AT and IT.	Link
Civitas initiatives	Cooperative consumption	Mobility	Automotive products (car-sharing)	Car-sharing initiatives implemented in cities in different Member States (network of cities)	Link
ReWee Project	Reuse	Various	Electrical and Electronic Equipment	Project aims to establish two WEEE sorting centers (SCs) will operate for the first time in Greece, in the wider region of Attika and Central Macedonia correspondingly. The core activity of those centers is the collection, the storage and the sorting of WEEE depending on their condition and then their preparation for reuse or treatment.	Link
SHAREPAIR - Digital Support Infrastructure for Citizens in the Repair Economy	Repair	BE NL UK IE DE	Electrical and Electronic Equipment	The project addresses the increasing amount of waste from electrical and electronic equipment (WEEE). The project aims to decrease WEEE from consumer products by scaling up citizen repair	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				initiatives through the use of digital tools: digital tools that stimulate and facilitate citizen repair by collecting repair solutions and making them easily accessible to citizens. The objective is to decrease WEEE by 13,5 T per year in pilot repair cafés and by 175 T per year in the pilot cities. The project's main output will be **an integrated approach to supporting citizen repair**: a digital infrastructure that supports self-repair, repairing together (in repair cafés or repair centres), and repairing with professional support.	
eHUBS - Smart Shared Green Mobility Hubs	Cooperative consumption	NL, BE, DE, UK, FR	e-bikes, e-scooters, e-cars	eHUBS are on-street locations that bring together e-bikes, e-cargo bikes, e-scooters and/or e-cars, offering users a wide range of options to experiment and use in various situations. The idea is to give an high-quality and diverse offer of shared electric mobility services to dissuade citizens from owning private cars, resulting in cleaner, more liveable and pleasant cities. Six partner cities from five different countries will realise and promote eHUBS and pave the way for others to do the same.	Link
PROMPT - Independent testing programme assessing the lifetime of consumer products	Premature obsolescence	Appliances/ various countries across EU	Electrical and Electronic Equipment	The project aims to establish an independent testing programme for premature obsolescence. This programme will support the assessment of the longevity of consumer products when they are put on the market. The testing programme will be established for smartphones, televisions, washing machines and vacuum cleaners.	Link
CIRC4Life - A circular economy approach for lifecycles of products and services	Recycling Reuse	Various	Electrical and electronic products Farming/agri-foods	The Collaborative Recycling/Reuse model will develop a system for stakeholders to interact with each other to facilitate the use/reuse of end-of-life products and reduce waste, and implement the eco-credits awarding scheme to encourage people to recycle/reuse.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
RESYNTEX A new circular economy concept: from textile waste towards chemical and textile industries feedstock	Reuse Recycling	Textiles	Textiles	the RESYNTEX project created a new circular economy model for the textile and chemical industries, by recovering secondary raw materials from unwearable textile waste. The pilot project – a textile recycling plant – which recycles 100 tonnes of waste per year. This pilot installation in Slovenia transforms textile waste into secondary raw materials for the chemical and textile industries, creating circularity and reducing environmental impacts.	Link
URBANREC - New approaches for the valorisation of URBAN bulky waste into high added value RECycled products	Recycling	Various	Bulky household items	URBANREC project aims to develop and implement an eco-innovative and integral bulky waste management system (enhancing prevention, improving logistics and allowing new waste treatments to obtain high added value recycled products) and demonstrate its effectiveness in different regions.	Link
C-SERVEES: Circular economy brings new business models to electrical and electronic sector	Waste management Circular business models	Electronics	Washing machines Laser printers and toner cartridges TV sets Telecom Equipment	the C-SERVEES project has the aim of fostering a circular economy that is more efficient in the use of the resources of the electrical and electronic sector by developing new circular business models. Four kinds of products have been chosen for evaluation of their business. These business models are based on eco-innovative services such as eco-leasing, product customization, better WEEE management, and ICT tools to assist with other circular services. ICT tools are currently being developed thanks to synergies between the circular economy and Industry 4.0.	Link Link
BELT - Boost Energy Label Take up	Information on environmental impacts	Consumer electronics	Various	BELT – Boost Energy Label Take up – is a project funded by EU Horizon 2020 which aims to promote the uptake of more efficient energy-related products. organisations from Italy, Spain, Portugal, Belgium and Slovenia – all members of BEUC – are participating in BELT. During a second stage, consumers groups in Greece, Lithuania,	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				Ireland and Croatia will step up their participation in the project. The project will organise dedicated workshops, events and trainings. The BELT project benefits from multidisciplinary expertise and a wide geographical coverage reaching 20 million European consumers and 5,000 market players.	
INHERIT (INter-sectoral Health and Environment Research for InnovaTion)	Collaborative Economy Information on environmental impacts	Various	Various	INHERIT was a 48-month / 4-year (2016-2019) Horizon 2020 project funded by the European Commission which aimed to stimulate effective policies, practices and innovations that simultaneously restore the environment, whilst promoting health and health equity – in other words, that enable a 'triple-win'. INHERIT has formulated scenarios for a more sustainable future and has designed, implemented and tested intersectoral initiatives to achieve the triple-win.	Link
Private companies					
MaGarantie5ans	Information on lifespan	Consumer Electronics	Various	'MaGarantie5ans' is a French retail platform where consumers can buy from a selection of the most sustainable appliances brands that come with a 5 year warranty included. The website also provides a durability index since 2012 for products based on criteria such as the product's failure rate, availability of spare parts, consumer rating and an expert's assessment. Brands and products are then ranked according to their score and consumers can inform their decision based on it.	Link
Rapha	Repair Information on environmental impacts	Textiles	Apparel	Since 2018 they are using the Higg Index to conduct life cycle assessments to measure the environmental impact of their products. Since 2004, they claim to have repaired over 34,000 garments.	Link
leapp	Reuse Refurbish	Consumer Electronics	Laptops Smartphones	Leap is a company from the Netherlands which refurbishes Apple products and offers a 24 month warranty. The refurbished products receive the	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
			Tablets	Refurbished Quality Mark after they are thoroughly tested to ensure quality.	
Patagonia	Repair Reuse	Textiles	Clothing	Outdoor clothing brand that offers repairs for a reasonable price, designs its clothes so that they are easily repairable by consumers and ensures that repair instructions are easily available (for example on iFixit (see below)) It also has a bring-back programme and a website where consumers can sell their used clothing to other consumers.	Link
Nudie Jeans	Repair	Textiles	Clothing	Swedish jeans company present in various European countries (and other countries) with repair spots	Link
H&M	Repair Cooperative consumption (rent) Reuse/Recycle	Textiles	Clothing	Repair: repair ateliers at some stores in Stockholm, Vienna, London and Paris, where consumers can get their clothes mended or upgraded. Rent: rental service in one of their stores in Stockholm. Reuse/Recycle: clothing collection program at their stores since 2013; clothes that can be worn are sold as second-hand clothes, the others are either transformed into other products or shredded into textile fibres and used to make other materials. Durability: H&M Take care section of their websites provides consumers with tips and instructions related to a good maintenance of fashion products in order to prolong their life.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
Martela	Repair Reuse Recycle	Furniture	Furniture	Office furniture company with a repairment/maintenance and a bring-back programme that ensures that furniture is repaired, resold in outlet stores, or dismantled to be recycled.	Link
Toyota – Remanufacturing initiative	Reuse	Mobility	Automotive products (car parts)	Car parts remanufacturing programme which takes back used parts from our European retailer network. The returned parts are inspected and reconditioned at a remanufacturing centre, with any elements that have worn out being replaced.	Link
Facebook – Market place	Reuse	Various	Various	Online platform (Facebook) to buy and sell second-hand products.	-
Adidas – Take back program	Reuse Recycle	Textiles	Shoes	Product return program whereby used shoes are either donated or recycled, depending on their state.	Link
Hasbro	Recycle (reuse)	-	Toys	Toy and game recycling programme recently implemented in FR and DE. Through the program, consumers can send Hasbro toys and games to TerraCycle (see below), a global product recycling company, who will recycle them into materials to be used in the construction of play spaces, flowerpots, park benches, and other innovative uses	Link
HP	Recycle	Electronic goods	IT products	Recycle/Trade in/Return for cash programme in various European countries.	Link
Hewlett-Packard (HP)	Remanufacture Reuse Cicular economy	Consumer Electronics	Laptops	An HP direct mail campaign currently running in Denmark for the new Elitebook 840 G6 laptop also features the Elitebook 840 from Circular Computing™. Under the headline 'We believe in reincarnation' the mailer explains that the Circular Computing™ Elitebook 840 looks and performs exactly like a new machine.It undergoes five hours of remanufacturing, a complete external recoat, and comes with a full three-year warranty. The	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				Circular Computing Remanufactured CO_2 neutral Enterprise grade laptops are available in: AT, BE, DK, NL, UK & USA (more coming).	
Apple	Recycle	Electronic goods	IT products	Take-back programme (trade in or recycling for free, depending on the state of the product). Apple offers their own certified refurbished products and offer a standard one-year limited warranty with every Apple Certified Refurbished product	Link Link
Fnac	Cooperative consumption Reuse	Electronic goods	IT products	Rental programme for electronic products (e.g. computers, tablets, phones, etc.). The programme does not seem to be conceived for environmental purposes. Fnac-Darty has launched an index to assess the reparability of laptops. The index is calculated based on 12 parameters, which are grouped in 4 areas: 1) Documentation (disassembly instructions, diagnosis support, maintenance tips), 2) Modularity and accessibility (ease of disassembly, modularity of main parts, use of tools), 3) Spare parts (availability, price, standardised parts), 4) Software/firmware (reset to original conditions, compatibility with open source software/firmware, updates). The maximum score for the index, which represent the best repair scenario, is 100. The contribution from each area is proportional (i.e. 25%). The score is then normalised to a 0-10 scale.	Link Link
Darty	Information on lifespan and environmental impact	Consumer Electronics	Various	Retailer Darty (Fnac Darty Group) provides on their website several services to help consumers extend the lifespan of their products such as an after-sales service barometer for products, a reparability index, a range of sustainable products or express repair for products even after the warranty. Products that score well in areas like	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				product reliability, parts availability or failure rate are labelled by Darty as "sustainable choice".	
SeMeubler	Cooperative consumption	Electronic goods	Home appliances	Rental programme for home appliances. The programme does not seem to be conceived for environmental purposes.	Link
IKEA – Furniture rental program	Cooperative consumption	Furniture	Furniture	Furniture rental programme to be launched in 2020	Link
IKEA – Circular Product Design Guide	Reuse	Furniture	Furniture	As one of the commitments to transform the total value chain into a circular business, IKEA is addressing circular product design through a series of product design principles. These are applicable to all products being developed for the 52 markets where IKEA operates its stores, worldwide. The greatest success of the project was confirming that the approach to circular product development is the right one and identifying development areas.	Link
Getaround (formerly Drivy)	Cooperative consumption	Mobility	Automotive products (P2P car sharing)	P2P car-sharing platform (individuals rent their cars) currently present in AT, BE, DE, ES, FR, UK. There are similar platforms in other countries (e.g. SnappCar (H2020-funded), CarAmigo[479])	Link
TerraCycle	Recycle	Various	Various	Waste-management company with headquarters in the US but present in 21 countries (including AT, BE, DE, DK, ES, FR, IE, NL, SE, UK). They are specialised in hard-to-recycle waste and partner up with other companies (e.g. Hasbro). They have several recycling solutions, including a zero-waste solution to facilitate the repurpose of any type of material that is not recyclable through the regular channels, and a new sustainable packaging	Link Link

[479] See http://stars-h2020.eu/wp-content/uploads/2019/06/STARS-D2.1.pdf.

Initiative	Area	Market(s)	Product(s)	Description	Link
				solution (loop). People can also earn points by recycling, redeemable for charitable gifts. TerraCycle also developed a ecolabel. When the logo is present on a product that TerraCycle has manufactured, it means the product was made from waste that would have otherwise gone to a landfill or been incinerated. In addition, TerraCycle accepts its old products back through the same collection programs to start the process over again.	
Inditex	Recycle	Textiles	Apparel	Customers and employees can drop off their used clothing, footwear and accessories at collection points in 2,299 stores in 46 markets, as well as cities and offices across a number of Inditex's main markets, in cooperation with 45 different non profit organizations. By 2020, Inditex pledged that 100% of their stores in the world will have an active garment collection scheme.	Link
Zara	Recycling Information regarding environmental impacts	Textiles	Apparel	Zara is part of Inditex. They created a special collection "Join Life" which is comprised of sustainable products and promoted as such in stores. Under the "join life" label, they classify all garments produced using processes and raw materials that help to reduce Zara's environmental impact, such as organic cotton, tencel™ or recycled polyester. Zara claims they are developing programmes that promote recycling at all stages of a garment's life cycle: using recycled raw materials, waste management programmes in stores and warehouses and even used clothes collection programmes.	Link
Esprit	Repair Recycling	Textiles	Apparel	36% of Esprit stores provide repair services and their goal is to establish a repair service in al retail store by July 2021. Esprit claims they established	Link 1 Link 2

Initiative	Area	Market(s)	Product(s)	Description	Link
				a garment refinishing procedure for all E-com channel goods, meaning that are they are working with their e-commerce partner to set up a process for repairing minor errors so that Esprit can return these products to the stock. This would reclaim around 15,000 garments per year. By 2020, Esprit pledged to increase the amount of garments resold by 40.000 kg. They have 11 outlet stores in Germany and 21 in Europe where they resell unsold goods or returned products by applying any required repairs or touch-ups.	
Packmee	Reuse	Textiles	Clothing Shoes Household objects	Packmee ("the clothing donation in a carton") is a project of Texaid. Texaid is a commercial company for the recycling of used clothing, and one of the largest organisations in Europe for the collection, sorting and recycling of used textiles. was launched on the German market. The German Red Cross is a partner and receives 50 percent of the revenue less postage and logistics costs. Other partners are the logistics companies DHL and Hermes as well as the textile company Esprit. With the system, clothing, shoes and household textiles can be donated free of charge by post. PACKMEE parcels can be sent by people from the comfort of their home or by bringing it to one of around 29,000 parcel acceptance points of DHL. Packmee is present in many European countries.	Link Link 2
Philips	Repair Reuse Information on environmental impact	Appliances	Appliances	Philips renews products returned by their customers to give them a second life and offer 2 year guarantee for refurbished Philips products. Prices for refurbished Philips products are at least 10% lower than the recommended retail price for the equivalent new product.	Link Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				Philips also uses since 1994 the Philips Green Logo. Philips products that have a Green logo offer customers, users and society an environmental improvement of at least 10% in one or more of the Philips Green Focal Areas: Energy efficiency; Packaging; Hazardous substances; Weight; Recycling and disposal; Lifetime reliability	
Veldeman Bedding	Repair Reuse	Furniture	Mattresses	During their life span, beds and mattresses can be upgraded and modulated as much as the customer wishes, while keeping the materials reusable, sustainable and recyclable. At the end of their lifetime, every fragment of the beds remains valuable and can be repurposed.	Link
Stolab	Recycling	Furniture	Chairs	'From Waste to Chair' - Lilla Snåland is an upcycling stool, entirely created and designed on the concept of using waste that otherwise would be incinerated for energy production. Lilla Snåland is made using 14 pieces of waste left over from cutting the ends off the Lilla Åland seat before it is turned.	Link
TKMaxx	Reuse	Textiles	Clothing Shoes	Since 2004, UK customers and associates have recycled over 1.6 million bags of clothing through TKMaxx's in store Give Up Clothes For Good charitable campaign. This equates to over 8000 tonnes of clothing or 180,000 tonnes of saved carbon emissions.	Link
Carrefour	Recycling	Retail	Food	When it is impossible to remove packaging or reuse it, Carrefour wishes to guarantee the effective recyclability or compostability of product packaging, in line with national recycling processes. Their goal: 100% reusable, recyclable or compostable packaging by 2025 for Carrefour brands.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
Carrefour Eco-Planete	Ecolabel	Retail	Food	The Group has developed the Carrefour Agir Éco Planète range, which comprises products that are certified (European Ecolabel, FSC, MSC and so on) or which carry an external support. In 2007, the HPC range was extended to include 13 eco-label products marketed in four countries: France, Belgium, Spain and Greece. The non-food sector also offers Agir Éco Planète products, including a fertilizer range suitable for use in organic cultivation (15 products) and a window cleaner produced using natural ingredient.	Link
ALDI Group	Information on environmental characteristics Reuse Recycle	Retail	Various	ALDI rolled out in 2019 in Germany reusable nets for fruit and vegetables. By end 2021, they aim to stop using disposable plastic carrier bags and introduce alternatives that can be reused, repaired and/or washable in all stores. ALDI created a first pilot project in 2019 together with one of our suppliers in the footwear product group and an external service provider. The aim of this project was the material evaluation of a selected product (an ethylene vinyl acetate copolymer mono substance shoe) with regard to product recyclability. ALDI Netherlands worked for example on an rPET women's clothing collection in 2019. This fashion line was made from recycled polyester, with a substantial proportion from PET bottles, in collaboration with the Trashcode label. A total of 536,914 bottles were recycled for this fashion collection. This method of production uses 70% less energy, 75% less CO2 and 86% less water compared to traditional polyester. In Germany, duvets and pillows made of rPET have been on sale for some time.	Link Link
(Ceconomy) MediaMarkt Saturn	Repair Recycle	Electronics	Appliances Electronics	The "SmartBars" offer a wide range of innovative services – from display protection and extended	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				warranties to on-the-spot smartphone repair. These services lengthen the products' lifecycle, thus making an important contribution to conserving resources. A "SmartBar" has now been set up in every MediaMarkt and Saturn store. In the 2018/19 financial year, a total of over 700,000 repairs were carried out at the "SmartBars" (2017/18: 440,000). In Germany, a technical and repair service at customers' homes is provided via Deutsche Technikberatung (DTB) and the RTS Service Group. Internationally, CECONOMY works with various different service partners. CECONOMY also offers the possibility to rent appliances or share them with others.	
Dixons Carphone	Repair Recycle	Electronics	Appliances Electronics	In 2018, as a group Dixons Carphone claim they collected approximately 88,105 WEEE tonnes. All recyclables from their UK stores are taken to their national recycling facility. Each of their centres are also partnered with a reuse charity or an organisation, through which they repair and sell selected WEEE items. Each year, Elkjøp stores across the Nordic region collect over 27,000 tonnes of electronic waste from customers. The waste then gets collected by local recycling partners and is re-introduced into their circular economy. Any display or slightly damaged products are sold at a discount; damaged or inoperable electronic products are recycled.	Link
Waste2Wear	Recycle	Textiles	Clothing	Company producing textiles out of recycled plastic waste - polyester fabrics made from recycled plastic waste that is saved from landfills and partly retrieved from the ocean. With the Waste2Wear® Blockchain technology and certifications in every step of the value chain, they provide full transparency and traceability about the post-consumer origin of their products and whether they were made in a responsible way. They	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				collaborate with a number of fashion brands to which they sell this new type of textiles.	
Worldwatchers - Klimakompass	Information on Environmental characteristics	Various	Various	worldwatchers is a climate company that provides objectivity, transparency and measurability for both consumers and producers with regard to CO2 and resource consumption. They created Klimakompass which is a versatile climate calculator for the mobile phone. The app offers a number of challenges that users can undertake. It starts with simple things like " living three days plastic-free " to defrosting the freezer. These challenges are quite instructive and try to gamify the topic of climate protection. It is also a scanner app with which you can scan the barcode of products and which then (apparently) outputs the CO2 emissions of these products.	Link Link
MOOT	Reuse	Textiles	T-shirts	German fashion label MOOT makes new T-shirts from bed linen that nobody wants anymore. Hence the name: MOOT stands for "made out of trash". The upcycling process gives bed linen a new life and saves the CO2 emissions that would result from a new T-shirt. In addition, the label ensures that production is as sustainable and fair as possible.	Link Link
RePack	Reuse	Mail order	Packaging	RePack is a reusable and returnable packaging service. RePack is reuse as a service. Its fee covers the bag and a global, empty packaging return. Returning an empty RePack is free of charge, anywhere in the world. The returnable packages are designed to fold into letter size when empty and returned to a postbox, anywhere in the world. Among brands that have upgraded to	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				reusable delivery packaging they mention Ganni, Makia, Weekday and Zalando as collaborators. Three mail order companies Tchibo, Otto and Avocadostore want to test in a three-year research project how reusable mailing bags prove themselves in practice. They want to prepare their experiences and results and make them available to the entire e-commerce industry so that sustainable solutions can be established more quickly in the mail order business.	
SPAIN project	Reuse Recycling	Textiles	Surgical masks	Bioquochem coordinates the SPAIN project (Neutral Industrial Antiseptic Pressurized System) for the recycling of surgical masks. The company, in alliance with the Ministry of Science and Innovation of the Principality of Asturias and in collaboration with the companies Olmar and Therman , have begun testing for the recycling of half a million daily masks to face the COVID-19 pandemic.	Link
Too Good to Go	Cooperative Consumption	Food	Food	Too good to Go is inspiring and empowering consumers and businesses alike to take action against food waste. The app, connects users with unsold food from a variety of shops and restaurants all over Europe. The food is perfectly edible food that stores and restaurants have to throw out at the end of the day. This can range from bakeries that need to bake fresh everyday to supermarkets that have groceries that were not sold and restaurants that did not sell all the food they had catered for that day. They are present in 15 countries and have 50921 partners and 23 mil installs.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
Infinitdenim or Back to Eco	Recycling Repair Refurbishment	Textiles	Apparel	Infinitdenim is a sustainable fashion brand made in Barcelona, Spain. The whole project started under the name of Back to Eco in 2016. The company is specialised in the recycling of second-hand denim, rescued from its own city. Pieces are cut out of this post-consumer material and fashioned into a variety of items. Then scraps of this production are used for its very sustainable fabric InfinitDenim. Back to Eco also organises workshops and conferences to share its own vision of the circular economy in the textile sector.	Link Link
PCDT	Repair	Consumer Electronics	Appliances	The Agence française des Pièces Détachées (PCDT)'s motto is "Réparez, ne jetez plus. Tous mobilisés pour la planète" (Repair, do not throw away: let us all act for the planet). Sometimes home appliances are out of order just because of a tiny spare part, which is broken and impossible to find. PCDT goes further in the sustainable development process and buys used spare parts for home appliances from customers whose appliances cannot be repaired. Its website then sells these spare parts - with no profit margin (price paid to buy the spare part + postage + VAT) - to other consumers, who will be able to use them to repair their own appliances at a lower cost.	Link Link
Veolia and Jacobs Douwe Egberts	Reuse	Food Industry	Coffee	In Joure (NL) the Jacobs Douwe Egberts (JDE) plant uses spent coffee grounds as a bio-fuel to produce the steam needed for its production process. Roasting coffee beans produces a large amount of residue, which was previously sent to landfill. Nowadays, this residue is kept and can be used to generate steam for operating the plant.	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
Jerónimo Martins	Recycle	Cleaning products	Packaging	In 2019, Biedronka (Poland) and Pingo Doce (Portugal) rolled out a new washing up liquid under the Kraft and Ultra Pro brands. Each bottle is made with 100% recycled PET, 11% of which is from marine litter, and 89% is post-consumption recycled plastic. The litter is collected by Waste Free Oceans through partnerships with fishers who do so using nets. The bottle is also 100% recyclable.	Link Link
cleanSpot (EYM Apps)	Recycle	Various	Various	The cleanSpot application provides users with an easy way to search for recycling centres and specialised recycling containers where they can drop off their non conventional urban waste for correct recycling. Currently almost 65.000 recycling spots have been located throughout Spain The cleanSpot developers are planning to expand to other countries with localised versions of the same app.	Link
Donar - Furniture from recycled felt	Recycle	Furniture	Chairs	Donar follows the Cradle-to-Cradle model with design thinking (double-diamond) principles and focusing on design management. Rather than being limited to aesthetics, the company focuses on products' social impact. Donar's design is a response to the overwhelming growth of consumerism. Products that show best practice are NicoLess, ChatLoop, and Collodi, all made from recycled felt (PES), using trash as an industrial material of the future. The Donar process keeps in mind the objective of the EU's 7th Environment Action Programme and the UN Sustainable Development Goals.The company received the Green Product Award in 2018 and the Circular Design of the Year Award in 2019.	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
Swappis	Reuse	Textiles	Apparel	Swappis is a clothing retail store in central Budapest that attempts to counteract the linear approach of the fashion industry by introducing a business model that focuses on circularity and the reuse of second-hand clothes. Their membership loyalty mechanism is designed to build a strong relationship with customers by encouraging them to choose sustainable options.	Link Link
Refurbed	Refurbish Reuse	Consumer electronics	Phones Laptops Tablets	Refurbed is an online marketplace for refurbished electronics, like second-hand phones, laptops and tablets. Refurbed products look like new, are 40% cheaper and use 70% less CO2 than the equivalent new product. Through rigorous quality controls, minimum 1-year warranty and a 30-day test phase, Refurbed ensures the high quality of its products. It is Refurbed's mission to make refurbished electronics the norm and to bring a refurbished product into every household in Europe. Refurbed is also present in Germany, Italy and Poland.	Link Link
Groupe SEB (Tefal, Krups, Rowenta, Moulinex and others)	Repair	Consumer electronics	Small appliances	Groupe SEB is a manufacturer in the small domestic appliances environment that offers the commitment to the reparability of its products for 10 years. On request, for any of the brands the Groupe SEB equipment replacement parts are delivered within 24 to 48 hours for the repair. They say they can troubleshoot a failure which may occur on one of the parts of the product with the brands, beyond the standard guarantee period. They created a local network of more than 6500 authorized repair professionals worldwide. The consumer can locate the authorized repairer nearest their home via the brand websites. They	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				use a logo mentioning "Product repairable 10 years"	
UrbanCyclers	Reuse Circular Economy Collaborative consumption	Mobility	Bicycles	UrbanCyclers is an urban cycling app (Android/iOS) that aims to promote sustainable mobility by supporting and motivating behavioural change through motivation and incentives, information and navigation, communication and engagement. The app includes a cycling route-planner (for Prague and several other cities), turn-by-turn navigation that allows for combining biking with public transport and other bike-sharing systems (real-time availability).	Link
Sapere Coop	Information on environmental impacts	Various	Various	Consumer co-operatives are committed to educating consumers towards a conscious and sustainable consumption. Sapere Coop was established in 1980 by Coop Italy and is a nationwide consumer education project designed for teachers, students at all levels of education, and families. Through free interactive resources, such as workshops, exhibitions and editorial materials, Sapere Coop provides useful tools that enable children and young adults to elaborate a stand-alone and original point of view on consumer choices and patterns. Sapere Coop's educational materials are tailored to fit with the Italian school program.	Link
NGO and other organisations					
Seal Clarity - Siegelklarheit.de	Information on environmental impacts Greenwashing	Various	Various	Siegelklarheit.de is an initiative of the German federal government. The portal emerged from a project that was initiated and financed by the Federal Ministry for Economic Cooperation and Development (BMZ). The Gesellschaft für Internationale Zusammenarbeit (GIZ), which provides the project secretariat, was commissioned with the	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				implementation. The aim of the project is to strengthen sustainable action by helping consumers, governments and companies to better understand environmental and social labels. By comparing the seals, the standard-setting organizations also have an incentive to work continuously on improving their systems.	
Stadtreinigung Hamburg – Shopping Guide	Recycling Information on environmental impacts	Various	Various	Informative booklet that presents different products and packaging solutions by using a simple traffic light system. It shows whether packaging can be recycled without any problems (green light), whether it can only be recycled with some effort or in part (yellow light) or whether it cannot be recycled at all with reasonable financial and technical effort (red light).	Link Link
The Higg Index	Information on environmental impacts Industry Standards	Textiles	Apparel	the Higg Index is a suite of tools developed by the Sustainable Apparel Coalition that enables brands, retailers, and facilities of all sizes to accurately measure and score a company or product's sustainability performance.	Link
EDANA Environmental Claims Guidelines	Greenwashing Industry Standards	Textiles	Textiles	EDANA is the leading global association and voice of the nonwovens and related industries. The EDANA Environmental Claims Guidelines represent the industry's commitment to apply the highest standards of responsibility and good business practice. By adhering to these guidelines, member "companies commit to ensure environmental claims comply with all relevant regulatory frameworks, are sincere, truthful and not vague or misleading, allow customers and consumers to make informed choice, promote fair competition and aim to prevent claims that may be unfair or misleading"	Link
True Twins – Digital product passport				App that provides consumers with information on the characteristics of a products using blockchain technology. The TrueTwins app helps consumers	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				make informed choices, satisfying the trend for conscious consumerism. By doing so, it also allows brands to document quality, durability and sustainability throughout the lifecycle of individual products. Brands can create a direct link between a physical product and its digital twin, making the service an immutable digital identity card for high value goods. The link is created by scanning a QR code on the product or via NFC connectivity.	
LONGTIME®	Durability Obsolescence Reparability	Household appliances Electronics Tools Leisure equipment Professional equipment.	Not specified	A certification scheme that aims to inform consumers through label regarding the durability of products by considering 3 main criteria: robust design, reparability, warranty conditions and after-sales service. The label is awarded after extensive and rigorous external audit. LONGTIME®, by Ethikis, is a European independent label for consumers. it was developed to encourage the manufacturing and consumption of more sustainable products. LONGTIME® label is: 41 criteria focusing on end-to-end approach of durability; an innovative solution providing durability information to consumers; applicable to all manufactured goods thanks to an innovative process, allowing identification of product specificities; granted after rigorous audit conducted by third-party certification bodies.	Link Link Link
HTV-Life®	Obsolescence	Various	Not specified	A certification scheme that aims to ensure consumers that products with the HTV-Life® label	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				do not contain measures for the intentional reduction of product lifetime (planned obsolescence) and thus are durable. The label is awarded after rigorous and independent testing	
iFixit	Repair	Electronic goods Furniture Other	ICT products, small and large household appliances, toys, furniture	Wiki-based website with repair guides for a wide range of products. It also sells parts and tools. They have published repair manuals for every Apple product made in the last two decades. A 0-to-10 score is assigned by iFixit12 to different categories of devices (e.g. laptops, smartphones), where a score of ten represents the easiest product to repair on the market. The scoring system considers indicators such as: ease of disassembly, availability of service manuals, types of fasteners used, type and number of required tools, possibility to upgradable the device, and modular design.	Link Link (page 14)
The Restart Project	Repair	Electronic goods	Not specified	UK-based social enterprise which organises repair parties in the UK and other countries. They created the "Fixometer" – a repository behind Restarters.net, a growing community of community fixers and organisers. Using the Fixometer tool, members are building a repair knowledge base and logging fixes occurring at the events they run, capturing the environmental and social impact of their work. The Fixometer produces stats on the impact of the volunteers work, in ways that are understandable and engaging. The Fixometer has been in use for the last 5 years and is now used by more than 300 repair groups.	Link Link
Repair Café	Repair	Various	Various	Originally mplemented in the Netherlands, it is now a worldwide movement.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				Repair Cafés are places where people can meet to repair broken things together. In a Repair Café there are tools and materials and also expert volunteers, with repair skills.	
OXFAM second-hand shops	Reuse Repair	Textiles Electronic goods Furniture	Clothing, home textiles and linen Toys, ICT products Furniture	Oxfam has second-hand shops in many countries. They also have a blog with tips on how to maintain and repair products such as clothes	Link 1 Link 2
Emmaus Group	Repair Reuse	Electronic goods Clothes	Large household appliances, ICT products, clothes, etc	Federation of local groups (not-for-profit) in 17 European countries involved in a wide array of activities, including collecting and repairing used goods	Link 1 Link 2
Fairphone	Repair Waste reduction	Electronic goods	Smartphone	Modular phone built to ensure reparability. The smartphone is designed for longevity, easy repair, and modular upgrades and they claim that the device and the software could be supported for over 5 years. The company also tries to avoid shipping unnecessary accessories (e.g. USB cable, headphones). A lifecycle assessment was recently carried by a research institute and concluded that the use of a smartphone for five to seven years can reduce CO2 emissions per year by 28-40%.	Link Link
Textile Exchange	Industry standards	Textiles	Textiles	Textile Exchange is a global non-profit that develops, manages, and promotes a suite of leading industry standards, as well as collects and publishes critical industry data and insights that enable brands and retailers to measure, manage, and track their use of preferred fibre and materials. Textile Exchange identifies and shares best practices regarding farming, materials, processing, traceability, and product end-of-life in	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				order to create positive impacts on water, soil, air, animals, and the human population created around the world by the textile industry. Members include 210 companies and organizations from more than 25 countries. Textile Exchange Standards include the Organic Cotton Standard, Recycled Claim Standard, Responsible Down Standard, Global Recycled Standard and the Content Claim Standard.	
Transparency Pledge	Industry standards	Textiles	Textiles	The objective of the Transparency Pledge is to help the garment industry reach a common minimum standard for supply chain disclosures by getting companies to publish standardized information on all factories in the manufacturing phase of their supply chains. The civil society coalition that developed the Pledge based it on published factory lists of leading apparel companies and developed a set of minimum supply chain disclosure standards. These build on good practices in the industry	Link
Clevercare.info	Information on durability Standard label	Textiles	Apparel	Ginetex (The international Association for textile care labelling) initiative providing additional information regarding textile care in order to extend life of products. Clevercare.info is an internationally applicable logo for sustainable care. Consumers are given information to help them reduce the environmental impact of caring for textile. The logo is used on clothing labels by major clothing manufacturers and retailers.	Link
The WEEE Forum	Recycle Reuse	Electronic goods	Electronics and electrical equipment	The WEEE Forum is the world's largest multi-national centre of competence as regards operational know-how concerning the management of waste electrical and electronic equipment (or 'WEEE', for short). It is a not-for-profit association of 40 WEEE producer	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				responsibility organisations across the world. Since their foundation, the producer responsibility organisations of the WEEE Forum have collected, de-polluted and recycled or sent for preparation for re-use 21 million tonnes of WEEE. The members of the WEEE Forum are representative of the whole spectrum of manufacturing industry. Two thirds of the members are market leaders.	
World Fair Trade Organization – Join the Business Revolution	Information on social impact	Various	Various	Set of principles and guidelines for developing sustainable business models that put people and planet first.	Link
Fashion Transparency Index	Information on environmental and social impacts	Textiles	Apparel	Tool developed by Fashion Revolution and Ethical Consumer which ranks companies according to their level of transparency based on a questionnaire and publicly available information about supply chain issues, social and environmental policies, practices and impacts. Transparency Index is a research and communication tool that surveys more than 250 of the world's largest fashion brands and retailers.	Link
CRNI	Reuse Repair	Various	Various	CRNI is the only community reuse and recycling network in Ireland and develops resource efficiency and circular economy initiatives at both local and national levels. CRNI collaborates with the Department of Agriculture, Environment and Rural Affairs (DAERA) to establish a pilot reuse and repair network for Northern Ireland which will run from May 2020 until March 2021.	Link
EcoTopTen	Information on environmental characteristics	Various	Various	EcoTopTen is an Internet platform of the Öko-Institut, on which consumers and procurers can find recommendations for top ecological products in the ten product clusters of *lighting, heating, electricity, large household appliances, small household appliances, TVs, computers / offices, mobility, food* and *textiles* . For comparison, typical products are presented that do not meet	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				the EcoTopTen criteria. In this way, EcoTopTen best product lists can facilitate the purchase decision for all-round good products.	
EtaBeta (Lavanda)	Reuse Recycling	Sanitary products	Diapers	EtaBeta are a non-profit social cooperative from Italy. They have created Lavanda which is a is a washing and rental service for ecological, washable and reusable diapers. It is aimed at public administrations, organizations and cooperatives that manage nursery schools but has the objective of gradually opening up to families and offering them the service of rental washing.	Link
Carpet Recycling Europe	Recycling	Textiles	Carpets	The carpet producers, represented by ECRA (European Carpet and Rug Association) set up an independent legal body, CRE (Carpet Recycling Europe) in 2018, which manages circularity and sustainability challenges of the EU carpet sector. The project will set up a statistics based information system which will specifically target recycling related data. Project 2020" will, for the first time, integrate circular economic and sustainability aspects, such as ease of installation, design for recycling and end of life performance, into the ongoing CEN standardisation work.	Link
Ethical Consumer	Information about environmental characteristics	Various	Various	They developed shopping guides - an ethical rating system to give consumers the information they need, based on detailed research of over 40,000 companies, brands and products. The ratings cover around 300 topics in 19 areas in 5 main categories and provide the tools and resources consumers need to make informed and effective choices. They rate among others: product sustainability, environmental reporting, climate change, animal testing, pollution & toxics, etc.	Link
Ressources (Federation des entreprises sociales et circulaires)	Labels for recyclability reuse	Various	Various	The Rec'Up label defines organizational criteria which guarantee the quality of the products and services offered by social economy enterprises	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
	durability			active in the collection, sorting, reuse, recovery and recycling of goods. It currently comprises 51 labelled sites and 18 labelled members. The Solid'R label guarantees the environmental, social and economic added value of donations. The Solid'R label identifies Belgian players in the social economy who collect second-hand goods and have chosen to highlight the ethical principles to which they conform. The electroREV label ensures the quality of household appliances upgraded by social economy operators in Wallonia and Brussels. The electroREV reuse centers respect a whole series of common principles (traceability, staff training, quality and safety controls, etc.). ElectroREV labeled equipment is guaranteed for 1 year and resold on average at a third of the price of the new equivalent.	
Climatop	Ecolabel	Various	Various Appliances Cleaning Products Cosmetics Electronics, etc	The aim of climatop is to label the most climate friendly products and services (best-in-class). Similar products of a product family (functional unit) are compared with respect to their environmental emissions. Products that cause CO2-eq emissions that are generally 20% lower, receive the label. Only products that have an environmental balance, which is at least equal or better than the one of the non-successful competitors, can be labelled. Independent organizations calculate life cycle assessments (LCA) of the products according to the standard ISO 14040. The label is valid for two years.	Link
Cradle to Cradle Certified(CM) Products Program	Ecolabel	Various	Various Appliances Cleaning Products Cosmetics	The Cradle to Cradle Certified(CM) Products Program provides a company with a means to demonstrate efforts in eco-intelligent design. Cradle to Cradle Certification is a third-party sustainability label that requires achievement across multiple attributes:	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
			Electronics Furniture Textiles Etc.	use materials that are safe for human health and the environment through all use phases product and system design for material reutilization, such as recycling or composting use of renewable energy efficient use of water, and maximum water quality associated with production company strategies for social responsibility. Cradle to Cradle certification is a four-tiered approach consisting of Basic, Silver, Gold, and Platinum levels. This certification program applies to materials, sub-assemblies and finished products. Cradle to Cradle CertifiedCM is a certification mark sublicensed by the Cradle to Cradle Products Innovation Institute.	
EPEAT	Ecolabel	Electronics	Electronics	EPEAT is a global rating system for greener electronics. Using EPEAT ("Electronic Product Environmental Assessment Tool"), purchasers in 43 countries can evaluate, compare and select electronics based on environmental attributes. EPEAT currently includes categories for PCs and Displays, Televisions, and Imaging Equipment (printers, copiers, scanners, multifunction devices, fax machines and mailing machines). Categories for Servers and Mobile Phones are in development. EPEAT rates products on a lifecycle basis. The system addresses the elimination of toxic substances, the use of recycled and recyclable materials, product design for recycling, product longevity, energy efficiency, corporate performance and packaging attributes. Products	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				are rated Gold, Silver or Bronze depending upon the number of environmental criteria they meet.	
European Computer Manufacturers Association ECMA: TR/70	Ecolabel	Electronics	Electronics	ECMA's TR/70 voluntary product declaration standard identifies and defines the environmental attributes related to ICT (Information and Communication Technology) and CE (Consumer Electronics) products, during their entire life cycle, from conception to end-of-life treatment. The product does not have to comply to fixed requirements, rather the declaration reports the product's performance.	Link
FairWertung - the German Fair Recycling Federation	Ecolabel	Textiles Waste management & Recycling	Textiles	is a network of non-profit organisations and social enterprises (many of them church-related) that comply with criteria laid down by FairWertung for a fair collection and marketing of second-hand clothes. FairWertung also has its own label which can be identified easily. Organisations committing themselves to fulfilling these criteria by a contract are permitted to use the FairWertung label. Our negotiated agreements include: to promote ethical standards and transparency in the collection and marketing of second-hand clothes to make sure that all laws, customs and taxes are respected when second-hand clothes are exported	Link
On-Pack Recycling Label	Ecolabel	Recycling	Packaging	The On-Pack Recycling Label (OPRL) scheme (http://www.onpackrecyclinglabel.org.uk//) operates in the UK to provide a standard consumer recycling label, which is simple, consistent, evidence led and provides sufficient	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				information to make it easy for consumers to recycle more packaging, more often. Over 145 brands and retailers are using the labels on over 75,000 product lines; the cornerstone of the label - the Recycle Now swoosh - is recognised by over two thirds of British consumers. The label has been endorsed by the four UK Governments, is cited as best practice in DEFRA's Green Claims Code and is recognised as the industry standard recycling label on the Government's Direct.gov website.	
Holy - Wood	Recycle Reuse	Furniture	Furniture	Created in 2018 in Belgium, Holy-wood is an association of craftsmen who create designer furniture with locally recovered wood in an ethical and holistic approach. Holy-wood ensures the quality of creations from the deposit, through design, to marketing and its customers (companies, offices, commercial spaces, cultural spaces). A wide range of furniture is offered: tables, desks, chairs, benches, kitchen furniture, shop furniture, bars, counters, etc.	Link Link
AIMPLAS	Recycle	Mobility	Vehicles	AIMPLAS, the Plastics Technology Centre, is coordinating the LIFE CIRC-ELV project with the aim of creating a new, technically and economically viable network in Europe where centres handling end-of-life vehicles can separate parts such as fuel tanks and bumpers made of materials with high levels of recycling content, including high-density polyethylene and polypropylene.	Link
HOP – Halte a l'obsolescence programee	Obsolescence	Various	Various	NGO advocating against planned obsolescence. They regularly investigate products to disclose good and worst practices and to reveal possible	Link Link

Initiative	Area	Market(s)	Product(s)	Description	Link
				cases of planned obsolescence. At the end of 2017, HOP files complaints for planned obsolescence in France against Epson and Apple.	
COOLPRODUCTS FOR A COOL PLANET	Ecodesign Energy labelling	Various	Various	are a coalition of European NGOs working to ensure that ecodesign and energy labelling truly work for Europeans and the environment. Led by the European Environmental Bureau and ECOS at a Brussels level, the campaign is fought at member state level by several specialists.	Link
Right to repair	Repair	Various	Various	Right to repair are a coalition of European organizations active around the cause of repair. Steering Group members are ECOS, EEB, IFIXIT, RunderTisch Reparatur and Restart.	Link
Sustainable Apparel Coalition	Information on environmental impact	Textiles	Apparel and footwear	The Sustainable Apparel Coalition is the apparel, footwear, and textile industry's leading alliance for sustainable production. The Coalition develops the Higg Index, a suite of tools that standardizes value chain sustainability measurement for all industry participants. It is a suite of tools that enables brands, retailers, and facilities of all sizes — at every stage in their sustainability journey — to accurately measure and score a company or product's sustainability performance.	Link
WRAP	Information on environmental impact	Textiles Food Plastics	Various	WRAP works with governments, businesses and communities to deliver practical solutions to improve resource efficiency. They provide information, tools and practical advice that help governments, businesses and consumers to act. Their report, Switched On to Value allegedly identified £1 billion of unused electronics in UK homes and demonstrated that extending the life of electrical products would reduce returns, saving businesses £400 million a year.	Link

Initiative	Area	Market(s)	Product(s)	Description	Link
World Apparel and Footwear Life Cycle Assessment Database (WALDB)	Information on environmental impact	Textiles Food	Various	was founded by Quantis (Zurich) together with a pre-competitive consortium leading organizations and companies from the apparel and footwear sector to solve the data scarcity and to deliver robust data for environmental impact assessment and footprinting. Life Cycle Assessments provide a comprehensive and holistic way to assess environmental impacts over the full value chain;	Link
Test-Achat Eco&Efficient logo	Information on environmental impact	Various	Various	The logo was developed by the Belgian consumer association Test Achat and it is applied to products that respect the environment and has obtained a good overall score on the criteria established by Test Achat experts.	Link
Commentreparer.com	Repair	Consumer Electronics	Various	CommentReparer.com is an online community dedicated to the repair of household appliances. Apparently, the site receives 20,000 visitors every day and has more than 15,000 fans on Facebook. The site aims to make repairs accessible to everyone by creating a platform for sharing the knowledge between beginners and expert repairers.	Link
Produitsdurables.fr	Information on Lifespan	Consumer Electronics Mobility Textiles	Various	Produitdurables.fr is a platform that is run by association HOP (Halte à l'obsolescence programmée) and platform Commentreparer.com, where consumers can find information on prolonging the lifespan of their electronics. Consumers can report products that failed due to planned obsolescence or consult the scores that have been granted to products by the HOP association based on visitors' opinions on a product's after-sales service, reparability or reliability and based on expert opinions	Link

Annex 12. Results of the sensitivity analysis of the MCA

In this annex we provide the results of the sensitivity analysis of the MCA for sub-problem 1.3. While the results of the sensitivity analysis of the MCA for the other problems are provided in the main report, the size of the results for sub-problem 1.3 required us to include it in annex and not in the main report.

