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# 2018

# Annual Activity Report

## DG CLIMATE ACTION

Dear reader,

In 2018, the European Commission delivered concrete actions on domestic and international fronts to limit global temperature increase to well below 2°C, and to pursue efforts to limit it to 1.5°C. In 2018, the last pieces of key EU legislation were adopted to cut emissions in the power sector, energy-intensive industries, road transport, agriculture, buildings, land use and forestry. The legal framework is now in place to ensure that the EU's 2030 climate target of reducing our emissions by at least 40% will be reached, the EU being the only major economy in the world that has fully translated into legislation the steps to be taken to meet its Paris Agreement pledges.

For the first time, the EU also equipped itself with an Energy Union governance framework, where Member States must establish integrated national energy and climate plans for the period 2021-2030, in order to demonstrate how they will meet the 2030 targets.

New scientific evidence provided by the Intergovernmental Panel on Climate Change (IPCC) report confirmed that limiting climate change to 1.5°C is necessary to avoid the worst impacts and that further action is needed to avoid crossing this line. In light of this report, the Commission has looked further ahead and has put forward a vision for *A Clean Planet for All – a vision for climate neutral economy by 2050*. The strategy demonstrates that a low-carbon transition is possible and makes economic sense.

The year 2018 saw major progress on the international front. At the COP24 in Katowice, the EU negotiated an ambitious and clear rulebook that will enable countries around the world to implement the Paris Agreement. The EU also promoted bilateral and multilateral cooperation, intensifying cooperation on carbon markets with strategic partners (e.g.: China, California, Switzerland and New Zealand), and playing an instrumental role in the context of the International Maritime Organisation (IMO) and International Civil Aviation Organisation (ICAO) negotiations.

The Commission furthermore proposed to reinforce the integration of climate action into all major EU spending programmes in the next budget (2021-2027), making the EU budget a driver of sustainability. Finally, the Commission proposed expansion of the scope and budget of the LIFE Programme, which is dedicated to environment and climate action.

Mauro Petriccione

Director-General of DG CLIMA

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# THE DG IN BRIEF

Under the political guidance of Commissioner Arias Cañete and Vice-President Šefčovič, the Directorate-General for Climate Action (hereafter 'DG CLIMA') is responsible for EU policy, legislation and action to **address climate change.**

As presented in the 10 strategic political priorities of President Juncker, the DG's general objective is to contribute to achieving "**A resilient Energy Union with a forward-looking climate policy**", which should contribute to keeping global warming well below 2°C and to the recovery of the ozone layer.

**The mission of DG CLIMA** is to foster the transition towards a low-carbon and climate resilient economy in the EU. In particular, it leads the EU in international negotiations in the areas of climate change mitigation and adaptation and the protection of the ozone layer; develops and monitors the implementation and enforcement of EU legislation to meet key climate targets in the Europe 2020 strategy and the 2030 climate and energy framework; increases resilience to the negative effects of climate change; promotes low carbon technologies and mainstreams (integrates) climate action into the EU budget and into other EU policies.

DG CLIMA was set up in 2010, climate action having previously been handled by DG Environment. It has currently around **200 staff** in the establishment plan. Close to 90% of this staff are active in **policy making**. It is internally structured by policy area in order to ensure that the main policies of the DG are developed efficiently. In February 2018, Mauro Petriccione was appointed **new Director General of DG CLIMA,** replacing Jos Delbeke and taking office on 16 March 2018. In the course of 2018, a new unit focusing on Legal Affairs, Interinstitutional Relations and Communication was set up. Additionally, Human Resources Business Correspondent team was redeployed to the unit dealing with financial management and planning (while retaining a direct reporting line to the Director-General on all HR matters) and a specific IT sector in charge of the oversight of all IT activities in the DG was created.

At present, DG CLIMA is developing its mission in five different ways:

1. By **preparing new EU climate legislation,** monitoring the implementation of this legislative acquis, ensuring its effective enforcement in Member States and designing a long-term vision for a prosperous and climate-neutral economy by 2050.

2. Through **the EU emissions trading system (EU ETS)**, hosted and managed in-house by the Commission on behalf of the Member States. It covers around 45 % of total EU greenhouse gas (GHG) emissions emitted by heavy energy-consuming installations and airlines.