Figure A268. Sensitivity analysis: sub-problem 1.3

Legend:

- Option 0 – baseline.
- Option A - measure 1.3.1: Provision of updated, user-friendly repair and maintenance manuals to consumers.
- Option B - measure 1.3.2: Provision of information about which spare parts are available and until when.
- Option C - measure 1.3.3: Information about availability of repair services.
- Option D - measure 1.3.4: Reparability Scoring Index.
- Option E - the European Commission, DG Justice and Consumers identified a fifth option after the conclusion of the research and consultation stages of the study – Provision of Repair Scoring Index, or other relevant repair information on a where applicable/available basis.

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0ABCDE	123	85	115	129	134	140	119	154
A0BCDE	152	109	148	154	157	160	154	172
B0ACDE	157	115	155	158	159	160	159	172
0BACDE	122	87	118	124	127	130	118	142
AB0CDE	133	96	130	136	138	140	131	152
BA0CDE	127	93	125	128	129	130	124	140
BAC0DE	150	111	150	150	150	150	149	160

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
ABC0DE	152	109	148	154	157	160	150	172
CBA0DE	103	74	100	106	108	110	103	118
BCA0DE	162	120	163	161	161	160	162	172
ACB0DE	167	126	170	164	162	160	168	172
CAB0DE	110	78	105	113	117	120	110	130
C0BADE	98	69	93	102	106	110	97	120
0CBADE	113	85	115	112	111	110	104	124
BC0ADE	157	115	155	158	159	160	156	174
CB0ADE	115	83	113	117	118	120	116	132
0BCADE	138	102	138	139	139	140	134	156
B0CADE	148	113	153	146	143	140	145	154
A0CBDE	150	111	150	150	150	150	144	164
0ACBDE	145	106	143	147	148	150	138	166
CA0BDE	117	81	110	121	126	130	115	142
AC0BDE	163	119	160	166	168	170	161	184
0CABDE	122	87	118	124	127	130	110	146
C0ABDE	107	70	95	114	122	130	103	142
D0ABCE	133	96	130	136	138	140	136	150
0DABCE	132	98	133	131	131	130	124	142
AD0BCE	155	117	158	153	152	150	155	164
DA0BCE	143	107	145	142	141	140	146	148
0ADBCE	132	98	133	131	131	130	125	144
A0DBCE	155	117	158	153	152	150	153	160

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
A0BDCE	138	102	138	139	139	140	142	150
0ABDCE	110	78	105	113	117	120	107	132
BA0DCE	125	94	128	123	122	120	130	126
AB0DCE	132	98	133	131	131	130	137	138
0BADCE	102	76	103	101	101	100	102	110
B0ADCE	137	104	140	134	132	130	143	140
BDA0CE	148	113	153	146	143	140	141	152
DBA0CE	113	85	115	112	111	110	111	116
ABD0CE	138	102	138	139	139	140	131	154
BAD0CE	130	100	135	127	123	120	125	132
DAB0CE	125	94	128	123	122	120	123	128
ADB0CE	142	109	148	138	134	130	136	142
0DBACE	125	94	128	123	122	120	118	130
D0BACE	132	98	133	131	131	130	135	138
B0DACE	165	128	173	160	155	150	164	160
0BDACE	143	107	145	142	141	140	135	154
DB0ACE	143	107	145	142	141	140	146	148
BD0ACE	162	120	163	161	161	160	160	174
CD0ABE	90	56	75	100	110	120	91	130
DC0ABE	107	70	95	114	122	130	115	136
0CDABE	105	72	98	110	115	120	96	132
C0DABE	100	67	90	107	113	120	98	128
D0CABE	117	81	110	121	126	130	117	140

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0DCABE	105	72	98	110	115	120	106	130
0DACBE	138	102	138	139	139	140	133	152
D0ACBE	140	100	135	143	147	150	145	160
A0DCBE	133	96	130	136	138	140	140	148
0ADCBE	110	78	105	113	117	120	112	132
DA0CBE	127	93	125	128	129	130	126	138
AD0CBE	138	102	138	139	139	140	136	154
AC0DBE	152	109	148	154	157	160	150	170
CA0DBE	105	72	98	110	115	120	104	128
0ACDBE	123	85	115	129	134	140	119	152
A0CDBE	128	91	123	132	136	140	125	150
C0ADBE	100	67	90	107	113	120	98	130
0CADBE	115	83	113	117	118	120	105	134
DCA0BE	117	81	110	121	126	130	127	136
CDA0BE	100	67	90	107	113	120	101	128
ADC0BE	128	91	123	132	136	140	134	150
DAC0BE	140	100	135	143	147	150	143	158
CAD0BE	105	72	98	110	115	120	106	132
ACD0BE	147	104	140	151	156	160	150	172
BCD0AE	140	100	135	143	147	150	145	162
CBD0AE	105	72	98	110	115	120	106	132
DBC0AE	128	91	123	132	136	140	133	148
BDC0AE	128	91	123	132	136	140	134	150

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
CDB0AE	93	63	85	99	104	110	97	118
DCB0AE	115	83	113	117	118	120	129	126
DC0BAE	98	69	93	102	106	110	110	114
CD0BAE	82	54	73	88	94	100	86	108
0DCBAE	97	70	95	98	99	100	100	108
D0CBAE	108	80	108	109	109	110	111	118
C0DBAE	87	59	80	91	96	100	87	106
0CDBAE	92	65	88	94	97	100	85	110
0BDCAE	110	78	105	113	117	120	112	132
B0DCAE	132	98	133	131	131	130	141	138
D0BCAE	133	96	130	136	138	140	141	150
0DBCAE	127	93	125	128	129	130	123	142
BD0CAE	138	102	138	139	139	140	136	154
DB0CAE	120	89	120	120	120	120	122	128
CB0DAE	108	80	108	109	109	110	111	118
BC0DAE	150	111	150	150	150	150	151	160
0CBDAE	120	89	120	120	120	120	111	134
C0BDAE	105	72	98	110	115	120	104	130
B0CDAE	132	98	133	131	131	130	132	140
0BCDAE	122	87	118	124	127	130	121	142
ABCD0E	147	104	140	151	156	160	149	174
BACD0E	145	106	143	147	148	150	148	162
CABD0E	112	76	103	118	124	130	110	144

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
ACBD0E	168	124	168	169	169	170	169	186
BCAD0E	162	120	163	161	161	160	164	176
CBAD0E	103	74	100	106	108	110	105	122
CBDA0E	122	87	118	124	127	130	120	142
BCDA0E	157	115	155	158	159	160	159	172
DCBA0E	115	83	113	117	118	120	126	126
CDBA0E	93	63	85	99	104	110	94	118
BDCA0E	145	106	143	147	148	150	151	162
DBCA0E	145	106	143	147	148	150	149	160
DACB0E	155	117	158	153	152	150	161	160
ADCB0E	143	107	145	142	141	140	152	152
CDAB0E	105	72	98	110	115	120	107	130
DCAB0E	122	87	118	124	127	130	133	138
ACDB0E	157	115	155	158	159	160	159	172
CADB0E	115	83	113	117	118	120	116	132
BADC0E	127	93	125	128	129	130	133	140
ABDC0E	135	94	128	140	145	150	139	162
DBAC0E	133	96	130	136	138	140	136	148
BDAC0E	168	124	168	169	169	170	166	184
ADBC0E	157	115	155	158	159	160	156	174
DABC0E	140	100	135	143	147	150	143	160
DABCE0	175	161	183	170	165	160	177	158
ADBCE0	192	176	203	184	177	170	191	172

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
BDACE0	203	185	215	196	188	180	201	182
DBACE0	168	157	178	162	156	150	171	146
ABDCE0	170	156	175	167	163	160	173	160
BADCE0	162	154	173	154	147	140	167	138
BACDE0	182	165	188	178	174	170	184	170
ABCDE0	183	163	185	182	181	180	185	182
CBADE0	140	133	145	137	133	130	140	130
BCADE0	198	180	208	192	186	180	200	184
ACBDE0	205	183	213	200	195	190	204	194
CABDE0	148	135	148	149	149	150	146	152
CDBAE0	118	113	118	119	119	120	121	116
DCBAE0	140	133	145	137	133	130	153	124
BCDAE0	182	165	188	178	174	170	186	170
CBDAE0	147	137	150	144	142	140	147	140
DBCAE0	170	156	175	167	163	160	176	158
BDCAE0	170	156	175	167	163	160	178	160
ADCBE0	170	156	175	167	163	160	178	160
DACBE0	182	165	188	178	174	170	186	168
CADBE0	142	131	143	141	141	140	142	140
ACDBE0	183	163	185	182	181	180	185	180
DCABE0	148	135	148	149	149	150	159	146
CDABE0	132	120	128	134	137	140	133	138
EDABC0	193	174	200	189	184	180	205	182

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
DEABC0	195	172	198	193	192	190	205	192
AEDBC0	182	165	188	178	174	170	195	170
EADBC0	217	193	225	211	206	200	224	206
DAEBC0	193	174	200	189	184	180	206	180
ADEBC0	217	193	225	211	206	200	224	206
ADBEC0	167	148	165	168	169	170	170	172
DABEC0	150	133	145	153	157	160	157	158
BADEC0	165	150	168	163	162	160	169	162
ABDEC0	173	152	170	176	178	180	175	184
DBAEC0	137	126	135	138	139	140	146	136
BDAEC0	172	154	173	171	171	170	176	172
BEADC0	188	169	193	186	183	180	202	182
EBADC0	187	170	195	181	176	170	201	172
ABEDC0	160	144	160	160	160	160	178	158
BAEDC0	152	143	158	148	144	140	172	136
EABDC0	195	172	198	193	192	190	206	194
AEBDC0	188	169	193	186	183	180	202	182
DEBAC0	193	174	200	189	184	180	204	180
EDBAC0	187	170	195	181	176	170	199	170
BDEAC0	223	196	230	219	214	210	229	216
DBEAC0	195	172	198	193	192	190	205	190
EBDAC0	228	202	238	222	216	210	234	216
BEDAC0	193	174	200	189	184	180	206	180

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
CEDAB0	145	139	153	140	135	130	156	128
ECDAB0	172	154	173	171	171	170	179	172
DCEAB0	175	161	183	170	165	160	192	158
CDEAB0	160	144	160	160	160	160	169	162
EDCAB0	175	161	183	170	165	160	195	160
DECAB0	160	144	160	160	160	160	169	160
DEACB0	210	189	220	203	197	190	223	192
EDACB0	208	191	223	199	189	180	223	182
ADECB0	182	165	188	178	174	170	188	174
DAECB0	158	146	163	156	153	150	170	148
EADCB0	203	185	215	196	188	180	220	184
AEDCB0	168	157	178	162	156	150	191	148
ACDEB0	217	193	225	211	206	200	227	204
CADEB0	175	161	183	170	165	160	184	164
DACEB0	208	191	223	199	189	180	220	180
ADCEB0	197	181	210	188	179	170	211	172
CDAEB0	158	146	163	156	153	150	170	150
DCAEB0	175	161	183	170	165	160	196	158
ECADB0	182	165	188	178	174	170	188	174
CEADB0	168	157	178	162	156	150	175	152
AECDB0	160	144	160	160	160	160	169	160
EACDB0	217	193	225	211	206	200	227	204
CAEDB0	140	133	145	137	133	130	155	128

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
ACEDB0	197	181	210	188	179	170	209	170
BCEDA0	197	181	210	188	179	170	209	170
CBEDA0	147	137	150	144	142	140	159	138
EBCDA0	217	193	225	211	206	200	227	204
BECDA0	167	148	165	168	169	170	173	170
CEBDA0	175	161	183	170	165	160	179	162
ECBDA0	188	169	193	186	183	180	193	184
ECDBA0	160	144	160	160	160	160	167	160
CEDBA0	133	130	140	129	124	120	144	116
DECBA0	153	141	155	152	151	150	162	148
EDCBA0	168	157	178	162	156	150	189	148
CDEBA0	153	141	155	152	151	150	162	150
DCEBA0	168	157	178	162	156	150	185	146
DBECA0	155	139	153	157	158	160	163	158
BDECA0	183	163	185	182	181	180	187	184
EDBCA0	198	180	208	192	186	180	212	182
DEBCA0	205	183	213	200	195	190	217	192
BEDCA0	170	156	175	167	163	160	190	158
EBDCA0	205	183	213	200	195	190	218	194
CBDEA0	177	159	180	174	172	170	182	174
BCDEA0	212	187	218	208	204	200	221	204
DCBEA0	177	159	180	174	172	170	195	168
CDBEA0	155	139	153	157	158	160	163	160

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
BDCEA0	198	180	208	192	186	180	209	182
DBCEA0	198	180	208	192	186	180	208	180
ABCED0	187	170	195	181	176	170	199	172
BACED0	185	172	198	177	168	160	198	160
CABED0	137	126	135	138	139	140	150	140
ACBED0	193	174	200	189	184	180	208	182
BCAED0	187	170	195	181	176	170	203	172
CBAED0	128	124	133	126	123	120	144	118
CBEAD0	165	150	168	163	162	160	174	164
BCEAD0	215	194	228	207	198	190	223	196
ECBAD0	170	156	175	167	163	160	177	164
CEBAD0	157	148	165	151	146	140	164	142
BECAD0	172	154	173	171	171	170	178	174
EBCAD0	222	198	233	214	207	200	232	208
EACBD0	228	202	238	222	216	210	236	218
AECBD0	172	154	173	171	171	170	178	174
CEABD0	165	150	168	163	162	160	169	164
ECABD0	178	157	178	179	179	180	183	186
ACEBD0	222	198	233	214	207	200	227	206
CAEBD0	165	150	168	163	162	160	174	164
BAECD0	148	135	148	149	149	150	158	150
ABECD0	157	137	150	161	166	170	164	172
EBACD0	205	183	213	200	195	190	216	194

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
BEACD0	207	181	210	204	202	200	217	204
AEBCD0	200	178	205	197	193	190	213	194
EABCD0	207	181	210	204	202	200	217	206
EAB0DC	205	183	213	200	195	190	218	194
AEB0DC	198	180	208	192	186	180	213	182
BEA0DC	200	178	205	197	193	190	212	192
EBA0DC	198	180	208	192	186	180	211	182
ABE0DC	172	154	173	171	171	170	176	170
BAE0DC	163	152	170	159	154	150	170	148
BA0EDC	175	161	183	170	165	160	193	160
AB0EDC	182	165	188	178	174	170	200	172
0BAEDC	140	133	145	137	133	130	154	130
B0AEDC	175	161	183	170	165	160	195	160
A0BEDC	177	159	180	174	172	170	194	170
0ABEDC	148	135	148	149	149	150	160	152
0EBADC	175	161	183	170	165	160	183	166
E0BADC	175	161	183	170	165	160	181	162
B0EADC	210	189	220	203	197	190	224	196
0BEADC	177	159	180	174	172	170	184	176
EB0ADC	210	189	220	203	197	190	224	196
BE0ADC	177	159	180	174	172	170	182	172
AE0BDC	177	159	180	174	172	170	182	172
EA0BDC	212	187	218	208	204	200	223	206

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0AEBDC	177	159	180	174	172	170	184	176
A0EBDC	212	187	218	208	204	200	223	206
E0ABDC	183	163	185	182	181	180	186	184
0EABDC	183	163	185	182	181	180	188	188
DEAB0C	193	174	200	189	184	180	198	184
EDAB0C	192	176	203	184	177	170	199	174
ADEB0C	215	194	228	207	198	190	217	198
DAEB0C	192	176	203	184	177	170	200	172
EADB0C	215	194	228	207	198	190	217	198
AEDB0C	180	167	190	173	167	160	189	162
AEBD0C	205	183	213	200	195	190	208	198
EABD0C	212	187	218	208	204	200	212	210
BAED0C	168	157	178	162	156	150	178	152
ABED0C	177	159	180	174	172	170	183	174
EBAD0C	203	185	215	196	188	180	206	188
BEAD0C	205	183	213	200	195	190	208	198
BDAE0C	187	170	195	181	176	170	181	174
DBAE0C	152	143	158	148	144	140	151	138
ABDE0C	188	169	193	186	183	180	180	186
BADE0C	180	167	190	173	167	160	174	164
DABE0C	165	150	168	163	162	160	162	160
ADBE0C	182	165	188	178	174	170	175	174
EDBA0C	180	167	190	173	167	160	186	162

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
DEBA0C	187	170	195	181	176	170	192	172
BEDA0C	187	170	195	181	176	170	193	172
EBDA0C	222	198	233	214	207	200	222	208
DBEA0C	188	169	193	186	183	180	193	182
BDEA0C	217	193	225	211	206	200	216	208
0DEABC	200	178	205	197	193	190	200	198
D0EABC	207	181	210	204	202	200	217	206
E0DABC	205	183	213	200	195	190	203	194
0EDABC	182	165	188	178	174	170	187	176
DE0ABC	183	163	185	182	181	180	185	182
ED0ABC	200	178	205	197	193	190	212	196
EDA0BC	210	189	220	203	197	190	222	194
DEA0BC	212	187	218	208	204	200	221	204
AED0BC	193	174	200	189	184	180	208	184
EAD0BC	228	202	238	222	216	210	236	220
DAE0BC	182	165	188	178	174	170	186	170
ADE0BC	205	183	213	200	195	190	204	196
A0EDBC	205	183	213	200	195	190	216	194
0AEDBC	170	156	175	167	163	160	177	164
EA0DBC	228	202	238	222	216	210	234	216
AE0DBC	193	174	200	189	184	180	193	182
0EADBC	205	183	213	200	195	190	206	200
E0ADBC	205	183	213	200	195	190	204	196

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
D0AEBC	200	178	205	197	193	190	213	194
0DAEBC	198	180	208	192	186	180	201	186
AD0EBC	228	202	238	222	216	210	236	220
DA0EBC	217	193	225	211	206	200	227	204
0ADEBC	205	183	213	200	195	190	206	200
A0DEBC	228	202	238	222	216	210	234	216
B0DEAC	233	207	245	226	218	210	240	216
0BDEAC	212	187	218	208	204	200	210	210
DB0EAC	217	193	225	211	206	200	227	204
BD0EAC	235	206	243	230	225	220	241	230
0DBEAC	200	178	205	197	193	190	200	196
D0BEAC	207	181	210	204	202	200	217	204
D0EBAC	205	183	213	200	195	190	216	194
0DEBAC	198	180	208	192	186	180	199	186
ED0BAC	198	180	208	192	186	180	211	184
DE0BAC	182	165	188	178	174	170	184	170
0EDBAC	175	161	183	170	165	160	181	164
E0DBAC	198	180	208	192	186	180	197	182
EBD0AC	235	206	243	230	225	220	241	230
BED0AC	200	178	205	197	193	190	212	194
DEB0AC	217	193	225	211	206	200	227	204
EDB0AC	210	189	220	203	197	190	222	194
BDE0AC	212	187	218	208	204	200	208	206

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
DBE0AC	183	163	185	182	181	180	185	180
0BEDAC	182	165	188	178	174	170	187	174
B0EDAC	215	194	228	207	198	190	228	194
E0BDAC	217	193	225	211	206	200	214	206
0EBDAC	217	193	225	211	206	200	216	210
BE0DAC	205	183	213	200	195	190	203	192
EB0DAC	238	213	253	229	219	210	246	216
AB0DEC	183	163	185	182	181	180	186	184
BA0DEC	177	159	180	174	172	170	179	172
0ABDEC	162	143	158	164	167	170	157	178
A0BDEC	190	167	190	190	190	190	191	196
B0ADEC	188	169	193	186	183	180	192	186
0BADEC	153	141	155	152	151	150	151	156
0BDAEC	160	144	160	160	160	160	158	166
B0DAEC	182	165	188	178	174	170	187	172
D0BAEC	148	135	148	149	149	150	158	150
0DBAEC	142	131	143	141	141	140	141	142
BD0AEC	178	157	178	179	179	180	183	186
DB0AEC	160	144	160	160	160	160	169	160
DA0BEC	167	148	165	168	169	170	173	170
AD0BEC	178	157	178	179	179	180	183	186
0DABEC	155	139	153	157	158	160	152	164
D0ABEC	157	137	150	161	166	170	164	172

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
A0DBEC	178	157	178	179	179	180	180	182
0ADBEC	155	139	153	157	158	160	152	166
BAD0EC	177	159	180	174	172	170	181	176
ABD0EC	185	161	183	187	188	190	187	198
DBA0EC	160	144	160	160	160	160	167	160
BDA0EC	195	172	198	193	192	190	197	196
ADB0EC	188	169	193	186	183	180	192	186
DAB0EC	172	154	173	171	171	170	179	172
DAC0EB	200	178	205	197	193	190	213	194
ADC0EB	188	169	193	186	183	180	204	186
CDA0EB	160	144	160	160	160	160	171	164
DCA0EB	177	159	180	174	172	170	197	172
ACD0EB	207	181	210	204	202	200	219	208
CAD0EB	165	150	168	163	162	160	176	168
CA0DEB	165	150	168	163	162	160	174	164
AC0DEB	212	187	218	208	204	200	220	206
0CADEB	175	161	183	170	165	160	175	170
C0ADEB	160	144	160	160	160	160	168	166
A0CDEB	188	169	193	186	183	180	195	186
0ACDEB	183	163	185	182	181	180	189	188
0DCAEB	158	146	163	156	153	150	171	154
D0CAEB	170	156	175	167	163	160	182	164
C0DAEB	153	141	155	152	151	150	163	152

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0CDAEB	158	146	163	156	153	150	162	156
DC0AEB	160	144	160	160	160	160	181	160
CD0AEB	143	130	140	146	148	150	157	154
AD0CEB	192	176	203	184	177	170	196	178
DA0CEB	180	167	190	173	167	160	187	162
0ADCEB	163	152	170	159	154	150	173	156
A0DCEB	187	170	195	181	176	170	201	172
D0ACEB	193	174	200	189	184	180	206	184
0DACEB	192	176	203	184	177	170	194	176
EDAC0B	193	174	200	189	184	180	208	184
DEAC0B	195	172	198	193	192	190	207	194
AEDC0B	153	141	155	152	151	150	175	150
EADC0B	188	169	193	186	183	180	204	186
DAEC0B	143	130	140	146	148	150	155	150
ADEC0B	167	148	165	168	169	170	173	176
ADCE0B	163	152	170	159	154	150	171	152
DACE0B	175	161	183	170	165	160	179	160
CADE0B	142	131	143	141	141	140	144	144
ACDE0B	183	163	185	182	181	180	187	184
DCAE0B	142	131	143	141	141	140	156	138
CDAE0B	125	117	123	127	128	130	130	130
CEAD0B	158	146	163	156	153	150	167	156
ECAD0B	172	154	173	171	171	170	180	178

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
ACED0B	187	170	195	181	176	170	201	174
CAED0B	130	122	130	130	130	130	147	132
EACD0B	207	181	210	204	202	200	219	208
AECD0B	150	133	145	153	157	160	161	164
DECA0B	155	139	153	157	158	160	166	162
EDCA0B	170	156	175	167	163	160	192	162
CDEA0B	155	139	153	157	158	160	165	164
DCEA0B	170	156	175	167	163	160	188	160
ECDA0B	167	148	165	168	169	170	176	174
CEDA0B	140	133	145	137	133	130	153	130
0EDACB	175	161	183	170	165	160	185	166
E0DACB	198	180	208	192	186	180	201	184
D0EACB	200	178	205	197	193	190	215	196
0DEACB	193	174	200	189	184	180	198	188
ED0ACB	193	174	200	189	184	180	210	186
DE0ACB	177	159	180	174	172	170	183	172
DEA0CB	182	165	188	178	174	170	191	174
EDA0CB	180	167	190	173	167	160	191	164
ADE0CB	175	161	183	170	165	160	173	166
DAE0CB	152	143	158	148	144	140	155	140
EAD0CB	198	180	208	192	186	180	205	190
AED0CB	163	152	170	159	154	150	177	154
A0DECB	172	154	173	171	171	170	178	174

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0ADECB	148	135	148	149	149	150	150	158
DA0ECB	160	144	160	160	160	160	171	162
AD0ECB	172	154	173	171	171	170	180	178
0DAECB	142	131	143	141	141	140	145	144
D0AECB	143	130	140	146	148	150	157	152
E0ADCB	170	156	175	167	163	160	180	164
0EADCB	170	156	175	167	163	160	182	168
AE0DCB	158	146	163	156	153	150	169	150
EA0DCB	193	174	200	189	184	180	210	184
0AEDCB	135	128	138	133	132	130	153	132
A0EDCB	170	156	175	167	163	160	192	162
C0EDAB	137	126	135	138	139	140	149	142
0CEDAB	145	139	153	140	135	130	147	134
EC0DAB	167	148	165	168	169	170	172	174
CE0DAB	135	128	138	133	132	130	134	130
0ECDAB	138	124	133	142	146	150	141	156
E0CDAB	165	150	168	163	162	160	164	164
E0DCAB	165	150	168	163	162	160	173	162
0EDCAB	142	131	143	141	141	140	157	144
DE0CAB	153	141	155	152	151	150	154	152
ED0CAB	170	156	175	167	163	160	181	166
0DECAB	143	130	140	146	148	150	144	156
D0ECAB	150	133	145	153	157	160	161	164

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
DCE0AB	142	131	143	141	141	140	152	138
CDE0AB	127	115	120	131	136	140	129	142
EDC0AB	160	144	160	160	160	160	180	162
DEC0AB	145	128	138	150	155	160	153	162
CED0AB	130	122	130	130	130	130	143	132
ECD0AB	157	137	150	161	166	170	166	176
0CDEAB	160	144	160	160	160	160	160	168
C0DEAB	155	139	153	157	158	160	162	164
D0CEAB	170	156	175	167	163	160	177	164
0DCEAB	158	146	163	156	153	150	166	154
CD0EAB	150	133	145	153	157	160	161	166
DC0EAB	167	148	165	168	169	170	185	172
AC0EDB	188	169	193	186	183	180	202	184
CA0EDB	142	131	143	141	141	140	156	142
0ACEDB	163	152	170	159	154	150	171	154
A0CEDB	168	157	178	162	156	150	176	152
C0AEDB	125	117	123	127	128	130	139	130
0CAEDB	140	133	145	137	133	130	146	134
0CEADB	168	157	178	162	156	150	166	158
C0EADB	160	144	160	160	160	160	168	166
E0CADB	175	161	183	170	165	160	173	166
0ECADB	148	135	148	149	149	150	150	158
CE0ADB	135	128	138	133	132	130	135	132

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
EC0ADB	167	148	165	168	169	170	173	176
EA0CDB	188	169	193	186	183	180	195	186
AE0CDB	153	141	155	152	151	150	154	152
0EACDB	183	163	185	182	181	180	189	188
E0ACDB	183	163	185	182	181	180	187	184
A0ECDB	162	143	158	164	167	170	170	174
0AECDB	127	115	120	131	136	140	131	144
CAE0DB	130	122	130	130	130	130	133	130
ACE0DB	187	170	195	181	176	170	186	172
ECA0DB	172	154	173	171	171	170	178	174
CEA0DB	158	146	163	156	153	150	165	152
AEC0DB	155	139	153	157	158	160	162	162
EAC0DB	212	187	218	208	204	200	220	206
EBC0DA	217	193	225	211	206	200	226	206
BEC0DA	167	148	165	168	169	170	172	172
CEB0DA	168	157	178	162	156	150	176	152
ECB0DA	182	165	188	178	174	170	190	174
BCE0DA	192	176	203	184	177	170	192	172
CBE0DA	142	131	143	141	141	140	143	140
CB0EDA	152	143	158	148	144	140	167	142
BC0EDA	193	174	200	189	184	180	208	184
0CBEDA	152	143	158	148	144	140	157	144
C0BEDA	137	126	135	138	139	140	150	140

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
B0CEDA	178	169	193	169	159	150	188	152
0BCEDA	168	157	178	162	156	150	176	154
0ECBDA	160	144	160	160	160	160	160	168
E0CBDA	187	170	195	181	176	170	183	176
C0EBDA	172	154	173	171	171	170	178	176
0CEBDA	180	167	190	173	167	160	176	168
EC0BDA	178	157	178	179	179	180	183	186
CE0BDA	147	137	150	144	142	140	145	142
BE0CDA	165	150	168	163	162	160	164	162
EB0CDA	198	180	208	192	186	180	206	186
0BECDA	138	124	133	142	146	150	141	154
B0ECDA	172	154	173	171	171	170	181	174
E0BCDA	188	169	193	186	183	180	193	184
0EBCDA	188	169	193	186	183	180	195	188
DEBC0A	195	172	198	193	192	190	207	194
EDBC0A	188	169	193	186	183	180	202	184
BDEC0A	173	152	170	176	178	180	177	186
DBEC0A	145	128	138	150	155	160	154	160
EBDC0A	195	172	198	193	192	190	208	196
BEDC0A	160	144	160	160	160	160	180	160
BECD0A	157	137	150	161	166	170	166	174
EBCD0A	207	181	210	204	202	200	219	208
CBED0A	137	126	135	138	139	140	152	142

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
BCED0A	187	170	195	181	176	170	201	174
ECBD0A	178	157	178	179	179	180	185	188
CEBD0A	165	150	168	163	162	160	171	166
CDBE0A	127	115	120	131	136	140	129	140
DCBE0A	148	135	148	149	149	150	161	148
BCDE0A	183	163	185	182	181	180	187	184
CBDE0A	148	135	148	149	149	150	148	154
DBCE0A	170	156	175	167	163	160	174	160
BDCE0A	170	156	175	167	163	160	175	162
EDCB0A	175	161	183	170	165	160	197	162
DECB0A	160	144	160	160	160	160	171	162
CEDB0A	140	133	145	137	133	130	153	130
ECDB0A	167	148	165	168	169	170	176	174
DCEB0A	175	161	183	170	165	160	194	160
CDEB0A	160	144	160	160	160	160	171	164
0DEBCA	193	174	200	189	184	180	198	188
D0EBCA	200	178	205	197	193	190	215	196
E0DBCA	193	174	200	189	184	180	195	184
0EDBCA	170	156	175	167	163	160	180	166
DE0BCA	177	159	180	174	172	170	183	172
ED0BCA	193	174	200	189	184	180	210	186
EDB0CA	180	167	190	173	167	160	191	164
DEB0CA	187	170	195	181	176	170	196	174

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
BED0CA	170	156	175	167	163	160	181	164
EBD0CA	205	183	213	200	195	190	210	200
DBE0CA	153	141	155	152	151	150	154	150
BDE0CA	182	165	188	178	174	170	177	176
B0EDCA	175	161	183	170	165	160	197	162
0BEDCA	142	131	143	141	141	140	157	142
EB0DCA	198	180	208	192	186	180	215	184
BE0DCA	165	150	168	163	162	160	173	160
0EBDCA	177	159	180	174	172	170	186	178
E0BDCA	177	159	180	174	172	170	184	174
D0BECA	150	133	145	153	157	160	161	162
0DBECA	143	130	140	146	148	150	144	154
BD0ECA	178	157	178	179	179	180	185	188
DB0ECA	160	144	160	160	160	160	171	162
0BDECA	155	139	153	157	158	160	155	168
B0DECA	177	159	180	174	172	170	184	174
C0DEBA	153	141	155	152	151	150	161	152
0CDEBA	158	146	163	156	153	150	159	156
DC0EBA	165	150	168	163	162	160	184	160
CD0EBA	148	135	148	149	149	150	160	154
0DCEBA	157	148	165	151	146	140	165	142
D0CEBA	168	157	178	162	156	150	176	152
D0ECBA	148	135	148	149	149	150	160	152

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0DECBA	142	131	143	141	141	140	143	144
ED0CBA	168	157	178	162	156	150	180	154
DE0CBA	152	143	158	148	144	140	153	140
0EDCBA	140	133	145	137	133	130	156	132
E0DCBA	163	152	170	159	154	150	172	150
ECD0BA	155	139	153	157	158	160	165	164
CED0BA	128	124	133	126	123	120	142	120
DEC0BA	143	130	140	146	148	150	152	150
EDC0BA	158	146	163	156	153	150	179	150
CDE0BA	125	117	123	127	128	130	128	130
DCE0BA	140	133	145	137	133	130	151	126
0CEDBA	138	135	148	132	126	120	141	122
C0EDBA	130	122	130	130	130	130	143	130
E0CDBA	158	146	163	156	153	150	157	152
0ECDBA	132	120	128	134	137	140	134	144
CE0DBA	128	124	133	126	123	120	127	118
EC0DBA	160	144	160	160	160	160	165	162
BC0DEA	212	187	218	208	204	200	220	206
CB0DEA	170	156	175	167	163	160	180	164
0BCDEA	183	163	185	182	181	180	189	188
B0CDEA	193	174	200	189	184	180	201	186
C0BDEA	167	148	165	168	169	170	173	176
0CBDEA	182	165	188	178	174	170	180	180

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0CDBEA	160	144	160	160	160	160	160	166
C0DBEA	155	139	153	157	158	160	162	162
D0CBEA	177	159	180	174	172	170	186	174
0DCBEA	165	150	168	163	162	160	175	164
CD0BEA	150	133	145	153	157	160	161	164
DC0BEA	167	148	165	168	169	170	185	170
DB0CEA	180	167	190	173	167	160	187	162
BD0CEA	198	180	208	192	186	180	201	188
0DBCEA	187	170	195	181	176	170	189	176
D0BCEA	193	174	200	189	184	180	206	184
B0DCEA	192	176	203	184	177	170	206	172
0BDCEA	170	156	175	167	163	160	177	166
CBD0EA	172	154	173	171	171	170	180	178
BCD0EA	207	181	210	204	202	200	219	208
DCB0EA	182	165	188	178	174	170	203	172
CDB0EA	160	144	160	160	160	160	171	164
BDC0EA	195	172	198	193	192	190	208	196
DBC0EA	195	172	198	193	192	190	207	194
ABC0ED	188	169	193	186	183	180	201	186
BAC0ED	187	170	195	181	176	170	200	174
CAB0ED	147	137	150	144	142	140	161	144
ACB0ED	203	185	215	196	188	180	219	186
BCA0ED	198	180	208	192	186	180	213	186

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
CBA0ED	140	133	145	137	133	130	154	132
CB0AED	140	133	145	137	133	130	156	132
BC0AED	182	165	188	178	174	170	197	174
0CBAED	138	135	148	132	126	120	144	124
C0BAED	123	119	125	122	121	120	137	120
B0CAED	173	163	185	166	158	150	186	154
0BCAED	163	152	170	159	154	150	174	156
0ACBED	170	156	175	167	163	160	179	166
A0CBED	175	161	183	170	165	160	184	164
C0ABED	132	120	128	134	137	140	143	142
0CABED	147	137	150	144	142	140	150	146
AC0BED	188	169	193	186	183	180	201	184
CA0BED	142	131	143	141	141	140	155	142
BA0CED	167	159	180	158	149	140	174	142
AB0CED	173	163	185	166	158	150	181	154
0BACED	162	154	173	154	147	140	168	144
B0ACED	197	181	210	188	179	170	210	174
A0BCED	192	176	203	184	177	170	204	174
0ABCED	163	152	170	159	154	150	170	156
EABC0D	212	187	218	208	204	200	219	208
AEBC0D	205	183	213	200	195	190	215	196
BEAC0D	212	187	218	208	204	200	219	206
EBAC0D	210	189	220	203	197	190	218	196

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
ABEC0D	162	143	158	164	167	170	165	174
BAEC0D	153	141	155	152	151	150	160	152
BACE0D	185	172	198	177	168	160	184	162
ABCE0D	187	170	195	181	176	170	185	174
CBAE0D	128	124	133	126	123	120	131	120
BCAE0D	187	170	195	181	176	170	190	174
ACBE0D	193	174	200	189	184	180	195	184
CABE0D	137	126	135	138	139	140	136	142
CEBA0D	157	148	165	151	146	140	163	142
ECBA0D	170	156	175	167	163	160	176	164
BCEA0D	215	194	228	207	198	190	222	196
CBEA0D	165	150	168	163	162	160	173	164
EBCA0D	222	198	233	214	207	200	231	208
BECA0D	172	154	173	171	171	170	177	174
AECB0D	170	156	175	167	163	160	179	164
EACB0D	227	204	240	218	209	200	237	208
CAEB0D	163	152	170	159	154	150	174	154
ACEB0D	220	200	235	210	200	190	228	196
ECAB0D	177	159	180	174	172	170	183	176
CEAB0D	163	152	170	159	154	150	170	154
0EABCD	183	163	185	182	181	180	188	190
E0ABCD	183	163	185	182	181	180	186	186
A0EBCD	212	187	218	208	204	200	223	208

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
0AEBCD	177	159	180	174	172	170	184	178
EA0BCD	212	187	218	208	204	200	223	208
AE0BCD	177	159	180	174	172	170	182	174
AEB0CD	187	170	195	181	176	170	195	176
EAB0CD	193	174	200	189	184	180	200	188
BAE0CD	152	143	158	148	144	140	152	142
ABE0CD	160	144	160	160	160	160	157	164
EBA0CD	187	170	195	181	176	170	193	176
BEA0CD	188	169	193	186	183	180	194	186
B0AECD	160	144	160	160	160	160	170	164
0BAECD	125	117	123	127	128	130	129	134
AB0ECD	167	148	165	168	169	170	175	176
BA0ECD	160	144	160	160	160	160	168	164
0ABECD	133	119	125	139	144	150	134	156
A0BECD	162	143	158	164	167	170	169	174
E0BACD	182	165	188	178	174	170	185	174
0EBACD	182	165	188	178	174	170	187	178
BE0ACD	183	163	185	182	181	180	186	184
EB0ACD	217	193	225	211	206	200	228	208
0BEACD	183	163	185	182	181	180	188	188
B0EACD	217	193	225	211	206	200	228	208
C0EABD	167	148	165	168	169	170	172	178
0CEABD	175	161	183	170	165	160	170	170

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
EC0ABD	173	152	170	176	178	180	176	188
CE0ABD	142	131	143	141	141	140	138	144
0ECABD	155	139	153	157	158	160	154	170
E0CABD	182	165	188	178	174	170	176	178
E0ACBD	205	183	213	200	195	190	205	198
0EACBD	205	183	213	200	195	190	207	202
AE0CBD	175	161	183	170	165	160	172	166
EA0CBD	210	189	220	203	197	190	213	200
0AECBD	148	135	148	149	149	150	149	158
A0ECBD	183	163	185	182	181	180	188	188
ACE0BD	198	180	208	192	186	180	196	186
CAE0BD	142	131	143	141	141	140	143	144
EAC0BD	223	196	230	219	214	210	230	220
AEC0BD	167	148	165	168	169	170	172	176
CEA0BD	170	156	175	167	163	160	175	166
ECA0BD	183	163	185	182	181	180	188	188
0CAEBD	175	161	183	170	165	160	174	170
C0AEBD	160	144	160	160	160	160	167	166
A0CEBD	203	185	215	196	188	180	204	188
0ACEBD	198	180	208	192	186	180	198	190
CA0EBD	177	159	180	174	172	170	184	178
AC0EBD	223	196	230	219	214	210	230	220
BC0EAD	217	193	225	211	206	200	225	210

Ranking of options	Default: Effectiveness 30%, Efficiency 60%, Coherence 10%	Effectiveness 1/3, Efficiency 1/3, Coherence 1/3	Effectiveness 45%, Efficiency 45%, Coherence 10%	Effectiveness 20%, Efficiency 70%, Coherence 10%	Effectiveness 10%, Efficiency 80%, Coherence 10%	Effectiveness 0%, Efficiency 90%, Coherence 10%	Experts	Worst-case scenario: Efficiency 100% (of which 60% allocated to costs and 40% to benefits)
CB0EAD	175	161	183	170	165	160	185	168
0BCEAD	192	176	203	184	177	170	194	180
B0CEAD	202	187	218	191	181	170	205	178
C0BEAD	160	144	160	160	160	160	167	166
0CBEAD	175	161	183	170	165	160	174	170
0CEBAD	167	159	180	158	149	140	164	148
C0EBAD	158	146	163	156	153	150	166	156
E0CBAD	173	163	185	166	158	150	171	156
0ECBAD	147	137	150	144	142	140	148	148
CE0BAD	133	130	140	129	124	120	133	122
EC0BAD	165	150	168	163	162	160	170	166
EB0CAD	208	191	223	199	189	180	214	190
BE0CAD	175	161	183	170	165	160	172	166
0EBCAD	198	180	208	192	186	180	203	192
E0BCAD	198	180	208	192	186	180	201	188
B0ECAD	182	165	188	178	174	170	189	178
0BECAD	148	135	148	149	149	150	149	158
CBE0AD	142	131	143	141	141	140	143	144
BCE0AD	192	176	203	184	177	170	192	176
ECB0AD	182	165	188	178	174	170	189	178
CEB0AD	168	157	178	162	156	150	176	156
BEC0AD	167	148	165	168	169	170	172	176
EBC0AD	217	193	225	211	206	200	225	210

Legend: 0-baseline; A-option A; B-option B; C-option C; Highlight in green – ranking of options with the highest score in a given scenario.

Source: ICF elaboration.

Annex 13. Coherence Analysis

This annex provides the coherence analysis of the various measures that were considered to be selected for in-depth analysis after an initial screening. However, after further iterations, these measures were later finetuned and in some cases combined, or even discarded, based on the continuous feedback received from experts and stakeholders (including comments from the RSB to the first Impact Assessment Report submitted by the European Commission). For this reason, the list of measures analysed in this section is not fully aligned with the list in Annex 11 and with the final set of measures analysed in-depth.

A13.1 Problem 1: Consumers lack reliable information to make environmentally sustainable purchases

A13.1.2 Sub-problem 1.2: Lack of reliable information on products' lifespan

The two measures proposed to respond to this sub-problem aim to ensure that consumers receive information on the lifespan of a good in a harmonised and consistent way. By providing consumers with this information consistently across products in the EU, it is expected that it will be easier for consumer to take decisions based on the life-cycle of the product because they will receive goods information which is currently not available and they will be able to more easily compare goods based on their lifespan.

The share of consumers that prefer to purchase goods with a lower environmental impact will be enabled to take into account the lifespan of goods when selecting which goods to buy. The measures will also promote a level-playing field between traders.

A13.1.2.1 Measure 1.2.1. EU-level obligation to inform consumers of the expected lifespan of products

Summary

The option does not state which methodology should be used to assess the expected lifespan. This space can therefore be filled by future Eco-design (and planned SPI) requirements. The (future) provisions under the Sale of Goods Directive and the Unfair Commercial Practices Directive would allow for individual consumer remedies (e.g. compensation for damage suffered by the consumer; or a price reduction or the termination of the contract) in case of unfounded statement on the expected durability. This could actually result – even in absence of harmonised methodology under Eco-design or SPI - in prudent/realistic estimations from sellers/traders on expected lifespan. Coherence issues may arise with respect to the SGD. Under the SGD, any public statement on durability made by the seller or other persons in previous links in the chain of transactions, including the producer, will have to be taken into account to determine what the consumer 'can reasonably expect' concerning durability as an objective requirement for conformity. Moreover, insofar as specific durability information is indicated in any pre-contractual statement which forms part of the sales contract, the consumer should be able to rely on them as a part of the subjective requirements for conformity. However, since the legal guarantee is limited to two years and it is reasonable to expect that, for durable products, the lifespan would exceed two years, issues of coherence might arise.

Analysis

Measure 1.2.A would introduce a requirement to provide **information on the expected lifespan** of goods.

This measure is coherent with the Treaty objectives to contribute to the proper functioning of the internal market and achieve a high level of consumer protection in line with Article 114 TFEU and 169 TFEU, in particular regarding consumers' right to

information and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

The inclusion of this information might generate coherence problems/issues with the SGD. Under the SGD, durability is now an **objective requirement** for conformity for the purposes of the **legal guarantee**. The Directive defines durability as 'the ability of the goods to maintain their required functions and performance through normal use'. Under Article 7 on **objective requirements** of conformity, the good should possess the durability which the consumer may reasonably expect given the nature of the goods and taking into account **any public statement made** by or on behalf of the seller, or other persons in previous links in the chain of transactions, including the producer, particularly in advertising or labelling. The Recitals further specify that 'in order for goods to be in conformity, they should possess the durability which is normal for goods of the same type and which the consumer can reasonably expect given the nature of the specific goods, including the possible need for reasonable maintenance of the goods, such as the regular inspection or changing of filters in a car**,** and any public statement made by or on behalf of any person constituting a link in the chain of transactions. The durability assessment should also take into account all other relevant circumstances, such as the price of the goods and the intensity or frequency of the use that the consumer makes of the goods'. Moreover, '**insofar as specific durability information is indicated in any pre-contractual statement which forms part of the sales contract,** the consumer should be able to rely on them as a part of the **subjective requirements for conformity'**, which triggers the legal guarantee.

The legal guarantee is currently limited to two years.

On the other hand, the requirement to provide information or a public statement on durability by the seller or other persons in previous links in the chain of transactions, including the producer, will have to be taken into account to determine what the consumer 'can reasonably expect' concerning durability as an objective requirement for conformity. A statement with information on the product's lifespan exceeding two years could lead consumers to reasonably expect that the lifespan would be longer than two years and that it would be reflected in the legal guarantee.

Moreover, information on the expected lifespan in any pre-contractual statement which would form part of the sales contract would become part of the subjective requirements of conformity, leading to the consumer expectation that the legal guarantee might expand beyond two years (for products whose expected lifespan would be longer than two years).

This is therefore a coherence problem where consumers might receive information on an expected lifespan that is longer than the 2 years while another provision limits to two years the period during which they would actually be able to avail themselves of the remedies under the legal guarantee.

This issue of coherence can be solved with a clarification in the text of the Directive or legal act to be adopted for this measure stating whether or not the information on the expected product's lifespan longer than two years triggers the expansion of the legal guarantee beyond two years. Moreover, the (future) provisions under the SGD and the Unfair Commercial Practices Directive, would allow for individual consumer remedies (e.g., compensation for damage suffered by the consumer; or a price reduction or the termination of the contract) in case of unfounded statement on the expected durability. This could actually result – even in absence of harmonised methodology under Eco-design or SPI - in prudent/realistic estimations from sellers/traders on expected lifespan.

The option does not state which methodology should be used to assess the expected lifespan. This space can therefore be filled by future Eco-design (and planned SPI) requirements. If a link between the expected lifespan and future **eco-design** requirements was to be introduced, this would reinforce coherence and create the

conditions for consumer law and product legislation to cooperate and mutually reinforce each other. Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products, as amended in 2012 by Directive 2012/27/EU (Ecodesign Directive) requires the introduction of technical standards for the products, but consumers do not necessarily have access to detailed information on the product characteristics required. An information obligation on the expected lifespan based on eco-design requirements would ensure a link between consumer law and product legislation standards and make it possible for the consumer to have access to information on the durability of the product as part of the product characteristics required in the product legislation.

Since this is point of sale information, no differences in coherence have been identified in the implementation through a stand-alone act or through the CRD. However, a stand-alone act would allow greater detail.

A13.1.2.2 Measure 1.2.2. EU-level obligation to inform consumers of the existence (or absence) of a producer's commercial guarantee of durability for the entire product and of its length.

Summary

The option is coherent will the legal framework and usefully completes the provisions set out in the SGD and the Consumer Rights Directive as it will ensure clearer information to consumers on the length of the legal guarantee and of the commercial guarantee, when it exists and is longer than the legal guarantee. In terms of consumer legislation, there would be no need to amend the SGD because the measure does not aim at introducing obligations to provide a guarantee on durability, but is limited to an obligation to communicate the existence or absence of the commercial guarantee. An issue that may arise concerns possible consumer confusion, as consumers might not be aware of the difference between the commercial and the legal guarantee. For example, an information that the commercial guarantee is zero years might create confusion in the sense that consumers might be under the impression that they have no guarantee and therefore no remedies, while, even if no commercial guarantee is offered, the consumers would still have the rights deriving from the legal guarantee. These concerns appear to be addressed by the fact that the proposed measure envisages a requirement to indicate, in the absence of a commercial guarantee, the length of the applicable legal guarantee period, and that the information obligation concerning the commercial guarantee would be limited to commercial guarantees over 2 years. With regard to the fact that the information obligations lie on the seller, it should be noted that the commercial guarantee creates obligations on the guarantor, which can be the manufacturer. The SGD governs the issue of discrepancies between the guarantee offered and the associated advertising, establishing that 'if the conditions laid out in the commercial guarantee statement are less advantageous to the consumer than those laid down in the associated advertising, the commercial guarantee shall be binding under the conditions laid down in the advertising relating to the commercial guarantee'. Therefore, it would appear more coherent with the SGD framework to also introduce an obligation on **the manufacturer** to provide clear information on the commercial guarantee in all statements, advertisement and descriptions of the products.

Analysis

Measure 1.2.2 requires information be provided to consumers on the existence (or absence) of a producer's commercial guarantee of durabiltiy for the entire product and of its length.

This measure aims to contribute to the proper functioning of the internal market and achieve a high level of consumers' protection, including their right to information, in line

with Article 114 and 169 TFEU and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

In light of the nature of this measure, which is an information obligation on a commercial guarantee relating to durability, it is necessary to assess whether such requirement would be coherent with the SGD.

General considerations

The general objective of the SGD is 'to contribute to the proper functioning of the internal market while providing for a high level of consumer protection, by laying down common rules on certain requirements concerning sales contracts concluded between sellers and consumers' (Article 2), including rules on both the legal and the commercial guarantee. For present purposes, it should be stressed that the SGD has introduced explicit references to the durability of the products, linking durability to the green transition in Recital 32: "Ensuring longer durability of goods is important for achieving more sustainable consumption patterns and a circular economy".

For what concerns **the legal guarantee**, durability is now an objective requirement of conformity under Article 7 giving rise to the seller's liability, which according to Article 11 should cover a 2 years period. For what concerns **commercial guarantees**, which can be voluntarily granted, Article 17 of the SGD provides that 'where a producer offers to the consumer a **commercial guarantee of durability** for certain goods for a certain period of time, the producer shall be liable directly to the consumer, during the entire period of the commercial guarantee of durability for repair or replacement of the goods'.

The proposed measure requiring the provision of information on the existence or absence of the commercial guarantee and of its length can be considered fully coherent with the SGD while complementing and reinforcing its provisions on commercial guarantees. As commercial guarantees are voluntarily offered by the manufacturer, the proposed measure ensures that the consumer is informed of the duration of the commercial guarantee when it is offered, and also that the consumer is made clearly aware if no commercial guarantee is provided, which is also possible, while no additional obligations in terms of guarantees are offered. This measure would not require amending the SGD, as it does not aim at imposing an obligation to provide a guarantee on durability, but is limited to an obligation to communicate the terms of the commercial guarantee that is offered, if it is offered. However, a cross reference to the obligation or requirement to provide information on the commercial guarantee might be advisable for consistency.

Specific issues

Avoiding consumers' confusion:

One question that may arise is whether requiring the display of this information might lead to **confusion for the consumer**, in light of the fact that the consumer might not be fully aware of the differences between a legal and a commercial guarantee. For example, an information that the length of the commercial guarantee is zero years might create confusion in the sense that consumers might be under the impression that they have no guarantee and therefore no remedies, while, even if no commercial guarantee is offered, the consumers would still have the rights deriving from the legal guarantee. It is therefore important that the information requirement on the commercial guarantee ensures that consumers still understand that their rights under the legal guarantee are not affected. Article 17(2) of the SGD already requires that the commercial guarantee statement contains 'a clear statement that the consumer is entitled by law to remedies from the seller free of charge in the event of a lack of conformity of the goods and that those remedies are not affected by the commercial guarantee'.

The proposed measure would therefore be fully coherent with the SGD if it would **require that the consumer is clearly informed that the rights stemming from**

the legal guarantee remain and are not affected by the guaranteed lifespan of the goods through the commercial guarantee.

These concerns appear to be addressed by the fact that the proposed measure requires to indicate, in the absence of a commercial guarantee, the length of the applicable legal guarantee period, and that this information obligation would be limited to commercial guarantees over 2 years.

Responsibility of the manufacturer for statements on the commercial guarantee:

The information obligation lies on the seller, but the guarantor might be different, e.g., the manufacturer.

On this point, it should be noted that the commercial guarantee creates obligations on the guarantor, which can be the manufacturer. The SGD also governs the issue of discrepancies between the guarantee offered and the associated advertising, establishing that 'if the conditions laid out in the commercial guarantee statement are less advantageous to the consumer than those laid down in the associated advertising, the commercial guarantee shall be binding under the conditions laid down in the advertising relating to the commercial guarantee'. Therefore, it appears more coherent with the SGD framework to also introduce an obligation on **the manufacturer** to provide clear information on the commercial guarantee in all statements, advertisement and descriptions of the products.

It should also be noted that, under the SGD, advertisement triggers liability for the purposes of the commercial guarantee only if it is advertisement **associated to the commercial guarantee**. Introducing an obligation for the manufacturer to include clear information on the guaranteed lifespan in all advertisement and descriptions of the product can significantly strengthen the consumers' right to information, making it clearer and differentiating from the situations when the manufacturer makes claims on durability that are not backed by a commercial guarantee. This might also strengthen the rights of the consumer under the legal guarantee.

A measure requiring to provide information on the commercial guarantee of the product is also coherent with Article 7(1)(d) of the SDG establishing that durability is an objective requirement for conformity and the product should possess the durability 'which is normal for goods of the same type and which the consumer may reasonably expect given the nature of the goods **and taking into account any public statement made by or on behalf of the seller, or other persons in previous links of the chain of transactions, including the producer, particularly in advertising or on labelling'** (Article 7(1)(d) of the SGD). While the legal guarantee is currently limited to two years, the guaranteed lifespan is up to the discretion of the trader.

Use of digital means: The SGD, Directive 2019/771 provides that 'The commercial guarantee statement shall be provided to the consumer on a durable medium at the latest at the time of the delivery of the goods' and the CRD, Directive 2011/83/EU also refers to durable media, e.g. requiring information for off-premise contracts to be provided on durable media. The Directives define 'durable medium' as any instrument which enables the consumer or the seller/trader to store information addressed personally to that person in a way that is accessible for future reference, for a period of time adequate for the purposes of the information, and which allows the unchanged reproduction of the information stored. The CJEU case-law has clarified that the medium must enable consumers, in a similar way to paper form, to be in possession of the relevant information in order to enable them to exercise their rights, where necessary. What is relevant for the consumers is that they should be able to store the information which has been addressed to them personally, to rest assured that its content will not be altered, that the information will be accessible for an adequate period and that it will be possible to reproduce it unchanged (Case C-375/15, para. 42 and cited case-law).

A13.1.3.3 Measure 1.2.3.Measure 1.2.2 + provision of information on the period of time during which the manufacturer will ensure availability of software updates

The analysis below refers to the obligation of the provision of information on the period of time during which the manufacturer will ensure availability of software updates.

Summary

The measure aims to ensure that consumers receive information on the period of time during which the manufacturer will ensure availability of software updates. This is coherent with the consumer protection and internal market objectives of EU law. In order to ensure coherence with SGD, this option would stipulate the number of years during which manufactures commit to provide updates, without prejudice to the statutory SGD right on software updates if the 'reasonably expected period' for updates turns out to be longer. The seller would be required to pass on the manufacturer's info as well as the reminder about the statutory right.

On the one hand, this could create some confusion; on the other hand, it would make the statutory SGD right more tangible and meaningful –i.e. the consumer will know that at least for the indicated period he is entitled to updates. Furthermore, the information on software updates will be on both goods with digital elements and digital content/service to ensure coherence between SGD and Digital Content Directive, which contain both the same update obligation of the seller/trader.

Analysis

The measure aims to ensure that consumers receive information on the period of time during which the manufacturer will ensure availability of software updates. This is coherent with the objectives under Article 114 TFEU to contribute to the proper functioning of the internal market and achieve a high level of consumer protection and in line with Article 169 TFEU regarding consumers' right to information and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

In particular, **sellers** are required to provide information on the **period of time** during which the manufacturer will ensure the availability of software updates to guarantee **both security and proper function** of the product.

These measure's objectives are coherent with the general objective of the SGD which is 'to contribute to the proper functioning of the internal market while providing for a high level of consumer protection, by laying down common rules on certain requirements concerning sales contracts concluded between sellers and consumers' (Article 2).

The proposed measure aims to ensure that the consumer will have information on the updates s/he will receive and take a decision to buy or not the product in relation to the period of time that s/he may reasonably expect.

For present purposes, it should be stressed that under the CRD, some pre-contractual information form an integral part of the contract (see Article 6, para. 5). Insofar as this information is indicated in any pre-contractual statement which forms part of the sales contract, this might become relevant for the **legal guarantee** under the **subjective requirements for conformity** which establish that **updates should be provided 'as stipulated in the sales contract'**.

The SGD includes the provision of updates among the subjective and objective requirements for conformity for the purposes of the **legal guarantee**.

Under Article 6 of SGD on '**subjective requirements** for conformity', **updates should be provided** 'as stipulated by the sales contract'. Article 7(3) in the SGD regarding '**objective requirements for conformity**' establishes that, in the case of goods with **digital elements**, the seller shall ensure that the consumer is informed of and supplied

with updates, including security updates, that are necessary to keep those goods in conformity, for the period of time:

(a) **that the consumer may reasonably expect** given the type and purpose of the goods and the digital elements, and taking into account the circumstances and nature of the contract, where the sales contract provides for a single act of supply of the digital content or digital service, or

(b) the different **applicable time** as indicated in Article 10(2) or (5) where the sales contract provides for a **continuous supply** of the digital content or digital service over a period of time.

If the consumer fails to install the update supplied, the seller is not liable for any lack of conformity provided that the seller informed the consumer about the availability of the update and the consequence of the failure to install it, and the failure to install was not due to shortcomings in the installation instructions provided to the consumer.

Similar provisions are included in Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services (DCD) in Articles 7 and 8.

The recitals of the SGD provide further clarifications. According to Recitals 30 and 31, in addition to contractually agreed updates, the seller should also provide updates, including security updates, in order to ensure that goods with digital elements remain in conformity. The seller's obligation should be limited to updates which are **necessary for such goods to maintain their conformity with the objective and subjective requirements for conformity** laid down in the Directive. In principle, the seller should only be liable for a lack of conformity that exists at the time of delivery. However, the obligation to provide updates should reflect the fact that the digital environment of any such good constantly changes. Therefore, updates are a necessary tool **in order to ensure that the goods are able to function in the same way that they did at the time of delivery**.

Furthermore, in contrast to traditional goods, goods with digital elements are not completely separate from the seller's sphere because the seller, or a third person supplying the digital content or digital service under the sales contract, is able to update the goods from a distance, usually over the internet. Therefore, if the digital content or digital service is supplied by a single act of supply, the seller should be liable to provide the updates necessary to keep the goods with digital elements **in conformity for a period of time that the consumer can reasonably expect,** even if the goods were in conformity at the time of delivery. The period of time during which the consumer **can reasonably expect** to receive updates **should be assessed based on the type and purpose of the goods and the digital elements,** and taking into account the circumstances and nature of the sales contract. Recital 31 further states that **'A consumer would normally expect to receive updates for at least as long as the period during which the seller is liable for a lack of conformity, while in some cases the consumer's reasonable expectation could extend beyond that period, as might be the case particularly with regard to security updates**'. In other cases, for instance as regards goods with digital elements the purpose of which is limited in time, the seller's obligation to provide updates would normally be limited to that time.

Similarly, Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services (DCD) clarifies, at Recital 47, that '**[f]or the period of time that the consumer would reasonably expect**, the trader should provide the consumer with updates, including security updates, in order to keep the digital content or digital service in conformity and secure. For instance, as regards digital content or digital services, the purpose of which is limited in time, the obligation to provide updates should be limited to that time, while **for other types of digital content or digital service the period during which updates should be provided to the consumer could be equal to**

the liability period for lack of conformity or could extend beyond that period, which might be the case particularly with regard to security updates'.

In order to ensure coherence with SGD, this option would stipulate the number of years during which manufactures commit to provide updates, without prejudice to the statutory SGD right on software updates if the 'reasonably expected period' for updates turns out to be longer. The seller would be required to pass on the manufacturer's info as well as the reminder about the statutory right. On the one hand, this could create some confusion; on the other hand, it would make the statutory SGD right more tangible and meaningful –i.e. the consumer will know that at least for the indicated period he is entitled to updates. Furthermore, the information on software updates will be on both goods with digital elements and digital content/service to ensure coherence between SGD and Digital Content Directive, which contain both the same update obligation of the seller/trader.

With regard to whether the notion of 'appropriate and safe functioning of a product' under the SGD can interact with similar notions in the field of eco-design under the Ecodesign Directive it is worth noting that its objective is to establish "ecodesign requirements for energy-related products with the aim of ensuring the free movement of such products within the internal market. […] It contributes to sustainable development by increasing energy efficiency and the level of protection of the environment, while at the same time increasing the security of the energy supply" (Articles 1(1) and 1(2)). According to the Ecodesign Working Plan 2016-2019, product design "can have significant impacts across the product life cycle e.g. in making a product more durable, easier to repair, reuse or recycle. Therefore, the standards adopted under the Eco-design scheme would facilitate the definition of the periods of time that the consumer can expect to receive those updates and that the trader might want to offer.

The Ecodesign Directive already covers all significant environmental impacts along the life-cycle of products but the focus so far has been on energy efficiency improvements**. In future, Ecodesign could potentially make a much more significant contribution to the circular economy, for example by more systematically tackling material efficiency issues such as durability and recyclability**". The Work Plan also stated that the Commission was to explore "the possibility of establishing more product-specific and/or horizontal requirements in areas **such as durability (e.g. minimum lifetime of products or critical components)**, reparability (e.g. availability of spare parts and repair manuals, design for repair), upgradeability, design for disassembly (e.g. easy removal of certain components), information (e.g. marking of plastic parts) and ease of reuse and recycling (e.g. avoiding incompatible plastics)". The Ecodesign Directive does not define the notion of 'functionality'. Functional requirements, which also in some cases refer to durability, are contained in product-specific implementing regulations and do not appear to require coordination with the measure at issue.

Specifically concerning software updates, Commission Regulation (EU) 2019/2021 of 1 October 2019 laying down ecodesign requirements for electronic displays provides that information on the **minimum guaranteed availability of software and firmware updates**, availability of spare parts and product support shall be indicated in the product information. However, this is of limited relevance here because such information shall be provided free of charge to third parties dealing with **professional repair** and reuse of electronic displays (including third party maintenance actors, brokers and spare parts providers).

Finally, the use of digital means for the provision of information on the period of time during which the manufacturer will ensure the availability of updates and for the provision of information on how and where consumers and independent repairers can get software updates and upgrades does not pose coherence issues in and of itself. However, legislation sometimes requires that information to consumers is provided

through durable means (for example, the CRD requires information concerning off premise contracts to be provided on a durable medium; the SGD requires that the commercial guarantee statement shall be provided to the consumer on a durable medium). In such cases, the digital means used should respect the requirements to be considered 'durable medium' as defined under the SGD Directive and the CRD. The CJEU case-law has clarified the interpretation of this definition considering that the medium must enable consumers, in a similar way to paper form, to be in possession of the relevant information in order to enable them to exercise their rights, where necessary. What is relevant for the consumers is that they should be able to store the information which has been addressed to them personally, to rest assured that its content will not be altered, that the information will be accessible for an adequate period and that it will be possible to reproduce it unchanged (see Case C-375/15, para. 42 and cited case-law).

A13.1.3 Sub-problem 1.3: Lack of reliable information about products' reparability

The measures designed to respond to this sub-problem aim to ensure that consumers receive a minimum set of reliable and useful information on the good's reparability characteristics, including software updates, for all products in a harmonised way. It prevents sales of products with a covertly shortened lifespan. By providing consumers with this information consistently across products in the EU, it is expected that consumers will prefer goods for which the update/upgrade policy is more advantageous. Also, this measure might ensure that consumers can update/upgrade their good's software in case they need them without much effort.

These measures focus on answering issues such as the lack of information on the availability of repair services, spare parts and repair manuals and on the software update/upgrade policy and on the ineffective enforcement of existing consumer protection rules related to imperfect information, obsolescence and greenwashing.

A13.1.3.1 Measure 1.3.1. Provision of updated, user-friendly repair and maintenance manuals to consumers

Summary

This option requiring the provision of repair and maintenance manuals contributes to ensuring good maintenance during the use phase which will contribute to extending the useful lifetime of the product. Moreover, it supports self-repair while protecting consumers from problems faced when trying to independently carry out repairs without having the necessary instructions to do so. Overall, the option appears fully coherent with existing EU legislation, in particular existing or future Eco-design/SPI requirements which may provide for specific product categories further details concerning what the specific 'repair and user manual' should include.

This option is certainly in line with the general objective of strengthening the reparability of products that is at the core of the circular economy policy and, therefore, of the new Ecodesign regulations. Moreover, the option is coherent with the new Ecodesign regulations, which promote maintenance and repair by requiring the provision of relevant information to professional repairers and ensuring the availability of spare parts, as well as the requirement that such spare parts can be replaced with the use of commonly available tools. That said, coherence should be ensured between the measure proposing to provide maintenance and **repair manuals** to consumers and the safety legislation. The General Product Safety Directive, together with other product-specific legislation and harmonised voluntary standards, impose requirements to ensure that the products placed on the market are safe for consumers. Moreover, legislative texts that are not specifically concerned with safety might contain provisions whereby the

inability to perform certain operations on products is justified by safety concerns. For example, the **Directive 2006/66/EC on batteries and accumulators** (which mainly seeks to improve the environmental performance of batteries and accumulators) provides that batteries and accumulators should be removable, but also adds that this does not apply if the inability to remove is justified, among others, by safety reasons (Art. 11). The repair operations that the user can carry out should be safe and should not impact the compliance of the product with safety requirements. In terms of market surveillance, it should be stressed that the General Product Safety Directive allows Member States to organise, even after the product has been placed on the market and considered as being safe, appropriate checks on its safety properties, on an adequate scale, up to the final stage of use or consumption. Coherence between safety requirements and facilitation of independent and self-repair must therefore be ensured.

The Ecodesign framework effectively takes safety concerns into account. The new **Ecodesign regulations** provide that **the manufacturer's obligation to provide access to repair and maintenance information is limited to professional repairers fulfilling a set of conditions** related to technical capacity, compliance with applicable national regulations for repairers and insurance covering liability. **The instructions that, according to some regulations, must be made available to end-users are limited to maintenance operations**.[480] In some cases, these instructions must also include information on **any implications of self-repair or non-professional repair for the safety of the end-user and for the guarantee**.[481] Therefore, in some cases the information requirements aim to **discourage self-repair**. Moreover, Art. 9 of the Waste Framework Directive offers an example where the promotion of self-repair and safety concerns are reconciled, providing that Member States must adopt measures that "encourage, as appropriate and without prejudice to intellectual property rights, **the availability of spare parts, instruction manuals**, technical information, or other instruments, equipment or software **enabling the repair and re-use of products without compromising their quality and safety**".

Analysis

This option requiring the provision of repair and maintenance manuals contributes to ensuring good maintenance during the use phase which will contribute to extending the useful lifetime of the product. Moreover, it supports self-repair while protecting consumers from problems faced when trying to independently carry out repairs without having the necessary instructions to do so. Overall, the option appears fully coherent with existing EU legislation, in particular existing or future Eco-design/SPI requirements which may provide for specific product categories further details concerning what the specific 'repair and user manual' should include. As the Ecodesign framework already does, safety concerns must be taken into account to ensure coherence with safety legislation.

EU rules on product safety are defined in the General Product Safety Directive (Directive 2001/95/EC). The purpose of the Directive is to ensure that products placed on the market are safe. Under the directive a product is safe if it meets all statutory safety requirements under EU or national law. The Directive's provisions apply in so far as there are no specific provisions with the same objective in rules of EU law governing the safety of the products concerned. Some categories of products are covered by product specific legislation such as toys, electrical appliances or cars. The General Product Safety

Directive does not specifically mention repair. Under Art. 2(b), it is stated that "safe product" shall mean any product which, under normal or reasonably foreseeable conditions of use including duration and, where applicable, putting into service, installation and **maintenance requirements**, does not present any risk or only the minimum risks compatible with the product's use, considered to be acceptable and consistent with a high level of protection for the safety and health of persons, taking into account a number of points which include the characteristics of the product, including composition, packaging, instructions for assembly and, where applicable, for installation and **maintenance**.

Under Art. 5, producers shall provide consumers with the relevant information to enable them to assess the risks inherent in a product throughout the normal or reasonably foreseeable period of its use, where such risks are not immediately obvious without adequate warnings, and to take precautions against those risks. Under Art. 6, distributors shall be required to act with due care to help to ensure compliance with the applicable safety requirements, in particular by not supplying products which they know or should have presumed, on the basis of the information in their possession and as professionals, do not comply with those requirements. Moreover, within the limits of their respective activities, they shall participate in monitoring the safety of products placed on the market, especially by passing on information on product risks, keeping and providing the documentation necessary for tracing the origin of products, and cooperating in the action taken by producers and competent authorities to avoid the risks. Within the limits of their respective activities they shall take measures enabling them to cooperate efficiently.

While the General Product Safety Directive does not address repair, issues may arise in cases where repair carried out by the consumer, both in terms of safety for the user of the repair operation and of the impacts of the repair carried out on the safety of the product. This might also impact market surveillance activities as Member States are entitled to organise, even after a product is placed on the market as being safe, appropriate checks on its safety properties, on an adequate scale, up to the final stage of use or consumption (Art. 8(1)(a)). Moreover, it will be necessary to ensure coherence with product-specific safety legislation and the European harmonised standards. Standards are developed by European standardisation organisations and are voluntary, but products compliant with a standard referenced in the Official Journal are presumed to be safe.

Justifications to limits to the possibility of, for example, removing certain components in light of safety concerns can be found in other pieces EU legislation. For example, **Directive 2006/66/EC on batteries and accumulators** (which mainly seeks to improve the environmental performance of batteries and accumulators) provides that "Member States shall ensure that manufacturers design appliances in such a way that waste batteries and accumulators can be **readily removed**. Where they cannot be readily removed by the end-user, Member States shall ensure that manufacturers design appliances in such a way that waste batteries and accumulators can be readily removed by qualified professionals that are independent of the manufacturer. Appliances in which batteries and accumulators are incorporated shall be accompanied by instructions on how those batteries and accumulators can be safely removed by either the end-user or by independent qualified professionals. Where appropriate, the instructions shall also inform the end-user of the types of battery or accumulator incorporated into the appliance". However, the second paragraph specifies that "**The provisions set out in the first paragraph shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary** and a permanent connection between the appliance and the battery or accumulator is required".

The option appears fully coherent with existing or future Ecodesign/SPI requirements which provide, for specific product categories, further details concerning what the specific 'repair and user manual' should include. The Ecodesign framework effectively takes safety concerns into account while promoting maintenance and repair.

The general objective of promoting reparability is in line with the EU Circular Economy policy and therefore, with the Ecodesign framework. The **Ecodesign Directive** 2009/125/EC, as amended, establishes "ecodesign requirements for energy-related products with the aim of ensuring the free movement of such products within the internal market". The objectives relate to "sustainable development by increasing energy efficiency and the level of protection of the environment, while at the same time increasing the security of the energy supply" (Art 1(1) and 1(2)). The scope of the Directive is limited to 'Energy-related products', defined as "any good that has an impact on energy consumption during use which is placed on the market and/or put into service, and includes parts intended to be incorporated into energy-related products covered by this Directive which are placed on the market and/or put into service as individual parts for end-users and of which the environmental performance can be assessed independently" (Art 2(1)).

Annex I, section 1.3(i) of the Ecodesign Directive includes as a parameter for evaluating the potential for improving the environmental aspects of products: "extension of lifetime as expressed through: minimum guaranteed lifetime, minimum time for availability of spare parts, modularity, upgradeability, reparability".

According to the Working Plan 2016-2019[482], the Commission was to explore "the possibility of establishing more product-specific and/or horizontal requirements in areas such as durability (e.g. minimum lifetime of products or critical components), **reparability (e.g. availability of spare parts and repair manuals**, design for repair), upgradeability, design for disassembly (e.g. easy removal of certain components), information (e.g. marking of plastic parts) and ease of reuse and recycling (e.g. avoiding incompatible plastics)" for both new product groups and existing product-specific.[483]

The Directive itself does not set out measures or standards required for each product category – this is to be done through implementing measures.

The European Commission on 1 October 2019 adopted several ecodesign regulations including product requirements related to the circular economy, e.g. availability of spare parts and **repair information to professional repairers**. Under these regulations, **the manufacturer's obligation to provide access to repair information is limited to professional repairers fulfilling a set of conditions**. The manufacturer (or the authorised representative or importer) may require the professional repairer to demonstrate (i) the technical expertise to repair and maintain the product concerned in compliance with the applicable regulations for repairers in the Member States where it operates; (ii) insurance covering liability resulting from its activity. Moreover, the manufacturer may charge reasonable and proportionate fees for access to the repair and maintenance information or for receiving regular updates.

The instructions that, according to some regulations, must be made available to end-users are limited to maintenance operations.[484] In some cases, these instructions must also include information on **any implications of self-repair or non-professional repair for the safety of the end-user and for the guarantee**.[485] Therefore, in some cases the information requirements aim to discourage self-repair.

[482] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[483] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[484] Commission Regulation (EU) 2019/2023 of 1 October 2019 laying down ecodesign requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02019R2023-20191205&from=EN; Commission Regulation (EU) 2019/2024 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2024&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2019&from=EN

[485] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02019R2023-20191205&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2022&from=EN

However, other **provisions under the new Ecodesign regulations also encourage self-repair**, establishing the availability of some spare parts to end-users, and the requirement that such spare parts can be replaced with the use of commonly available tools (see below, under measure 1.3.B, for a more detailed discussion of these aspects).

Thus, the Ecodesign framework promotes repair while effectively taking safety concerns into account.

Similarly, the Waste Framework Directive, as amended, takes into account safety concerns in relation to repair manuals and spare parts. Art. 9 provides that Member States shall take measures to prevent waste generation. Among the measures that Member States must adopt, Art. 9(1)(e) mentions measures that "encourage, as appropriate and without prejudice to intellectual property rights, **the availability of spare parts, instruction manuals**, technical information, or other instruments, equipment or software **enabling the repair and re-use of products without compromising their quality and safety**".

This provision shows that safety concerns must be taken into account, but also provides an example of how to formulate an obligation so as to ensure coherence with safety legislation.

A13.1.3.2 Measure 1.3.2. Provision of information about which spare parts are available and until when

Summary

This option aims at protecting consumers trying to repair products as they can know if and which spare parts are available. As it focuses on informing consumers on the availability of spare parts, the option is coherent and complements eco-design rules if and when they define whether spare parts should be available for a given product category. The new Ecodesign regulations strongly promote reparability by requiring the availability of spare parts for a certain number of years, and by imposing information obligations concerning spare parts. The Ecodesign regulations on availability of spare parts and on information obligations (on the list of spare parts available and the procedure for ordering them) make a **distinction between the spare parts available only to professional repairers and the spare parts available to both professional repairers and consumers**. This information must be provided via the free access website of the manufacturer. In this regard, these information obligations complement the information obligations foreseen under the proposed measure, which covers **which spare parts are available and for how long**. In addition, the Ecodesign regulations require spare parts to be made available for a period '**after placing the last unit of the model on the market**'. While for spare parts available to end-users, the information must be made available **at the moment of the placing of the market of the first unit of a model**, for spare parts available only to professional repairers such information must be made available **at the latest two years after the placing on the market of the first unit of a model**.

Analysis

From the point of view of consumer protection, the introduction of an obligation to provide information about which spare parts are available and until when them does not appear to raise any coherence problems with the consumer protection legislation.

In terms of general objectives, the measure aims at guaranteeing that consumers are provided with information about the reparability of a product. While the SGD, Directive 2019/771 leaves the consumer a choice between repair and replacement, recital 48 recalls that enabling consumers to require repair should encourage sustainable consumption and contribute to greater durability of products. **As to spare parts in**

particular, the recitals of the SGD, Directive 2019/771 clarify that it is possible that sellers would make use of spare parts in order to fulfil their obligation to repair goods in case of lack of conformity. In this regard, it is stated that "while this Directive should not impose an obligation on sellers to ensure the availability of **spare parts** throughout a period of time as an objective requirement for conformity, it should not affect other provisions of national law obliging the seller, the producer or other person constituting a link in the chain of transactions, to ensure that spare parts are available or to inform consumers about such availability". Since the proposed measure only aims at creating an information obligation on the availability of the spare parts, there appear to be no issues of interaction with the legal guarantee.

As it focuses on informing consumers on the availability of spare parts, the option is coherent and complements eco-design rules if and when they define whether spare parts should be available for a given product category. In this case as well, safety concerns are taken into account in the **Ecodesign** legislation.

Recent Ecodesign regulations have introduced obligations to **ensure the availability of spare parts, as well as some information requirements on the available spare parts**. Examples include the availability of spare parts over a long period after purchase (7 years minimum for refrigerating appliances; 10 years minimum for household washing-machines and household washer-dryers; 10 years minimum for household dishwashers), including the obligation, during that period, for the manufacturer to ensure the delivery of the spare parts within 15 working days. The spare parts should be removable with the use of commonly available tools. Moreover, under the new Ecodesign measures, manufacturers have to ensure the availability of repair and professional maintenance information for professional repairers.

In terms of objectives, the requirements on spare parts availability and information imposed by the Ecodesign regulations and the proposed measure 1.3.B are certainly aligned, as they aim at fostering reparability of products (the Ecodesign regulation) and the provision of information on reparability (both the Ecodesign and the proposed measure). However, a number of aspects concerning the obligations introduced by the Ecodesign Regulations should be considered to ensure the coherence of both legal frameworks.

- The Ecodesign regulations provide for product-specific obligations on the availability of spare parts for minimum periods of time.
- The Ecodesign regulations **distinguish** between the **spare parts that must be made available to professional repairers** and those that must be made available to **both professional repairers and end-users**.
- Spare parts must be made available for a certain number of years **after placing the last unit of the model on the market**.
- Next to the obligation to provide spare parts, the Ecodesign regulations **introduce information obligations**, distinguishing between the spare parts that must be made available to professional repairers and those available to professional repairers and end-users:
- **The list of spare parts available for professional repairers** and **the procedure for ordering them** shall be publicly available on the free access website of the manufacturer, importer or authorised representative, **at the latest two years after the placing on the market of the first unit of a model and until the end of the period of availability of the spare parts**.
- **The list of spare parts available to both professional repairers and end-users**, as well as the procedure for ordering them, shall be publicly available on the manufacturer's, importer's or authorised representative's free access website, **at the moment of the placing on the market of the first unit of a model** and until the end of the period of availability of these spare parts.

The following aspects could be taken into account to ensure full coherence:

- The Ecodesign regulations make a distinction between the spare parts available only to professional repairers and the spare parts available to both professional repairers and consumers. The proposed measure would instead target consumers.
- The Ecodesign regulations introduce information obligations as to which spare parts are available and the procedure for ordering them. This information must be provided via the free access website of the manufacturer. In this regard, these information obligations at least partly overlap with the information obligations foreseen under the proposed measure, which covers how long and which spare parts are available. It should be noted that, in the Ecodesign regulations, for spare parts also available to end-users the information must be made available at the moment of the placing of the market of the first unit of a model, while for spare parts available only to professional repairers such information must be made available at the latest two years after the placing on the market of the first unit of a model.

As discussed above, the Waste Framework Directive, as amended, takes into account safety concerns in relation to repair manuals as well as **spare parts**. Art. 9 provides that Member States shall take measures to prevent waste generation. Among the measures that Member States must adopt, Art. 9(1)(e) mentions measures that "encourage, as appropriate and without prejudice to intellectual property rights, **the availability of spare parts, instruction manuals**, technical information, or other instruments, equipment or software **enabling the repair and re-use of products without compromising their quality and safety**". This provision shows that safety concerns must be taken into account, but also provides an example of how to formulate an obligation so as to ensure coherence with safety legislation.

A13.1.3.4 Measure 1.3.3. Information about availability of repair services

Summary

No issues of coherence were identified. The provision of information about the availability of repair services does not pose coherence issues with consumer legislation. The provision is also overall coherent with the Ecodesign regulations promoting access to repair, although these measures are more focused on professional rather than independent repair.

Analysis

Under the SGD, repair is one of the remedies that the consumer can use in case of lack of conformity under the legal guarantee. It is the seller that is responsible for the repair. The present measure would impose a distinct information obligation upon the seller that would not interact with the SGD provisions. The Consumer Rights Directive 2011/83/EU does not expressly mention repair services, but references are made to after sale services and after sale customer assistance. Art. 6 mentions among the information requirements for distance and off-premise contracts, "where applicable, the existence and the conditions of **after sale customer assistance, after-sales services** and commercial guarantees" (Art. 6). Art. 5 of the Directive imposes that the trader provides to the consumer, in a clear and comprehensible manner, information on the main characteristics of the goods or services. While the scope of 'main characteristics' of the product is not defined in the Directive, the guidance document developed in 2014 by DG Justice states that the 'information requirement in Article 5(1)(a) of the Consumer

Right Directive is identical to the one in Article 7(4)(a) of the UCPD'[486] that regulates misleading omissions and refers to the 2009 UCPD guidance for more details. According to the UCPD guidance, material information as regards the main characteristics of the product to be provided under Article 7(4) depends largely on the product concerned and on what can be considered 'appropriate' given the 'medium' used by the trader to make the commercial communication. Restrictive conditions which limit the offer and safety warnings are elements that can be considered to be main characteristics[487]. Article 6(1)(b) of UCPD provides the most complete definition of 'main characteristics', including '**after sale customer assistance'**.

References to access to repair services can be found in the Ecodesign regulations. For example, Regulation 2019/2023 on washing machines (Annex II) and Regulation 2019/2022 on dishwashers (Annex II) provide that user instructions should specify "how to access **professional repair** (internet webpages, addresses, contact details)". However, this is limited to **access to professional repair**, and does not include **independent repair**. From a more general perspective, the relevant provisions of the Ecodesign regulations are focused on **professional repair** and are less focused on independent repair.

A13.1.3.5 Measure 1.3.4. Reparability scoring Index

Summary

No issue of coherence with existing EU law were identified. An EU-level reparability scoring index could avoid risks of market fragmentation deriving from the development of national reparability indexes. The criteria to determine the scoring should ensure coherence with the definitions and requirements of EU legislation.

Analysis

The introduction of a Reparability scoring index would be coherent, complement and strengthen the EU law provisions aiming at boosting reparability and the availability of reparability information. The introduction of an EU-level scoring index would avoid the market fragmentation that may result from the proliferation of national-level indexes. The purpose of the Reparability Index would be to inform consumers about the ability to repair the product concerned and to guide consumers towards products that can last longer because they are repairable. The ultimate objective is to increase repair.

Therefore, the introduction of a Reparability scoring index would be coherent, complement and strengthen the EU law provisions aiming at boosting reparability and the availability of reparability information. The objective of reparability is present in many pieces of EU legislation. For example, the SGD has included the durability of the product among the objective requirements of conformity. The SGD upheld the hierarchy of remedies, already present in the previous directive, in which consumers have to accept first repair or replacement and are entitled to refund or termination only if those first remedies cannot be granted. While the consumers enjoy a choice between repair and replacement, Recital 48 stresses that '[e]nabling consumers to require repair should encourage sustainable consumption and could contribute to greater durability of products'.

Reparability is also a relevant objective under the **Ecodesign** legislation. For example, under the Ecodesign Directive, parameters that must be used for evaluating the

[486] European Commission, DG Justice (2014) DG Justice Guidance Document concerning Directive 2011/83/EU of the European Parliament and of the Council of 25 October2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

[487] UCPD Guidance, 2016, section 3.4.5 Material information in invitations to purchase — Article 7(4), P.68.

potential for improving the environmental aspects include how easily parts and components can be reused and recycled (Annex I, section 1.3(f) and (h)) and Annex I, section 1.3(i) also includes as a parameter for evaluating the potential for improving the environmental aspects of products: "extension of lifetime as expressed through: minimum guaranteed lifetime, minimum time for availability of spare parts, modularity, upgradeability, **reparability**". Moreover, as already discussed, according to the Working Plan 2016-2019[488], the Commission was to explore "the possibility of establishing more product-specific and/or horizontal requirements in areas such as durability (e.g. minimum lifetime of products or critical components), **reparability** (e.g. availability of spare parts and repair manuals, design for repair), upgradeability, design for disassembly (e.g. easy removal of certain components), information (e.g. marking of plastic parts) and ease of reuse and recycling (e.g. avoiding incompatible plastics)". As explained above, the European Commission, on 1 October 2019, adopted several Ecodesign regulations including product requirements promoting reparability, such as availability of spare parts and repair information to professional repairers. This has been done, in particular, by requiring that spare parts are available over a long period after purchase (7 years minimum for refrigerating appliances; 10 years minimum for household washing-machines and household washer-dryers; 10 years minimum for household dishwashers); by including the obligation, during that period, for the manufacturer to ensure the delivery of the spare parts within 15 working days; by ensuring the availability of repair and professional maintenance information for professional repairers.

Reparability is also addressed in the **Waste Framework Directive**[489], as amended by Directive 2018/851. Article 8(2) of the Waste Framework Directive provided for the possibility for Member State to take measures to encourage the design of products to reduce their environmental impacts and the generation of waste. It specified that such measures could include '*the development, production and marketing of products that are [..] are technically durable [..]*' The Directive has added '*and **easily reparable'*** to this provision. Moreover, the Directive establishes measures that Member States must take to prevent waste generation. One of the measures that Member States are required to take is to '*encourage the design, manufacturing, and use of products that are resource-efficient, **durable** (including in terms of life span and absence of **planned obsolescence**), **reparable**, re-usable and upgradable*[490]*'*. Other measures under Article 9(1) are to set up '*systems promoting **repair***[491]*'* and to encourage *'the availability of **spare parts***[492]*'*. Finally, concerning the PEF methodology, a PEF Study covers the duration/life time of the product. Under the use-stage processes, repair and maintenance of the product are covered.

That said, the Reparability scoring index system would have to be clear and easy to use by consumers but also by manufacturers if they need to allocate an index for their products. On that basis, the implementation of the criteria designed by the EU legislation for the scoring index for each product should be made public. For example, mirroring existing initiatives, it would provide information on the price of parts compared to new products, or the duration of availability of spare parts.

In order to ensure consistency, the development of the reparability index at EU level might need to be based on processes that are consistent with those to develop energy efficiency labelling where experts and stakeholders are involved and should take into account requirements under the Eco-design regulations related to repair and spare parts. It should be possible to verify the relevant requirements efficiently, similarly to what happens for market surveillance in the fields of Ecodesign and Energy Label. Other

[488] https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf

[489] Directive 2008/98/EC

[490] Article 9(1)(b) of Directive 2008/98/EC

[491], Article 9(1)(d) of Directive 2008/98/EC

[492] Article 9(1)(e) of Directive 2008/98/EC

specific criteria may require taking into account relevant legislation. To give an example, relevant provisions on disassembly, which might be a relevant criterion, can be found in Commission Decision (EU) 2016/1371 of 10 August 2016 establishing the ecological criteria for the award of the EU Ecolabel for personal, notebook and tablet computers. Commercial guarantees might also be of relevance, for example if the scoring system was to include among its criteria a commitment to free repair through a commercial guarantee.

A13.2 Problem 2: Consumers face misleading practices in relation to sustainable purchases

A13.2.1 Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

A13.2.1.1 Measure 2.1.1. Information on accumulated evidence of recorded early failures of products present in the market

Summary

This option aims to protect consumers from unknowingly purchasing products that are likely to fail earlier than they would expect. No issues of coherence with existing legislation were identified. The provision of information on products with recorded early failures might complement and reinforce other EU law provisions relating to durability and lifespan, helping consumers to support their claims on early failures of products. This would be the case, for example, for the **SGD**, which includes as an objective criterion for assessing the conformity of goods the **durability** of the product, defined as the '**ability of the goods to maintain their required functions and performance through normal use'**. To be considered in conformity, goods should 'possess the durability which is normal for goods of the same type and which the consumer can reasonably expect given the nature of the specific goods' (Recital 32). Another relevant notion is contained in the **UCPD Guidance**, which clarifies that planned obsolescence is not unfair per se but that a trader who fails to inform the consumer that a product has been designed with a "**limited lifetime**" might, according to the specific circumstances of the individual case, be considered to have omitted to provide material information. The proposed option could also help enforcement of current and future **minimum durability requirements** in the **Ecodesign regulations**. Such minimum durability requirements are already in place for some products, such as vacuum cleaners[493] and lamps[494], and can be expected to be developed in the future since, as was emphasised under the Work Plan 2016-2019, the Commission should explore "the possibility of establishing more product-specific and/or horizontal requirements" in a number of areas including **durability, e.g. minimum lifetime of products or critical components**.

Analysis

This option aims to protect consumers from unknowingly purchasing products that are likely to fail earlier than they would expect. No issues of coherence with existing legislation were identified. The provision of information on products with early failures might complement and reinforce other EU law provisions relating to durability and lifespan, helping consumers to support their claims on early failures of products. This would be the case, for example, for the **SGD**, which includes as an objective criterion for assessing the conformity of goods the **durability** of the product, defined as the '**ability of the goods to maintain their required functions and performance through normal use'**. To be considered in conformity, goods should 'possess the durability which is normal for goods of the same type and which the consumer can

[493] E.g., Commission Regulation (EU) No 666/2013 of 8 July 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for vacuum cleaners; Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps, which will be replaced starting 1 September 2021 with Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears.

[494]

reasonably expect given the nature of the specific goods' (Recital 32). Another relevant notion is contained in the **UCPD Guidance**, which clarifies that planned obsolescence is not unfair per se but that a trader who fails to inform the consumer that a product has been designed with a "**limited lifetime**" might, according to the specific circumstances of the individual case, be considered to have omitted to provide material information. The proposed option could also help enforcement of current and future **minimum durability requirements** in the **Ecodesign regulations**. Such minimum durability requirements are already in place for some products, such as vacuum cleaners[495] and lamps[496], and can be expected to be developed in the future since, as was emphasised under the Work Plan 2016-2019, the Commission should explore "the possibility of establishing more product-specific and/or horizontal requirements" in a number of areas including **durability, e.g. minimum lifetime of products or critical components**.

If placed under an obligation to provide such information, market surveillance bodies and consumer organisations should be provided with the necessary surveillance tools, such as the development of adequate **verification mechanisms to detect early failures**. The verification and monitoring mechanisms foreseen for this option adequately satisfy this requirement. Consumers would be informed of the evidence (results of independent testing, based on consumer complaints etc.) collected on certain aspects of the product's design that could cause an early failure of the product, thus reducing its lifespan. Third party "authorised entities", such as consumer organisations and market monitoring bodies (public or non-public), would be nominated by Member States and called upon to collect such evidence, verify and publish synthesis reports for consumer information. The details of collected information would be accessible to public authorities for market surveillance purposes including possible sanctions against the trader. This information would be made available via the website of the authorised entities or via other means. This is in line with existing EU legislation on **market surveillance and inspections**, such as Regulation 2019/1020 on market surveillance

Finally, the use of digital means for the provision of information on the product's design that can cause it to fail earlier than the expected lifespan for the product type does not pose legal coherence issues in itself. However, legislation sometimes requires that information to consumers is provided through durable means (for example, the CRD requires information concerning off premise contracts to be provided on a durable medium; the SGD requires that the commercial guarantee statement shall be provided to the consumer on a durable medium). In such cases, the digital means used should respect the requirements to be considered 'durable medium' as defined under the SGD and the CRD. The CJEU case-law has clarified the interpretation of this definition considering that the medium must enable consumers, in a similar way to paper form, to be in possession of the relevant information in order to enable them to exercise their rights, where necessary. What is relevant for the consumers is that they should be able to store the information which has been addressed to them personally, to rest assured that its content will not be altered, that the information will be accessible for an adequate period and that it will be possible to reproduce it unchanged (see Case C-375/15, para. 42 and cited case-law).