3. By leading the Commission task force in **international negotiations** on climate change and ozone-depleting substances, to implement the Paris agreement of 2015 and coordinate bi-lateral and multi-lateral partnerships on climate change with non-EU countries.

4. Through the climate action sub-programme of the **LIFE financial programme** 2014-2020, amounting to EUR 864 million overall. More than two thirds of this budget has been delegated to the Executive Agency for Small and Medium-sized Enterprises (EASME), which manages action grants (projects) and operating grants (to NGOs), and to the European Investment Bank (EIB) that manages two financial instruments: the Private Finance for Energy Efficiency (PF4EE) and the Natural Capital Financing Facility (NCFF). DG CLIMA also manages an off-budget fund based on sales of ETS allocations, the NER 300 (New Entrants Reserve) programme, allocating grants to low-carbon energy demonstration projects.

5. Cooperating with other DGs (REGIO, RTD, AGRI, DEVCO, etc.) to implement the **20 % climate mainstreaming target** in the EU Multiannual Financial Framework 2014-20, monitoring its achievement together with DG BUDG and further strengthening climate action in the next EU long-term budget.

# EXECUTIVE SUMMARY

The Annual Activity Report is a management report of the Director-General of DG CLIMA to the College of Commissioners. Annual Activity Reports are the main instrument of management accountability within the Commission and constitute the basis on which the College takes political responsibility for the decisions it takes as well as for the coordinating, executive and management functions it exercises, as laid down in the Treaties[1].

[1] Article 17(1) of the Treaty on European Union.

## a) Key results and progress towards the achievement of general and specific objectives of the DG (executive summary of section 1)

Climate change is one of the **major global challenges** of this century. The once remote-seeming dangers of climate change are today a reality – also in Europe[2]. In October 2018 the Intergovernmental Panel on Climate Change (IPCC) issued its Special Report on the impacts of global warming of 1,5 °C above pre-industrial levels. Based on scientific evidence, it demonstrates that human-induced global warming has already reached 1 °C above pre-industrial levels and is increasing at approximately 0,2 °C per decade. It confirms that the world needs to limit the temperature increase to 1,5 °C to reduce the likelihood of extreme weather events. Emissions need to be reduced with far more urgency than previously predicted.

The United Nations has defined climate action as one of the **Sustainable Development Goals (SDG) for 2030**[3]. Sustainability challenges the world faces are undeniable. The Commission presented in February 2019 scenarios for how the EU and its Member States can lead in the sustainability transition for the benefit of all[4]. EU citizens are also conscious of the need to take action against the risks associated with climate change. In the most recent Eurobarometer survey of 2017, about 92 % of respondents said they consider climate change a serious problem[5].

The EU has made a clear pledge to contribute to global efforts to address the climate challenge, both by taking the lead in **international action** and by developing and implementing **domestic policies**.

In 2018, as in previous years, DG CLIMA contributed to the achievement of three of the 10 key strategic objectives of the Juncker Commission. First and foremost, the creation of "**A Resilient Energy Union with a forward looking climate policy**", followed by "A New Boost for Jobs, Growth and Investment", and finally "A Stronger Global Actor".

To achieve these objectives, the European Commission continued with the implementation of its **2020 and 2030 Climate and Energy Framework**. As part of this framework, the EU has set itself climate and energy **targets for 2020 and 2030**:

- By 2020, the EU has committed to cut its greenhouse gas emissions by 20%, compared to 1990 levels.
- As its contribution to the Paris Agreement, the EU has committed to cut domestic greenhouse gas (GHG) emissions by at least 40 % by 2030 compared to 1990 levels. This will be achieved by a 43 % emissions reduction in the sectors included in the EU emissions trading system (EU ETS) and a 30 % cut in the non-ETS sectors compared to 2005 levels.

In 2018, DG CLIMA ensured that the last pieces of key legislation were adopted to deliver on our climate goals and the necessary low carbon shift in our energy system. All policies are now in place to reach the **EU's 2030 climate targets**.

[2] *"10 Trends Reshaping Climate and Energy",* European Political Strategy Centre (EPSC), 8 December 2018

[3] SDG 13: "Take urgent action to combat climate change and its impacts".

[4] Reflection paper *"Towards a sustainable Europe by 2030"*, COM(2019)22.

[5] Special Eurobarometer 459. Report on Climate Change from September 2017.