[495] E.g., Commission Regulation (EU) No 666/2013 of 8 July 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for vacuum cleaners; Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps.

[496]

A13.2.1.2 Measure 2.1.2 Ban of certain identified practices associated to premature obsolescence

Summary

This option foresees the inclusion of certain obsolescence practices in the 'blacklist' of per se prohibited commercial practices in Annex I of the UCPD. No issues of coherence were identified between this option and existing legislation. It might be worth stressing that, to ensure coherence with the nature and approach of the UCPD blacklist, the design of the measure should ensure that practices are easy to identify and avoid the use of language that is open to interpretation. It is moreover necessary to avoid to formulate the practice in a way that would still require an assessment *in concreto* of the unfairness of the behaviour of the trader.[497] At the same time, using examples that are excessively specific and concrete might make the blacklisted practices soon outdated, and that is problematic given that the blacklist can only be changed by revising the Directive.

It is also necessary to take into account that certain practices that have negative impacts on the product's lifespan, such as preventing access to certain components by the user, might be justified in light of safety concerns.

Analysis

This option foresees the inclusion of certain obsolescence practices in the 'blacklist' of per se prohibited commercial practices in Annex I of the UCPD. These would include, for example, providing software updates resulting in slowing down, not providing updates which are needed for the proper functioning of the device, no access to batteries/accumulators or other key components of a product which will make the product irreparable (unless justified for safety /security concerns).

The general purpose of the UCPD is to contribute to the proper functioning of the internal market and achieve a high level of consumer protection by approximating the laws, regulations and administrative provisions of the Member States on unfair commercial practices harming consumers' economic interests (Article 1), in line with Article 114 TFEU and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

The UCPD contains a list of the commercial practices which are considered in all circumstances unfair (so-called 'blacklist'). The practices contained in the list are considered unfair without the need for a case-by-case assessment to verify whether they are contrary to the requirements of professional diligence and without the need to assess their effects on consumer behaviour. The blacklist can only be modified through a revision of the Directive following the legislative procedure. As specified in the UCPD Guidance, the blacklist 'was drawn up to enable enforcers, traders, marketing professionals and customers to identify certain practices and give a more immediate enforcement response to them'. It therefore leads to greater legal certainty (Recital 17). The Guidance states that if '…it can be proved that the trader has carried out a blacklisted commercial practice, national enforcers can take action to sanction the trader without having to apply a case-by-case test (i.e. assessing the likely impact of the practice on the average consumer's economic behaviour)'.

To ensure coherence with the nature and approach of the UCPD blacklist, the design of the measure should ensure that practices are easy to identify and avoid the use of language that is open to interpretation. It is moreover necessary to avoid to formulate the practice in a way that would still require an assessment *in concreto* of the unfairness of the behaviour of the trader.[498] At the same time, using examples that are excessively

[497] See Study for the Fitness Check of EU consumer and marketing law, prepared by Civic Consulting, May 2017.

[498] See Study for the Fitness Check of EU consumer and marketing law, prepared by Civic Consulting, May 2017.

specific and concrete might make the blacklisted practices soon outdated, and that is problematic given that the blacklist can only be changed by revising the Directive.

It is also necessary to take into account that preventing access to certain components by the user might be justified in light of safety concerns. Respect for safety legislation and standards should therefore be taken into account when the prohibited measure concerns access to certain parts or the possibility of carrying out repairs for the consumer. For example, with regard to the possibility of banning "no access to batteries/accumulators", it should be considered that **Directive 2006/66/EC on batteries and accumulators** provides that batteries and accumulators should be removable, but also adds that this does not apply if the inability to remove is justified, among others, by safety reasons (Art. 11, more precisely, refers to cases "where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and a permanent connection between the appliance and the battery or accumulator is required"). These concerns are effectively taken into consideration as the proposed measure includes, for example, banning practices preventing access to batteries/accumulators or other key components of a product which will make the product irreparable **unless justified for safety /security concerns**.

A13.2.1.3 Explicit general ban of planned/intentional obsolescence

Summary

The introduction of a prohibition on planned obsolescence would be overall coherent with the existing legal framework. However, prohibiting planned or programmed obsolescence requires proving 'intent' which makes the enforcement of this measure very difficult and might therefore be less coherent with the consumer protection objective. Moreover, the current market surveillance framework would have to be adapted and supplemented by introducing adequate mechanisms to test and detect planned obsolescence.

Analysis

EU law does not currently include a prohibition on planned obsolescence. The UCPD Guidance states that, while planned obsolescence is not unfair per se, a trader who fails to inform the consumer that a product has been designed with a limited lifetime might, according to the specific circumstances of the individual case, be considered to have omitted to provide material information and therefore fall under Article 7 of the UCPD.

The practice of national authorities shows that the UCPD can be used to tackle obsolescence practices. In 2018, the Italian Competition Authority imposed a fine to Apple and Samsung on the basis of the Italian legislation implementing the UCPD provisions on the prohibition of unfair commercial practices, misleading actions, misleading omissions and aggressive commercial practices. According to the Authority, the companies, insistently requesting consumers to download updates, induced consumers to install updates on devices that were not suitable for such updates, without providing adequate information or means to restore the original functionality of the products. These actions were qualified as misleading and aggressive, although neither the national legislation nor the Authority expressly framed these as planned/premature obsolescence practices. Therefore, in terms of general objectives, a prohibition of planned or premature obsolescence is fully in line with the UCPD. However, as evidence by several French cases dealt with under specific legislation, prohibiting planned or programmed obsolescence requires proving 'intention' which makes enforcement of this measure very difficult and **might be less coherent with the consumer protection objective**. The option to introduce the prohibition of premature obsolescence would not face this problem and would be easier to enforce and ensure a higher level of consumer protection.

Regarding its enforcement, adequate mechanisms to test and detect planned obsolescence might be necessary, including the link with the current market surveillance system. Such mechanisms should therefore be developed taking into account, and supplementing, the current market surveillance framework. That said, as mentioned above, enforcing the prohibition of planned obsolescence implies the need to prove intention of the practices which does not seem to be coherent with the consumer protection objective.

A13.2.2 Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

The measures responding to this sub-problem aim to regulate the practice of greenwashing and the ineffective enforcement of existing consumer protection rules related to greenwashing. They protect consumers from buying goods and services based on misleading environmental claims that are not properly substantiated or that do not comply with clear criteria related to the product's environmental performance. They ensure that the share of consumers that want to buy environmentally friendly products effectively do so. Those measures increase the level of trust of consumers on environmental claims, including those using labels and finally they contributes to a level playing field between traders.

A13.2.2.1 Measure 2.2.1 Ban of unsubstantiated general statements on the environmental performance of the product

Summary

No issue of coherence between this option banning unsubstantiated statements on the environmental performance of the products and existing EU legislation have been identified. The proposed measure will complement the general safety net of the UCPD. It will also rely on the PEF and eco-labels instruments which will serve as benchmark to assess the reliability of the claim.

Analysis

The proposed measure banning unsubstantiated statements on the environmental performance of the products could be achieved by amending Article 6(1) and 7 of the UCPD Directive 2005/29/EC clarifying that misleading claims cover environmental claims on products whose environmental characteristics and benefits need to be clearly stated and substantiated. Furthermore, the Guidance document declares that claims could be misleading within the meaning of Articles 6 and 7 if traders are not in a position to substantiate that consumers are likely to achieve the maximum results promised under normal circumstances. Amending this provision would be quite effective as this provision is legally binding and the banning of misleading environmental claims due to the lack of substantiation would be clear and enforceable.

Banning unsubstantiated general statements on the environmental performance of a product could also be made effective by amending Annex I of the UCPD, Directive 2005/29/EC to ban commercial practices that do not substantiate the claimed environmental benefits. While Annex I is not legally binding, the reference to Annex I under Article 5(5) makes the list mandatory in all EU Member States and all its elements need to be fully complied with.

Both provisions would complement Article 12 of the UCPD, Directive 2005/29/EC which requires Member State to establish a system where national courts or administrative authorities have the power/competence to require the trader to furnish evidence as to the accuracy of factual claims (Article 12). However, this provision enables the authorities to request the substantiation and not to ensure that manufacturers make

substantiating evidence publicly available from the moment the product is on the market. The proposed measure aims at protecting consumers by requiring manufacturers to substantiate their claims to inform consumers.

Under both options substantiation means providing scientific evidence on any factual elements of the claims.

The requirement to substantiate claims linked to the requirement under the UCPD, Directive 2005/29/EC regarding the consideration that the claims should use terms that are easy to identify and avoid the use of language that is open to interpretation. It is moreover necessary to avoid to formulate the claim in a way that would still require an assessment *in concreto* of the unfairness of the behaviour of the trader.[499] In other words using terms that do not clearly and prominently qualify the specific benefit or benefits of the claim and/or are vague and are not substantiated.

The UCPD Guidance document establishes that to determine if certain claims are misleading they must be assessed on a case-by-case basis. Different criteria could be relevant, such as:

- Whether the claim clearly disclose results and benefits that the average consumer can reasonably expect to achieve within the meaning of Article 6 or Article 7 of the UCPD.
- Whether the trader has adequate evidence readily available to substantiate the claim within the meaning of Article 12 of the UCPD.

However, an amendment to Annex I of the UCPD, Directive 2005/29/EC, to forbid an unfair commercial practice would, avoid the case by case analysis while being coherent with the Directive's purpose. The UCPD, Directive 2005/29/EC contains a list of the commercial practices which are considered in all circumstances unfair (so-called 'blacklist'). The practices contained in the list are considered unfair without the need for a case-by-case assessment to verify whether they are contrary to the requirements of professional diligence and without the need to assess their effects on consumer behaviour. As specified in the Guidance document on the implementation/ application of the UCPD Directive 2005/29/EC[500], the blacklist 'was drawn up to enable enforcers, traders, marketing professionals and customers to identify certain practices and give a more immediate enforcement response to them'. It therefore leads to greater legal certainty (Recital 17). The Guidance states that if '…it can be proved that the trader has carried out a blacklisted commercial practice, national enforcers can take action to sanction the trader without having to apply a case-by-case test (i.e. assessing the likely impact of the practice on the average consumer's economic behaviour)'.

Despite the benefits of an exhaustive list of blacklisted terms, consumers would face two problems:

First of all, it would be difficult to cover all the potential terms and words currently used in products to ensure a high level of consumer protection. A recent Study supporting new Commission initiatives on environmental claims has identified that over one-third of the environmental claims were considered by the expert consumers to be unclear and ambiguous, i.e. they could not discern the nature of the actual environmental benefit promoted by the claim. Many of the claims assessed as unclear were vague based on general statements which, on first impression, could not be associated with any concrete environmental impact. The proposed options based on a list of blacklisted terms might not cover the full extent of the environmental claims.

In addition, the content of these options might be soon outdated and would require to be updated when other terms emerge, which is problematic given that the backlist can

[499] See Study for the Fitness Check of EU consumer and marketing law, prepared by Civic Consulting, May 2017.

[500] Guidance on the implementation/application of Directive 2005/29/EC on unfair commercial practices, SWD(2016) 163 final, 25.5.2016

only be changed by revising the Directive following the relevant legislative procedure foreseen for legal act adopted under Article 114, TFEU. This procedure is long and does not provide a lot of flexibility to ensure appropriate consumer protection when needed. One solution would be to include in the text of the new articles of the UCPD, Directive 2005/29/EC banning the use of the above mentioned terms, a provision empowering the Commission to update the list through implementing or delegated act.

The amendments to the UCPD would require that environmental claims that are supported by an ecolabel scheme or other robust and reputable labelling schemes would also need to substantiate their claims. However, labelling schemes are typically based on specific criteria that manufacturers requesting the label need to proof that their products comply with. Those systems also have third party verification procedures, control mechanisms including inspections and sanctions. Clear examples are the EU Ecolabel established under Regulation (EC) No 66/2010, the energy labelling established under Regulation (EU) 2017/1369 or the labelling of organic products regulated by Regulation 834/2007.

This option is also coherent with other mechanisms requiring substantiation of the environmental performance of products through to life cycle assessment studies proving the evidence of the product's positive environmental performance[501]. The UPCD Guidance refers to the use of lifecycle environmental performance of products and organisations, referencing also the Commission's PEF and OEF methods promoted under Recommendation 2013/179/EU establishing the Product and Organisation Environmental Footprint (PEF and OEF) methods. PEFCRs are quite detailed and provide a certain amount of relevant product-specific information on the environmental performance of the product. However, they require a lot of environmental expertise to fully understand the link to an environmental claim. In addition, not all products are covered by the PEFs under a product category. For example, the washing machine detergent PEF only covers liquid heavy-duty detergent; laptops only cover storage; pasta only covers wheat pasta. This is beyond the capacity of the average or even educated consumer. PEF refer to 'hotspots' which consider the most significant or important environmental impacts, life-cycle stages and processes of a product that are identified in a PEFCR.

Both options would need to be adopted following the legislative procedure foreseen for legal acts adopted under Article 114, TFEU. The proposed measures would be coherent with the general objective of the UCPD, Directive 2005/29/EC to contribute to the proper functioning of the internal market and achieve a high level of consumer protection in line with Article 114, TFEU, Article 169, TFEU regarding consumers' right to information and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

Any commercial practice that would not complain with the new provisions banning certain practices or the use of certain terms would be treated under the enforcement provisions of the UCPD Directive 2005/29/EC, as modified by Directive (EU) 2019/2161[502] on the better enforcement and modernisation of Union consumer protection rules, under the New Deal for Consumers. They require Member States to ensure that competent authorities have **adequate and effective powers** to enforce those provisions. In addition, the rules on penalties to be applied in case of breaches of provisions of the Directive and on consumer rights to individual remedies have been strengthened. It has introduced indicative criteria for the application of penalties, in particular to decide on the severity of the penalty to be imposed. These criteria include:

- the nature, gravity, scale and duration of the infringement,

[501] These studies should be made according to recognised or generally accepted methods applicable to the relevant product type and should be third-party verified.

[502] Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, OJ L 328, 18.12.2019, p. 7–28.

- any action taken by the trader to mitigate or remedy the damage suffered by consumers,
- any previous infringements by the trader,
- the financial benefits gained or losses avoided by the trader due to the infringement, if the relevant data are available
- penalties imposed on the trader for the same infringement in other Member States in cross-border cases,
- any other aggravating or mitigating factors applicable to the circumstances of the case[503].

Fines may be introduced as an element of penalties, establishing a maximum fine for infringements of at least 4 % of the trader's annual turnover in the Member State or Member States concerned. If information on the trader's annual turnover is not available, Member States should introduce the possibility to impose fines up to a maximum amount, which must be at least EUR 2 million. These provisions will be applicable from 28 May 2022[504].

A13.2.2.2 Measure 2.2.2 Prohibition of environmental claims that do not fulfil a minimum set of criteria (from the 2016 stakeholder group criteria).

Summary

This measure aims to protect consumer from misleading environmental claims by prohibiting the practice to refer to environmental characteristics of the products and/or their impacts if they do not fulfil minimum set of criteria.

No issue of coherence has been identified between this option and existing legislation. The option will feature as part of the general safety net of the UCPD and will be complementary to the green claims initiative.

Analysis

This measure proposes prohibiting the practice to refer to environmental characteristics of the products and/or their impacts if they do not fulfil minimum set of criteria.

This option protects consumers from misleading claims containing false or untruthful information or information presented in such a way that deceives the consumer. Those environmental claims might be on the product or on its packaging and may take the form of a statement, information, graphics, symbols, logos, labelling and brand names.

This prohibition could entail amending the Unfair Commercial Practices Directive 2005/29/EC (UCPD, Directive 2005/29/EC) and introducing 'Environmental aspects' on its Art. 6(1)(b) in order to be explicitly mentioned in the non-exhaustive list of elements about which the trader needs to provide truthful information. That provision currently only requires traders to provide information on the nature of the product, its main characteristics, including its benefits, method of manufacture, and geographical or commercial origin. The introduction of this amendment is critical as the lack of explicit recognition of environmental claims has been interpreted in some Member States as it was a non-legally binding requirement triggering problems in the enforcement of this provision in relation to environmental claims[505]. This amendment may then also modify

[503] Art. 13(2) in the UCPD, Directive 2005/29/EC introduced by Directive 2019/2161/EU

[504] Art. 13(3) in the UCPD, Directive 2005/29/EC introduced by Directive 2019/2161/EU

[505] European Commission, Consumer market study on environmental claims for non-food products, in particular Appendix 6 on Enforcement, July 2014.

Article 7 of the UCPD, Directive 2005/29/EC related to misleading omissions, which forbids omitting information required under Article 6(1) or providing unclear, unintelligible, ambiguous information on the product.

Linked to this recognition of environmental claims under a legally binding instrument, this option could introduce the description of the minimum set of criteria in the Guidance document on the implementation and application of the UCPD, Directive 2005/29/EC[506] which will then be referenced in ANNEX II of UCPD, Directive 2005/29/EC "Community law setting out rules for advertising and commercial communication" which provides a non-exhaustive list of information requirements that shall be regarded as material. Annex II is referred to under Article 7 of the UCPD in relation to what should be considered material information.

This would mean that the minimum set of criteria would be legally binding as it would be considered material information that the average consumer needs to take an informed transactional decision and thereby causes or is likely to cause the average consumer to take a transactional decision that s/he would not have taken otherwise. The lack of compliance with the minimum set of criteria regarding the information on environmental characteristics of the product and its impacts would then qualify as a misleading omission and fall under the prohibition of Article 7 of the UCPD Directive 2005/29/EC. Therefore, while the Guidelines to the UCPD are not legally binding, the reference in Annex II linked to Article 7 would change their nature to make them mandatory.

If the proposed measure is adopted as amendments to the UCPD, Directive 2005/29/EC, the new provisions would be coherent with its general objective to contribute to the proper functioning of the internal market and achieve a high level of consumer protection in line with Article 114, TFEU, Article 169, TFEU in particular in relation to consumers' right to information and Article 38 of the Charter of Fundamental Rights and would also be coherent with the specific objectives in existing provisions in relation to product information in commercial communication including advertising and marketing. The adopted measure would be legally binding, ensuring legal certainty and a high level of consumer protection.

From a procedural point of view, an amendment to Article 6 and to Annex II of the UCPD Directive 2005/29/EC would require its adoption through the legislative procedure applicable to legal acts adopted under Article 114, TFEU.

On the other hand, the adoption of a new stand-alone instrument whose main objective would be to set minimum set of criteria regarding the information on the environmental characteristics of the product, including the products' high environmental impacts that needs to be provided to consumers would also be coherent with the objectives to ensure the functioning of the internal market through consumer protection as established under Article 114 TFEU and Article 38 of the Charter of Fundamental Rights. A stand-alone legal act would enable an easier design, establishing the obligations on the different type of traders including seller and manufacturer and would provide more flexibility to go deeper on the requirements of the necessary information and the obligations. The adoption of an independent or stand-alone instrument aiming to ensure the functioning of the internal market through consumer protection would probably be based on Article 114 TFEU and follow the corresponding legislative procedure.

This option would also be coherent with other mechanisms assessing the environmental performance of products through life cycle assessment studies proving the evidence of the product's impact on the environment based on specific criteria[507]. The UPCD Guidance refers to the use of lifecycle environmental performance of products and

[506] Guidance on the implementation/application of Directive 2005/29/EC on unfair commercial practices, SWD(2016) 163 final, 25.5.2016.

[507] These studies should be made according to recognised or generally accepted methods applicable to the relevant product type and should be third-party verified.

organisations, referencing also the Commission's PEF and OEF methods promoted under Recommendation 2013/179/EU establishing the Product and Organisation Environmental Footprint (PEF and OEF) methods. PEFCRs are quite detailed and provide a certain amount of relevant product-specific information on the environmental performance of the product. However, they require a lot of environmental expertise to fully understand the link to an environmental claim. In addition, PEFs not always cover all products under a product category. For example, the washing machine detergent PEF only covers liquid heavy-duty detergent; laptops only cover storage; pasta only covers wheat pasta. PEF refer to 'hotspots' which consider the most significant or important environmental impacts, life-cycle stages and processes of a product that are identified in a PEFCR.

The amendments would facilitate and comply with the current enforcement provisions of the UCPD Directive 2005/29/EC, under which Member States must ensure that competent authorities have **adequate and effective powers** to enforce those provisions. Directive (EU) 2019/2161[508] on the better enforcement and modernisation of Union consumer protection rules, under the New Deal for Consumers has amended the Unfair Commercial Practices Directive 2005/29/EC strengthening rules on penalties applied in case of breaches of provisions of the Directive and on consumer rights to individual remedies. It introduced indicative criteria for the application of penalties, in particular to decide on the severity of the penalty to be imposed. These criteria include:

- the nature, gravity, scale and duration of the infringement,
- any action taken by the trader to mitigate or remedy the damage suffered by consumers,
- any previous infringements by the trader,
- the financial benefits gained or losses avoided by the trader due to the infringement, if the relevant data are available
- penalties imposed on the trader for the same infringement in other Member States in cross-border cases,
- any other aggravating or mitigating factors applicable to the circumstances of the case.[509]

Fines may be introduced as an element of penalties, establishing a maximum fine for infringements of at least 4 % of the trader's annual turnover in the Member State or Member States concerned. If information on the trader's annual turnover is not available, Member States should introduce the possibility to impose fines up to a maximum amount, which must be at least EUR 2 million. These provisions will be applicable from 28 May 2022[510].

[508] Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, OJ L 328, 18.12.2019, p. 7–28.

[509] Art. 13(2) in the UCPD, Directive 2005/29/EC introduced by Directive 2019/2161/EU

[510] Art. 13(3) in the UCPD, Directive 2005/29/EC introduced by Directive 2019/2161/EU

A13.2.2.3 Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

A13.2.3.1 Measure 2.3.1 EU-led voluntary initiative to develop minimum criteria on sustainability labels and digital information tools – for uptake on a voluntary basis by the organisations running the labels

Summary

The introduction of minimum criteria for sustainability labels and digital information tools would increase their reliability enhancing the quality of consumer decision-making and therefore, ensuring consumer protection, in line with existing consumer legislation.

However, as this option would rely on voluntary uptake with no obligation to fulfil the minimum criteria, it would not be easy for consumers to identify which labels and and digital information tools adhere to those minimum criteria. Therefore, the impact on the quality of the decision-making is negligible. The view of some independent experts and consumer associations consulted was that voluntary actions would have a very low effectiveness

The involvement of the EU in their development should ensure that the criteria comply and are consistent with existing EU legislation. Therefore, no issue of coherence has been identified.

Analysis

This measure promotes the development of a minimum set of criteria for the substantiation of sustainability claims presented in the form of labels or by digital information tools that would be led by the EU. The criteria would be used on a voluntary basis by existing organisations already managing the use of their labels.

The EU would lead by facilitating the development of the minimum criteria by the organisations running the labels and digital information tools as a self-regulation initiative. With this measure the EU promotes harmonised approach and, while the measure is voluntary, the EU would need to ensure coherence with existing criteria applied to labels such as:

- Regulation (EC) No 66/2010 on the EU Ecolabel.
- Regulation (EU) 2017/1369 setting a framework for energy labelling and repealing Directive 2010/30/EU Directive:
- Directive 2012/27/EU on energy efficiency as amended by Directive (EU) 2019/944;
- Directive 2010/31/EU on the energy performance of buildings, as amended in 2018 by Directive (EU) 2018/844 and Regulation (EU) 2018/1999;
- Regulation (EC) No 1222/2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters;
- Directive 2009/72/EC on common rules for the internal market in electricity as amended by Directive (EU) 2019/944;
- Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products, as amended in 2012 by Directive 2012/27/EU;
- Regulation 834/2007 on organic production and labelling of organic products, as amended in 2013 by Regulation (EU) No 517/2013.

Most of those EU measures prohibit the use of other labels and symbols that may mislead consumers. For example Article 10(1) of the Ecolabel Regulation (EC) No 66/2010 prohibits false or misleading advertising or use of any label or logo which leads

to confusion with the EU Ecolabel or Article 6(c) of the Energy Labelling Regulation (EU) 2017/1369 prohibits the use of other labels, marks, symbols or inscriptions which do not comply with the requirements of this Regulation that would be likely to mislead or confuse customers with respect to the consumption of energy or other resources during use and requires the accuracy of the labels and product information sheets and the production of technical documentation sufficient to enable the accuracy to be assessed. However, none of them include specific rules on what is considered misleading environmental claims or the criteria for substantiating the claims.

On that basis, the proposed measures would need to ensure coherence and complement existing EU legislation. However, the voluntary nature of the criteria raises some coherence issues with other labelling systems whose criteria are legally binding once the manufacturer or organisation decides to use the label. This measure would enable the existence of labels not complying with the voluntary criteria endorsed by the EU which would create a confusing environment for consumers. It would be difficult for consumers to differentiate those labels complying with the criteria from those not following them.

The fact that the criteria are voluntary means that manufacturers are not required to comply with them; however, once the organisations managing labels decide to use them, the sustainability criteria would be enforced by the associations managing the label to ensure that consumers can trust the label.

The enforcement of the use of voluntary sustainability labels that meet a minimum set of criteria endorsed by the EU but based on self-declaration would be difficult and might lead to consumer confusion on its accuracy. This measure might be more effective if the use of voluntary sustainability labels compliant with a minimum set of criteria is, at least, based on an appropriate ex-post verification by an EU body/the Commission or an accredited third-party and/or national authorities.

A13.2.3.2 Measure 2.3.2 Introduction of minimum requirements in EU law to be respected by the sustainability labels and digital information tools in relation to their governance and transparency/credibility towards consumers (ex-post enforcement from consumer protection bodies)

Summary

The introduction of mandatory minimum criteria for all sustainability labels and digital information tools would ensure consumer protection by increasing transparency and credibility of labels (and possibly slow down or even reverse the current proliferation of these labels) and digital information tools and, thus, enhancing the quality of consumer decision-making.

No issue of coherence has been identified with existing EU legislation. The Green Claims Initiative may introduce technical life-cycle assessment requirements on certain ecolabels however, this option will be complementary to the Green Claims Initiative as it will introduce only 'governance requirements' on sustainability labels and the scope will be broader than only ecolabels.

Analysis

This measure aims to prohibit labels and digital information tools unless they comply with a minimum set of criteria in relation to the governance, transparency and reliability of the information. These requirements might include the development of governance structures or processes where experts and stakeholders are involved to ensure transparency and reliability of the design and implementation of the sustainability criteria. Other existing initiatives will introduce technical requirements on the ecolabels

so this option is complementary proposing only 'governance requirements' on sustainability labels. This option relies on a post-verification system by consumer protection bodies, complementing the use of labels which already represent some form of recognition.

This measure aims to protect the share of consumers that want to buy sustainable products and prevent greenwashing by defining the criteria that justify the use of labels and digital information tools. It provides an answer to the problem of uncontrolled proliferation of labels, trade-marks, trust-marks, quality marks and/or digital information tools claiming sustainability or environmental benefits. It increases the level of trust of consumers on labels and digital information tools and finally it contributes to a level playing field between traders using sustainability labels. It also deals with the problem of the current ineffective enforcement of existing consumer protection rules related to environmental claims and the imperfect information and greenwashing.

In relation to its objectives, this measure is coherent with the objective of Article 114, TFEU to contribute to the proper functioning of the internal market and achieve a high level of consumer protection and is in line with Article 169, TFEU regarding consumers' right to information and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

Directive 2005/29/EC on unfair commercial practices (the UCPD Directive 2005/29/EC) is the main general body of EU legislation regulating misleading advertising and other unfair commercial practices harming consumers' economic interests. It aims to contribute to the proper functioning of the internal market and achieve a high level of consumer protection.

The UCPD, Directive 2005/29/EC does not refer explicitly to environmental claims nor it provides specific rules on environmental claims but its Article 5 prohibits unfair commercial practices which are contrary to the requirements of professional diligence and that are likely to materially distort the economic behaviour of the average consumer with regard to the product. The Directive defines two main categories of unfair practices: those that are misleading (either by action or omission); and those that are aggressive.

Article 6 of the UCPD Directive 2005/29/EC prohibits misleading commercial practices which are those containing false information and are therefore untruthful or deceive in any way, or is likely to deceive the average consumer, even if the information is factually correct, and it causes or is likely to cause the average consumer to take a transactional decision that she/he would not have taken otherwise. As this provision requires that information should be truthful on elements of the product such as the nature and the main characteristics of the product (e.g. its benefits, risks, composition, fitness for purpose, geographical origin, the results to be expected from its use, the results and material features of tests or checks carried out on the product), it has been interpreted that it includes environmental characteristics of the product. Under Article 7 the omission of those elements considered material information that the average consumer needs, according to the context, to take an informed transactional decision and thereby causes or is likely to cause the average consumer to take a transactional decision that he would not have taken otherwise is also forbidden. Those requirements on truthful information and omission of material information reflect the transparency principle.

The UCPD, Directive 2005/29/EC refers to professional diligence and reflects transparency requirements under by Articles 5(2), 2(h), 6 and 7 UCPD, however, the lack of explicit reference to environmental claims in the text of the Directive, does not provide a clear legal framework. This gap is behind the confusion and lack of consumers trust on environmental claims through labels or any other information tool and have

made the enforcement of these UCPD Directive 2005/29/EC provisions ineffective in relation to environmental claims[511].

While sustainability claims are not explicitly mentioned in the Directive, the Guidance document on the implementation and application of the UCPD Directive 2005/29/EC defines environmental claim as a commercial practice of suggesting or otherwise creating the impression (in a commercial communication, marketing or advertising) that a good or a service has a positive or no impact on the environment or is less damaging to the environment than competing goods or services[512]. This may be due to its composition, how it has been manufactured or produced, how it can be disposed of and the reduction in energy or pollution expected from its use. Furthermore, it refers to greenwashing as all forms of business-to-consumer commercial practices concerning the environmental attributes of goods or services, including all types of statements, information, symbols, logos, graphics and brand names, and their interplay with colours, on packaging, labelling, advertising, in all media (including websites) and made by a trader engaged in commercial practices towards consumers[513]. Therefore, logos, labels and other information and marketing tools are covered by the Directive.

This measure forbids the use of labels and digital information toolsthat claim environmental or sustainability performance if they do not comply with a minimum set of criteria. It would imply an amendment to the above mentioned provisions to make its scope clear and refer to the criteria, including transparency and governance aspects. It, therefore, fills a gap and is coherent with the UCPD Directive 2005/29/EC general objective to contribute to the proper functioning of the internal market and achieve a high level of consumer protection by regulating better the use of labels regarding sustainability claims. A measure ensuring the definition and enforcement of those criteria including transparency and governance rules through ex-post verification measures by national consumer bodies would be coherent with the objective to ensure high level of consumer protection and would provide e legal certainty on the use of environmental claims. The design of the criteria related to the scheme's governance, transparency and reliability towards consumers would have to ensure consistency with similar labelling systems in existing legislation including:

- Regulation (EC) No 66/2010 on the EU Ecolabel.
- Regulation (EU) 2017/1369 setting a framework for energy labelling and repealing Directive 2010/30/EU Directive:
- Directive 2012/27/EU on energy efficiency as amended by Directive (EU) 2019/944;
- Directive 2010/31/EU on the energy performance of buildings, as amended in 2018 by Directive (EU) 2018/844 and Regulation (EU) 2018/1999;
- Regulation (EC) No 1222/2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters;
- Directive 2009/72/EC on common rules for the internal market in electricity as amended by Directive (EU) 2019/944;
- Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products, as amended in 2012 by Directive 2012/27/EU;
- Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007.

[511] European Commission, Consumer market study on environmental claims for non-food products, in particular Appendix 6 on Enforcement, July 2014.

[512] Ibid

[513] Guidance on the implementation/application of Directive 2005/29/EC on unfair commercial practices, SWD(2016) 163 final, 25.5.2016

Most of the above-mentioned EU labelling measures prohibit the use of other labels and symbols that may mislead consumers. They are mainly based on performance criteria whose compliance is verified ex-ante by the body deciding whether the label is granted that are mostly EU or national public authorities and also have ex-post enforcement mechanisms including inspections and sanctions.

The proposed measure would therefore be coherent with those pieces of legislation as long as the ex-ante verification is not left to peer-review or self-declaration. For example Article 6 of the Ecolabel Regulation (EC) No 66/2010 establishes the general requirements for the definition of the specific product criteria for the use of the label at EU level, and Article 9 describes the procedure for ex-ante verification for granting the label, including the governance system by EU and national authorities. Article 10 establishes an ex-post control and monitoring system of the use of the label, including the prohibition of false or misleading advertising or use of any label or logo which leads to confusion with the EU Ecolabel. The ex-post control system is based on national competent bodies within the market and surveillance system which are able to verify compliance regularly, carry out on the spot checks, respond to complaints, and adopt sanctions such as the prohibition of the use of the label.

The proposed measure would be coherent with the legislation on organic production and labelling of organic products. The legislation on organic production establishes a system of criteria and ex-ante enforcement with some ex-post enforcement actions. It requires the organic logo to be used only on products that have been certified as organic by an authorised control agency or body. This means that they have fulfilled the established criteria regarding how they must be produced, processed, transported and stored. The logo can only be used on products when they contain at least 95% of organic ingredients and additionally respect further strict conditions for the remaining 5%. Next to the EU organic logo, a code number of the control body must be displayed as well as the place where the agricultural raw materials composing the product have been farmed. The enforcement system by national bodies is based on precautionary measures and risk-based controls of the supply chain. It foresees on-the-spot checks on operators once a year or every 2 years if no fraud has been detected over the previous 3 years. In addition, there can be other controls; for example if a control body suspects an operator of trying to place a non-authorised product on the market as 'organic', it must formally investigate and temporarily ban the placing on the market of that product pending the investigation's outcome. In the event of serious or repeated infringements, operators may be prohibited from selling products described as organic for a given period or may have their certificate withdrawn.

Energy Labelling Regulation (EU) 2017/1369 provides for the labelling of energy-related products at EU level which should provide standard product information regarding energy efficiency, and the consumption of energy during use, thereby enabling customers to choose more efficient products in order to reduce their energy consumption. It establishes a general governance system with obligations on suppliers, dealers and competent authorities in Member States to be complied with ex-ante to the use of the label. Article 6(c) prohibits the use of other labels, marks, symbols or inscriptions which do not comply with the requirements of this Regulation that would be likely to mislead or confuse customers with respect to the consumption of energy or other resources during use and requires the accuracy of the labels and product information sheets and the production of technical documentation sufficient to enable the accuracy to be assessed. In addition, it establishes an ex-post system on market surveillance and control of products entering the Union market by national authorities.

At the time of drafting this report and with the available information on the general content of this measure, the proposed option applies a similar system based on ex-ante criteria that would be very effective when applied by existing labelling systems with certification schemes and digital information tools. The ex-ante verification through an accredited body or public authorities would ensure that the criteria are properly complied with. The ex-post enforcement measures by consumer protection bodies would be

critical to ensure compliance of those labels and digital information tools with the minimum criteria developed.

It is not clear yet where the sustainability criteria would be introduced and what would be the framework of the enforcement mechanism, given that the environmental Green Claims initiative is planned. A measure modifying the UCPD, Directive 2005/29/EC and based on the enforcement by the national bodies already ensuring the implementation of the UCPD Directive 2005/29/EU would be coherent with the current system. In addition to relying on the relevant authorities ensuring the implementation of the UCPD Directive 2005/29/EU, the measure could include a provision similar to Article 8 of the Energy Labelling Regulation (EU) 2017/1369 linking the competent authorities with the current system of exchange of information on market surveillance relating to the labelling of products between national authorities of the Member States that are responsible for market surveillance or in charge of the control of products entering the Union market and between them and the Commission, under the Eco-design and Energy Labelling legislation.

The way market surveillance mechanism works is regulated under Regulation 2019/1020 on market surveillance and compliance of products replacing market surveillance provisions of Regulation 765/2008 provisions from 16 July 2021, with regard to products subject to Union harmonisation legislation. Linking this Regulation with the proposed measure would ensure its enforcement and cooperation between relevant authorities. The approach of the Regulation includes the performance of "appropriate checks on the characteristics of products on an adequate scale", establishing the criteria that surveillance authorities shall use to decide "which checks to perform, on which types of products and on what scale" (Art. 11). Among the powers of market surveillance authorities Regulation 2019/1020 establishes "(d) the power to carry out unannounced on-site inspections and physical checks of products" (Art. 14(4)(d)).

The market surveillance system is composed of national market surveillance authorities designated by Member States in their territory and which are required to cooperate with each other. Each Member State shall inform the Commission and the other Member States of its market surveillance authorities and the areas of competence of each of those authorities, using the information and communication system. A single liaison office is responsible for representing the coordinated position of the market surveillance authorities and for communicating the national strategies. The single liaison office is also in charge of assisting the cooperation between national market surveillance authorities which perform appropriate checks on the characteristics of products on an adequate scale, by means of documentary checks and, where appropriate, physical and laboratory checks based on adequate samples, prioritising their resources and actions to ensure effective market surveillance and taking into account the national market surveillance strategy.

In the area of environment, the Recommendation of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States has low levels of implementation given its non-legally binding nature.

A13.2.3.3 Pre-approval of sustainability labels and digital information tools via an EU body

Summary

No issue of coherence has been identified with existing EU legislation. The initiative on Green Claims currently under development will look at pre-approval scheme, ensuring coherence of both approaches.

Analysis

This measure prohibits the use of labels or digital information tools unless they comply with a minimum set of criteria in relation to governance and transparency/reliability towards consumers.

While option 2.3.2 proposes a measure based on the adoption of minimum requirements in EU law to be respected by the sustainability labels and digital information tools in relation to their governance and transparency/reliability criteria towards consumers that would be subject to ex-post enforcement from consumer protection bodies, this option proposes explicitly that the use of sustainability claims in the form of labels or digital information tool are granted through a some form of recognition mark based on pre-approval via an EU body.

This measure aims to protect the share of consumers that want to buy sustainable products and prevent greenwashing by defining the criteria that justify the use of labels or information provided by a digital information tool. It provides an answer to the problem of uncontrolled proliferation of labels, trade-marks, trust-marks, quality marks and/or digital information tools claiming sustainability or environmental benefits. It increases the level of trust of consumers on labels and digital information tools and finally it contributes to a level playing field between traders using sustainability labels. It also deals with the problem of the current ineffective enforcement of existing consumer protection rules related to environmental claims and the imperfect information and greenwashing.

In relation to its objectives, this measure is coherent with the objective of Article 114, TFEU to contribute to the proper functioning of the internal market and achieve a high level of consumer protection and is in line with Article 169, TFEU regarding consumers' right to information and with Article 38 of the Charter of Fundamental Rights of the EU (2000/C 364/01).

Directive 2005/29/EC on unfair commercial practices (the UCPD Directive 2005/29/EC) is the main general body of EU legislation regulating misleading advertising and other unfair commercial practices harming consumers' economic interests. It aims to contribute to the proper functioning of the internal market and achieve a high level of consumer protection.

The UCPD, Directive 2005/29/EC does not refer explicitly to environmental claims nor it provides specific rules on environmental claims but its Article 5 prohibits unfair commercial practices which are contrary to the requirements of professional diligence and that are likely to materially distort the economic behaviour of the average consumer with regard to the product. The Directive defines two main categories of unfair practices: those that are misleading (either by action or omission); and those that are aggressive.

Article 6 of the UCPD Directive 2005/29/EC prohibits misleading commercial practices which are those containing false information and are therefore untruthful or deceive in any way, or is likely to deceive the average consumer, even if the information is factually correct, and it causes or is likely to cause the average consumer to take a transactional decision that she/he would not have taken otherwise. As this provision requires that information should be truthful on elements of the product such as the nature and the main characteristics of the product (e.g. its benefits, risks, composition, fitness for purpose, geographical origin, the results to be expected from its use, the results and material features of tests or checks carried out on the product), it has been interpreted that it includes environmental characteristics of the product. Under Article 7 the omission of those elements considered material information that the average consumer needs, according to the context, to take an informed transactional decision and thereby causes or is likely to cause the average consumer to take a transactional decision that he would not have taken otherwise is also forbidden. Those requirements on truthful information and omission of material information reflect the transparency principle.

The UCPD, Directive 2005/29/EC refers to professional diligence and reflects transparency requirements under by Articles 5(2), 2(h), 6 and 7 UCPD, however, the lack of explicit reference to environmental claims in the text of the Directive, does not provide a clear legal framework. This gap is behind the confusion and lack of consumers trust on environmental claims through labels or digital information tools and have made the enforcement of these UCPD Directive 2005/29/EC provisions ineffective in relation to environmental claims[514].

While environmental claims are not explicitly mentioned in the Directive, the Guidance document on the implementation and application of the UCPD Directive 2005/29/EC defines environmental claim as a commercial practice of suggesting or otherwise creating the impression (in a commercial communication, marketing or advertising) that a good or a service has a positive or no impact on the environment or is less damaging to the environment than competing goods or services[515]. This may be due to its composition, how it has been manufactured or produced, how it can be disposed of and the reduction in energy or pollution expected from its use.

Furthermore, it refers to greenwashing as all forms of business-to-consumer commercial practices concerning the environmental attributes of goods or services, including all types of statements, information, symbols, logos, graphics and brand names, and their interplay with colours, on packaging, labelling, advertising, in all media (including websites) and made by a trader engaged in commercial practices towards consumers[516]. Therefore, labels and other information and marketing tools are covered by the Directive.

However, the lack of explicit reference to environmental claims in the text of the UCPD Directive 2005/29/EC, jeopardises its effective enforceability in relation to environmental claims and leads to the lack of consumers trust on environmental claims through labels or digital information tools.

This option forbids the use of labels that claim environmental or sustainability performance if they do not comply with a minimum set of criteria which are defined at EU level and implemented through an ex-ante verification system of the compliance with the criteria by an accredited EU body, instead of a national body (as proposed for measure 2.3.B for the ex-post enforcement). The ex-ante verification through an accredited EU body ensures a harmonised approach to the definition of the criteria and approval of the products that can use the label in all EU Member States. The design of the criteria related to the scheme's governance, transparency and reliability towards consumers would have to ensure consistency with similar criteria used in existing legislation including:

- Regulation (EC) No 66/2010 on the EU Ecolabel.
- Regulation (EU) 2017/1369 setting a framework for energy labelling and repealing Directive 2010/30/EU
- Directive 2012/27/EU on energy efficiency as amended by Directive (EU) 2019/944;
- Directive 2010/31/EU on the energy performance of buildings, as amended in 2018 by Directive (EU) 2018/844 and Regulation (EU) 2018/1999;
- Regulation (EC) No 1222/2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters;

[514] European Commission, Consumer market study on environmental claims for non-food products, in particular Appendix 6 on Enforcement, July 2014.

[515] Ibid

[516] Guidance on the implementation/application of Directive 2005/29/EC on unfair commercial practices, SWD(2016) 163 final, 25.5.2016

- Directive 2009/72/EC on common rules for the internal market in electricity as amended by Directive (EU) 2019/944;
- Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products, as amended in 2012 by Directive 2012/27/EU;
- Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007.

Most of those EU measures establishing a labelling scheme are based on criteria defined at EU level with transparency and governance requirements for the granting of the label. Most of them are enforced ex-post by national bodies to carry out inspections or on spot checks, to deal with complaints, and to adopt sanctions including the prohibition of the use of the label.

For example, Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products defines+ more explicitly rules applicable to organic production, in order to contribute to transparency and consumer confidence as well as to a harmonised perception of the concept of organic production. Under Article 23 a labelling system is established where certain terms listed in the Annex, their derivatives or diminutives, such as 'bio' and 'eco', alone or combined, may be used throughout the EU for the labelling and advertising of organic products only if they comply with the requirements set out in the Regulation. In relation to its enforcement, the Regulation requires Member States to set up a system of controls based on designated competent authorities responsible for controls of the obligations established by the Regulation.

In addition, the Ecolabel Regulation (EC) No 66/2010 establishes the general requirements for the definition of the specific product criteria for the use of the label at EU level, and a procedure for ex-ante verification of compliance with the criteria for granting the label, including the governance system at EU and national level. Its ex-post control system is based on national competent bodies within the market and surveillance system which are able to verify compliance regularly, carry out on the spot checks, respond to complaints, and adopt sanctions such as the prohibition of the use of the label.

The Energy Labelling Regulation (EU) 2017/1369 is based on an EU system prohibiting the use of other labels, marks, symbols or inscriptions which do not comply with the EU requirements established in the Regulation with respect to the consumption of energy or other resources during use and requires the accuracy of the labels and product information sheets and the production of technical documentation sufficient to enable the accuracy to be assessed. It establishes a general governance system with obligations on suppliers, dealers and competent authorities in Member States to be complied with ex-ante to the use of the label. In addition, it establishes an ex-post system on market surveillance and control of products entering the Union market by national authorities.

The proposed option applies a similar system based on ex-ante criteria defined at EU level, establishing an EU certification scheme. The ex-ante verification through an accredited body or public authorities at EU level ensures that the sustainability criteria are implemented in a harmonised way in all EU Member States. This system is coherent with the legal framework establishing other labelling systems.

A system based on sustainability labels and digital information tools that meet criteria based on an appropriate verification system by an EU public body would be easier to enforce ex-post by national authorities with inspections, checks, complaints and sanctions.

If this option is based on a measure modifying the UCPD, Directive 2005/29/EC and based on the enforcement by the national bodies already ensuring the implementation of the UCPD Directive 2005/29/EU would be coherent with the current system. In addition to relying on the relevant authorities ensuring the implementation of the UCPD Directive 2005/29/EU, the measure could include a provision similar to Article 8 of the Energy Labelling Regulation (EU) 2017/1369 linking the competent authorities with the current system of exchange of information on market surveillance relating to the labelling of products between national authorities of the Member States that are responsible for market surveillance or in charge of the control of products entering the Union market and between them and the Commission, under the Ecodesign and Energy Labelling legislation.

Regulation 2019/1020 on market surveillance and compliance of products will replace market surveillance provisions of Regulation 765/2008 provisions from 16 July 2021, with a view to strengthening market surveillance, with regard to products subject to Union harmonisation legislation. The approach of the Regulation includes the performance of "appropriate checks on the characteristics of products on an adequate scale", establishing the criteria that surveillance authorities shall use to decide "which checks to perform, on which types of products and on what scale" (Art. 11).

Annex 14. Result of screening of measures

As recommended by the Better Regulation Guidelines, for each of the six sub-problem many potentially interesting measures were identified (see Figure A269) in an initial stage based on the evidence collected through desk research and stakeholder consultations.

These measures were assessed through an iterative process, of which the last step was to carry out a first-level assessment to help us identify which of the most promising measures should be discarded and not included in the impact assessment. The first-level assessment was done against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence. The assessment was done by the study team based on the results of the consultations carried out in the context of this study (in particular the final stakeholder workshop), on evidence from desk research and expert judgment.

In this annex, we briefly describe the identified measures considered relatively promising to address each of the identified sub-problems in the context of the DG JUST initiative "Empowering consumers for the green transition", present the results of their assessment and provide the list of the measures selected to be analysed in the Impact Assessment. Figure A269 provides an overview of those measures.

Figure A269. Overview of possible policy measures

Sub-problem 1.1: Lack of reliable information on products' environmental characteristics	Measure 1.1.a: Requirement to provide information on CO2 emissions during use (for products where the CO2 emissions at use phase are not negligible) Measure 1.1.b: Requirement to provide information life-cycle CO2 emissions Measure 1.1.c: Requirement to inform consumers that the product has a high CO2 emission within its product category Measure 1.1.d: Requirement to inform consumers that the product has a high impact on environment and/or climate within its product category Measure 1.1.e: Requirement to provide information of the overall excellent environmental performance of products (for example using PEF whenever possible).
Sub-problem 1.2: Lack of reliable information on products' lifespan	Measure 1.2.a: Requirement to provide information on the guaranteed lifespan of goods Measure 1.2.b: Requirement to provide information on the expected lifespan of goods Measure 1.2.c: Requirement to provide information on the lifespan with minor/reasonable repairs of goods Measure 1.2.d: Requirement to provide information on how the expected lifespan of a good compares with a minimum expected lifespan Measure 1.2.e: Provision of information on the known product features that may lead to product early failure
Sub-problem 1.2: Lack of reliable information on products' lifespan **&** **Sub-problem 1.3: Lack of reliable information about products' reparability**	Measure 1.2.f: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of receive software updates to guarantee the appropriate and safe functioning of the product. Measure 1.2.g: Requirement to provide information on how and where consumers and independent repairers can get software updates and upgrades. Measure 1.2.h: Requirement to provide information on the frequency and cost policy of the software upgrades.
Sub-problem 1.3: Lack of reliable information about products' reparability	Measure 1.3a: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of spare parts after the purchase of the product. Measure 1.3b: Requirement to provide information on the maximum time it will take to deliver spare parts upon request. Measure 1.3c: Requirement to provide information on how and where consumers and independent repairers can get/purchase the spare parts. Measure 1.3d: Requirement to provide information on recommended price of spare parts

	Measure 1.3e: Requirement to provide up-to-date information on available repair services (by location). Measure 1.3f: Requirement to provide up-to-date information on average price of repair services (by location). Measure 1.3g: Provision of user-friendly and up-to-date repair manuals to consumers and third-party "professional repairers". Measure 1.3.h: Use a repair score system
Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect	Measure 2.1a: Include certain obsolescence practices in the 'blacklist' of per se prohibited commercial practices in Annex I of the UCPD Measure 2.1b: General prohibition of "planned/programmed/built-in obsolescence" Measure 2.1c: General prohibition of "premature obsolescence"
Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims	Measure 2.2a: Amending Annex I of UCPD to prohibit certain defined greenwashing examples Measure 2.2b: Provide specific requirements for green claims based on a minimum set of compliance criteria
Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent	Measure 2.3a: Companies could request the use some form of mark to inform consumers of which voluntary sustainability labels and digital information tools meet a minimum set of criteria assessed based on self-declaration. Measure 2.3b: Companies could request the use a stamp or other mark to inform consumers of which voluntary sustainability labels and digital information tools meet a minimum set of criteria assessed based on pre-endorsement by designated authorities at national level. Measure 2.3c: Only allow in the market voluntary sustainability labels and digital information tools that meet a minimum set of criteria based on self-declaration. Measure 2.3d: Only allow in the market voluntary sustainability labels and digital information tools that meet a minimum set of criteria based on "pre-endorsement" by designated authorities at national level.

A14.1 Measures to address sub-problem 1.1: Lack of reliable information on products' environmental characteristics

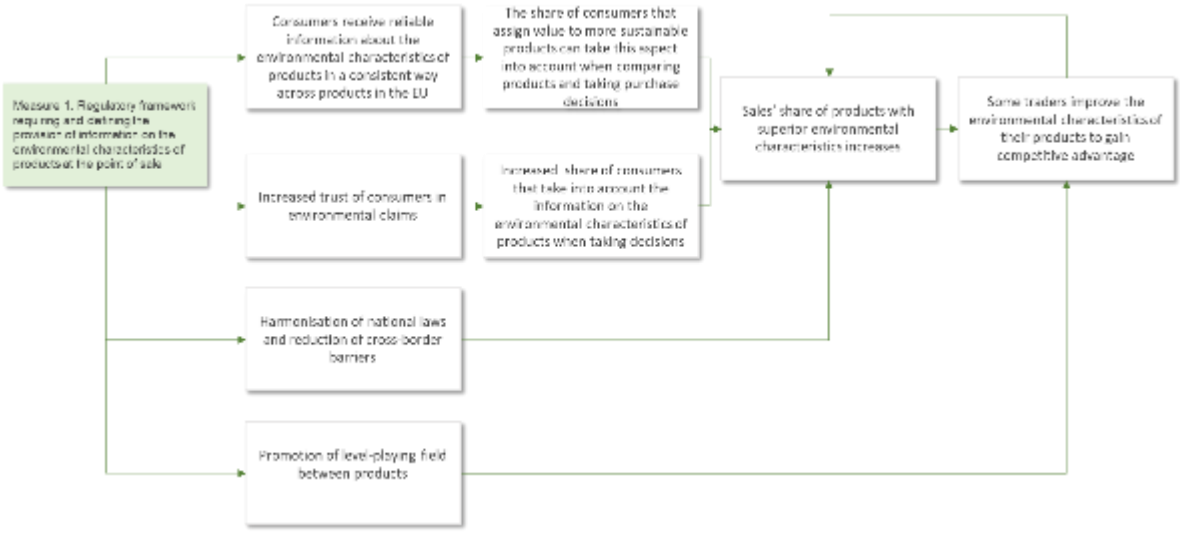
Problem(s) addressed	Sub-problem 1.1: Lack of reliable information on products' environmental characteristics
Specific Objective(s)	Enable informed purchasing decisions by consumers to foster sustainable consumption
Scope	All products (goods and services). Exception might be considered based on further analysis.

Rationale

These measures aim to ensure that consumers receive a minimum level of information on (key) environmental characteristics and/or impacts of products in a consistent way.

By providing consumers with this information consistently across products in the EU, it is expected that the share of consumers that want to purchase more environmentally friendly products can do so more easily and more effectively because a) they will receive this information for products for which this information is currently not available; b) they will be able to more easily compare products based on their "actual" environmental characteristic(s). Furthermore, by ensuring that environmental claims are aligned with minimum requirements, the trust of consumers in environmental claims is expected to increase and to promote a level-playing field between products. See Figure A270 for a depiction of the impact chain of the measures.

Figure A270.Impact chain of measures to address sub-problem 1.1



Possible measures

Based on the findings from the desk research and stakeholder consultations, we have identified the following possible measures (some can be complemented while some are mutually exclusive) to address sub-problem 1.1:

- Measure 1.1.a: Requirement to provide information on one single key environmental characteristic related to climate change measured considering the "use phase" only. Findings from desk research and consultations would suggest CO2 equivalent emissions as the most relevant and feasible indicator. The information could be provided in absolute values, using a label (like the CO2 emission label for vehicles[517]) or using absolute values with a colour scheme

[517] See 'Car labelling Directive' (Directive 1999/94/EC) available at: https://eur-lex.europa.eu/eli/dir/1999/94/2008-12-11.

indicating whether the value is high/moderate/low (the colour scheme can only be used on specific products types for which a benchmark is available). The emissions should be calculated based on PEF or other widely recognised approaches, supporting evidence should be available to the general public and the claims should ideally meet a set of minimum criteria (see sections 0 and 0). Details could be provided by the trader to consumers using digital means (e.g., QR code, website).

- Measure 1.1.b: Requirement to provide information on one single key environmental characteristic related to climate change measured considering the life-cycle of the product. Findings form desk research and consultations would suggest CO2 equivalent emissions as the most relevant and feasible indicator. The information could be provided in absolute values, using a label (like the CO2 emission label for vehicles) or using absolute values with a colour scheme indicating whether the value is high/moderate/low (the colour scheme can only be used on specific products types for which a benchmark is available). The emissions should be calculated based on PEF or other widely recognised approaches, supporting evidence should be available to the general public and the claims should ideally meet a set of minimum criteria (see sections 0 and 0). Details could be provided by the trader to consumers using digital means (e.g., QR code, website).
- Measure 1.1.c: Requirement to warn consumers that the product has a high impact on climate within its product category (measured using CO2 equivalent emissions). The information would be provided through a textual message or through a logo, as in South Korea but with the opposite message/purpose[518], designed to convey a message of warning. Details could be provided by the trader to consumers using digital means (e.g., QR code, website). This can be implemented as a positive obligation or as a prohibition.
- Measure 1.1.d: Requirement to warn consumers that the product has a high impact on environment and/or climate, if any of the environmental and/or climate impacts are higher than what would be reasonably expected for its product category. The information would be provided through a textual message or through a logo designed to convey a message of warning or through a textual message. Details could be provided using digital means (e.g., QR code, website). This can be implemented as a positive obligation or as a prohibition.
- Measure 1.1.e: Requirement to provide information of the overall environmental performance of products based on LCA studies in accordance with an EU level-based method specified in EU legislation. Details could be provided using digital means (e.g., QR code, website).

Table A77 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to discard all measures. This does not mean, however, that the measures are not potentially interesting in the context of other (legal) initiatives.

[518] In South Korea, products with low CO2 emissions are allowed to use a logo that signals that. The logo is voluntary but managed by a public entity (Ministry of the Environment).

Table A77. Assessment of possible measures to address sub-problem 1.1

Legend: + Low ++ Moderate +++ High

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.1.a: Requirement to provide information on CO2 emission during use	++ / +++ Approaches to measure CO2 are widely available and consensual The amount of information is low, not requiring significant changes to packaging, etc. If a colour scheme is used, identifying a benchmark might be technically challenging for some products	++ Easy to check if information is provided Difficult to ascertain if the information is reliable without technical support for an external party	+ Covering emission during "use" only has limited effectiveness as, for a significant number of products, production and transport are the main sources of emissions Covering one single environmental characteristic (CO2e) is less effective in promoting sustainable behaviour (as some products might have low carbon footprint	+++ Costs for companies and public authorities Total costs also dependent on the requirements regarding verification/certification and reporting obligations	+ A Life cycle approach would be more in line with the EU legal framework and policy Covering only one single environmental aspect is not fully coherent with the EU legal framework and policy	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
			but other high environmental impacts). However, information is easy to understand by consumers, and to act upon (e.g., compare products Comparability of products might be complicated if different approached are allowed			
Measure 1.1.b: Requirement to provide information on one single key environmental characteristic related to climate change measured considering the life-cycle of the product	++ / +++ Approaches to measure CO2 are widely available and consensual Challenging if the supply chain is complex	++ Easy to check if information is provided Difficult to ascertain if the information is reliable without technical support	+ Covering one single environmental characteristic is less effective in promoting sustainable behaviour (as some products might have low carbon footprint	++ Costs for companies and public authorities Covering the whole life-cycle can be costly	+ Covering only one single environmental aspect is not fully coherent with the EU legal framework and policy	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	The amount of information is low, not requiring significant changes to packaging, etc. If colour scheme is used, identifying a benchmark might be technically challenging for some products	from an external party	but other high environmental impacts). However, information is easy to understand by consumers, and to act upon (e.g., compare products).	Total costs also dependent on the requirements on verification/certification and reporting obligations		
Measure 1.1.c: Requirement to warn consumers if a product has a high impact on climate within its product category (measured through life-cycle CO2 emissions)	++ / +++ Approaches to measure CO2 are widely available and consensual Requires the existence of widely accepted CO2e thresholds	+/++ Easy to check if information is provided Difficult to ascertain if companies are complying	+ Covering one single environmental characteristic is less effective in promoting sustainable behaviours. However, information is easy to	+++ Costs for companies and public authorities Covering the whole life-cycle can be costly, however the measure does not require the	+ Covering only one single environmental aspect is not fully coherent with the EU legal framework and policy	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	per product category Challenging if the supply chain is complex The logo needs to be developed and communicated to society Identifying a benchmark might be technically challenging for some products		understand by consumers, and to act upon (e.g., compare products). Consumers would only receive information for products with high CO2e emissions. Communicating it through a warning makes it easy to understand by consumers, and to act upon (e.g., compare products).	calculation of the impacts – only to inform if companies know that the impacts are high.		
Measure 1.1.d: Ensure that traders warn consumers if the product has high impact on environment and/or climate within its product category	++ / +++ Approaches to measure environmental and climate impacts are	+/++ Easy to check if information is provided	+/++ Covering most environmental and climate impacts is considered	+++ Costs for companies and public authorities	++	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	widely available and consensual to some extent Requires the existence of widely accepted environmental and climate impact thresholds per product category Challenging if the supply chain is complex The logo needs to be developed and communicated to society Identifying a benchmark might be technically challenging for some products	Difficult to ascertain if companies are complying	effective in promoting sustainable products and behaviour. Not providing information on impacts for the full range of products and not requiring companies to assess the impacts may reduce its effectiveness Communicating it through a warning makes it easy to understand by consumers, and to act upon (e.g., compare products).	Covering the whole life-cycle can be costly however the measure does not require the calculation of the impacts – only to inform if companies know that the impacts are high		

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.1.e: Requirement to provide information of the overall excellent environmental performance of products using a recognised life-cycle approach (e.g., PEF)	+/++ While technically feasible it is a more complex measure to implement. For example, PEF has required significant preparatory work from the side of the Commission and stakeholders.	+/++ Easy to check if information is provided Challenges to ascertain the compliance of companies	++/+++ Covering most environmental and climate impacts is considered effective in promoting sustainable products and behaviour. Not recommending one single approach might hinder the comparability of the information More challenging for consumers to fully understand the impacts covered and the individual impacts	+ Costs for companies and public authorities Covering the whole life-cycle can be costly Total costs also dependent on the requirements regarding data gathering, verification/certification and reporting obligations	+++	Discarded

A14.2 Measures to address sub-problem 1.2: Lack of reliable information on products' lifespan

A14.2.1 Lifespan

Problem(s) addressed	Sub-Problem 1.2: Lack of reliable information on products' lifespan
Objective(s)	Enable informed purchasing decisions by consumers to foster sustainable consumption (indirectly) Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices
Scope	All durable goods. Exception might be also required.

Rationale

These measures aim to ensure that consumers receive information on the lifespan of a good in a consistent way.

By providing consumers with this information consistently across products in the EU, it is expected that it will be easier for consumer to take decisions based on the life-cycle costs because a) they will receive this information for goods for which this information is currently not available; b) they will be able to more easily compare goods based on their lifespan. The share of consumers that prefer to purchase goods with a lower environmental impact will also take into account the lifespan of goods when selecting which goods to buy. The measures will also promote a level-playing field between traders. Figure A271 depicts the impact chain of the measures.

Figure A271.Impact chain of measures to address sub-problem 1.2

Possible measures

Based on the findings from the desk research and stakeholder consultations, we have identified a few possible measures (some complement each other, and some are mutually exclusive) to address sub-problem 1.2:

- Measure 1.2.a: Requirement to provide information on the guaranteed lifespan of goods in a prominent place (e.g., next to the price), i.e., the number of years of lifespan of the good covered by a commercial guarantee[519] (included in the price of the good) by the manufacturer and/or seller; if no commercial guarantee is offered with the good then this should be also communicated to the consumers

[519] i.e., it will entail producers' obligation to provide "free repair or replacement", in accordance with the Sales of Goods Directive.

in the same prominent way[520]. The information will either be provided in a textual format. Details on the commercial guarantee could be also provided using digital means (e.g., QR code). The sellers are responsible for providing the information to consumers. Possibly, manufacturer may also be required to provide this information in all advertisement and descriptions of the product made available to consumers (to be assessed).

- Measure 1.2.b: Requirement to provide information on the expected lifespan of goods in a prominent place (e.g., next to the price), i.e., the average duration of proper functioning of a good assuming normal usage and maintenance[521]. This lifespan could be measured in years by default or in a unit specific to product type, e.g., number of use cycles for a washing machine, or lumen hours for a light bulb. In addition, the consumer should be informed about what "normal usage" means and what "normal maintenance" entails[522]. This could be self-declared subject to verification through random and targeted inspections/test (possibly decided based on consumer complaints) or limited to certain products for which a 'usage counter' would be introduced in the future. Details could be provided to the consumer using digital means (e.g., QR code, website).[523]
- Measure 1.2.c: Requirement to provide information on the lifespan if minor/reasonable repairs are performed by consumers (with the consumer in charge of any necessary repairs) in a prominent place (e.g., next to the price), i.e., the average duration of proper functioning of a good assuming normal usage and maintenance and the performance of minor/reasonable repairs. This lifespan could be measured in years by default or in a unit specific to product type, e.g., number of use cycles for a washing machine, or lumen hours for a light bulb. In addition, the consumer should be informed about what "normal usage" means, what "normal maintenance" entails, "what minor/reasonable repairs" consists of, and how/where to carry out the repairs. This would be self-declared subject to verification through random and targeted inspections/test (possibly decided based on consumer complaints) or limited to certain products for which a 'usage counter' would be introduced in the future. Details could be provided using digital means (e.g., QR code, website).
- Measure 1.2.d: Requirement to provide information on how the expected lifespan of a good compares with the minimum expected lifespan (if it has been set for the product type) for that type of goods in a prominent place (e.g., next to the price). This will be done either using a scoring system or a colour code. This would be self-declared subject to verification through random and targeted inspections/test (possibly decided based on consumer complaints) or limited to certain products for which a 'usage counter' would be introduced in the future. Details could be provided using digital means (e.g., QR code, website).

Table A78 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain measure 1.2.a and measure 1.2.b. This does not mean, however, that the

[520] This would mean no additional commitment to the consumer besides the legal guarantee of (at least) 2 years for which sellers are liable in the Sales of Goods Directive.
[521] Which might require mandatory product specific rules to ensure transparency and comparability.
[522] This would possibly be linked to future eco-design /sustainable product initiative requirements or when technical standards for certain products will become available.
[523] In Finland Consumer Protection Act, Chapter 5, section 12, the Netherlands (Legislation implementing Directives 1999/44/EC and 2019/771, and in Greece (Consumer Protection Law 2251/1994) the 'expected' durability of product is used when calculating the duration of the legal guarantee for "durable consumer goods."

discarded measures are not potentially interesting in the context of other (legal) initiatives.

Table A78. Assessment of measure addressing sub-problem 1.2

Legend: + Low ++ Moderate +++ High

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.2.a: Requirement to provide information on the guaranteed lifespan of the goods	+++ Industry considered it to be a feasible measure The measure would only involve companies to update technical and promotional material If a logo is used, it will have to be designed and communicated to the general public.	+++ Easy to check if information is provided Mechanisms already in place to enforce compliance with the requirements	++ All stakeholder groups considered it to be an effective measure The effectiveness will depend on the extent to which consumers will be able to understand the concept and compare products based on this aspect adopting a life-cycle cost approach.	+++ Costs for companies and public authorities	+++	Retained

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	Actions will be required if digital means are used/allowed to provide details on the commercial guarantee.					
Measure 1.2.b: Requirement to provide information on the expected lifespan of the goods	++ Industry was divided on the feasible of this measure Need for common guidance on what "normal use and maintenance" are per product type Need to define criteria to ensure that the information is	+/++ Easy to check if information is provided Possible challenges in ascertaining if the information is reliable Need for a complaint mechanism, market surveillance and random and	++/+++ (if information is reliable and only for products within the scope) Challenges to its effective implementation and enforcement might significantly hinder its effectiveness. If not accompanied by an obligation its effectiveness will be reduced and	+ Costs for companies and public authorities Total costs vary per product type. For some product types, manufacturers already carry out tests that allow them to know the expected lifespan of a products. Costs also dependent on the	+++	Retained

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	reliable and comparable Difficulties in establishing the lifespan	targeted inspections/tests carried out by a third-party	possibly lead to misinterpretations from the side of consumers.	requirements regarding verification/certification and reporting obligations		
Measure 1.2.c: Requirement to provide information on the lifespan with minor/reasonable repairs of the goods	+ Industry was divided on the feasible of this measure Need for common guidance on what "normal use and maintenance" are per product type Need for clear criteria to define which repairs are minor/reasonable	+ Easy to check if information is provided Challenges in ascertaining if the information is reliable and if minor/reasonable repairs were made Need for a complaint mechanism, market	+/++ (if information is reliable) Challenges to its effective implementation and enforcement might significantly hinder its effectiveness though. If not accompanied by an obligation its effectiveness will be reduced and possibly lead to	+ Costs for companies and public authorities Total costs vary per product type. For some product types, manufacturers already carry out tests that allow them to know the expected lifespan of a products. Costs also dependent on the requirements regarding	+/++ Might create disincentives in repairing goods when near the indicated lifespan which is contrary to the objective of circular economy	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	are per product type Need to define criteria to ensure that the information is reliable and comparable Difficulties in establishing the lifespan	surveillance and random and targeted inspections/tests carried out by a third-party	misinterpretations from the side of consumers. Experts highlighted that consumers might decide to replace goods instead of repairing them if they break close to the indicated lifespan hindering the effectiveness of the measure.	verification/certification and reporting obligations		
Measure 1.2.d: Requirement to provide information on how the expected lifespan of a good compared with the minimum expected lifespan set for that type of goods	++ Experts indicated that this would be feasible Need for common guidance on what "normal use and	+/++ Easy to check if information is provided Challenges in ascertaining if the information is reliable	+/++ (if information is reliable) Challenges to its effective implementation and enforcement might significantly hinder its	+ Costs for companies and public authorities Total costs vary per product type. For some product types, manufacturers already carry out	+++	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	maintenance" are per product type Need to set minimum lifespan per product type Need to define colour scheme/logo and communicate it to the general public Difficulties in establishing the lifespan	Need for a complaint mechanism, market surveillance and random and targeted inspections/tests carried out by a third-party	effectiveness though. If not accompanied by an obligation its effectiveness will be reduced and possibly lead to misinterpretations from the side of consumers. (see complementary measure 5 on premature obsolescence)	tests that allow them to know the expected lifespan of a products. Costs also dependent on the requirements regarding verification/certification and reporting obligations		

A14.2.1 Software updates/upgrades

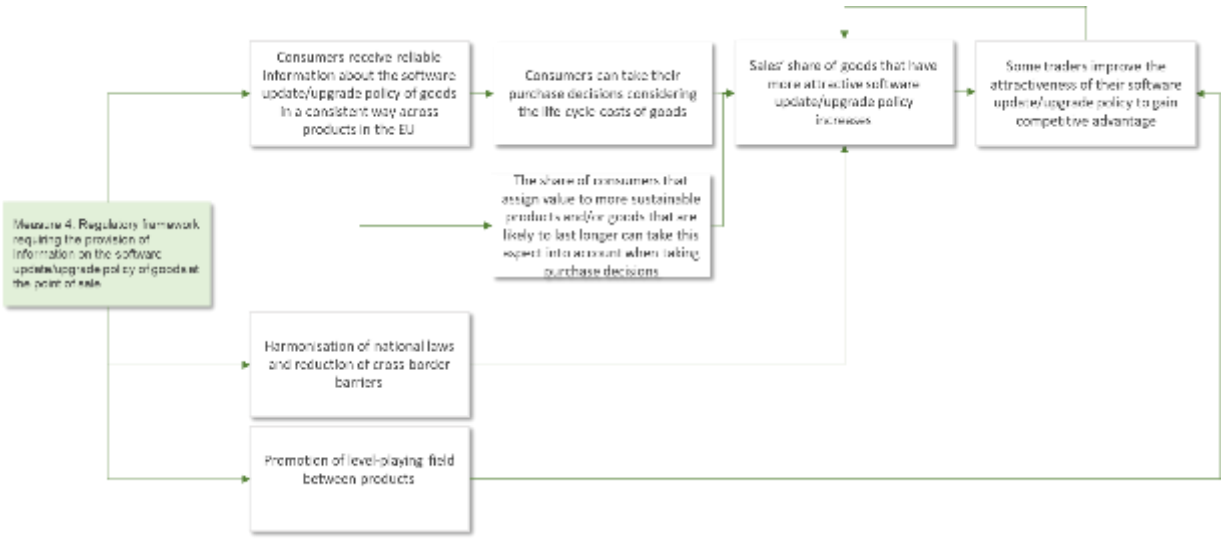
Problem(s) addressed	Sub-Problem 1.2: Lack of reliable information on products' lifespan Sub-Problem 1.3: Lack of reliable information about products' reparability
Objective(s)	Enable informed purchasing decisions by consumers to foster sustainable consumption (indirectly) Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices
Scope	All good with digital content

Rationale

These measures aim to ensure that consumers receive specific information on the good's software updates/upgrade policy.

By providing consumers with this information consistently across products in the EU, it is expected that consumers will prefer goods for which the update/upgrade policy is more advantageous. Also, these measures might ensure that consumers can update/upgrade their good's software in case they need them without much effort. Figure A272 depicts the impact chain of these measures.

Figure A272.Impact chain measures to address sub-problem 1.2 – software update/upgrade



Possible measures

Based on the findings from the desk research and stakeholder consultations, we have identified a few possible measures to address the sub-problem 1.2 in regard to software updates/upgrades (these measures are complementary):

- Measure 1.2.e: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of receive software updates to guarantee the appropriate and safe functioning of the

product. This requirement would be on the seller. The information will be provided in a textual message on or next to the product (possibly using digital means).[524]

- Measure 1.2.f: Requirement to provide information on how and where consumers and independent repairers can get software updates and upgrades. The information should be frequently updated and consequently be provided by manufacturers and/or sellers (to be assessed) through digital means.
- Measure 1.2.g: Requirement to provide information on the frequency and cost policy (i.e., whether they are provided for free to consumers or against payment) of the software upgrades. The information will be provided in a textual message on or next to the product (possibly using digital means).

Table A79 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain measure 1.2.e. This does not mean, however, that the discarded measures are not potentially interesting in the context of other (legal) initiatives.

[524] Legislation in France (here) requires that retailers inform consumers of updates, including security updates, which are necessary to maintain the conformity of the product, of how those updates should be installed, and of the consequences of refusing to install them.

Table A79. Assessment of possible measures to address sub-problem 1.2 – software updates/upgrades

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.2.e: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of receive software updates	+++ Industry considered it to be feasible measure The measure would only involve companies to update communication material (higher if coupled with measure 1.2.a)	+++ Easy to check if information is provided Public authorities considered it relatively easy to enforce	++/+++ All stakeholder groups considered it to be an effective measure	+++ Costs for companies and public authorities	++/+++ While there is some overlap with the SGD the measure is more specific on what information needs to be provided to consumers	Retained
Measure 1.2.f: Requirement to provide information on how and where consumers and independent repairers can get software updates and upgrades	++/+++ The measure would involve companies to regularly update communication channels	++ Easy to check if information is provided	++/+++ (higher if coupled with measure 3a)	+/++ Costs for companies and public authorities	++/+++ While there is some overlap with the SGD the measure is more specific on what information needs to be	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
					provided to consumers	
Measure 1.2.g: Requirement to provide information on the frequency and cost (to consumers) of software upgrades	+/++ Difficult for companies to know whether and when they will provide upgrades.	+++ Easy to check if information is provided	+/++	+++ Costs for companies and public authorities	+++	Discarded

A14.3 Measures to address sub-problem 1.3: Lack of reliable information about products' reparability

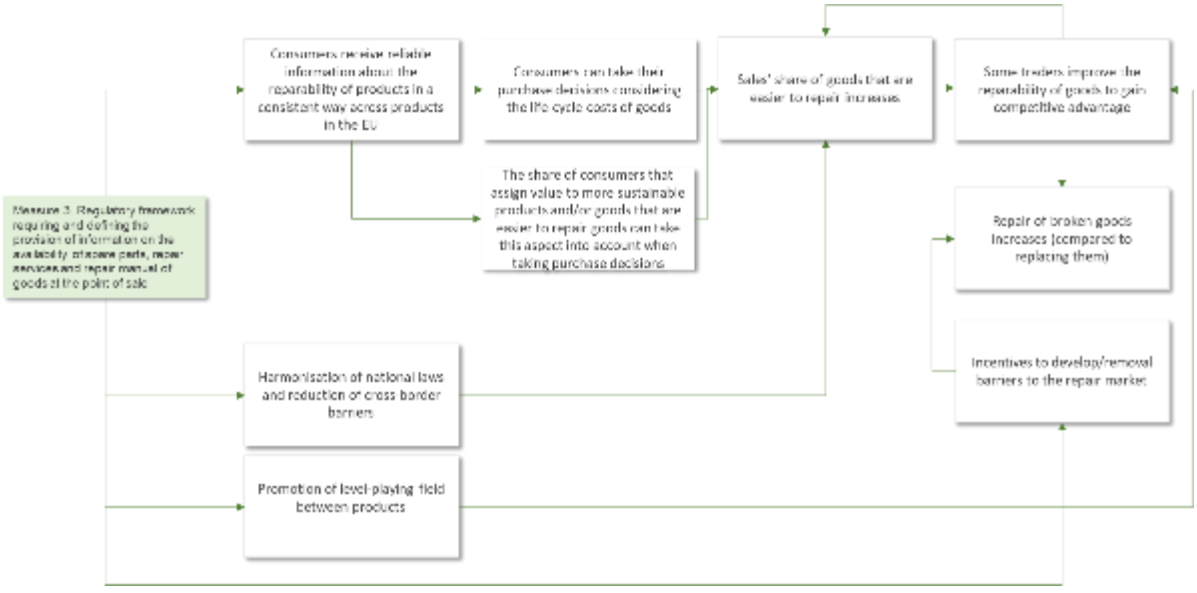
Problem(s) addressed	Sub-problem 1.3: Lack of reliable information about products' reparability
Objective(s)	Enable informed purchasing decisions by consumers to foster sustainable consumption (indirectly) Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices
Scope	All durable goods (exceptions might be identified when carrying out the assessment of impacts (qualitative/quantitative))

Rationale

These measures aim to ensure that consumers receive information on (some aspects of) the reparability of goods for all durable products in a consistent way.

On the one hand, by providing consumers with this information consistently across products in the EU, it is expected that it will be easier for consumers consider the life-cycle costs of goods when taking purchasing decision because a) they will receive this information for goods for which this information is currently not available; b) they will be able to more easily compare goods based on their reparability. In addition, the share of consumers that prefer to purchase goods with a lower environmental impact and/or that are easier to repair will also have a preference for goods that are easier to repair. Finally, this information will promote the repair of products as consumers will have information that will make repairing goods (by a repair service or by themselves) easier, simpler and possibly cheaper. Figure A273 depicts the impact chain of these measures.

Figure A273.Impact chain of measures to address sub-problem 1.3



Possible measures

Based on the findings from the desk research and stakeholder consultations, we have identified a set of possible measures to address sub-problem 1.3: (all are complementary):

- Measure 1.3.a: Requirement to provide information on the period of time (in years) during which the manufacturer will ensure the availability of spare parts defined in relation to the production date. This requirement would be on the

manufacturer. The information will be either provided in a textual message or through a logo similar to the "10 year reparable" if coupled with measure 3c and measure 3e[525]. The information should be provided on or next to the product.[526] Remedies for consumer if the information provided by the manufacturer turns out to be incorrect will be considered.

- Measure 1.3.b: Requirement to provide information on the maximum time it will take to deliver spare parts upon request. This requirement would be on the manufacturer. This information should be coupled with measure 3c and should be provided on or next to the product.
- Measure 1.3.c: Requirement to provide information on how and where consumers and independent repairers can get/purchase the spare parts. The information should be frequently updated and consequently be provided by manufacturers through digital means.
- Measure 1.3.d: Requirement to provide information on recommended price of spare parts. The information should be frequently updated and consequently be provided by manufacturers and/or sellers (to be assessed) through digital means.
- Measure 1.3.e: Requirement to provide up-to-date information on available repair services (by location). The information should be frequently updated and consequently be provided by manufacturers and/or sellers (to be assessed) through digital means.
- Measure 1.3.f: Requirement to provide up-to-date information on the average price of repair services (by location) by output. The information should be frequently updated and consequently be provided by manufacturers and/or sellers (to be assessed) through digital means.
- Measure 1.3.g: Provision of user-friendly and up-to-date repair manuals to consumers and third-party "professional repairers". The manuals should include all the necessary information for consumers and repairers to be able to repair the goods. The manuals should include images showing various steps of the process and supporting videos showing "how to do the repair". If for safety reasons consumers must not perform certain repairs, those should be excluded from the manual provided to consumers (but not from the one to be provided to third-party "professional repairers").
- Measure 1.3.h: Use a repair score system to inform consumers of the level of reparability of a product, as for example the one developed by a JRC research project5 or the French score system developed for certain products.

Some (or all) of this information could be provided by default through a digital mean and, for those consumers that are not able to use the digital means, on the package, in the shop (online or offline) or on demand (by post).

Table A80 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain measure 1.3.a, measure 1.3.c, measure 1.3.e, measure 1.3.g and measure 1.2.h (at the request of DG JUST). This does not mean, however, that the discarded measures are not potentially interesting in the context of other (legal) initiatives.

[525] Some experts highlighted that for a product to be reparable, it is not enough to supply spare parts it is also necessary that consumers can actually purchase/obtain them and then be able to repair the product. In this sense some consider the logo as misleading.
[526] Legislation in France (here) requires manufacturers and reporters providing information on the availability of spare parts.

Table A80. Assessment of the measures to address sub-problem 1.3: Regulatory framework requiring and defining the provision of information on the availability of spare parts, repair services and repair manual of goods at the point of sale – preliminary assessment of possible elements

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.3.a: Requirement to provide information on period of time (in years) during which the manufacturer will ensure the availability of spare parts after the purchase of the product.	+++ Industry considered it to be feasible measure The measure would only involve companies to update communication material If a logo is used, it will have to be designed and communicated to the general public	+++ Easy to check if information is provided Public authorities considered it relatively easy to enforce	++/+++ (higher if coupled with measure 1.3.c) All stakeholder groups considered it to be an effective measure The effectiveness will depend on type of product (and possibly on future developments related to the eco-design framework). The measure is should be more effective for product types that are expected to last very long and for which the psychological	+++ Costs for companies and public authorities	+++	Retained (to be combined with 1.3.c)

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
			obsolescence is less prevalent The effectiveness of the measure is also influenced by the other aspects of reparability notably the price of the spare parts and that they are accessible			
Measure 1.3.b: Requirement to provide information on the maximum time to deliver key spare parts upon request	++ Industry considered it to be feasible measure Industry does not control the time to transport the spare parts from their warehouses to the final destination.	+++ Easy to check if information is provided Public authorities considered it relatively easy to enforce	+/++ (higher if coupled with measure 1.3.c) All stakeholder groups considered it to be an effective measure however for only a very limited type of products. The effectiveness will depend on	+++ Costs for companies and public authorities	++	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
	The measure would only involve companies to update communication material		type of product. The measure is should be more effective for product types that users use every day and very frequently (e.g., mobile phones). The effectiveness of the measure is also influenced by the other aspects of reparability notably the price of the spare parts and that they are accessible			
Measure 1.3.c: Requirement to provide information on how and where to get/purchase the spare parts	+++ The measure would involve companies to regularly update communication channels	+++ Easy to check if information is provided	++/+++ (higher if coupled with measure 1.3.a and/or 1.3.b)	+++ Costs for companies and public authorities	+++	Retained (to be combined with 1.3.a)

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
			The effectiveness of the measure is also influenced by the other aspects of reparability notably the price of the spare parts and availability of spare parts.			
Measure 1.3.d: Requirement to provide information on recommended price of spare parts	++ The measure would only involve companies to update communication channels	+++ Easy to check if information is provided	+ Prices can change fast and significantly therefore consumers could be taken decision based on a certain price and face a completely different price when buying a spare part. The effectiveness of the measure is also influenced by the other aspects of reparability notably the availability of spare parts	+++ Costs for companies and public authorities	+++	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 1.3.e: Requirement to provide up-to-date information on available repair services (per location)	++ Industry considered it to be feasible measure if only had to provide information about recommended professional repair services The measure would only involve companies to update communication channels	+++ Easy to check if information is provided Public authorities considered it relatively easy to enforce	+/++ All stakeholder groups considered that this could be an effective measure if there would be no discrimination between professional repair services. The effectiveness of the measure is also influenced by the other aspects of reparability notably the price of the spare parts and that they are accessible and the accessibility and price of repair services.	++ Costs for companies and public authorities	+/++	Retained
Measure 1.3.f: Requirement to	+	+++	++	+/++	+/++	Discarded

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
provide up-to-date information on average price of repair services (by location)	Traders often do not have this information. Also, the cost varies due to many variables.	Easy to check if information is provided. More challenging to confirm that the price indicated is the correct one.		Costs for companies and public authorities		
Measure 1.3.g: Provision of user-friendly and up-to-date repair manuals to consumers and third-party "professional repairers".	+++	+++ Easy to check if information is provided Challenges to ascertain the compliance of companies	++	++/+++ Costs for companies	+++	Retained
Measure 1.3.h: Use a repair score system to inform consumers of the level of reparability of a product	+/++ Requires a product specific approach	+/++ Easy to check if information is provided Challenges to ascertain the compliance of companies	++/+++	+/++ Costs for companies and public authorities	+++	Retained at the request of DG JUST

A14.4 Measures to address sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect

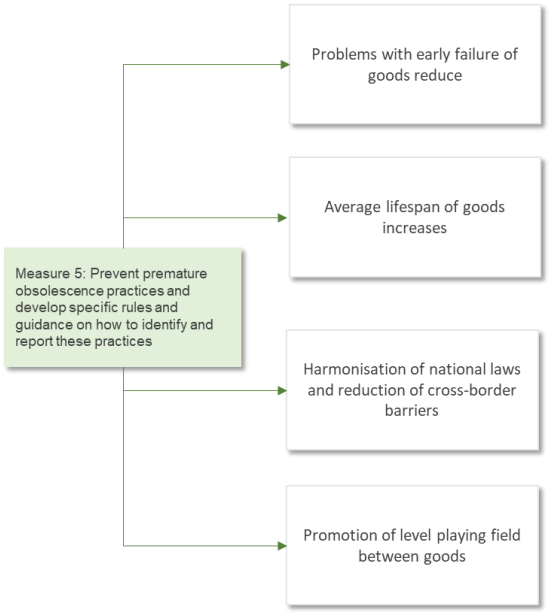
Problem(s) addressed	Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect
Objective(s)	Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices Ensure a better and coherent application of the EU legal framework thanks to clearer and more enforceable rules
Scope	All goods (exceptions might be identified when carrying out the assessment of impacts (qualitative/quantitative)

Rational

Current EU consumer law, i.e., UCPD, does not prohibit obsolescence practices as such but a trader selling goods with hidden obsolescence issues could be pursued for withholding material information, subject to case-by-case assessment.

These measures aim to prevent the practice of premature obsolescence (planned[527] and/or not planned), i.e., situations where the goods fail earlier than the minimum expected lifespan. They will protect consumers from buying goods that fail prematurely and contribute to a level playing field. Figure A274 depicts the impact chain of these measures.

Figure A274. Impact chain of measures to address problem 2.1



Possible measures

Based on the findings from the desk research and stakeholder consultations, a few possible measures to address sub-problem 2.1 have been identified (some are mutually exclusive and other are complementary):

[527] Planned obsolescence, i.e., by intention: due to an action of the producer by which he introduces in the product a component with the purpose of limiting the durability or lifespan of the product. The role of such a component can be fulfilled by a part designed or manufactured in a way ensuring its failure after a pre-determined time (e.g., soon after the end of the legal or commercial guarantee) or by a software element programmed to cause product malfunction or fail after a pre-determined time.

- Measure 2.1.a: Include in the UCPD 'blacklist' a number of unfair practices in the area of product premature obsolescence, such as[528]:
  - Technical and functional obsolescence
  - General
    - incorporating product design features for the specific purpose of reducing the durability of the product, including any device/component which renders the product unusable after a certain period of time or a certain number of uses;
    - an average percentage of failures of more than 10% of the products sold, during the time period which can be considered as the normal lifetime of the product is caused.
  - Software-related obsolescence:
    - software updates resulting in slowing down/reduced functionality or performance of the device without informing (and receiving consent if update was not for safety/security reasons) the consumer;
    - not providing updates required to ensure that the product can adequately perform the function for which they were created.
  - Hardware-related obsolescence:
    - preventing access to key components of the product (unless there is an obvious safety/security reason for that);
    - a device is introduced into the product which renders any repair of the product impossible or abnormally expensive.
    - the batteries and accumulators of the product cannot be easily removed and replaced;
- Measure 2.1.b: General prohibition of "premature obsolescence"[529] i.e., early product failure defined as either when more than e.g., 10% (to be assessed) of the products sold, fail before the minimum lifetime set for the product type[530] or when tests run by independent parties show that the expected lifespan of the product is below the minimum lifetime set for the product type[531]. Random (set a limit) and targeted inspections (informed by complaints from consumers, companies, and other associations) will be considered and the burden of proof to be on the manufacturer and importers. If a product is selected for inspection, companies must disclose any results of independent tests they have conducted or carry out those tests. When there is presumption of a practice of premature obsolescence the manufacturer or importer will be required to provide relevant correspondence with suppliers, internal reports or audits or strategy/activity planning etc.

[528] The indicated practices were based on BE proposal "Proposition de loi visant à lutter contre l'obsolescence organisée et à soutenir l'économie circulaire." and feedback from stakeholders (e.g., Test-achat) and independent experts (e.g., Prompt project).
[529] Inspired by the French law "The Law on energy transition for green growth (2015) Available here, the Belgium proposal "Proposition de loi visant à lutter contre l'obsolescence organisée et à soutenir l'économie circulaire.", and the Italian proposal "Legislative proposal S.615 "Modifications to Legislative Decree 206/2005 and other provisions to fight the planned obsolescence of consumer products", Art. 1. Available here: here.
[530] In the Netherlands the expected lifespan of products is used to define the period of the legal guarantee per product type. See https://www.technieknederland.nl/stream/richtlijnenafschrijvingsmethoden.
[531] The information could come from a third party supported by evidence (e.g., Trop Vite Use). Trusted third parties (e.g., consumer organisations or testing bodies that have set up databases like Trop Vite Usé) will be able (or even requested to) provide evidence to the market surveillance authorities of situations as above (e.g., a situation where a trader has not informed the consumer about known aspects in the product's design that can cause it to fail unusually early.)

- Measure 2.1.c: General prohibition of "planned/intentional obsolescence".[532], i.e., trade of goods (particularly of durable consumer goods) that fail early because they are purposely designed not to last as long as the average consumer would expect.

Table A81 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain measure 2.1.a and measure 2.1.and combine them. This does not mean, however, that the discarded measure 2.1.b is not potentially interesting in the context of other (legal) initiatives that can adopt a product-specific approach.

[532] Inspired by the French law "The Law on energy transition for green growth (2015) Available here.