The EU also raised its level of ambition on renewable energy and energy efficiency in 2018, with higher targets than proposed by the Commission for improving energy efficiency (32,5 %) and for renewable energy (32 %). These measures will lead to **steeper emissions reduction** for the entire EU and, provided the legislation is fully implemented, EU emissions are **estimated to be cut by 45% by 2030**. This would be more than the EU's commitment under the Paris Agreement and reaffirms our commitment to being at the forefront of global climate action.

## EU domestic action – key achievements in 2018

The EU is well **on track to reach its 2020 target** of reducing GHG emissions by 20 % compared to 1990 levels. In 2017, EU GHG emissions **were down by 22%[6] compared to 1990.** As emissions are expected to decrease further, the EU expects to overachieve its 2020 target. With the policies already in place, emissions in 2030 are projected to be **30% below the 1990 level[7]** . This shows that in order to meet their obligations under the new legislation, Member States will have to formulate ambitious policies and measures to further reduce emissions.

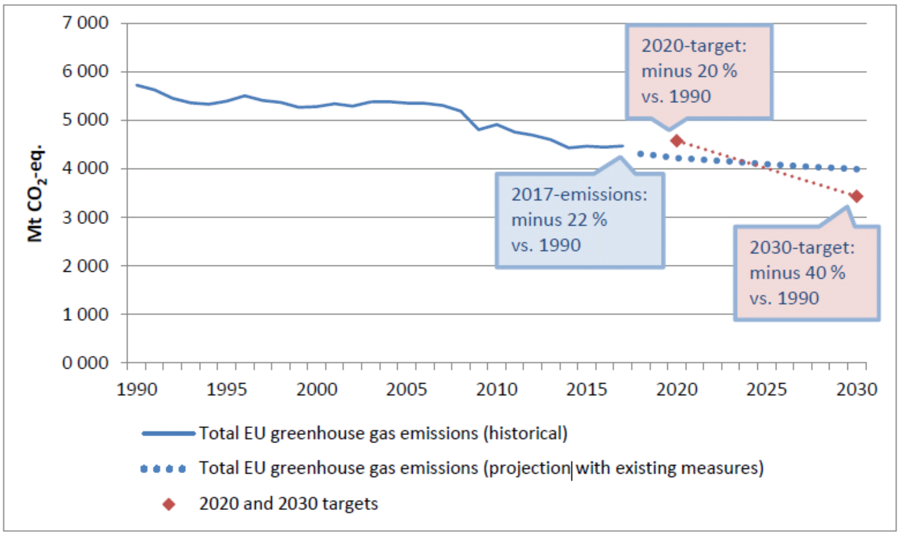



***Figure 1:*** Total EU GHG emissions (historical emissions 1990-2017, projected emissions 2018-2030) (Mt $CO_2$-eq.) and GHG reduction targets

***Source:*** EU and the Paris Climate Agreement progress report, COM(2018) 716 final

Over the **past 4 years**, most of the EU emissions reduction has taken place in the **energy supply sector, where emissions are down by 11 %** compared to 2013. Lower emissions from energy use in buildings, waste management and energy use in industry have also contributed. On the other hand, emissions from road transport, agriculture and international aviation have increased over the last 4 years.

The transition to **low-carbon economic growth** is essential for a successful global climate strategy. The EU economy now emits half as much $CO_2$ per unit of Gross Domestic Product (GDP) as in 1990. This tendency toward the reduction of carbon

[6] According to preliminary data (covering emissions from international aviation, but not emissions and removals from land use, land-use change and forestry (LULUCF)). Source: COM(2018) 716 final

[7] Based on projections from the Member States, mostly from March 2017.

intensity was maintained in 2017. Overall, the **EU cut emissions by 22 % from 1990 to 2017, while the economy grew by 58 %.**

**EU added value – A Clean Planet for All**

**A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy**

The **Special Report** issued in October 2018 by the IPCC unequivocally confirms that limiting global warming to 1,5 °C is necessary to avoid the worst impacts of climate change and reduce the likelihood of extreme weather events. Its conclusions indicate that further action is needed in mitigation and adaptation in order to achieve a **carbon neutral economy** as soon as possible in this century. In this context, at the end of 2018 the Commission put forward a proposal for a **strategy for long-term EU GHG emission reduction.**


The strategy is a **comprehensive vision** for the modernisation of the EU economy, industry and the financial sector. It sets out how Europe can lead the world to **climate neutrality** by investing in realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance and research, while also ensuring social fairness for a just transition in all regions of the EU. This work will be an important building block for the future.