Table A81. Assessment of possible measures to address sub-problem 2.1

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.1.a: Include on the UCPD 'blacklist' a number of unfair practices in the area of product premature obsolescence	++ Industry considered it to be a feasible measure in general. The practices listed were suggested by stakeholders but not assessed by all.	++ Public authorities considered it relatively difficult to enforce and monitor	++ All stakeholder groups (except industry associations) considered it to be an effective measure	+/++/+++ Costs for companies and public authorities Very dependent of the practices to be banned	+++	Retained (to be combined with measure 2.1.c)
Measure 2.1.b: General prohibition of "premature obsolescence"	++ Definition of premature obsolescence is challenging, in particular the definition of the allowed percentage of failures and minimum expected lifespan per product type	++ Public authorities considered it very difficult to enforce and monitor	+++ All stakeholder groups (except industry associations) considered it to be an effective measure	+ Costs for companies and public authorities	+/++ Measure too product-specific to be implemented through a horizontal initiative	Discarded as this measure is considered too product-specific to be implemented through a horizontal initiative

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.1.c: General prohibition of "planned obsolescence"	++ Definition of planned obsolescence is challenging, in particular the definition of intention	++ Public authorities considered it relatively difficult to enforce, monitor and prove "intent"	++ All stakeholder groups (except industry associations) considered it to be an effective measure	+++ Costs for companies and public authorities	+++	Retained (to be combined with measure 2.1.a)

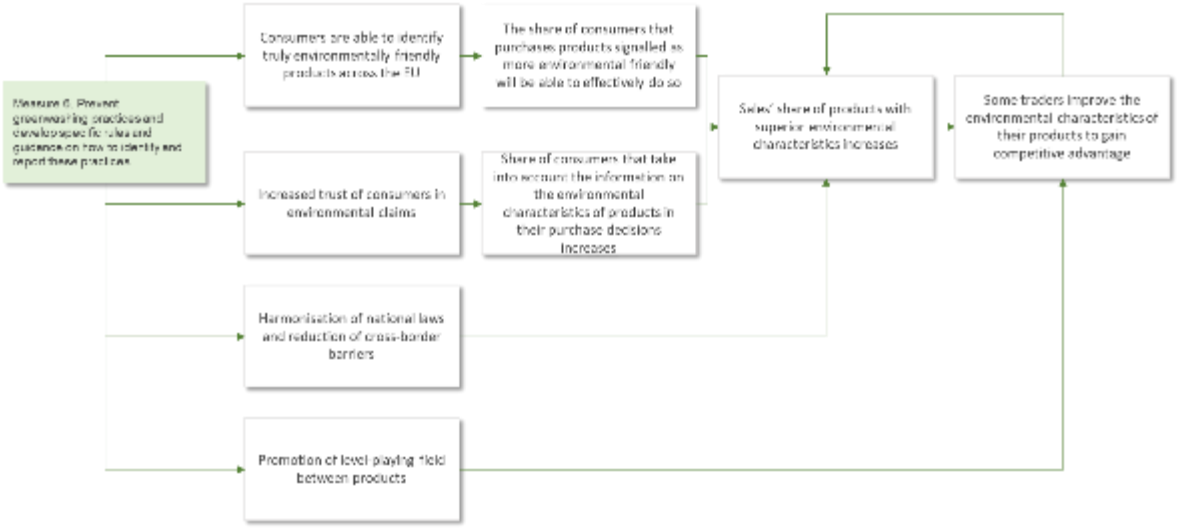
A14.5 Measures to address sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims

Problem(s) addressed	Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims
Objective(s)	Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices Ensure a better and coherent application of the EU legal framework thanks to clearer and more enforceable rules
Scope	All goods (exceptions might be identified when carrying out the assessment of impacts (qualitative/quantitative)

Rationale

These measures aim to prevent the practice of greenwashing. These measures protect consumers from buying goods based on false environmental claims and so ensure that the share of consumers that buy environmentally friendly products effectively do so. Also, they increase the level of trust of consumers in environmental claims and finally they contribute to a level playing field between traders. Figure A275 depicts the impact chain of these measures.

Figure A275. Impact chain of measures to address sub-problem 2.2



Possible measures

Based on the findings from the desk research and stakeholder consultations, a few possible measures to address sub-problem 2.2 have been identified (all are mutually exclusive):

- Measure 2.2.a: General prohibition of providing information on environmental characteristics and/or impacts that do not fulfil a minimum set of criteria[533], for example inspired by the compliance criteria of the multi-stakeholder group on environmental claims[534].

[533] For example. defining notion of green claims/greenwashing; explicit provisions that green claim must be clear, unambiguous and specific; must relate to relevant and specific environmental impacts; green claims on a product must relate to the product and not the company as a whole or future aspiration, etc.

[534] See compliance criteria here https://ec.europa.eu/info/sites/info/files/compliance_criteria_2016_en.pdf. For example, they included the following criteria: Claims need to reflect main environmental impacts of the product over its life cycle; Claims should be clear to which aspects of the product or its life cycle they refer to; Claims should be meaningful in the relevant

- Measure 2.2.b: Amending Annex I of UCPD to ban unfounded vague statements (e.g., claims that a product is durable, eco-responsible, environmental-friendly, "eco-friendly", "eco", "good for the environment", "sustainable", "green", "carbon friendly", "carbon neutral", "non-toxic", "ecologically safe", "pollutant free", "zero emissions", "an ethically correct choice", "conscious", "responsible" are vague and should be banned). These statements would be considered unfounded unless 'environmental excellence' is proven (via reliable public labels like EU ecolabel and/or LCA studies in accordance with EU level-based method specified in EU legislation.

Table A82 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain both measures.

market; The benefit claimed should not result in an undue transfer of impacts; Comparisons should not be misleading but objective and relevant; Companies shall not make claims about aspects that are required by law.

Table A82. Assessment of possible measures to address sub-problem 2.2.

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.2.a. General prohibition of providing information on environmental characteristics and/or impacts that do not fulfil a minimum set of criteria	+++ Industry considered it to be feasible measure	++/+++ It depends on how S.M.A.R.T.[535] the criteria are. Public authorities considered it relatively easy to enforce	++/+++ All stakeholder groups considered it to be an effective measure	++/+++ Costs for companies and public authorities Total costs also dependent on the requirements regarding verification/certification and reporting obligations	++/+++	Retained
Measure 2.2.b. Amending Annex I of UCPD to ban all unfounded vague claims	+++ Industry considered it to be feasible measure	++/+++ Public authorities considered it relatively easy to enforce	++/+++ All stakeholder groups considered it to be an effective measure	++/+++ Costs for companies and public authorities Total costs also dependent on the requirements	++/+++	Retained

[535] i.e., specific, measurable, achievable, relevant and (if applicable) time-bound

Measures	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
				regarding verification/certification and reporting obligations		

A14.6 Measures to address sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent

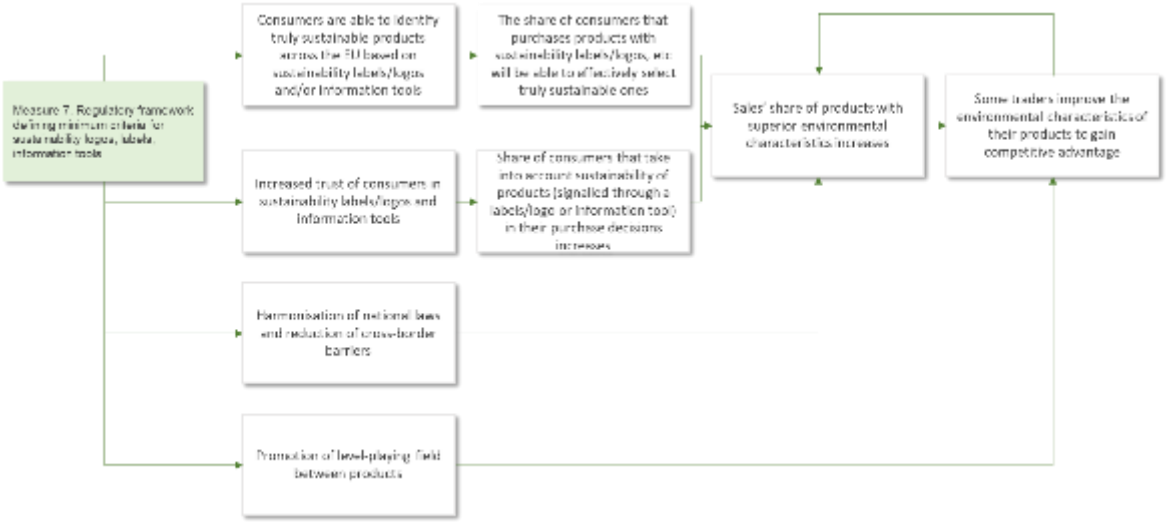
Problem(s) addressed	Problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent
Objective(s)	Eliminate untrustworthy practices that run against sustainable economy and mislead consumers away from sustainable consumption choices
Scope	All sustainability labels and digital information tools

Rationale

These measures aim to ensure that traders can only use sustainability labels and digital information tools that comply with pre-defined minimum criteria.

These measures protect consumers from buying products based on sustainability labels and digital information tools that are not robust and ensures that the share of consumers that want to buy sustainable products can effectively do so. In addition, they increase the level of trust of consumers on labels and digital information tools and finally contribute to a level playing field between traders and sustainability labels/digital information tools.

Figure A276. Impact chain of measures to address sub-problem 2.3



Possible elements

Based on the findings from the desk research and stakeholder consultations, a few possible measures to address sub-problem 2.3 have been identified (all are mutually exclusive):

- Measure 2.3.a: Companies could request to the use of a stamp or other mark to inform consumers of which voluntary sustainability labels and digital information tools meet a minimum set of criteria[536]. The colour would vary depending on how stringent the criteria used are. The assessment would be based on self-declaration (either through simple disclosure or tied disclosure through a specific website/on-line tool);

[536] The minimum criteria will be developed based for example on ISO standards, ISEAL, EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs and https://label-online.de/unsere-bewertung/.

- Measure 2.3.b: Companies could request the use of a stamp or other mark to inform consumers of which voluntary sustainability labels and digital information tools meet a minimum set of criteria. The colour would vary depending on how stringent the criteria used are. The assessment would be based on "pre-endorsement" by a national or EU public body or an accredited third-party.
- Measure 2.3.c: Only allow the use of voluntary sustainability labels and digital information tools that meet a minimum set of criteria based on self-declaration (either through simple disclosure or tied disclosure through a specific website/on-line tool);
- Measure 2.3.d: Only allow the use of voluntary sustainability labels and digital information tools that meet a minimum set of criteria based on "pre-endorsement" by a national or EU public body or an accredited third-party.
- Measure 2.3.e: EU-led co-regulatory initiative (multi-stakeholder dialogue) to develop joint minimum criteria on sustainability labels and digital information tools – for uptake on a voluntary basis by the organisations running the labels (also called "certification schemes").

Table A83 summarises the assessment of the identified measures in the context of the DG JUST initiative against five criteria: technical feasibility, enforceability, effectiveness, efficiency and coherence, as well as the conclusion on whether the measure will be retained for further analysis or not.

The main conclusion of the preliminary assessment of the identified measures was to retain measure 2.3.c and measure 2.3.2 (at the request of DG JUST as it is a soft measure). This does not mean, however, that the discarded measures are not potentially interest in the context of other (legal) initiatives.

Table A83. Assessment of possible measures to address sub-problem 2.3

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.3.a: Some form of mark + self-declaration	+++ Industry considered it to be feasible measure	++ Public authorities considered it relatively easy to enforce and monitor	+ Stakeholders indicated that a mark could increase the confusion of consumers Relying on self-declaration might make this measure less effective	++/+++ Costs for companies and public authorities	+++	Discarded
Measure 2.3.b: Some form of mark + pre-endorsement	+++ Industry considered it to be feasible measure	+++ Public authorities considered it relatively easy to enforce and monitor	+/++ Stakeholders indicated that a mark could increase the confusion of consumers	+/++ Costs for companies and public authorities Total costs for public authorities dependent on the requirements in the criteria	+++	Discarded

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.3.c: Permission based on self-declaration	+++ Industry considered it to be feasible measure	++ Public authorities considered it relatively easy to enforce and monitor	++/+++ All stakeholder groups considered it to be an effective measure Relying on self-declaration might make this measure less effective	++/+++ Costs for companies and public authorities	+++	Retained
Measure 2.3.d: Permission based on pre-endorsement	+++ Industry considered it to be feasible measure	++ Public authorities considered it relatively difficult to implement	+++ All stakeholder groups considered it to be an effective measure	++ Costs for companies and public authorities Total costs for public authorities dependent on the requirements in the criteria	+++	Retained

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence	Decision
Measure 2.3.e: EU-led co-regulatory initiative (multi-stakeholder dialogue) to develop joint minimum criteria on sustainability labels	+++ Considered it to be feasible measure	+++ Public authorities considered it relatively easy to enforce and monitor	+ Since it is voluntary it is not expected to be highly effective	+++ Costs for companies and public authorities	+++	Retained as it is a "soft measure" to address the problem

A14.7 Summary of measures retained for further analysis

Core-problems	Sub-problem	Measures	Notes
Problem 1: Consumers lack reliable information to make environmentally sustainable purchases	Sub-problem 1.1: Lack of reliable information on products' environmental characteristics[537]	-	
	Sub-problem 1.2: Lack of reliable information on products' lifespan	Measure 1.2.1: EU-level obligation to inform consumers of the expected/estimated/indicative lifespan of products or Measure 1.2.2: EU-level obligation to inform consumers of the existence (or absence) of a producer commercial guarantee for the entire product and of its length. or Measure 1.2.3: obligation in 1.2.2 plus obligation to provide information on the period of time during which the availability of software updates will be ensured by the manufacturer	In the context of the DG JUST initiative the information obligation must be on the trader/seller and no specific guidelines/standards can be set for companies to follow when determining the lifespan of the products

[537] At a later stage a new measure not identified before the end of the screening process was included in the list of measures to be further analysed in the Impact Assessment. The measure is "Measure 1.1.3: Obligation to inform consumers if a product did not undergo a PEF study".

Core-problems	Sub-problem	Measures	Notes
	Sub-problem 1.3: Lack of reliable information about products' reparability	Measure 1.3.1: Provision of updated, user-friendly repair and maintenance manuals to consumers *and /or* professional repairers	In the context of the DG JUST initiative the information obligation must be on the trader/seller
		Measure 1.3.2: Provision of information about which spare parts are available, for how long and where to buy them	In the context of the DG JUST initiative the information obligation must be on the trader/seller
		Measure 1.3.3: Requirement to provide up-to-date information on available repair services (per location)	In the context of the DG JUST initiative the information obligation must be on the trader/seller
		Measure 1.3.4: Use a repair score system to inform consumers of the level of reparability of a product	In the context of the DG JUST initiative the information obligation must be on the trader/seller Retained at the request of DG JUST
Problem 2: Consumers face misleading practices in relation to sustainable purchases	Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect	Measure 2.1.1: Provision of information on accumulated evidence of recorded early failures of products present in the market	Introduced at the request of DG JUST
		Measure 2.1.2: Ban of certain practices associated to premature obsolescence (including software obsolescence (e.g., Apple/Samsung case), no access to key components of a product which will make the product irreparable, planned obsolescence, etc).	
	Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly	Measure 2.2.1: Ban unfounded vague statements (e.g., ecological, green etc) unless 'environmental excellence' is proven	

Core-problems	Sub-problem	Measures	Notes
	substantiated green claims	Measure 2.2.2: Prohibition of environmental information that do not fulfil a minimum set of criteria	
	Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent	Measure 2.3.1: Development of principles promoting the transparency and credibility of sustainability labels and digital information tools for voluntary uptake or Measure 2.3.2: Introduction of minimum transparency and credibility requirements to be respected by sustainability labels and digital information tools(ex-post enforcement from consumer protection bodies) or Measure 2.3.3: Pre-approval of sustainability labels and digital information tools via an EU body	Retained as it is a "soft measure" to address the problem

Annex 15. Impact Assessment methodology

A15.1 Introduction

This Annex describes the approach to:

- Screen and select the key impact categories of the selected measures;
- Monetise those impacts;

A15.2 Screening of socio-economic and environmental impacts

A16.2.1 Identification of impacts

In line with the European Commission's guidance on impact assessment (as set out in the 'Better Regulation Guidelines,'), all of the impacts (potentially) associated with the selected options/ measures were identified (Table A84). The process of identifying impacts was mainly informed by the literature review and stakeholder consultation. It also drew on expert input/ judgement.

The starting point for the development of the 'long list' of impacts was the "impacts checklist," as set out in the 'Better Regulation Guidelines' (Tool #19). This was based on an in-depth analysis and understanding of all available evidence, which in turn minimised the risk of failing to consider potentially significant impacts. Specifically, the identification of impacts accounted for:

- Positive and negative impacts;
- Direct and indirect effects (stemming from changes in costs and product substitution);
- Intended and unintended consequences. Specifically, intended consequences include benefits for consumer protection and the Single Market, while possible unintended consequences could include impacts on the structure of the market;
- Short and long -term effects – e.g., short-term costs of providing information and long-term costs of reformulating products and/or commitments.

Table A84. *'Long* list' of impacts

Impact type	Long list of impacts drawing on Commission IA guidelines	Specific direct impacts considered
Economic Impacts	• Growth and investment • Trade and investment flows • Facilitating SMEs growth • Costs of business • Functioning of the Internal Market and competition • Increased innovation and research • Technological development • Increased international trade and investment Consumer and households • Public authorities (and budgets)	• Business substantive compliance costs • Business administrative burdens • Enforcement costs for administration • Consumer prices and choices • Consumer decision making process
Social Impacts	• Employment • Income distribution and social inclusion • Health & safety • Education • Governance & good administration	• Consumer trust • Consumer protection

Impact type	Long list of impacts drawing on Commission IA guidelines	Specific direct impacts considered
	• Social protection, health and educational systems • Cultural heritage	
Environmental impacts	• The climate change • Fostering the efficient use of resources (renewable & non-renewable) • Quality of natural resources/fighting pollution (water, soil, air etc.) • Reducing and managing waste • Protecting biodiversity, flora, fauna and landscapes • Minimizing environmental risks	n/a
Overarching Impacts	• Economic and social cohesion • Impacts in developing countries • Sustainable development • Fundamental Rights	• Application of the EU legal consumer framework

Source: ICF elaboration based on Better Regulation Guidelines (Toolbox #19)

A15.2.2 Screening of impacts

The significance of social, economic, and environmental (direct and indirect) impacts that the policy options may entail for the various stakeholders was assessed on the basis of:

- Their expected magnitude – taking into account the likely scale of impacts (i.e., the extent of resulting costs and benefits), the number of businesses and consumers affected, and the extent of change expected;
- Their likelihood – taking into account available evidence on the probability of positive and negative impacts/ effects occurring, and prioritising those impacts for which there is robust evidence;
- Their relevance to stakeholders – taking into account existing views provided by relevant stakeholder groups, additional insights/ judgements expressed during the stakeholder consultation; and
- Their link to Commission objectives, i.e., the extent to which each of the selected impacts is aligned with the objectives of the initiative (as it was important to ensure that all of the impacts that directly link to the objectives of the initiative were included).

The assessment was done by the study team while taking into account the views of stakeholders gathered through extensive consultations as well as evidence collected through desk research and validated by selected independent experts. The result of the assessment, i.e., the final/ screened list of impacts to be investigated further, is provided in Table A85 overleaf.

Many of the screened impacts are inter-related, with some impacts being the causes or consequences of others. For example, growth/ investment is clearly a highly relevant policy impact; however, it is influenced by all of the other economic factors, such as sectoral competitiveness, SME growth, the functioning of the Single Market, innovation

and research, technological development, international trade and investment, and competition. The screening process has therefore attempted to distinguish between those impacts which occur directly and those which may occur indirectly, i.e., as a result of other impacts.

The selected impacts vary across the different policy options, notably in terms of their likelihood and significance. However, most impacts are relevant across the different policy options/ measures. Screening was therefore undertaken for the options collectively (including the baseline) rather than individually, with a view to assessing in more detail (at a later stage in the impact assessment) any differences in (the extent/ magnitude of) the impacts associated with the different options. An impact was retained for further analysis if it was deemed 'relevant' and expected to be of a magnitude of "●●" (at a minimum) for at least one of the proposed policy options.

Table A85. Significance of impacts for all the policy options under consideration

Key: '●' low; '●●' moderate; '●●●' high

Impact type	Expected magnitude	Likelihood	Relevance for stakeholders	Link with the objectives (✓)	Comment	Retained (✓)
Economic impacts						
Growth and investment	●	●●	●●		Growth and investment are EU policy priorities, and any potential impacts need to be considered carefully. The foreseen measures may require investment in repair services, product development and new production processes, but may (indirectly) entail adverse impacts, in the form of costs for business and the public sector and reduction of sales. These impacts are considered under other impact categories below (see "business substantive compliance costs," "business administrative burdens," "enforcement costs for administration").	
Sectoral competitiveness, trade and investment flows	●	●●	●●		Some options could impact business costs and, consequently, competitiveness (see further below "business substantive compliance costs," "business administrative burdens," "enforcement costs for administration").	
SMEs growth	●●	●●●	●●●		SMEs account for the majority of businesses in the EU. The options will therefore potentially impact large numbers of SMEs (as producers), although possibly negatively, as they may lead to an increase in businesses' operational costs. Furthermore, SMEs with fewer resources may face greater challenges in adapting to new rules/ requirements as opposed to large companies.	☑
Functioning of the Single Market	●●	●●	●●●	☑	There are currently some differences in approaches related to obsolescence, greenwashing, sustainability labels/logos and information to consumers in different Member States. One of the arguments for action at EU level would be to harmonise regulatory approaches across the Single Market. The initiative is expected to contribute to creating a level-playing field for producers and reducing, to some extent, barriers to cross-border trade.	☑

Impact type	Expected magnitude	Likelihood	Relevance for stakeholders	Link with the objectives (✓)	Comment	Retained (✓)
Increased innovation and research and Technological development	•	•	•		Options stimulating improvements in products' durability/ lifespans, reparability and sustainability may stimulate innovation and technological development. However, this may also entail additional investments/ costs for businesses (see further below: "business substantive compliance costs," "business administrative burdens").	
Increased international trade and investment	•	•	•		The options are expected to have a very limited impact on trade.	
Business substantive compliance costs	•••	•••	•••		Businesses will incur direct costs redesigning products and procedures to ensure they comply with the measures related to premature/planned obsolescence and to the criteria for logos. These costs may vary by option.	☑
Business administrative burden	•••	•••	•••		The effectiveness of the options will depend on the transfer of information between the authorities, businesses and consumers. This may require substantial effort and time – i.e., from having to understand the rules, formulate appropriate responses, and monitor and report on progress. This could potentially result in important administrative burdens for businesses.	☑
Costs for public authorities	••	•••	•••		Public authorities will have to monitor and enforce the measures as well as handle specific cases of non-compliance. These actions will likely impose certain costs on public authorities.	☑
Consumer detriment	•••	•••	•••	☑	Some options will contribute to a reduction in consumer detriment, as currently experienced by many consumers owing to sub-optimal choices being made and/ or the early failure of products.	☑
Consumer prices and choices	••	••	•••		The options may have an impact on product availability, prices and, ultimately, the volume of sales.	☑
Consumer decision making process	•••	•••	•••	☑	The options will likely improve the availability of information to consumers, reduce information asymmetries and therefore contribute to enhancing consumers' decision-making process. Consideration will however be given to the potential negatives effects of providing too much	☑

Impact type	Expected magnitude	Likelihood	Relevance for stakeholders	Link with the objectives (✓)	Comment	Retained (✓)
					information which could lead to an information overload and, thus, increased confusion among consumers.	
Social Impacts						
Employment	•	•	•		Enhancing employment is a key policy priority for the EU. No evidence was found of an immediate effect of any of the proposed measures on employment. Jobs will potentially be impacted indirectly through changes in business costs, competitiveness and investment. Cost increase may translate into some job losses but that this is hard to quantify and in addition, there may be a positive job impact due to the increase in consumer confidence and trust as well as an increased level playing field (all leading to less transaction costs and an increase of allocative efficiency as untrustworthy companies and practices are penalised).	
Income distribution and social inclusion	•	•	•		Actions to limit premature obsolescence are expected to have a greater impact on consumers of goods of lower price ranges. On the one hand, lower-priced goods might have their lifespan increased and, hence, their life-cycle costs (for more vulnerable consumers) reduced. On the other hand, owing to their enhanced qualities, the price of these goods might increase.	
Health (& safety)	•	•	•		Climate change and negative environmental impacts can strongly impact people's health. Options contributing to a reduction in the environmental impacts of consumption are expected to have a positive impact on public health. This effect will be partially covered when assessing the impact of the proposed measures in the environment.	
Education	•	•	••		The options are not expected to impact education; however, consumer awareness is a significant issue, particularly with respect to its role in changing consumption patterns and therefore contributing to the green transition. This potential change in consumer awareness/ education will be addressed when assessing the impacts entailed by the proposed measures on consumer trust/ protection.	

Impact type	Expected magnitude	Likelihood	Relevance for stakeholders	Link with the objectives (✓)	Comment	Retained (✓)
Governance & good administration	●	●	●●		This is closely related to the issue of administrative burden, which is listed under economic impacts above and can be considered alongside that issue.	
Social protection, health and educational systems					No distinct issues related to social protection, health and educational systems were identified, other than impacts on consumer health and awareness (as identified above).	
Cultural heritage					No distinct issues related to cultural heritage were identified, other than impacts on consumer choice and awareness (as identified above).	
Consumer trust	●●	●●●	●●●	☑	Some options will likely contribute to increasing consumer trust (as a result of the improved quality of the information provided and providing reassurance about the quality of the products purchased), which would help improve their subjective well-being.	☑
Consumer protection	●●	●●●	●●●	☑	The options will contribute to strengthening consumer protection, reducing the potential for consumer harm/ detriment and leading to an overall increase in consumers' well-being.	☑
Environmental Impacts						
Fighting climate change	●●	●●●	●●●	☑	Some options will help bring about a reduction in purchase frequency, given that products will not have to be replaced frequently as before, as well as an increase in the share of the market accounted for by more environmentally-friendly products. This in turn is expected to contribute to reducing the CO2 equivalent emissions associated with consumption.	☑
Other environmental impacts including fostering the efficient use of resources (renewable & non-renewable)	●●	●●●	●●●	☑	Some options will help bring about a reduction in purchase frequency, given that products will not have to be replaced as frequently as before, as well as an increase in the share of the market accounted for by more environmentally-friendly products. This in turn is expected to contribute to reducing the use of resources and/or fostering a more efficient use of resources.	☑

Impact type	Expected magnitude	Likelihood	Relevance for stakeholders	Link with the objectives (✓)	Comment	Retained (✓)
Protecting biodiversity, flora, fauna and landscapes	•	•	•		Some options will help bring about a reduction in purchase frequency, given that products will not have to be replaced as frequently as before, as well as an increase in the share of the market accounted for by more environmentally-friendly products. This in turn is expected to contribute to protecting biodiversity, flora, fauna and landscapes.	
Minimizing environmental risks					Principal environmental risks relate to climate change and efficient use of resources – as identified above.	
Overarching impacts						
Application of the EU legal consumer framework	••	•••	•••	☑	Some options will help ensure a better and more coherent application of the EU legal framework for consumer protection.	☑
Economic and social cohesion	•	•	•		Economic and social cohesion will potentially be indirectly impacted by other impacts identified above.	
Sustainable development and circular economy	••	•••	•••	☑	Options will contribute to the circular economy and to sustainable development (to one or more of the three pillars economic, environment and social) will potentially be indirectly impacted by a number of other impacts described above.	☑
Fundamental Rights					Not identified as a potentially significant impact category in the literature or stakeholder consultations.	
Individuals, private and family life, freedom of conscience and expression					Not identified as a potentially significant impact category in the literature or stakeholder consultations.	
Property rights and the right to conduct a business					Not identified as a potentially significant impact category in the literature or stakeholder consultations.	

Based on the screening assessment, the following potentially significant impacts were identified as priorities for more detailed analysis:

- **Consumer benefits and losses**, including the following sub-categories of impacts:
  - Consumer detriment and other gains and losses (due, for example, to changes in prices and choices);
  - Quality of the decision-making process;
  - Consumer protection; and
  - Consumer trust.
- **Functioning of the Single Market**, which includes the following sub-categories of impacts:
  - Impact on the level-playing field; and
  - Reduction of barriers to cross-border trade.
- **Costs to companies and impact on SMEs,** which includes the following sub-categories of impacts:
  - Administrative burdens;
  - Substantive compliance costs;
  - Indirect costs; and
  - SME growth.
- **Costs to public bodies**, including the following sub-categories of impacts:
  - Enforcement costs; and
  - Other costs
- **Sustainability**, which includes the following sub-categories of impacts:
  - Circularity and Sustainable Consumption;
  - Climate change; and
  - Other environmental impacts.
- **Application of the EU legal consumer framework**, which includes:
  - Any impact on enforcement and harmonisation of approaches across the EU.

The table below sets out the impacts that were selected, the stakeholder group(s) affected and the general approach used to assess them. It is important to highlight that the impacts of the measures might differ between product categories. This is highlighted when relevant.

Table A86. Selected significant impacts

Main category of impacts	Affected parties							Assessment	
	Citizens	Consumers	Complying enterprises (SMEs and large enterprises)	Non-complying enterprises (SMEs and large	Public administrations (EU, national)	Third countries	Nature	Qualitative	Quantitative
Consumer benefits and losses		●						●	partial
Functioning of the EU internal market		●	●	●				●	
Costs to companies and impact on SMEs			●	●				●	partial
Costs to public bodies					●			●	partial
Sustainability	●	●	●	●	●	●	●	●	partial
Application of the EU legal consumer framework	●	●	●	●	●			●	

A15.3 Approach to monetisation of costs and benefits

In this section we describe the approach and assumptions used to estimate the monetizable costs to businesses and enforcement authorities and the monetizable impact on consumer welfare (personal detriment and surplus) for each sub-problem.

A15.3.1 General assumptions

	Assumption	Source
Cost of labour (EU-27 average)	Manager: EUR 41.5/h Other employees: EUR 27.70/h *2019 prices*	Eurostat[538]
Sales in EUROS and Volume	Presented in the annex with the overview of the market	Statista (up to 2025) and ICF projections (until 2050)
Number of companies	–	Eurostat *Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2) [SBS_SC_SCA_R2]*
Population	–	Eurostat *Population on 1st January by age, sex and type of projection [PROJ_19NP]*
Shadow price of CO2e	34 EUR/tonne	High-Level Commission on Carbon Prices (i.e., EUR 34 prices 2019). See N. Stern and J. E. Stiglitz (2017). Report of the High-Level Commission on Carbon Prices. World Bank.[539]
CO2e/kg of production equipment	36 kg CO2e/Kg	Adaptation of various studies covering specific products[540]
Value of Statistical life (million euros 2019)	The monetized value of a premature death follows a uniform distribution with a lower limit of 3.93 million EUR and a upper limit of 5.63[541] million EUR.	The recommended values for the VSL vary depending on the source. We adopted the values from the European Chemicals Agency[542] in line with other

[538] https://ec.europa.eu/eurostat/statistics-explained/index.php/Hourly_labour_costs
[539] Available at: https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices/
[540] Andersen, O., Walnum, H.J. and Andrae, A., 2010. Life Cycle Assessment of Electronics. Ugelstad-particles Ball Grid Array and Chip Scale Packaging. Vestlandsforsking, Sogndal, Norway, 6(10).; Hu, Allen & Lin, Rong-Wei & Huang, Ching-Yao & Wu, Chin-Lueng. (2012). Carbon Reduction Assessment of a Product Service System: A Case Study of Washing Machines. 10.1007/978-94-007-3010-6_211.; https://www.apple.com/environment/pdf/products/notebooks/13-inch_MacBookPro_PER_may2019.pdf;
https://www.apple.com/sg/environment/pdf/products/iphone/iPhone_8_PER_sept2017.pdf
[541] €3.5 million (lower estimate) and €5 million (higher estimate) (in EUR 2012); We inflated by using the labour cost index.
[542] Kip W. Viscusi (2019), Identifying the legitimate role of the Value of a Statistical Life in Legal Contexts, Journal of Legal Economics 25(1-2), pp. 5-28; ECHA (2016), Reference willingness-to-pay values for monetizing chemicals health impacts,

	Assumption	Source
		recent studies carried out for DG JUST.
Costs of treating waste (euros)	0.45 EUR/Kg	Own calculations-based desk research[543]
Overall environmental impacts of consumption	-	COWI & ECOFYS, 2019[544], determined as part of the Indicators and Assessment of the Environmental Impact of EU by JRC.

A15.3.3 "Sub-problem 1.2: Lack of reliable information on products' lifespan"

The monetisation was only possible for a selection of product categories (large household appliances, small household appliances and ICT and other electronic products) due to lack of data regarding volume of sales and about contingent valuation. Within each product category the monetisation was firstly done for a selection of specific products for which we had data from the consumer survey (contingency valuation for example; see Annex 8) and mystery shopping exercises (see **Error! Reference source not found.**). Afterward the results obtained for the i ndividual products were extrapolated to their product category.

There is lack of data regarding the lifespan of products offered in the market, consequently we relied on desk research to define that the lifespan of the product models available in the market follow a truncated Gaussian distribution with parameters defined based on several sources[545]

Measure 1.2.1. EU-level obligation to inform consumers of the expected/estimated/indicative lifespan of products

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[546]

Administrative burden

Assumption	Source
Manufacturers (excluding those that only produce components)	

pp. 1-8, available at: https://echa.europa.eu/support/socio-economic-analysis-in-reach/willingness-to-pay-to-avoid-certain-health-impacts.

[543] https://sites.psu.edu/cstruthersblog/2016/04/27/the-cost-of-recycling-e-waste-is-becoming-a-problem/; https://ec.europa.eu/environment//waste/studies/pdf/eucostwaste.pdf

[544] COWI & ECOFYS, 2019. "Support for potential policies implementing the Environmental Footprint methods". Confidential.

[545] including https://www.applia-europe.eu/images/Library/Preparatory_Study_on_Washing_Machines__Washer_Dryers_-_2017-compress_compressed.pdf; https://iopscience.iop.org/article/10.1088/1755-1315/219/1/012008/pdf; https://www.interstatebrick.com/sites/default/files/library/nahb20study20of20life20expectancy20of20home20components.pdf ; https://www.consumentenbond.nl/binaries/content/assets/cbhippowebsite/gidsen/digitaalgids/2016/nummer-3---mei/dg201605p20_enquete_levensduur.pdf.

[546] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing what the necessary steps are that need to be taken to comply with it* SME: [7,35]h legal team, 35h product development team, 7h commercial team Large Enterprises: 35h legal team, 70h product development team, 14h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 3.5h manager + 10.5h key employees Large enterprises: 7h managers + 21h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available on expected lifespans and procedures followed to assess them, as well as adjusting current data and systems to be able to start providing this information* SME: 4 weeks (35h X 4) of two employees working half-time a week, 140h Large enterprises: 4 weeks (35h X 4) of four employees working half-time a week, 280h	Interviews with companies and industry associations
Producing new data **(one-off per product model)**	*While the measure does not require the performance of tests to assess the lifespan of products, most companies will base their indication of the expected lifespan on some tests* While non-business stakeholders indicated that companies already perform some tests to assess the lifespan of their products, consulted business indicated that it is not always the case, consequently we considered three scenarios in the analysis to test if this would have an impact on the conclusions regarding the merit of the measure: - 25% of manufacturers already assess the lifespan of their products - 50% of manufacturers already assess the lifespan of their products - 75% of manufacturers already assess the lifespan of their products	The number of current and new product models was based on the data from Impact Assessment Reports of the Ecodesign regulations[547] complemented by desk research of the offer of main online retailers in different EU countries and the results of the written interviews with a few companies. Because of the relative uncertainty about this data, in the analysis this follows a uniform distribution function, with lower and upper limits defined for each type of products and

[547] https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-349-F1-EN-MAIN-PART-2.PDF; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0347&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0354&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0341&from=EN

	Assumption	Source
	The total costs with tests are equal to the unit cost of one test times the number of models in the market initially (for which an assessment of the lifespan has not been conducted, depends on the scenario) and then, for each year, the number of new models introduced annually (for which an assessment of the lifespan would have not been conducted in the baseline, depends on the scenario). The cost of testing one new product model: Large household appliances follow a triangular distribution function with minimum value of EUR 3 200, peak value of six times the minimum number and maximum value of 12 times the minimum value. Small household appliances: half of the costs for large household appliances. ICT and other electronic products: as for the large household appliances.	based on the collected evidence. The estimated costs of the tests were based on the views expressed by two experts and on an interview with a manufacturer complemented by the market data.[548]
Designing and placing information material	*This includes:* *the costs of redesigning existing packages of the goods to include the information (one-off cost):* 7h per package model. *the costs of printing stickers with the information for products in stock (which will be given to suppliers if needed). These costs are expected to be incurred in the 3 years after the implementation of the measure and will only continue beyond that for a small share of units (as a contingency in the analysis). The value is EUR 0.3.*	Design costs: interviews with companies Cost of printing: Impact Assessment Reports of the Ecodesign regulations[549]
Adjust forms and tables (one-off)	*This includes re-designing existing forms to include data related to the measure. Filling in the tables/forms was considered business as usual (as the additional time spent on this is judged to be negligible)* SME: [0.5,1]h manager + [7,14]h employee Large: [1,2]h manager + [14,21]h employee	Interviews with companies and industry associations
Inspections (internal and external)	*Internal inspections involve [0.5,1.75]h of a manager and 7h of an employee in the case of SMEs and [1,3.5]h of a manager and 14h in the case of large enterprises* *External inspections are expected to take place in less than 1% of the companies. Each external*	Interviews with companies and industry associations

[548] http://www.atlete.eu/2/doc/Draft_GuidelinesRev4_october2013; https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-341-F1-EN-MAIN-PART-1.PDF

[549] https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-349-F1-EN-MAIN-PART-2.PDF; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0347&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0354&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0341&from=EN

	Assumption	Source
	inspection will involve 3.5h manager and 7h of an employee.	
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the necessary steps that need to be taken to comply with it* SME: [7,17.5]h legal team, 7h commercial team Large Enterprises: 17.5h legal team, 14h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees. To ensure that staff is able to properly explain what the indicated expected lifespan means we consider the need for:* SME: 0.5h manager + 4h key employees Large enterprises: 1h managers + 8h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	–	
Producing new data	–	
Designing and placing information material	*This includes the costs of sticking stickers provided by manufacturers or importers on products in stock.* *Given that the measure will take about 2 years to be implemented, the number of units without the information is considered to be about 2.5% of the volume of sales three years after coming into force. The costs to stick a sticker is equal to 5 minutes of labour.*	Stock percentage and time required to stick a sticker in line with Impact Assessment Reports of the Ecodesign regulations[550]
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	*None as it is assumed that the information will be provided on the product by default*	

Enforcement costs

[550] https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-349-F1-EN-MAIN-PART-2.PDF; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0347&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0354&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0341&from=EN

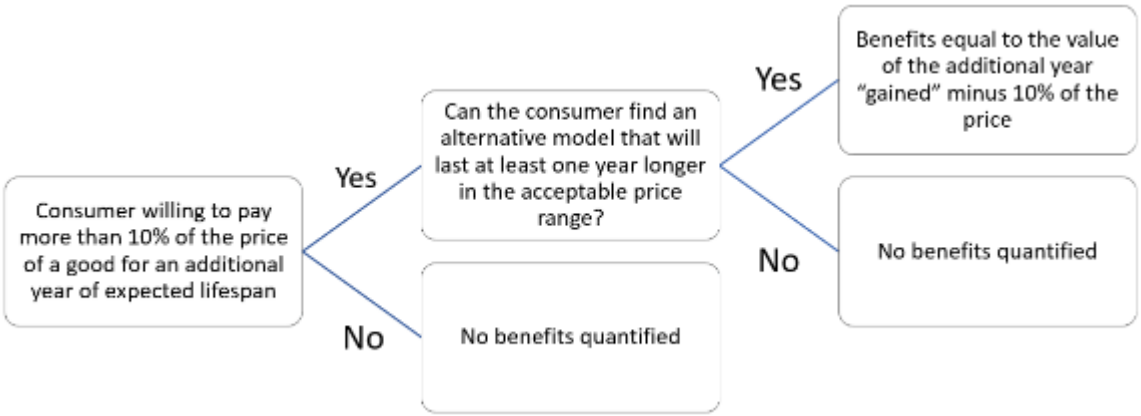
Based on interviews with some CPCs, it is assumed that Member States (possibly with the exception of France) would have to create a dedicated team to enforce this measure. The size of the team would be around 5 experts. 25% of their time would be dedicated to monitoring the compliance with the measure, 50% would be to carry out inspections and 25% with handling complaints. We estimate that the number of complaints that can be handled given the available resources will be around 700 per year per Member State (average as in some it will more and other less). We then assumed that about 1% will be dealt through ADR bodies and 0.1% in courts. The costs of an ADR body adjudication and of a court adjudication were obtained from the Impact Assessment of CPC authorities and supporting study[551].

We assumed 140h for familiarization with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there will be a yearly action per Member State, which will amount to EUR 40,000 (based on market research).

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.



	Assumption	Source
Share of consumers willing to pay 10% or more for a product that last longer	11%-15% depending on the product type	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Likelihood of a consumer finding an alternative that last longer within an	The uncertainty regarding this parameter required us to define it as a uniform distribution function with a lower limit of 0.3 and an upper limit of 0.5.	Expert judgement by a panel

[551] https://ec.europa.eu/info/sites/info/files/cpc_review_support_study_1_en.pdf and https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0164&from=EN.

	Assumption	Source
acceptable price range		
Reliability of the information	Two scenarios were tested given the uncertainty regarding how reliable the information on expected lifespans indicated by companies (even if the information is based on tests, the assumptions used on those tests might lead to results that are not verified when the good are used by normal users under normal conditions): low-moderate reliability (40%) moderate-high reliability (60%)	Expert judgement by a panel
Current lifespan of products	Varies depending on the product	Desk research complemented by results of the consumer survey (see Annex 8)
Available information on expected lifespan at the baseline	0%	Mystery shopping conducted in the context of this study (see Annex 9)

Measure 1.2.2. Obligation to inform consumers of the existence (or absence) of a commercial guarantee for the entire product and of its length

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[552]

Administrative burden

	Assumption	Source
Manufacturers (excluding those that only produce components)		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing what are the necessary steps that need to be taken to comply with it (including deciding whether or not to provide the commercial guarantee and if yes for how long)* SME: [7,21]h legal team, [7,14]h product development team, [7,14]h commercial team Large Enterprises: 21h legal team, [21,28]h product development team, [21,28]h commercial team	Interviews with companies and industry associations

[552] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Training (one-off)	*This includes an initial training of managers and key employees* SME: 0.5h manager + 2h key employees Large enterprises: 1h managers + 4h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) (one-off)	*This includes identifying and compiling all the information available on commercial guarantees* SME: 21h in total Large enterprises: 42h in total	Interviews with companies and industry associations
Producing new data	-	
Designing and placing information material	-	
Adjust forms and tables (one-off)	-	
Inspections (internal and external)	-	
Retailers		
Familiarization with the measure (one-off)	*This includes not only identifying the new obligations imposed by the measure but analyzing what are the necessary steps that need to be taken to comply with it* SME: [7,17.5]h legal team, 17.5h commercial team Large Enterprises: 17.5h legal team, 35h commercial team	Interviews with companies and industry associations
Training (one-off)	*This includes an initial training of managers and key employees* SME: 0.5h manager + 4h key employees Large enterprises: 1h managers + 8h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and	*This includes identifying and compiling all the information available on commercial guarantees and adjusting databases to compile this information in a consistent way. The costs are linked to the number of products sold.*	Interviews with companies and industry associations

	Assumption	Source
adjusting existing data	SME: 35h in total Large enterprises: 70h in total	
Producing new data	–	
Designing and placing information material	*This includes the costs of re-designing price tags and to replace the existing ones. The cost is incurred once per product model sold by the seller.* *35h to redesign tags and 5 minutes to replace existing tags (per price tag) as we assume sellers will be doing this in preparation for the measure*	Cost to re-design price tags based on data from with companies. Ecodesign regulations[553]
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	We assume that placing the tags with the correct information will not impose incremental costs however ensuring that all is correctly done will be relatively demanding and for this reason inspection costs are higher for this measure SME: [1,2]h manager plus [7,14]h employee per year Large enterprises: [2,4]h manager plus [14,28]h employee per year	Interviews with companies and industry associations

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would not require significant additional resources on top of the existing ones to enforce CRD and SGD.

We therefore assume that the measure will require an additional Full Time Equivalent, with its time divided equality between monitoring, inspecting and handling complaints.

We assumed 70h for familiarization with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

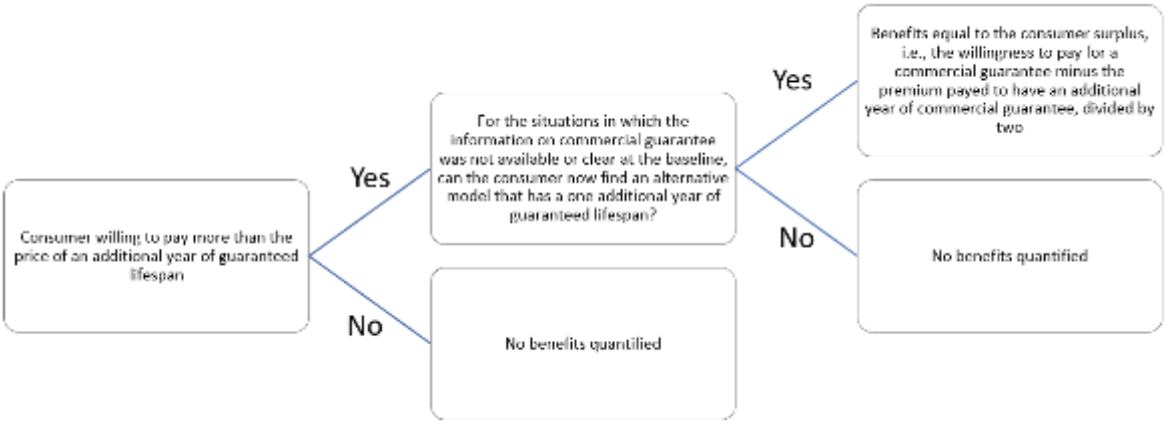
It is also assumed that there will be a yearly action per Member State, which will amount to EUR 40,000 (based on market research).

The other unit costs are assumed to be the same as in the previous measure.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.

[553] https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-349-F1-EN-MAIN-PART-2.PDF; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0347&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0354&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0341&from=EN



	Assumption	Source
Share of consumers willing to pay 5% or more for a product that has one year of guaranteed lifespan	29%-33% depending on the product type	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Average cost of one year of commercial guarantee	Depends on the good	Mystery shopping exercise (see Annex 9)
Likelihood of a consumer finding an alternative that has at least an additional year of guaranteed lifespan within an acceptable price range	Depends on the expected evolution of the offer of commercial guarantees. This was studied using an agent-based model and two scenarios were developed considering the results of the simulations: Low-moderate effectiveness (evolution of products with commercial guarantees longer than 2 years and closer to the expected lifespan low-moderate about 0.25% a year) Moderate-high effectiveness (evolution of products with commercial guarantees longer than 2 years and closer to the expected lifespan moderate-high about 1% a year)	Agent based model provided an indication on how the offer of commercial guarantees might evolve Expert judgement by a panel based on interviews and surveys with stakeholders and desk research
Comparability of information at the baseline	The data collected related the difficulties of consumers in comparing the available information varied greatly and for that reason we defined this parameter as a uniform distribution with a lower limit of 0.5 and an upper limit of 0.85.	Mystery shopping exercise (see Annex 9).
Current lifespan of products	Varies depending on the product	Desk research complemented by

		results of the consumer survey (see Annex 8)
Available information on expected lifespan at the baseline	0%-28% depending on the product	Mystery shopping conducted in the context of this study (see Annex 9)

Measure 1.2.3 Obligation to inform consumers of the existence (or absence) of a commercial guarantee for the entire product and of its length plus information on the availability and duration of software updates

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[554]

Administrative burden

	Assumption	Source
Manufacturers (excluding those that only produce components) *For manufacturers producing products without digital content the costs are similar to the ones of measure 1.2.2. For those producing products with digital content the costs are as follows*		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing what are the necessary steps that need to be taken to comply with it (including deciding whether or not to provide the commercial guarantee and if yes for how long and for how long software updates will be provided)* SME: [7,21]h legal team, [10.5,17.5]h product development team, [10.5,17.5]h commercial team Large Enterprises: 21h legal team, [28,35]h product development team, [28,35]h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 1h manager + 3.5h key employees Large enterprises: 1.5h managers + 7h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available on commercial guarantees and software updates and to identify for how long updates could be available* SME: 24.5h in total Large enterprises: 49h in total	Interviews with companies and industry associations
Producing new data	**–**	

[554] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Designing and placing information material	-	
Adjust forms and tables (one-off)	*This includes re-designing existing forms to include data related to the measure. Filling in the tables/forms was considered business as usual (as the additional time spent on this is judged to be negligible)* SME: [0.5,1]h manager + [3.5,7]h employee Large: 1h manager + [7,14]h employee	Interviews with companies and industry associations
Inspections (internal and external)	Internal inspections take place quarterly and in total involve - 0.5h of a manager in the case of SMEs and 1h for large enterprises - [3.5,7]h of an employee in the case of SMEs or 14h in the case of large enterprises External inspections considered as part of the baseline in the context of the enforcement of Sales Good Directive.	Interviews with companies and industry associations
Retailers		
Familiarization with the measure (one-off)	*This includes not only identifying the new obligations imposed by the measure but analyzing what are the necessary steps that need to be taken to comply with it* SME: [7,17.5]h legal team, 17.5h commercial team Large Enterprises: 17.5h legal team, 35h commercial team	Interviews with companies and industry associations
Training (one-off)	*This includes an initial training of managers and key employees* SME: 1h manager + 3.5h key employees Large enterprises: 1.5h managers + 7h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	*This includes identifying and compiling all the information available on commercial guarantees and adjusting databases to compile this information in a consistent way. The costs are linked to the number of products sold.* SME: 35h in total Large enterprises: 70h in total	Interviews with companies and industry associations
Producing new data	-	
Designing and placing	*This includes the costs of re-designing price tags and to replace the existing ones. The cost is*	Cost to re-design price tags based on data from with companies.

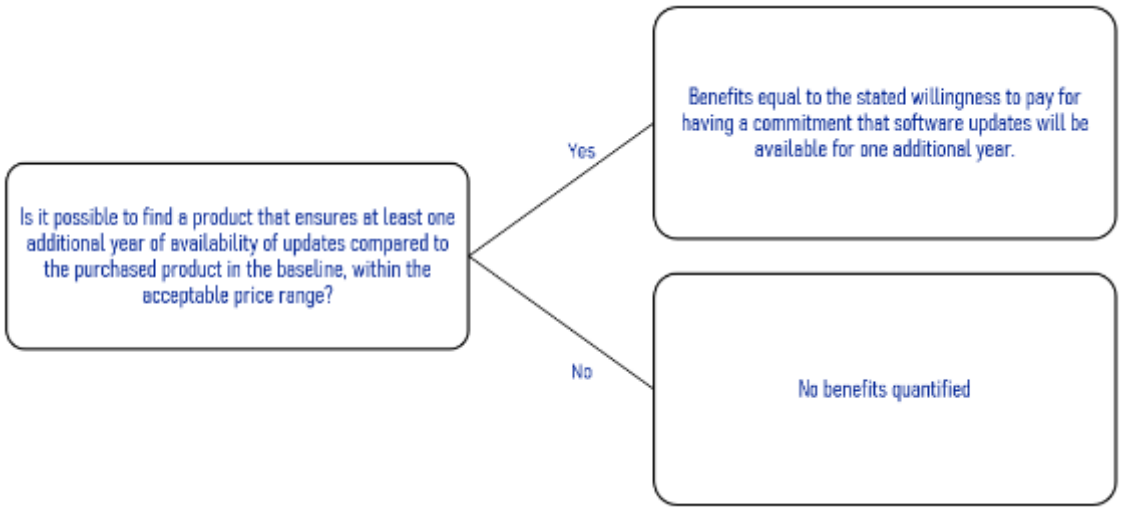
	Assumption	Source
information material	*incurred once per product model sold by the seller.* *35h to redesign tags and 5 minutes to replace existing tags (per price tag) as we assume sellers will be doing this in preparation for the measure*	Ecodesign regulations[555]
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	We assume that placing the tags with the correct information will not impose incremental costs however ensuring that all is correctly done will be relatively demanding and for this reason inspection costs are higher for this measure SME: [1,2]h manager plus [7,14]h employee per year Large enterprises: [2,4]h manager plus [14,28]h employee per year	Interviews with companies and industry associations

Enforcement costs

This will be the same as the ones for measure 1.2.2.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare related to the obligation of software updates is illustrated in the figure below.



[555] https://ec.europa.eu/transparency/regdoc/rep/10102/2019/EN/SWD-2019-349-F1-EN-MAIN-PART-2.PDF; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0347&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0354&from=EN; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0341&from=EN

	Assumption	Source
Share of consumers that did not repair a product because of lack updates	1%-10% depending on the product	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Likelihood of a consumer being able to repair a product due to the existence of updated (when that would have not been the case in the baseline)	We considered that not all products that were not repaired because of lack of updates after the reasonably expected period of time (this is already a requirement per SGD) will be reparable. Consequently, the likelihood is assumed to follow a Uniform distribution with a lower limit of 0 and 0.5.	Expert judgement by a panel
Additional lifespan as a result of a repair	See previous measures.	
Available spare part information at the baseline	5%-6%	Mystery shopping conducted in the context of this study
Likelihood of finding a product that offer updates after the reasonable period of time	This probability will follow a triangular distribution with a lower limit of zero and upper limit of 1. The peak is considered to be below 50%, at around 25%.	Expert judgement by a panel
Willingness to pay for an additional year of updates	Values from the information provided respondents to the survey. It varies depending on the product.	Consumer survey (see Annex 8)

A15.3.4 "Sub-problem 1.3: Lack of reliable information about products' reparability"

Measure 1.3.1. Provision of updated, user-friendly repair and user manuals

Administrative burden

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[556]

[556] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Manufacturers (excluding those that only produce components)		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken to comply with it* SME: [7,21]h legal team, 14h product development team, 3.5h commercial team Large Enterprises: 21h legal team, 28h product development team, 7h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees including on how to develop repair manuals* SME: 0.5h manager + 7h key employees Large enterprises: 1h managers + 14h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available to develop the repair manuals for models already in the market and adjust internal systems to collect data to prepare repair manuals* SME: [7,35]h in total Large enterprises: 105h in total	Interviews with companies and industry associations
Producing new data **(one-off per model)**	*Cost with producing a user-friendly repair manual* A simple repair manual for users is expected to cost between EUR 3,500 and 6,000 (per model) The difference might be due to the complexity of the product and to the existence or not of a repair manual developed for professional repairers. For this reason in the model we consider the unit costs to follow a uniform distribution.	Data provided by iFixit
Designing and placing information material	*Two scenarios were developed:* *The repair manual is made available on the website (in this case it will require [7,14]h for SMEs and 28h for large enterprises), version updates will be done once a month and will take [0.5,1]h for SMEs and 2h for large enterprises* *The repair manual is printed. The costs will be equal to EUR 2.16 per manual*	Update of website, Expert judgement by a panel based on interviews with companies. Cost of printing: 80 pages times average cost of EUR 0.027 a page (ICF data)
Adjust forms and tables (one-off)	*This includes re-designing existing forms to include data related to the measure. Filling in the tables/forms was considered business as*	Interviews with companies and industry associations

	Assumption	Source
	usual (as the additional time spent on this is judged to be negligible) SME: [0.5,1]h manager + [7,14]h employee Large: 1h manager + [14,21]h employee	
Inspections (internal and external)	Internal inspections take place quarterly and in total involve: 0.5h of a manager in the case of SMEs and 1h for large enterprises [3.5,7]h of an employee in the case of SMEs or 14h in the case of large enterprises External inspections are expected to take place in less than 1% of the companies. Each external inspection will involve 1h of a manager and 2h of an employee.	Interviews with companies and industry associations
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing the steps that need to be taken to comply with it* SME: 3.5h legal team + 3.5h commercial team Large Enterprises: 3.5h legal team + 7h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 2h key employees Large enterprises: 1h managers + 4h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	–	
Producing new data	–	
Designing and placing information material	–	
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	–	

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would not require significant additional resources on top of the existing ones to enforce CRD and SGD.

We therefore assume that the measure will require one additional Full Time Equivalent (per Member State), with its time divided equally between monitoring, inspecting and handling complaints.

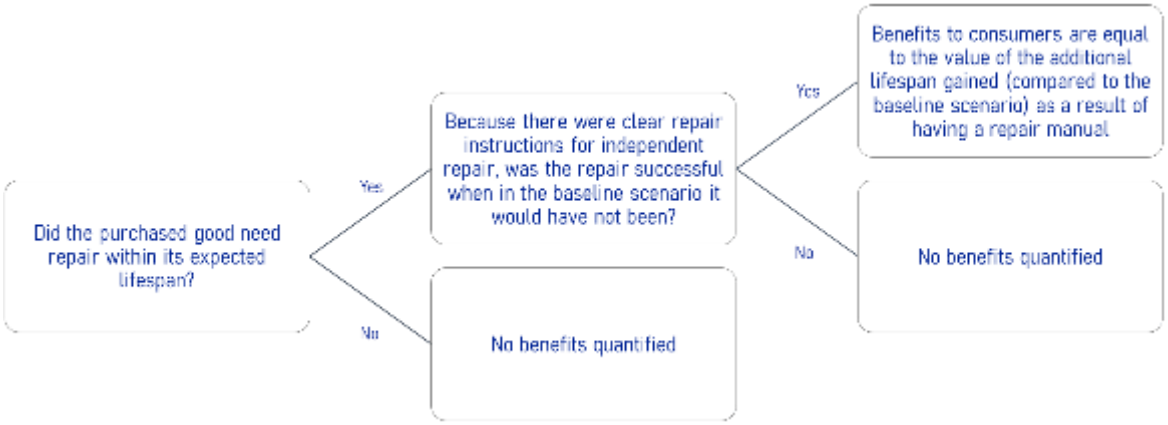
We assumed 70h for familiarization with the measure and adjusting the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there will be a yearly action per Member State, which will cost EUR 20,000 (based on market research).

The other unit costs are assumed to be the same as in the previous measures.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.



	Assumption	Source
Share of consumers that did not repair a product because of lack of repair manual at the baseline	2%-5% depending on the product	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Likelihood of a consumer being able to repair a product due to the existence of a repair manual (when that would have not been the case in the baseline)	We considered that on average between 50% to 100% of the products that were not repaired because of lack of manual could be successfully repaired if one were available.	Expert judgement by a panel

	Assumption	Source
Additional lifespan as a result of a repair	Adopted a conservative approach and assumed that it will be between 0.5 years and 1 year depending on the product. This is considered reasonable as lower gains would most likely lead to replacement instead of repair (given the costs with repair)	Expert judgement by a panel
Available repair manuals at the baseline	0%	Mystery shopping conducted in the context of this study

Measure 1.3.2 Lack of information about how long and which spare parts are available

Administrative burden

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[557]

	Assumption	Source
Manufacturers (excluding those that only produce components)		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing the steps that need to be taken to comply with it* SME: [7,21]h legal team, 17.5h product development team, 3.5h commercial team Large Enterprises: 21h legal team, 35h product development team, 7h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 3.5h key employees Large enterprises: 1h managers + 7h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available to identify which spare parts are provided and adjusting internal systems to ensure that this information is consistently accessible* SME: [14,35]h in total Large enterprises: 105h in total	Interviews with companies and industry associations

[557] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Producing new data	*Meetings to decide which spare parts will be available and for how long* [0.5,1]h per product (this decision will be taken during meetings organized as part of business as usual).	Interviews with companies and industry associations
Designing and placing information material	35h for SMEs and 70h for large enterprises to update their websites to be able to provide the necessary information [0.25,0.5]h for SME and 1h for large enterprises to weekly update their websites.	Market data from ICF Interviews with companies and industry associations
Adjust forms and tables (one-off)	*This includes re-designing existing forms to include data related to the measure. Filling in the tables/forms was considered business as usual (as the additional time spent on this is judged to be negligible)* SME: [0.5,1]h manager + [7,14]h employee Large: 1h manager + [14,21]h employee	Expert judgement by a panel based on interviews with companies
Inspections (internal and external)	Internal inspections take place quarterly and in total involve 0.5h of a manager in the case of SMEs and 1h for large enterprises [3.5,7]h of an employee in the case of SMEs or 14h in the case of large enterprises *External inspections are expected to take place in less than 1% of the companies. Each external inspection will involve 1h manager and 2h of an employee.*	Interviews with companies and industry associations Expert judgment by a panel
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing the steps that need to be taken to comply with it* SME: [7,17.5]h legal team; 10.5h key employees Large Enterprises: 17.5h legal team, 21h key employee	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 2h key employees Large enterprises: 1h managers + 4h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	–	

	Assumption	Source
Producing new data	*Negotiations with manufacturers and importers to make sure that they provide this information*. We only considered the incremental time devoted to discussing this aspect SME: 7h per year Large enterprises: 21h per year	Interviews with companies and industry associations
Designing and placing information material	*This includes the costs of re-designing their websites and updating information if they sell online.* SME: 14h for updating website and 3.5h per month to keep the information up to date Large enterprises: 21h for updating website and 7h per month to keep the information up to date	Interviews with companies and industry associations
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	Internal inspections: SME: 0.5h manager plus 3.5h employee per year Large enterprises: 1h manager plus 7h employee per year	Interviews with companies and industry associations
	External inspections are expected to take place in less than 1% of the companies	Expert judgement by a panel

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would not require significant additional resources on top of the existing ones to enforce CRD and SGD.

We therefore assume that the measure will require one additional Full Time Equivalent (per Member State), with its time divided equally between monitoring, inspecting and handling complaints.

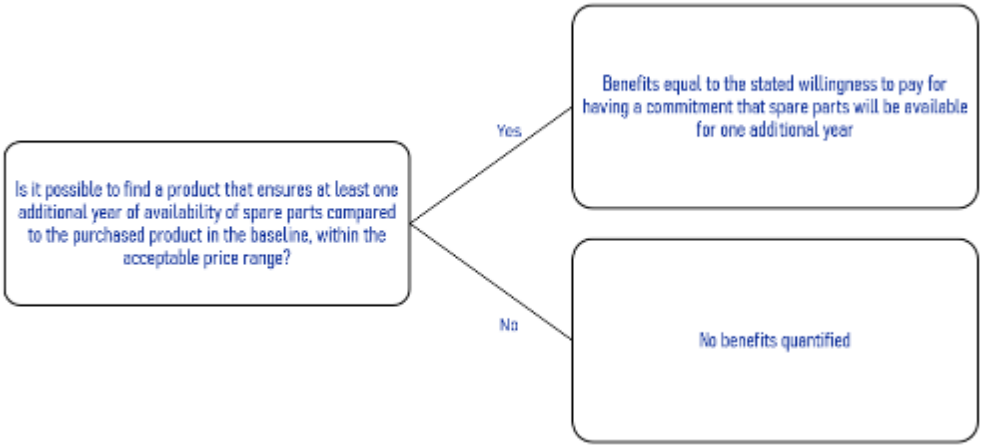
We assumed 70h for familiarization with the measure and adjusting the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there might be a yearly action per Member State, which will cost EUR 20,000 (based on market research).

The other unit costs are assumed to be the same as in the previous measures.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.



	Assumption	Source
Share of consumers that did not repair a product because of lack spare parts	3%-13% depending on the product	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Likelihood of a consumer being able to repair a product due to the existence of spare parts (when that would have not been the case in the baseline)	We considered that between 50% to 100% of the products that were not repaired because of lack of spare parts could be successfully repaired if parts were available.	Expert judgement by a panel
Additional lifespan as a result of a repair	See previous measure	
Available spare part information at the baseline	5%-6%	Mystery shopping conducted in the context of this study
Probability of finding a product with better conditions regarding spare parts within an acceptable price range	This probability will follow a triangular distribution with a lower limit of zero and upper limit of 1. The peak is considered to be below 50% around 40%.	Expert judgement by a panel

Willingness to pay for an additional year of spare parts	Values from the information provided respondents to the survey. It varies depending on the product.	Consumer survey (see Annex 8)

Measure 1.3.3 Provision of information on availability of repair services

Administrative burden

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[558]

	Assumption	Source
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken to comply with it* SME: [7,17.5]h legal team; 17.5h key employees Large Enterprises: 17.5h legal team, 35h key employee	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 2h key employees Large enterprises: 1h managers + 4h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	*This includes searching and compiling available information about repair services and adjusting the internal systems to be able to gather and report this data* [35,70]h for SMEs and 140h for Large enterprises	Interviews with companies and industry associations
Producing new data	Updating information on a weekly basis: SME: 1h per week Large enterprises: 3.5h per week	Interviews with companies and industry associations
Designing and placing information material	Update of website: 35h to redesign	Interviews with companies and industry associations

[558] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Adjust forms and tables (one-off)	–	Interviews with companies and industry associations
Inspections (internal and external)	SME: 1h manager plus 7h employee per year Large enterprises: 2h manager plus 14h employee per year	Interviews with companies and industry associations

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would not require significant additional resources on top of the existing ones to enforce CRD and SGD.

We therefore assume that the measure will require an additional 0.5 Full Time Equivalent (per Member State), with its time divided equally between monitoring, inspecting and handling complaints.

We assumed 70h for familiarization with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there might be a yearly action per Member State, which will cost EUR 20,000 (based on market research).

The other unit costs are assumed to be the same as in the previous measures.

Impact on monetizable consumer welfare

The quantification of benefits was done by adjusting the stated willingness to pay for information about the availability of repair services of products[559] (including availability of spare parts, repair services and updates) by the respondents to the consumer survey and multiplying it by the number of consumers in the EU.

	Assumption	Source
Share of consumers that willing to pay for the information	43%	Consumer survey (see Annex 8)
Average willingness to pay	Values adapted from the information provided respondents to the survey.	Consumer survey (see Annex 8)

Measure 1.3.4 Provision of Repair index score

This measure was identified after the consultations had been concluded. A panel used the data available to fill in in the data gaps.

Administrative burden

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[560]

559 The question did not specify for what products the information would be available, so we adjusted the value based on the share that consumers spend on the three product categories considered in the analysis (large household appliances, small household appliances and ICT and electronic services).

560 While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
Manufacturers (excluding those that only produce components)		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken as a result of the measure* SME: [7,35]h legal team, 35h product development team, 7h commercial team Large Enterprises: 35h legal team, 70h product development team, 14h commercial team	Expert judgement by a panel based on data collected for previous measures
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 3.5h manager + 10.5h key employees Large enterprises: 7h managers + 21h key employees	Expert judgement by a panel based on data collected for previous measures
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available to assess how reparable their products are according to the methodology* SME: [35,52.5]h Large enterprises: 175h	Expert judgement by a panel based on data collected for previous measures
Producing new data	Assessment of the reparability according to the methodology will take 7h per model	Expert judgement by a panel
Designing and placing information material	*We assume information will be provided by digital means* Design will take: 35h	Expert judgement by a panel based on data collected for previous measures
Adjust forms and tables (one-off)	*This includes re-designing existing forms to include data related to the measure. Filling in the tables/forms was considered business as usual (as the additional time spent on this is judged to be negligible)* SME: [0.5,1]h manager + [7,14]h employee Large: 1h manager + 28h employee	Expert judgement by a panel based on data collected for previous measures
Inspections (internal and external)	Internal inspections involve [0.5,1.75]h of a manager and 7h of an employee in the case of SMEs and [1,3.5]h of a manager and 14h in the case of large enterprises *External inspections are expected to take place in less than 1% of the companies. Each external inspection will involve 3.5h manager and 7h of an employee.*	Expert judgement by a panel based on data collected for previous measures
Retailers		

	Assumption	Source
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken to comply with it.* SME: [7,35]h legal team; 42h key employees Large Enterprises: 35h legal team, 84h key employees	Expert judgement by a panel based on data collected for previous measures
Training **(one-off)**	*This includes an initial training of managers and key employees. This training will ensure that employees understand the repair index and that can on the on hand score a product according to the index and explain the repair score to consumers. As this will be completely new concept it is expected that the training will involve more resources* SME: 3.5h manager + [7,42]h key employees Large enterprises: 7h managers + [42,84]h key employees	Expert judgement by a panel based on data collected for previous measures
Retrieving relevant information from existing data and adjusting existing data	*This involves collecting all the information and preparing the procedures to be able to assess the reparability of products per product category (including negotiations with manufacturers and importers)* SME: 140h Large enterprises: 280h	Expert judgement by a panel based on data collected for previous measures
Producing new data	*This includes assessing the reparability of products for which the information is not available and stick the label on the product plus updating internal systems.* SME: 2h a week Large enterprises: 4h employees a week	Expert judgement by a panel
Designing and placing information material	*Costs with placement of tags* 5 minutes to stick the labels on those products that do not have it but that were provided by the importer/manufacturer (assumed to be about 2.5%)	Expert judgement by a panel based on data collected for previous measures
Adjust forms and tables (one-off)	**–**	Expert judgement by a panel based on data collected for previous measures
Inspections (internal and external)	SME: 1h manager plus 7h employee per year Large enterprises: 2h manager plus 14h employee per year	Expert judgement by a panel based on data collected for previous measures

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would require some additional resources on top of the existing ones to enforce CRD and SGD.

We therefore assume that the measure will require two additional Full Time Equivalents (per Member State), with their time divided equally between monitoring, inspecting and handling complaints.

We assumed 70h for familiarization with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there might be a yearly action per Member State, which will cost EUR 20,000 (based on market research).

The other unit costs are assumed to be the same as in the previous measures.

Impact on monetizable consumer welfare

The quantification of benefits was done by adjusting the stated willingness to pay for information about the availability of repair services of products[561] (including availability of spare parts, repair services and updates) by the respondents to the consumer survey and multiplying it by the number of consumers in the EU.

	Assumption	Source
Share of consumers that willing to pay for the information	43% depending on the product	Consumer survey (see Annex 8)
Average willingness to pay	Values adapted from the information provided respondents to the survey.	Consumer survey (see Annex 8)

A15.3.5 "Sub-problem 2.1: Consumers are sold products that do not last as long as they should or as long as consumers expect"

For the purpose of the assessment obsolescence is defined by failures happening in the first 60% of the expected lifespan of a good.

Measure 2.1.1 Information on recorded early failures of products present in the market by authorised entities

This measure was identified after the consultations had been concluded and the estimations relied on the expert judgement of a panel.

Administrative burden

	Assumption	Source
Third-parties (assumption based on the contact list developed during the study: about 20 per Member State)		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken to comply with it* 35h legal team, 35h employees	Expert judgement by a panel based on data available for other measures

561 The question did not specify for what products the information would be available, so we adjusted the value based on the share that consumers spend on the three product categories considered in the analysis (large household appliances, small household appliances and ICT and electronic services).

	Assumption	Source
Training **(one-off)**	*This includes an initial training of managers and key employees* 1h manager + 7h employees	Expert judgement by a panel based on data available for other measures
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes identifying and compiling all the information available regarding early failure of products* 35h of employee	Expert judgement by a panel
Updating data	14h adjust website and 2h per month to update the website in case of new relevant data.	Market research and expert judgement by a panel based on data available for other measures

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would not require significant additional resources on top of the existing ones to enforce UCPD.

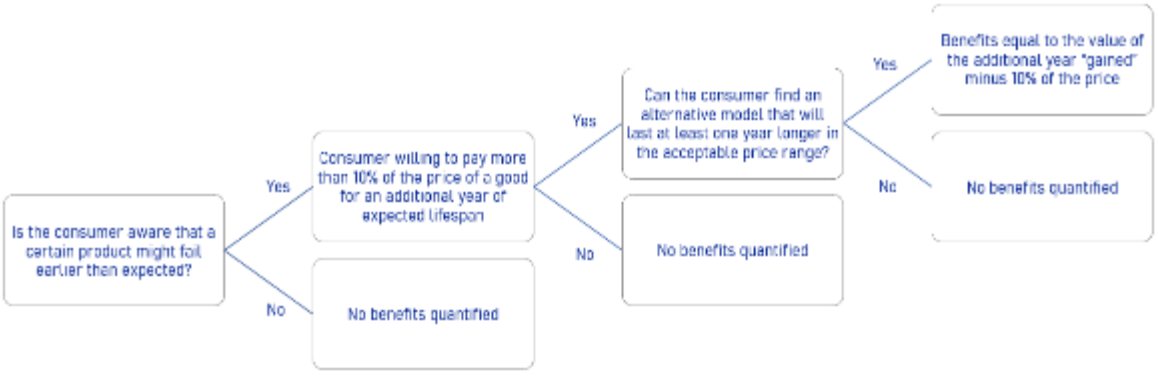
We therefore assume that the measure will require half- Full Time Equivalent (per Member State), with 50% of their time devoted to surveillance, 25% devoted to inspections and 25% to handling complaints.

We assumed 35h for one person getting familiarized with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 3.5h training.

The costs of adjudication are expected to be in line with the unit costs presented in the previous measures.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.



	Assumption	Source
Share of early failures	6%-20% depending on the product (for 60% scenario)	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Additional lifespan as a result of the improvement	40% or 25% (depending on the scenario 60% or 75%)	NA

Measure 2.1.2: Ban on certain identified practices associated with early obsolescence

The incidence of banned practices is not known. For this reason, we monetised the costs and benefits for two scenarios for the incidence of the banned practices (i.e., the percentage of early failures that are due to the practices that will be banned under the measure): 15% and 30%.

Substantive Compliance Costs

The costs indicated below were calculated per main product group considered (large household appliances, small household appliances, electronics and IT goods) and then added up.[562]

	Assumption	Source
Manufacturers (excluding those that only produce components)		
Familiarization with the measure (one-off)	*This includes not only identifying the new obligations imposed by the measure but also analyzing the steps that need to be taken to comply with it* SME: [7,35]h legal team, [14,35]h product development team, 7 commercial team Large Enterprises: 35h legal team, [35,70]h product development team, 14 commercial team	Interviews with companies and industry associations
Training (one-off)	*This includes an initial training of managers and key employees* SME: 3.5h manager + 10.5h key employees Large enterprises: 7h managers + 21h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing	*This includes identifying and compiling all the information available to ensure that banned practices are being practices and if they are to ensure the procedures are put in place to address them*	Interviews with companies and industry associations

[562] While theoretically there might be an overlap between product groups within a company that produces both, this overlap would concern only a small fraction of familiarization costs and is therefore considered to be negligible.

	Assumption	Source
data (including adapting system to retrieve information) **(one-off)**	SME: [70,140]h in total Large enterprises: 280h in total	
Updating models to comply with measure	Companies producing models that do not comply with the measure will have to revise their production process in order to not engage in the banned practices and possibly improve their products. The latter costs are particularly difficult to estimate as they depend on two things: • the list of practices that will be banned, and the nature of those practices, i.e., if the practice is to prevent access to components or avoid software updates that will reduce the performance of the product, then they are not expected to lead to costs, if the banned practice is to ensure that the design of the product ensures its robustness and its reparability, then the companies may need to adapt their production process. • the specificities of the production process of those companies engaging in these practices. While fully aware of these limitations, we decided to carry out a very rough estimation of the possible costs for companies. This was done by screening the prices of various product types on online marketplaces, identifying the price of the cheapest product, and then assume that it will cost between 7.5% to 15% extra to comply with the measure and improve the product accordingly.[563]	Market research
Inspections (internal and external)	*Internal inspections take place quarterly and in total involve* *0.5h of a manager in the case of SMEs and 1h for large enterprises* *[3.5,7]h of an employee in the case of SMEs or 14h in the case of large enterprises* *External inspections are expected to take place in less than 1% of the companies. Each external inspection will involve 1h manager and 2h of an employee.*	Interviews with companies and industry associations Expert judgment by panel
Retailers		

563 This was incorporated in the analysis by ensuring that the costs of improving follows a uniform distribution (0.075, 0.15).

	Assumption	Source
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing what are the necessary steps that need to be taken to comply with it* SME: [7,17.5]h legal team Large Enterprises: 17.5h legal team	Interviews with companies and industry associations

Enforcement costs

Based on interviews with some CPCs, it is assumed that the measure would require significant additional resources on top of the existing ones to enforce UCPD (except for one Member States – France).

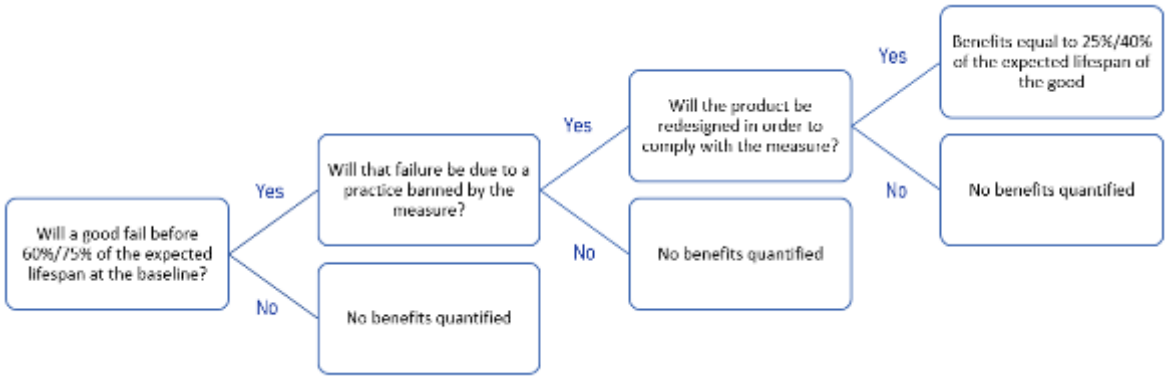
We therefore assume that the measure will require a team of seven additional Full Time Equivalent (per Member State), with 42% of their time devoted to surveillance, 42% devoted to inspections and 16% to handling complaints.

We assumed 70h for three people getting familiarized with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 14h training.

The costs of adjudication ate expected to be significantly higher than average given the complexity of the matter. We assume that one ADR case will costs around EUR 7,756 and a court case around five times the average.

Impact on monetizable consumer welfare

The approach followed to monetize the consumer welfare is illustrated in the figure below.



	Assumption	Source
Share of early failures	6%-20% depending on the product (for 60% scenario)	Consumer survey (see Annex 8)
Average price of goods	Depends on the good	Statista (see Annex 6)
Likelihood of the failure being due to the practice banned	See incidence of practice	NA

	Assumption	Source
Additional lifespan as a result of the improvement	40% or 25% (depending on the scenario 60% or 75%)	NA

A15.3.6 "Sub-problem 2.2: Consumers are faced with the practice of making unclear or poorly substantiated green claims"

Measure 2.2.1 Ban of unfounded general statements

Substantive compliance costs

The adopted approach to the monetisation of the substantive compliance costs of the measure took into account the lack of data on the number of products offered in the market and so assumed cost per company (SMEs and Large enterprises) but not per product.

Data regarding the share of products with unsubstantiated vague claims (to avoid double counting of benefits with measures under problem 2.3, we only considered non-label/logo type of claims) was obtained from the Study on "Environmental claims in the EU: Inventory and reliability assessment".[564]

	Assumption	Source
Manufacturers and Service Providers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but analyzing what the necessary steps are that need to be taken to comply with it.*[565] SMEs: 3.5 legal team, 1h product development team, 1h commercial team Large Enterprises: 3.5 legal team, 2h product development team, 2h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers* SME: 0.5h manager Large enterprises: 1h managers	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data (including adapting	*This includes gathering data about which products have claims that are not allowed according to the measure. We assume the information is very easy to trace as it is included with the products.* SME: 7h employees Large enterprises: 14h employees	Interviews with companies and industry associations

[564] Milieu & IPSOS, 2020. To be published.

[565] The measure is relatively simple, specific and already in line with many guidelines. It also prohibits an action instead of requiring one. For these reasons the time required for legal analysis is considered to be much less than the one considered for other measures.

	Assumption	Source
system to retrieve information) **(one-off)**		
Producing new data **(one-off per model)**	–	
Designing and placing information material	*This includes re-designing the packages that still include banned claims at the time the measure enters into force* SME: [14,28]h employees Large enterprises: [28,42]h employees	Interviews with companies and industry associations
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	Internal inspections involve 0.5h of a manager and 1h of an employee in the case of SMEs and 1h of managers and 4h in the case of large enterprises *External inspections are expected to take place in less than 1% of the companies. Each external inspection will require an amount of time similar to an internal inspection.*	Interviews with companies and industry associations Expert judgment by panel
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the necessary steps that need to be taken to comply with it* SME: 3.5h legal team, 1h commercial team Large Enterprises: 3.5h legal team, 2h commercial team	Interviews with companies and industry associations
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 1h key employees Large enterprises: 1h managers + 2h key employees	Interviews with companies and industry associations
Retrieving relevant information from existing data and adjusting existing data	–	
Producing new data	–	
Designing and placing information material	*This includes ensuring that the packages do not have banned claims. We assume that in the first years after the implementation of the measure, there might be products in stock with claims*	Expert judgment by panel

	Assumption	Source
	that need to be "removed" using for example a sticker SME: 7h employees Large enterprises: 14h employees	
Adjust forms and tables (one-off)	–	
Inspections (internal and external)	*External inspections are expected to take place in less than 1% of the companies. Each external inspection will require 0.5h of manager and 3.5h employees for SMEs and 1h of managers and 7h employees for Large Enterprises.*	Expert judgment by panel

Enforcement costs

It is assumed that the measure would not require significant additional resources on top of the existing ones to enforce UCPD. In fact, some of the interviewed CPC authorities even indicated that the measure might lead to savings as it will help them to prove the practice of "greenwashing" more easily (less resources are needed to substantiate their assessment). For these Member States we considered that the measure does not bring incremental costs. For the others, we assume that one Full Time equivalent would work half time with 50% of its time devoted to monitoring, 25% to inspections and the remaining 25% to handle complaints.

For all Member States, we assumed 35h for two people getting familiarized with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

It is also assumed that there might be a yearly action per Member State, which will cost EUR 20,000 (based on market research).

The costs of an ADR body adjudication and of a court adjudication were obtained from the Impact Assessment of CPC authorities and supporting study[566].

Impact on monetizable consumer welfare

- The approach to quantification of the impact of the measure on the monetizable consumer welfare was the following:
- Step 1. Estimate the percentage of products carrying claims that will become banned if the measure is implemented.[567]
- Step 2. Estimate the share of consumers that were purchasing those products (in the baseline) and that are willing to pay to be sure that the information is trustworthy.
- Step 3. Estimate how much these consumers are willing to pay for more trustworthy information for those sales covered by the measure.[568]

[566] https://ec.europa.eu/info/sites/info/files/cpc_review_support_study_1_en.pdf and https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0164&from=EN.

[567] We do not have data on volume but on sales, so had to assume proportionality between the share of products and the share of sales.

[568] We assume the costs of the products with vague non-substantiated claims and with vague substantiated claims is similar.

- In the scenario where we assume that the measure will increase the level of trust of consumers, and for that reason more consumers (than in the baseline) will purchase greener products, then the monetisation of the benefits of the new demand was done by:
- Step 4. Estimate the share of consumers that were not purchasing those greener products (in the baseline) and that would be start doing as a result of the measure.
- Step 5. Estimate the surplus of these new consumers based on their stated willingness to pay to having products with trustworthy information.

	Assumption	Source
Consumers that always buy more environmentally friendly products (when available)	15%	Consumer survey (see Annex 8)
Consumers that will start trusting the information and buying greener products more often	Three scenarios were developed to consider three possible impact of the measure on the trust of consumers on environmental claims and therefore (following evidence collected from the consumer survey and other studies) purchase products that claim to be more environmentally friendly: 0% no impact on trust 0.5% low-moderate impact on trust 1% moderate-high	Expert judgement based on results of the consumer survey (see Annex 8)
Willingness to pay for having trustworthy environmental information	Existing demand: 0.35 (average, depends on the product) New demand: 4.91% (average, depends on the product)	Consumer survey (see Annex 8)
Sales within scope	Products with textual claims: 27% (average) Share of textual vague claims: 36% Sales within scope: 27% X Uniform(34%,36%)[569]	Study on "Environmental claims in the EU: Inventory and reliability assessment".[570] Mystery shopping carried out in the context of the present study
Likelihood of finding a greener product without a	The uncertainty regarding this parameter required us to define it as a triangular distribution function with a lower limit of 0, a upper limit of 0.5 and a peak of 25%	Expert judgment by a panel

[569] Vague claims will not be banned for products that are best in class. We do not have data on the share of those products, but it is expected to be very small. We modelled this by using a uniform distribution.

[570] Milieu & IPSOS, 2020. To be published.

misleading claim

Measure 2.2.2 Ban of environmental claims that do not fulfil a minimum set of criteria

The substantive compliance costs and enforcement costs followed the same approached and assumptions presented for the previous measure. Given the possible overlap with the Green Claims initiative two scenarios were developed to incorporate the impact overlap in the incremental benefits and costs of the measure: 30% or 60% of issues addressed by the measure not covered by the Green claims initiative.

A15.3.7 "Sub-problem 2.3: Consumers are faced with a proliferation of sustainability labels and digital information tools that are not always credible or transparent"

Measure 2.3.1 EU-led voluntary initiative to develop minimum criteria on sustainability labels and digital information tools

Administrative burdens

Expected to be negligible.

Substantive compliance costs

Expected to be negligible.

Enforcement costs

Given the voluntary nature of the option there will be no enforcement costs associated. Other costs to public bodies (including the Commission) will be related to the organisation of meetings and preparation of the minimum criteria. These are estimated to be around EUR 94 000 in the first year and about EUR 16 000 per year[571].

Impact on monetizable consumer welfare

Expected to be negligible.

Measure 2.3.2 Introduction of minimum transparency and credibility requirements to be respected by sustainability labels and digital information tools

Administrative burdens

Since the measures impose both administrative burden and substantive compliance costs, we split the costs related to familiarization with the measure, training, retrieving data and adjusting internal systems and procedures between administrative burden and substantive compliance costs.

	Assumption	Source
Labels managers		
Familiarization with the measure	*This includes not only identifying the new obligations imposed by the measure but analyzing what the necessary steps are that need to be taken to comply with it.*[572]	Interviews with two organisations running labels

[571] Assuming six meetings in the first year to discuss and prepare the minimum criteria and then one meeting a year to revise the criteria.

[572] The measure is relatively simple, specific and already in line with many guidelines. It also prohibits an action instead of requiring one. For these reasons the time required for legal analysis is considered to be much less than the one considered for other measures.

	Assumption	Source
(one-off)	17.5h legal team, 17.5h technical team	
Training **(one-off)**	*This includes an initial training of managers and employees* 0.5h managers and 14h employees	Interviews with two organisations running labels
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	*This includes gathering data about the label/logo and adjusting internal procedures and systems to systematically collect, analyse and disclose the necessary information* 210h for those labels that currently do comply with at least one the criterion (based on the analysis of the ecolabels listed in the ecolabelindex.com that would be about 94%)	Interviews with two organisations running labels
Designing and placing information material	*This includes re-designing the websites to include the information required by the measure* 70h employees	Market research
Adjust forms and tables (one-off)	**–**	
Inspections (internal and external)	Internal inspections involve 0.25h of a manager and 0.75h of an employee. We assume that internal inspections already take place in the baseline and that the incremental burden of the measure in this respect is very limited. *External inspections are expected to take place in less than 5% of the companies. Each external inspection will require involve 0.5h of a manager and 3.5h of an employee*	Interviews with two organisations running labels Expert judgement by panel
Retailers		
Familiarization with the measure **(one-off)**	*This includes not only identifying the new obligations imposed by the measure but also analyzing the necessary steps that need to be taken to comply with it* SME: 3.5h legal team, 1h commercial team	Expert judgment by panel based on data for previous measures
Training **(one-off)**	*This includes an initial training of managers and key employees* SME: 0.5h manager + 1h key employees Large enterprises: 1h managers + 2h key employees	Expert judgment by panel based on data for previous measures

Substantive compliance costs

	Assumption	Source
Labels managers		

	Assumption	Source
Familiarization with the measure **(one-off)**	As for administrative burden (we split these costs between the two categories)	
Training **(one-off)**	As for administrative burden (we split these costs between the two categories)	
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	As for administrative burden (we split these costs between the two categories)	
Producing new data **(one-off per model)**	*These costs are passed on to the companies applying to the label/logo so they are accounted accordingly (see below)*	
Fee to get approval from EU body	**–**	
Designing and placing information material	**–**	
Adjust forms and tables (one-off)	**–**	
Inspections (internal and external)	As for administrative burden (we split these costs between the two categories)	
Manufacturers and Service Providers		
Producing new data **(one-off per model)**	*This includes the costs with having to carry out a third-party verification in the case of labels/logos that currently do not do it and that are passed on to companies applying for the label/logo* Share of logos/labels that do not require third-party verification in the baseline: 46% Number of products awarded with a given label/logo (in the baseline, average): 25 666 Incremental cost of a third-party verification: EUR 388/per year	Interviews with two organisations running labels/logos Ecolabelindex.com Data on number of products with EU ecolabel, Fair trade, Nordic Swan

Enforcement costs

It is assumed that the measure would not require significant additional resources on top of the existing ones to enforce UCPD. In fact, some of the interviewed CPC authorities even indicated that the measure might lead to savings as it will help them tackle the issue of lack of transparency and reliability of labels/logos more easily (less resources are needed to substantiate their assessment). For these Member States we considered that the measure does not bring incremental costs. For the others, we assume that one Full Time equivalent will work to monitor (50%), carry out inspections (40%) and handle complaints (10%).

For all Member States, we assumed 35h for two people getting familiarized with the measure and adjust the internal procedures to start enforcing the measure. 16 employees will receive a 7h training.

The costs of an ADR body adjudication and of a court adjudication were obtained from the Impact Assessment of CPC authorities and supporting study[573].

Impact on monetizable consumer welfare

- The approach to quantification of the impact of the measure on the monetizable consumer welfare was the following:
- Step 1. Estimate the percentage of products carrying labels/logos that will become more transparent and reliable if the measure is implemented.[574]
- Step 2. Estimate the share of consumers that were purchasing those products (in the baseline) and that are willing to pay to be sure that the information is trustworthy.
- Step 3. Estimate how much these consumers are willing to pay for more trustworthy information for those sales covered by the measure.[575]
- In the scenario where we assume that the measure will increase the level of trust of consumers on labels/logos, and that for that reason more consumers (than in the baseline) will purchase products that are more sustainable, then the monetisation of the benefits of the new demand was done by:
- Step 4. Estimate the share of consumers that were not purchasing those "more sustainable" products (in the baseline) and that would be start doing it as a result of the measure.
- Step 5. Estimate the surplus of these new consumers based on their stated willingness to pay to having products with trustworthy labels/logos.

	Assumption	Source
Consumers that always buy more environmentally friendly products (when available)	15%	Consumer survey (see Annex 8)
Consumers that will start trusting the	Three scenarios were developed in line with what was described for measure 2.2.1	

[573] https://ec.europa.eu/info/sites/info/files/cpc_review_support_study_1_en.pdf and https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0164&from=EN.

[574] We do not have data on volume but on sales, so had to assume proportionality between the share of products and the share of sales.

[575] We assume the costs of the products with vague non-substantiated claims and with vague substantiated claims is similar.

information and buying sustainable products more often		
Willingness to pay for having trustworthy environmental information	Existing demand: 0.18% (average, depends on the product) New demand: 4.91% (average, depends on the product)	Consumer survey (see Annex 8)
Sales within scope	Products with labels/logos: 10% (average) Share of labels/logos not fully complying: 94% Sales within scope: 10% X 94%	Study on "Environmental claims in the EU: Inventory and reliability assessment".[576] Mystery shopping carried out in the context of the present study Ecolabelindex.com

Measure 2.3.3 Pre-approval of sustainability labels and digital information tools via an EU body

Administrative burdens

Similar to measure 2.3.2.

Substantive compliance costs

	Assumption	Source
Labels managers		
Familiarization with the measure **(one-off)**	As for measure 2.3.2.	
Training **(one-off)**	As for measure 2.3.2.	
Retrieving relevant information from existing data and adjusting existing data (including adapting system to retrieve information) **(one-off)**	As for measure 2.3.2.	
Producing new data	As for measure 2.3.2.	

[576] Milieu & IPSOS, 2020. To be published.

	Assumption	Source
(one-off per model)		
Fee to get approval from EU body (only for measure 2.3.4	EUR [1 000, 2 000] every two years	Based on data for EU Ecolabel
Designing and placing information material	-	
Adjust forms and tables (one-off)	-	
Inspections (internal and external)	As for measure 2.3.2.	
Manufacturers and Service Providers		
Producing new data	As for measure 2.3.2.	
(one-off per model)		

Enforcement costs

In addition to the enforcement costs of measure 2.3.2., this measure will have costs related to setting up and running the EU body were considered to be around EUR 4.02 million[577] per year.

Impact on monetizable consumer welfare

As for measure 2.3.2.

[577] Source: costs setting up and running BEREC office.
https://ec.europa.eu/transparency/regdoc/rep/10102/2016/EN/SWD-2016-303-F1-EN-MAIN-PART-1.PDF

Annex 16. Summary of evidence on obstacles to repair, re-use and share products and possible solutions

This Annex presents a brief analysis of the evidence collected (through desk research and stakeholder consultations) on obstacles and possible EU-level measures related to the two challenges not relevant in the context of the DG JUST initiative (thus not covered in the main report) but that were found to also constrain the consumers' effective and active role in the green transition (see Problem Tree in Figure A277):

- promote the repair of consumer products;
- promote more re-use of (parts of) goods.

Figure A277. Problem Tree beyond legal initiative

A16.1 Problem 3. Repairing goods is challenging and unappealing

A16.1.1 Brief description

As detailed in section 3 of the main report, product reparability is an important consideration in the transition to a circular economy as it may contribute to lengthening a product's life, which can ultimately translate into a reduction of a product's overall lifecycle impacts by increasing the timescale over which the raw materials, manufacture, distribution, retail and disposal impacts are spread.

However, as highlighted in section 3 of the main report, some goods are currently being discarded and replaced earlier than socially desirable because repair is not possible or attractive.

In line with findings from literature[578,579], the consumer survey carried in the context of the present study showed that the commonly difficulties (not related to information) encountered by consumers when undertaking product repairs are (see Table A87 and Table A30):

- the insufficiency of or difficulties in finding repair services and their excessive cost;
- the lack of access to spare parts or software updates/upgrades (due to unavailability and/or time to be delivered) and their excessive cost;
- the low reparability of the product either because the repair would take too long, the failed component/whole product was impossible to repair or because the repair service did not have the necessary information to carry out the repair.

Table A87. Problems experienced by respondents of consumer survey when trying to have a product repaired by a professional service

Question: You indicated that you tried to organise a repair by a professional service. When you did so, did you experience any of the following problems?

	Large household appliances (N=1280)	Small household appliances (N=839)	Electronic and IT products (N=761)	Furniture (N=153)
The repair was not available locally	16%	25%	24%	25%
It was not easy to find out if and where the product could be repaired	20%	27%	18%	24%
The repair service was too expensive/it was cheaper to replace the product	15%	26%	14%	21%
The repair would have taken too long	9%	14%	9%	14%
Spare parts of the product were no longer available	11%	17%	7%	18%
Software updates for this version of the product were no longer available	6%	11%	6%	8%
Spare parts would have taken too long to arrive	9%	12%	7%	9%
Spare parts were expensive	14%	15%	11%	12%
The failed component / the whole product was impossible to repair	6%	8%	6%	8%
The repair service did not have the necessary information to perform the repair	5%	4%	4%	6%

[578] European Parliament. 2017. 'Report on a longer lifetime for products: benefits for consumers and companies.' Available at: https://www.europarl.europa.eu/doceo/document/A-8-2017-0214_EN.html?redirect

[579] European Commission. 2018. 'Behavioural Study on Consumers' Engagement in the Circular Economy.' Available at: https://ec.europa.eu/info/sites/info/files/ec_circular_economy_final_report_0.pdf

Table A88. Problems experienced by respondents of consumer survey when trying to repair a product themselves or via a Repair Café

Question: You indicated that you tried to repair/update/upgrade the product yourself or via a Repair Café (or asked a friend or relative or acquaintance to do that). Did you experience any of the following problems when you did so?

	Large household appliances (N=890)	Small household appliances (N=675)	Electronic and IT products (N=405)	Furniture (N=134)
The necessary spare parts were not available	16%	19%	13%	20%
The software/firmware was no longer supported	11%	16%	20%	13%
I did not know where or how to get spare parts	21%	28%	17%	21%
The price of spare parts was too high	19%	20%	12%	16%
I could not access/remove the failed component (this could be because the product could not be opened because e.g. it was glued shut or because special tools were needed to open it or get the component out, or any other reason you couldn't do this)	15%	21%	14%	19%
The repair manual was not available	15%	18%	12%	16%
The repair manual was not clear on what to do, or easy to understand	11%	12%	9%	5%
The repair turned out to be too difficult	13%	11%	15%	19%
The failed component was impossible to repair due to its product design	4%	5%	3%	9%
Another problem	2%	1%	3%	1%

The results of the consumer survey show that when consumers tried to organise a repair by a professional service, in about between 35% ±3% (in the large household appliances and electronics categories) and 54% ±8% (in the small household appliances and furniture categories), professional repairs were not successful[580]. Mirroring the responses for the outcome of professional repair, self-repairs of large household appliances and electronics were not successful in approximately half of the time (48% ±3% and 50% ±5% respectively) and in about two thirds of the time for small household appliances and furniture (39% ±4% and 35% ±8% respectively)[581].

Most Consumer Associations, Public authorities, experts and NGOs consulted also indicated (see details in Annex 8) that in their experience consumers are faced with many obstacles when it comes to deciding whether to repair goods rather than replace them. A significant majority of Consumer Associations and Public authorities highlighted that consumers tend to consider that buying new products is cheaper than repairing their broken products and that repairing is expensive, time-consuming and burdensome.

[580] In all product categories, the most common action following a failed professional repair was to attempt self-repair (15% ±2% for large household appliances, 24% ±2% for small household appliances, 12% ±2% for electronics, and 17% ±6% for furniture).

[581] Across all product categories, the most common response following a failed attempt at self-repair was to attempt to arrange a professional repair (32% ±3% for large household appliances, 36% ±4% for small household appliances, 32% ±5% for electronics and 35% ±8% for furniture).

Most business associations consulted (see details in Annex 8) agree that only some companies commit to consumers to support them in repairing their products with necessary information, spare parts, clear and easy-to-understand repair manuals or affordable repair and maintenance services.

The main problem drivers of this problem are (see details in Table A89):

- in general, unless legally required, producers do not have incentives to provide products that are easy to repair as, among other reasons, the increasing reparability of goods can lead to a reduction of sales and turnover for manufacturers and retailers.
- repair markets are not fully developed and/or competitive, which can lead to low reduced availability and/or quality of repair services and low/high prices of repairs.

While important steps have been taken at EU level to address some of the aforementioned problems (see Annex 3), the current legal framework (e.g., Ecodesign Directive) does not currently fully address the aforementioned obstacles for all product groups. The Sustainable Product Initiative[582] is expected to further contribute to addressing this problem.

In addition, as described in Annex 10 and 11, various public initiatives (current and planned) at national level and private initiatives at national and multi-national level aim to address some of the aforementioned problems.

Table A89. Drivers of problem 3: Repairing goods is challenging and unappealing

Driver	Rationale	Baseline
Insufficient/uneven incentives to ensuring goods are easy to repair	Manufacturers and sellers: may make repairs less convenient for consumers, driving consumers to replace goods instead of repairing them, in order to increases sales over the longer term. Furthermore, commitments related to repair (e.g. keeping spare parts available for long periods) are often not attractive to manufacturers.	<u>Supply practices</u> Research[583] shows that more than three-quarters of consumers are willing to seek repairs but cannot do so owing to the high cost of repairs, the lack of access to spare parts, the complexity of software and electronics, including the low reparability of specific product components, and the insufficiency of repairs/replacement services. Similarly, Independent repairers indicate that repairs cannot, in many instances, be undertaken owing to a lack of access to original spare parts, technical information, diagnostic software and training. A shared view among independent repairers is that manufacturers tend to limit access to these to their own after-sales services or to

[582] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12567-Sustainable-products-initiative

[583] Cited in European Parliament. 2017.

Driver	Rationale	Baseline
		recognised repairers of a specific brand[584]. The following factors are considered to hinder the reparability of products: lack of standardisation and interoperability of key components across brands, or between different products of the same brand; increased technical knowledge required for repairs due to the growing complexity of products and to the increased incorporation of electronic components and component miniaturisation. This is particularly observed within certain product categories, such as laptops, tablets and smartphones, which are becoming increasingly difficult to be dismantled and repaired owing to the absence of accessible screws, miniaturization of components, non-replaceable batteries, etc. The same issue is observed in relation to other electronic goods, most of which are assembled by using non-standard screws in order to prevent the users from causing a malfunction. However, this practice hinders the possibility to repair the product if it fails. Repair and service manuals from manufacturers are not always available to consumers and reuse and repair centres. Sometimes these are available for purchase or only accessible to the agreed after-sales service providers of the manufacturers. <u>Enforcement</u> The Ecodesign requirements related to reparability only apply to a limited number of goods.

[584] European Commission. 2018. 'Behavioural Study on Consumers' Engagement in the Circular Economy.' Available at: https://ec.europa.eu/info/sites/info/files/ec_circular_economy_final_report_0.pdf

Driver	Rationale	Baseline
Repair markets not fully developed and/or competitive	The preference for replacing products instead of repairing means that the demand for repair services is low. Repair shops face high labour prices when compared to the lower cost of mass-produced new products, often in countries with lower labour costs.	There is evidence that the availability of repair services across the EU is generally decreasing. For example, evidence shows that in terms of employment, the obstacles preventing repairs have resulted in a decline in the number of repairers in active employment across the EU. In the Netherlands, 2,000 jobs were lost in this sector over a period of seven years; while in Germany, 13% of radio and television repair shops have closed down in one year; and finally in Poland, the number of repairers has decreased by 16% in two years. The reduced competition and offer of repair services will make those services more expensive and less convenient to consumers, leading consumers to choose to buy new products instead of repairing current ones. <u>Enforcement</u> The European Consumer Association, BEUC, has called for further changes to the '*Ecodesign Directive*', such as mandating manufacturers to make spare parts available to all repairers, not just professional repairers. RReuse called for measures that go beyond product design to support repairs, such as repair subsidies for consumers or lower VAT for repair services, which could encourage consumers to seek repairs as opposed to new purchases and help increase the supply / provision of such services.

This problem affects all goods that are not perishable and that do not wear out quickly. But most of all, it affects products that are reparable and have an expected lifespan longer than the period of the legal guarantee (such as large household appliances, small household appliances and electronics and IT goods).

To some extent it affects all consumers that attempt to repair products, which is around 288-333 million, which corresponds to the 77%-89% of consumers that attempt to repair products when they break.

The current lack of incentives potentially affects most companies on the EU market that manufacture goods (around 206 thousand manufacturers) and around 193 thousand repairers.

The fact that repairing goods is challenging and unappealing when compared to replacing them with something new may lead to non-optimal choices from the perspective of society (because some goods are replaced instead of repaired).

Consumers

The main consequence of this problem for consumers is personal consumer detriment as a result of either having to spend more time and/or money repairing a product (than they would if the product were easier to repair) or having to purchase a replacement earlier than they would if the product were easier to repair (see section 3 and Annex 8 for estimations of the detriment experienced by consumers when trying to repair.

Market

The Study on socioeconomic impacts of increased reparability (2016) concluded that increased demand of repair services, has high potential to bring added value to the economy (although there would be negative economic impacts as well, such as loss of turnover for manufacturers and retailers) by, for example, increasing the turnover of repairers. The economic impacts of increased reparability were also analysed by the European Parliament study on longer lifetime of products, concluding that an increase of 1% of the use of the maintenance, repair, rental services etc. sectors, has an aggregated effect of 6.3 billion EUR.[585]

Non-harmonised national regulatory initiatives (see Annex 10) can lead to duplication of costs to businesses, barriers to cross-border sales and confusion to consumers.

Environment

The opportunity costs to the climate and environment are equal to the gains to the environment resulting from reduction of consumption of new products if products would be repaired (instead of replaced) and so would last longer.

A16.1.2 Possible EU measures

Various stakeholder groups strongly support making repair easier for consumers.[586] Some consumer policy EU-level initiatives identified during the study that are potentially relevant and cost-effective (and not covered by the initiative) to address Problem 3 "Repairing goods is challenging and unappealing when compared to replacing them with something new", include:

- Measure 3.1. Ensure that products are designed in such a manner so as to enable easy repair (and replacement of the components)
- Measure 3.2. Ensure that repair services are easily accessible and affordable, this could include:
  - Setting a minimum availability of repair services that are certified by manufacturers and/or retailers.
  - Setting a minimum availability of independent repair services that are not certified by manufacturers and/or retailers.
  - Imposing a cap on price of repair services
  - Provision of performance rankings on repair services

[585] European Parliament, 2016. A Longer Lifetime for Products: Benefits for Consumers and Companies. Available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2016/579000/IPOL_STU(2016)579000_EN.pdf.

[586] See Annex 8 and for example: https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/640158/EPRS_BRI(2019)640158_EN.pdf

- Measures 3.3. Ensuring that the spare parts are available and affordable, this could include:
  - Setting a minimum period during which spare parts must be available.
  - Setting a maximum number of days to delivery of spare parts
  - Imposing a cap on price of spare parts

The next sub-section provides a preliminary analysis of the identified measures.

A16.1.2.1 Measure 3.1: Ensure that products are designed in such a manner so as to enable easy repair (and replacement of the components)

This measure aims to ensure that the products are designed in a manner that makes reparability of goods easy .

Such "eco-designed" products would possibly make repair easier, simpler and possibly cheaper and encourage consumers to get the products repaired (themselves or through a professional repairer) thus resulting in products lasting longer. Even after the products are discarded, this would make the reuse of components of the products which are still functional easier. Overall, the measure would contribute to circular economy and resource efficiency. This measure covers several aspects related to product design[587], for example:

- easily detachable connections which simplify disassembly and reuse of components.
- easy access to connections for disassembly to enable fast and efficient disassembly.
- easy access to connecting parts for disassembling tools.
- ensure functioning of connections over whole service life, against corrosion, soiling etc. by covering caps over nuts and threads.
- ensure reversibility of assembly procedure in case of manufacturing defects and for repair work during use stage, and, in particular, for disassembly after end of life.
- minimize time and paths for disassembly to enable fast disassembly.
- end-of life advantage: a clear and easy to disassemble products can reduce work input and costs as disassembly accounts for a great part of the end-of life costs.

The measure could be implemented in a general and horizontal way by banning the practice of designing products in a way that makes repair difficult or impossible (this has been already considered under the practices to be banned in the context of measure 2.1.2). In addition, it could be implemented through a product policy instrument which would specify design guidelines/requirements for specific product groups and/or product components building on and extending existing generic eco-design measures of some regulations adopted under the Ecodesign Directive.

Table A90 presents a preliminary assessment of this measure based on the collected views of stakeholders and experts.

[587] Vanegas P., Peeters J.R., Cattrysse D., Duflou J.R., Tecchio P., Mathieux F., Ardente F., 2016. Study for a method to assess the ease of disassembly of electrical and electronic equipment - Method development and application in a flat panel display case study. EUR 27921 EN. doi:10.2788/130925 and Ecodesign online pilot

Table A90. Preliminary assessment of product-specific measures to ensure that products are designed in such a manner so as to enable easy repair.

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
3.1.a: Product-specific requirements/guidelines to ensure that they are designed in such a manner so as to enable easy repair (and replacement of the components)	++ The measure was considered feasible by the consulted stakeholders. Some concerns were raised by industry and public authorities related to safety/health concerns, intellectual property rights or trade secrets; potential reduction in products' functionality, safety and performance.	++ The enforceability depends on the product and on the specific guidelines/requirements , e.g., how many steps needed to disassemble a given product, tools required for disassembling and assembling back, etc	++/+++ The effectiveness will depend on type of product. Most respondents within each stakeholder category[588] deemed the measure effective, with more respondents indicating that the measure would be "highly effective" as opposed to "somewhat effective".	+/++ Costs for companies and public authorities will depend on the specific requirements Consulted business associations and companies considered that some requirements could have a significant impact on costs	+++

A16.1.2.2 Measure 3.2. Ensure that repair services are more easily accessible to consumers.

This measure aims to ensure that it is easier and possibly cheaper to access to repair services. This will encourage consumers to get products repaired thus resulting in products lasting longer. Overall, it will contribute to circular economy and resource efficiency.

The possible elements for this measure would be:

[588] Consumer organisations, business associations, public authorities, and others. See Annex 8 for more details.

- Sub-measure 3.2.a: Ensure that repair/maintenance services that are certified by manufacturers and/or retailers are available within a reasonable distance or time.
- Sub-measure 3.2.b: Ensure that independent repair/maintenance services that meet minimum quality standards but are not certified by manufacturers and/or retailers are available within a reasonable distance or time.
- Sub-measure 3.2.c: Ensure that repair services are affordable by imposing a cap on the cost of repair services (e.g., as a percentage of the product price).
- Sub-measure 3.2.d: Provision of performance rankings on repair services

Table A91 presents a preliminary assessment of these elements/sub-measures based on the collected views of stakeholders and experts.

Table A91. Preliminary assessment of measures to ensure repair services are more easily accessible to consumers.

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
3.2.a Ensure that repair/maintenance services that are certified by manufacturers and/or retailers are available within a reasonable distance or time	++/+++ The technical feasibility depends on the type of products and the location of consumers. .	+++	++ Across the different stakeholder groups consulted the consensus was that this measure would be effective, with more respondents indicating that the measure would be "somewhat effective" as opposed to "highly effective". Some concerns were raised by public authorities related to the possibility of the manufacturer being the only	++/+++ Costs for companies would depend on the type of products and the location of consumers as well as on the requirements regarding distance/time.	+++ The implementation of such a measure through a product/services policy instrument would be more appropriate

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
			certified repairer was raised, in which case there was suggested that repairs could actually become more costly for consumers.		
3.2.b Ensure that independent repair/maintenance services that meet minimum quality standards but are not certified by manufacturers and/or retailers are available within a reasonable distance or time	+/++ Pre-defined standards should be established for independent repairers. The technical feasibility as these would be non-certified repair services, it might not be feasible to ensure their availability and depends on the type of products and the location of consumers. .	++/+++ The enforceability will depend on the minimum quality standards that would be defined.	++/+++ Across the different stakeholder groups consulted the consensus was that this measure would be effective, with more respondents indicating that the measure would be "somewhat effective" as opposed to "highly effective". Its effectiveness would depend on the availability of spare parts.	++/+++ Most business associations consulted thought that the measure would have a moderate impact on costs, whereas among public authorities, the likely impacts of the measure on repairs were judged mostly positive. Costs for companies would depend on the type of products and the location of consumers as well as on the requirement	+++ The implementation of such a measure through a product/services policy instrument would be more appropriate

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
				s regarding distance/time.	
3.2.c Impose a cap on the cost of repair services	+ The cost of repairs depends on various factors including the type of problem and the cost of labour. Imposing caps might render some repairs unattractive to repairs which would not be available to do it. The measure might have an effect on the competition of the market.	++ The enforceability of the measure would depend on how the cap would be set	+/++ Opinions on a possible measure imposing a cap (e.g., as a percentage of the product price) on the cost of repair services were divided. Consumer organisations, public authorities and other stakeholders consider that the measure would be effective, with more respondents indicating that the measure would be "somewhat effective" as opposed to "highly effective". On the contrary, most business associations believed that the proposed measure would not	+/++ Most business associations consulted thought that the measure would have a high impact on costs.	++ The implementation of such a measure through a product/services policy instrument would be more appropriate

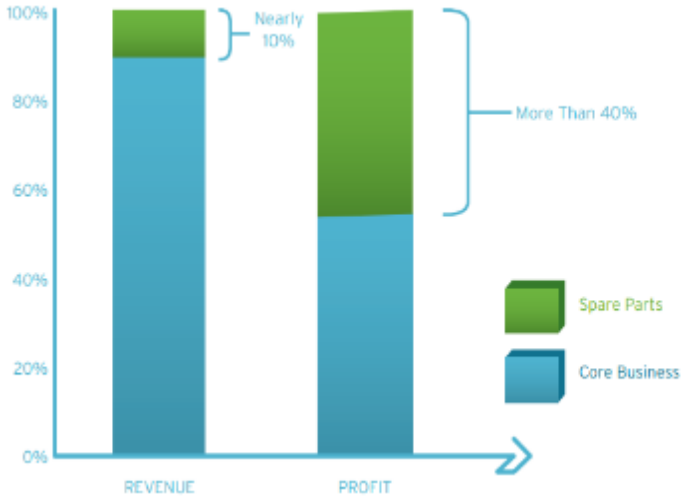
Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
			be effective.		
3.2.d Provision of performance rankings on repair services	+/++ Ensuring that the rankings would be comprehensive and trustworthy would be challenging. Rankings based on consumers' experiences would be easier to implement.	++ The enforceability of the measure would be difficult as it would have to ensure that the rankings would be trustworthy and comprehensive. Rankings based on consumers' experiences would be easier to enforce.	++ Overall, the measure was deemed to be likely effective by most respondents within each stakeholder category[589]. However, more respondents indicated that the measure would be "somewhat effective" as opposed to "highly effective".	+/++ Most business associations consulted thought that the measure would have a moderate impact on costs.	++

A16.1.2.3 Measure 3.3. Ensuring that the spare parts are available and affordable

This measure aims to ensure the availability and affordability of spare parts with the final objective of increasing the lifetime of products. As indicated before, the unavailability of spare parts is one of the reasons why repairs are not successful. By ensuring their availability it is expected that more products will be repaired instead of replaced. The cost of spare parts is also an obstacle to repairing (instead of replacing) and ensuring that their price is reasonable (compared to the cost of a new product) might make repairs more attractive.

[589] Consumer organisations, business associations, public authorities, and others. See Annex 8 for more details.

Figure A278. Spare parts' contribution to revenue and profit of repair (caption)



Source: Spare Parts Pricing Optimization, Cognizant 20-20 insights

The possible elements for this measure are the following:

- Sub-measure 3.3.a: Ensure that key spare parts are available for a minimum period of years.
- Sub-measure 3.3.b: Ensure that key spare parts are provided within a maximum number of days.
- Sub-measure 3.3.c: Ensure that key spare parts are affordable (e.g., cap on price)

Sub-measure 3.3.a and 3.3.b are already integrated in recent Ecodesign regulations for refrigerating appliances, electronic displays, household dishwashers, and household washing machines and household washer-dryers, which require that manufacturers provide certain spare parts to professional repairers and end users for a period from seven to ten years and manufacturers also have the obligation to deliver the spare parts within 15 days from receipt of the order.

Table A92 presents a preliminary assessment of these elements/sub-measures based on the collected views of stakeholders and experts.

Table A92. Preliminary assessment of measures to ensure spare parts are more easily accessible to consumers

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
3.3.a Ensure that key spare parts are available for a minimum period of years	++ The measure is generally technically feasible and is already implemented in the recent	++ The enforceability of the measure depends on the precision of the definition of	++ The measure was judged to be likely effective by most respondents within each stakeholder	++ Consulted business associations generally believed that the measure would have a high	+++ The implementation of such a measure through a product policy instrument would be

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
	regulations under the Ecodesign Directive for some products. Of the consulted business associations half consider it feasible while the other half, unfeasible. Its feasibility would vary per product category and is dependent on the minimum period of time during which spare parts would have to be available	key spare parts	category (i.e., consumer organisations, business associations, public authorities, and others). There were generally (slightly) more respondents that thought that the proposed measure would be "highly effective" as opposed to "somewhat effective."	impact on costs. The impact would vary per product category and is dependent on the minimum period of time during which spare parts would have to be available.	more appropriate.
3.3.b Ensure that key spare parts are provided within a maximum number of days	+/++ The measure is generally technically feasible and is already implemented in the recent regulations under the Ecodesign Directive for some products.	++ The enforceability of the measure depends on the precision of the definition of key spare parts and on the ability of assigning the onus of delivery times to	++ The measure was judged to be likely effective by most respondents within each stakeholder category (i.e., consumer organisations, business associations, public authorities,	++ Consulted business associations generally believed that the measure would have a high impact on costs. The impact would vary per product category and is dependent on the	+++ The implementation of such a measure through a product policy instrument would be more appropriate

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
	Of the consulted business associations business, most considered that the measure would rather be unfeasible. The implementation of the measure is to some extent challenging as for most products, spare parts are located in a central warehouse and the time required to reach will depend on: (a) the location of the consumer and (b) on the delivery services which are independent of the manufacturer/supplier of spare parts	manufacturers.	and others). there were generally (slightly) more respondents that thought that the proposed measure would be "somewhat effective" as opposed to "highly effective."	maximum period of time available to deliver spare parts.	
3.3.c Ensure that key spare parts are affordable (e.g., cap on price)	+/++ The implementation of the measure would require setting	++/+++ The enforceability of the measure depends on the precision of	++ Consulted stakeholders had divergent views on the proposed	+/++	+++ The implementation of such a measure through a product policy

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
	price cap per key spare part which could be extremely challenging. It would be extremely important that the price cap is above the production costs of spare parts. Otherwise, the provision of some spare parts could become unattractive for manufacturers (which would mean that they would not provide them or that they would face net costs when providing them). The views of the consulted business associations mirror these concerns as most of them considered it unfeasible	the definition of key spare parts and of the price cap	measure to establish a cap (e.g., as a percentage of the product price) on the price of spare parts. Most business associations considered the measure would not be effective and the majority of public authorities stated that the measure would be somewhat effective. In contrast, most consumer associations and the other stakeholders deemed the measure would be effective, with many seeing the measure as highly effective. Public authorities were reserved, stating that the likely impact of the measure		instrument would be more appropriate

Possible elements	Technical Feasibility	Enforceability	Effectiveness	Efficiency	Coherence
			would depend on a number of factors.		

A16.2 Problem area 4: Re-using (parts of) goods is challenging and unappealing

A16.2.1 Brief description

In this section we explore other obstacles preventing consumers from adopting more sustainable consumption behaviours such as purchasing second-hand or refurbished goods instead of purchasing them, using bring-back programmes to contribute to the reuse and recycling of products, their components and/or materials.

In the EU as a whole, only 40% of household waste is currently reused or recycled[590] and, according to estimates gathered by Rreuse,[591] a third of all material arriving at recycling centres and civic amenity sites can still be re-used and at least 25% of electronic waste still has significant re-use value.

There are both environmental and social benefits to increasing recycling and reuse. The environmental benefits include:

- Reduction of the amount of waste, including hazardous waste.
- Pollution prevention.
- Reduction of greenhouse gas emissions, which contribute to global climate change.
- Decreased strain on natural resources (raw materials, fuel, forests, water).[592]

If we look at specific markets in more detail, the environmental benefits of reuse become more tangible. For example, UK research body WRAP estimated that current reuse of T-shirts[593] and sofas[594] in the UK save 450,000 tonnes CO2-equivalent and 52,000 tonnes CO2 equivalent per year.[595]

While reducing the environmental impact of goods, at the same time, increased reuse could also have a positive social impact. Reuse is labour intensive and could generate jobs in the collection, sorting, testing, refurbishment and reselling of items reused[596].

Most Consumer Associations and Public Authorities consulted (see Annex 8) considered that that availability and use of 'bring-back' programmes and the purchasing or selling of refurbished products only occur sometimes. On the other hand, most of the consulted business associations indicated that:

- companies generally commit to collecting old/defective/non-used products from consumers[597];
- companies generally commit to remanufacturing or refurbishing old/defective/non-used products on behalf of consumers598. Among those seven respondents, a majority (5) believed that only some companies are providing this commitment, while two business associations indicated that it is provided by a small minority of companies (or close to none).

[590] https://ec.europa.eu/clima/citizens/tips/reuse_en

[591] https://www.rreuse.org/reuse-targets/

[592] European Week for Waste Reduction, accessible at: [https://www.ewwr.eu/en/ideas/reuse].

[593] WRAP (2011) Benefits of Reuse Case Study: Clothing Project.

[594] WRAP (2011) Benefits of Reuse Case Study: Domestic Furniture.

[595] (2012) Rreuse "Challenges to Boosting Reuse Rates in Europe", accessible at: [https://www.ewwr.eu/docs/ewwr/reuse_RREUSE.pdf].

[596] (2018) Rreuse "position on the updated EU Waste Framework Directive", accessible at: [https://www.rreuse.org/wp-content/uploads/RREUSE-public-position-on-the-WFD_2018_09_17-FINAL.pdf].

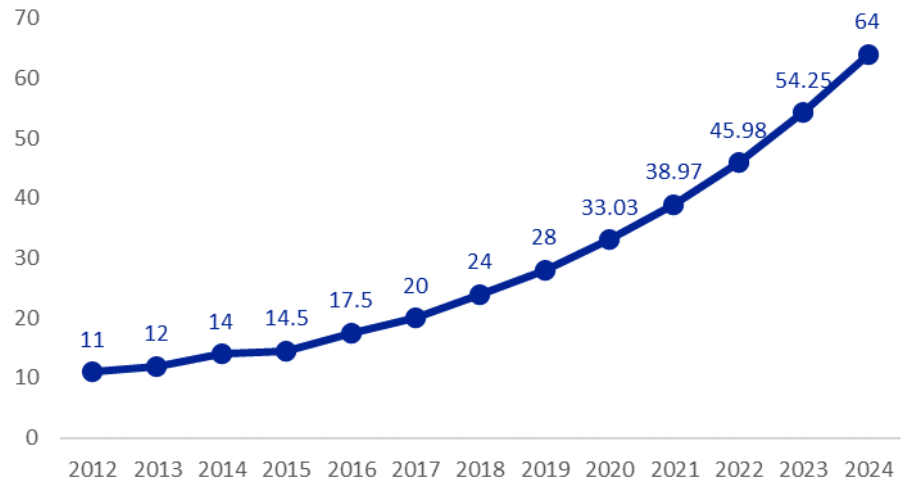
[597] 6 agreed while 4 disagreed.

[598] Fewer respondents (3 out of 10) indicated that this commitment is not provided by companies at all.

- companies provide consumers with the commitment to recycle products that cannot be remanufactured[599]. Among those eight respondents, four business associations indicated that it was a vast majority of companies that provide consumers with this commitment, four indicated that it was some companies only and one other stated it was a minority of companies (or close to none).

The second-hand and refurbish goods market can also play a very significant role in increasing the lifetime of a product[600]. Purchasing and selling second-hand products is a growing market[601], in particular thanks to consumer-to consumer (C2C) exchanges and web platforms that facilitate these exchanges[602] and also to the consumer behaviour of modern generations[603]. According to Statista, the global retail industry for second-hand apparel in 2024 will almost double compared to 2020 values (see Figure A222) and according to Hristova (2019)[604] studies indicate that the retail industry for second-hand furniture will increase 20% between 2021 and 2023.

Figure A279. Second-hand apparel market value worldwide from 2012 to 2024 (in billion U.S. dollars)



Source: Statista, 2021[605]

[599] On the other hand, three business associations (out of 11) indicated that this commitment is not provided by companies at all.

[600] See for example: Cherrier, H., Szuba, M. & Özçağlar-Tou, N., 2012. Barriers to downward carbon emission: Exploring sustainable consumption in the face of the glass floor. Journal of Marketing Management, October, 28(3-4), pp. 397-419.; Young, W., Hwang, K., McDonald, S. & Oates, C. J., 2010. Sustainable Consumption: Green Consumer Behaviour When Purchasing Products. Sustainable Development, 18(1), pp. 20-31.; and Hristova, Y., 2019. The second-hand goods market: trends and challenges. Известия на Съюза на учените-Варна. Серия Икономически науки, 8(3), pp.62-71.

[601] Many Consumer associations and Public authorities consulted, acknowledged that purchasing and selling of second-hand products occurs often in the economy.

[602] Interview with Rreuse – Senior policy officer.

[603] Hristova, Y., 2019. The second-hand goods market: trends and challenges. Известия на Съюза на учените-Варна. Серия Икономически науки, 8(3), pp.62-71. Available at: https://www.researchgate.net/publication/337722167_The_Second-Hand_Goods_Market_Trends_and_Challenges

[604] Hristova, Y., 2019. The second-hand goods market: trends and challenges. Известия на Съюза на учените-Варна. Серия Икономически науки, 8(3), pp.62-71. Available at: https://www.researchgate.net/publication/337722167_The_Second-Hand_Goods_Market_Trends_and_Challenges

[605] Available at: https://www.statista.com/statistics/826162/apparel-resale-market-value-worldwide/

The collaborative economy is also growing rapidly. Gross revenue in the EU from collaborative platforms and providers was estimated to be €28 billion in 2015 and growth in recent years has been significant with revenues almost doubling from 2014 to 2015.[606] According to a recent Eurobarometer, one in six Europeans is already a user of the collaborative economy and more than half is aware of its existence.[607,608]

The second-hand market remains underdeveloped, however.There are various reasons why second-hand markets have yet to fully develop. One example is the fact that in some cases it is not economically viable to sell second-hand products at a competitively lower price than new products for example due to transport costs.[609] One specific example is the furniture market in which the price differential between new furniture against the cost of second-life furniture is not significant enough to drive more sustainable purchasing behaviour.[610] In this specific market there is also a poor demand for recycled materials. End markets for recycled materials, post deconstruction, are underdeveloped, and sometimes saturated.[611]

There are also barriers from the consumer side. A Eurobarometer conducted in 2013 shows how reasons for not buying second-hand products include a lack of trust in the product's quality (43%) as well as health & safety concerns (41%).[612] Similar barriers have been identified in relation to the collaborative economy.[613] For example, in the furniture market, the low demand is coupled with poor awareness of the availability and benefits of sustainable furniture options, for both domestic and commercial purposes. Other barriers identified in this market include a consumer desire for new products, and, to a degree, a stigma attached to second-life furniture - which is often associated with disadvantaged groups in society.[614]

The results of consumer survey provide some pointers regarding possible measures that may promote the purchase of refurbished and second-hand goods and the use of bring-back programmes:

- Respondents were asked if certain circumstances would make them more likely to purchase refurbished products. The results of this question are shown in Figure A220. The scenario which most respondents considered would make them at least somewhat more likely to purchase refurbished products was if refurbished products came with a two-year commercial guarantee (66% of respondents ±1%) followed by if information were available on how long a refurbished product would last without repair (61% of respondents ±1%).

[606] (2016) European Commission "Factsheet on the Collaborative Economy", accessible at: [http://ec.europa.eu/DocsRoom/documents/16955/attachments/1/translations].

[607] (2016) European Commission "Flash Eurobarometer No438".

[608] The COVID-19 pandemic and related containing measures has had a positive impact on the level of awareness and use of digital services which may also lead to long term changes of consumer behaviours regarding collaborative platforms.

[609] *Supra* interview with Rreuse.

[610] (2017) European Environmental Bureau "Circular Economy Opportunities in the Furniture Sector", page 16. Accessible at: [file:///C:/Users/36164/Downloads/Report-on-the-Circular-Economy-in-the-Furniture-Sector%20(1).pdf].

[611] *Ibid*.

[612] (2014) European Commission "Flash Eurobarometer - Attitudes of Europeans towards

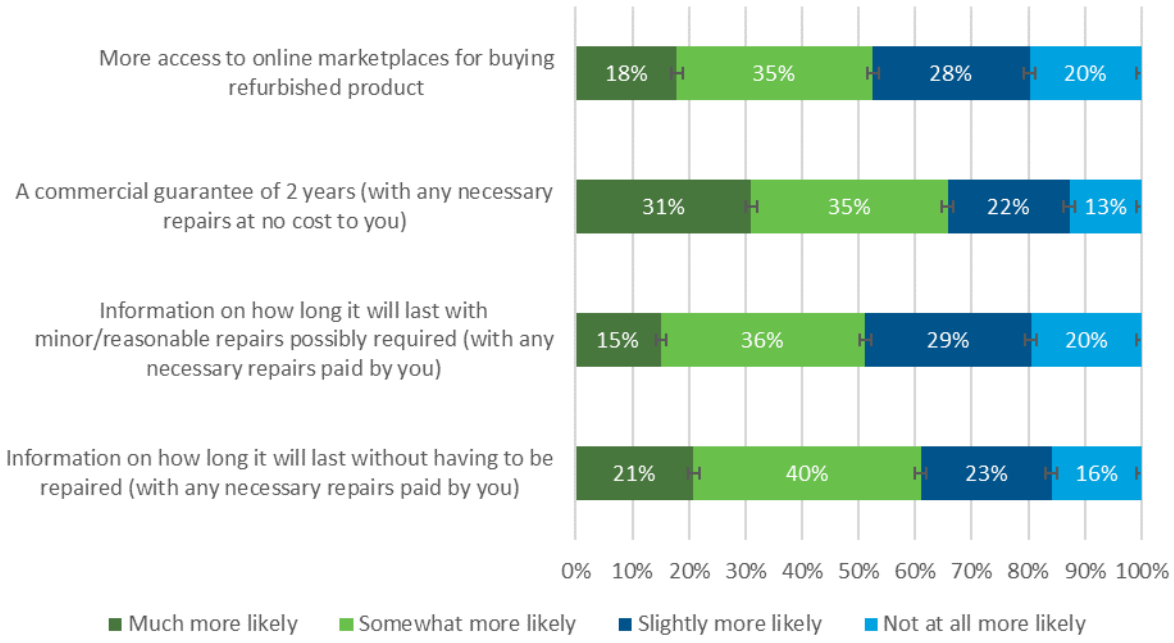
Waste Management and Resource Efficiency, page 19. Accessible at: [https://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_388_sum_en.pdf].

[613] (2019) Spindeldreher, Fröhlich, Ak and Schlagwein, "Why Won't You Share? Barriers to Participation in the Sharing Economy", accessible at: [https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1471&context=amcis2019#:~:text=Our%20findings%20suggest%20that%20nine,risk%2C%20and%20undesired%20social%20interaction.].

[614] Supra EEB.

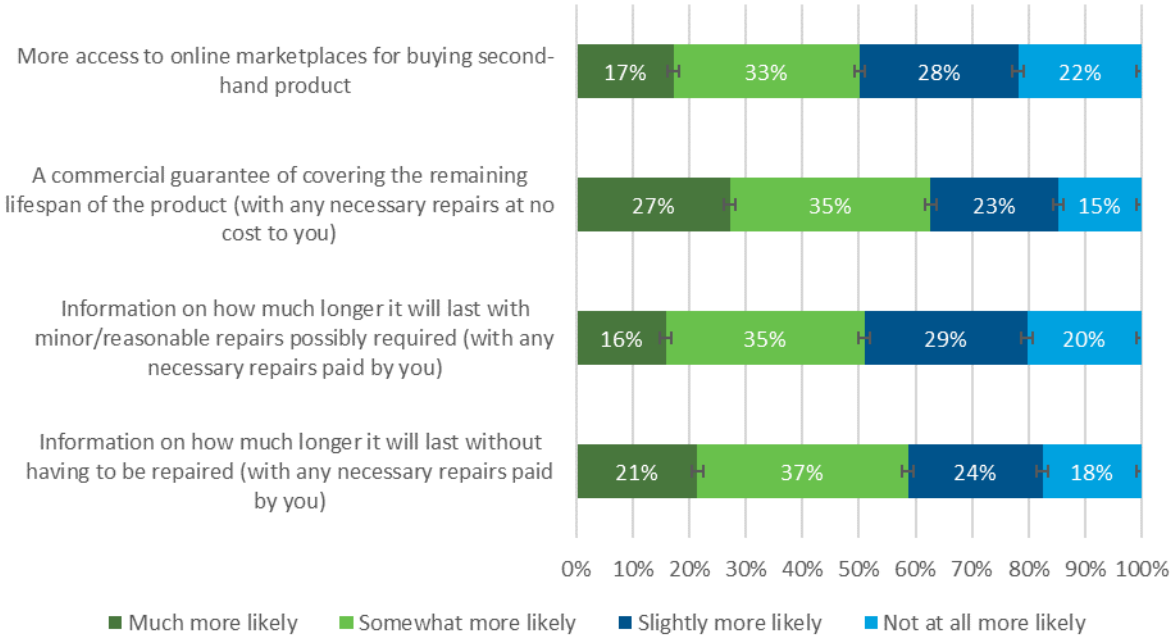
- Respondents were then asked the same question about purchasing second-hand products, the results of which are shown in Figure A221. The scenario which most respondents considered would make them at least somewhat more likely to purchase second-hand products was if second hand products came with a two year commercial guarantee (62% of respondents ±1%) followed by if information were available on how long a second hand product would last without repair (48% of respondents ±1%).
- Respondents were asked how likely they would be to use three different mode of bring-back program, should they become widely available. As shown in Figure A222, the mode of bring-back programs that most respondents would be at least somewhat likely to use would be those that would grant the respondent credit with the retailer (67% of respondents ±1%). The bring-back program fewest respondents would be at least somewhat likely to use would be one that offered the respondent no direct rewards (55% of respondents ±1%). Given that just over half or respondents would still use a bring-back program if it offered no rewards suggests that bring-back programs could still have relevant uptake even if no rewards to consumers were offered.

Figure A280. Would you be more likely to buy a refurbished product if you had… (N=11805)



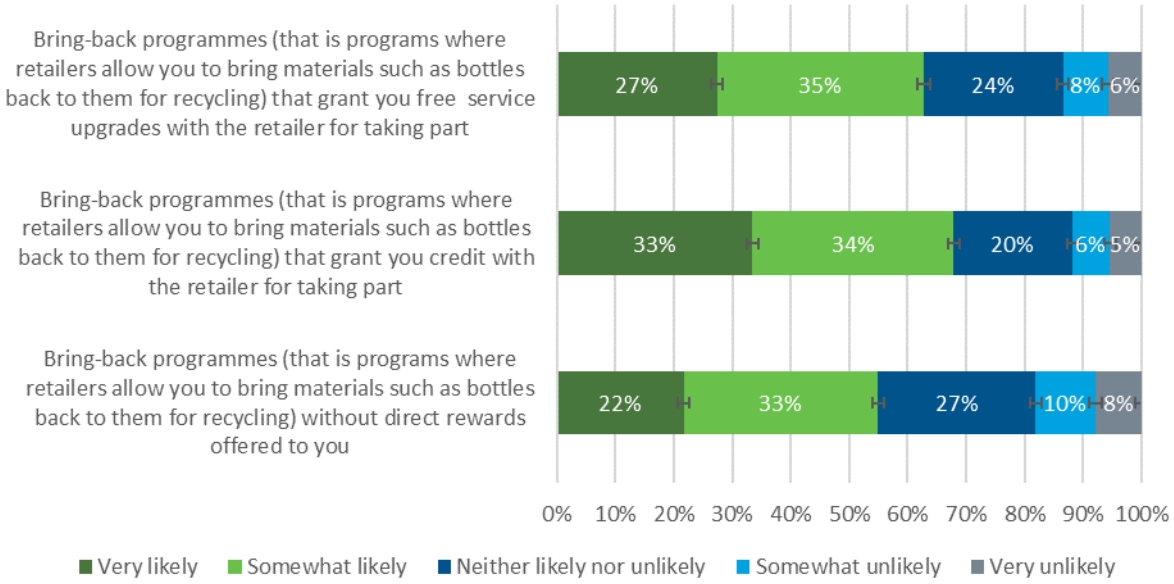
Source: Consumer Survey carried out in the context of this study (see Annex 8)

Figure A281. Would you be more likely to buy a second-hand product if you had (N=11805)



Source: Consumer Survey carried out in the context of this study (see Annex 8)

Figure A282. If the following services would be widely available, what would be the likelihood of you using them (N=11805)



Source: Consumer Survey carried out in the context of this study (see Annex 8)

A16.2.2 Possible EU measures

During the study, the following four measures were identified as potentially cost-effective in promoting the re-use of (parts of) goods:

- Measure 4.1: Make Extended Producer Responsibility (EPR) organisations more engaged in reuse activities.
- Measure 4.2: Make Bring-back programmes mandatory.
- Measure 4.3: Incentivise purchase of refurbished products by for example through economic incentives reducing VAT on these products.
- Measure 4.4: Guarantee on remanufactured and refurbished goods

These measures could contribute to products having more than one life, which would directly result in increase in the effective lifetime of those products contribute to circular economy and resource efficiency.