The strategy put forward **demonstrates that a low-carbon transition is possible and makes economic sense.** Our economy needs serious modernisation and decisive action to maintain and regain competitiveness, to re-industrialise and regain technology leadership, to renovate our cities and to improve our quality of life. With the strategy on the table, an EU-wide debate is initiated that should allow the EU to **submit its strategy to the United Nations Framework Convention on Climate Change (UNFCCC) by 2020**, as requested under the Paris Agreement.

The sectors covered by the **EU ETS (Emissions Trading System),** the world's first major carbon market, have a specific target reduction of 21 % for 2020 and 43 % for 2030 compared to 2005. The EU **is on track to meet this objective** since emissions from stationary installations covered by the EU ETS fell by 26 % between 2005 and 2017, even though emissions from aviation continue to grow by a yearly average of 4 %.

The EU is equally on track to meet the **2020 target of a 10 % reduction for the sectors not covered by the EU ETS,** including transport, buildings, agriculture, small industry and waste. The Effort Sharing Decision (ESD) in force establishes binding annual greenhouse gas emissions targets for Member States for the period 2013-2020. The national targets have been agreed upon unanimously on the basis of relative wealth.

The EU already over-achieves its 2020 target in the non-ETS sectors: emissions covered by the Effort Sharing Decision were 11% lower in 2017 compared to 2005.

In 2018, the EU adopted a comprehensive set of climate legislation to deliver on its commitment to reduce its domestic greenhouse gas emissions by at least 40 % by 2030 compared to 1990. Together the **revised ETS directive, the Effort Sharing regulation** and the **Land Use, Land Use Change and Forestry (LULUCF) Regulation** create a binding legal framework to reach the 2030 targets. A **new governance system** was also adopted in 2018[8]. As part of this system, each Member State is invited to present by the end of 2018 its policies and measures towards 2030 in **national energy and climate plans (NECPs)** for the period 2021-2030. These plans will be reviewed and finalised in the course of 2019.

Based on laboratory tests, **average $CO_2$ emissions of new cars**[9] in the EU have fallen by 16 % between 2010 and 2017. The average emissions level of a new car sold in the EU in 2016 was 118,5 grams of carbon dioxide ($CO_2$) per kilometre, well below the 2015 target of 130 g, but above the 2021 target of 95 g $CO_2$/km. In addition, average emissions slightly increased by 0.4 g $CO_2$/km in 2017, the first increase since monitoring started.

Manufacturers will have to reduce emissions further to meet the targets of 95 g $CO_2$/km by 2021 for cars and 147 g $CO_2$/km by 2020 for vans.

Based on laboratory tests, a **new van sold in the EU in 2017** emitted on average 156 grams of $CO_2$ per kilometre, which is below the 2017 target of 175 g, but above the 2020 target of 147 g. In 2017, those vehicles emitted 7,7 g less carbon dioxide ($CO_2$)/km than those sold in 2016. This is the highest annual reduction since $CO_2$ standards for vans came into force.

In the last two years, the Commission has adopted three comprehensive packages of measures on mobility to reduce emissions from road transport and to implement the European strategy for **low-emission mobility**[10]. At the end of 2018, the co-legislators provisionally agreed on **new $CO_2$ emission standards for cars and vans for the period after 2020**. Emissions from new cars will have to decrease by 37,5 % by 2030 and by 31 % by 2030 for vans, compared to 2021 levels. In addition, in 2018 the Commission completed its agenda for a low-emission mobility system by putting forward the first ever **$CO_2$ emissions standards for new heavy-duty vehicles (HDV).** In 2025, average $CO_2$ emissions from new trucks would have to be 15 % lower than in 2019. For 2030, an indicative reduction target of at least 30 % was proposed.

Commissioner for Climate Action and Energy, **Miguel Arias Cañete** said: *"All sectors must contribute to meet our climate commitments under the Paris Agreement. That's why, for the first time ever, we are proposing EU standards to increase fuel efficiency and reduce emissions from new heavy-duty vehicles."*

The Paris Agreement calls on Parties to **increase the resilience** of their societies,

[8] Regulation (EU) 2018/1999 of 11 December 2018

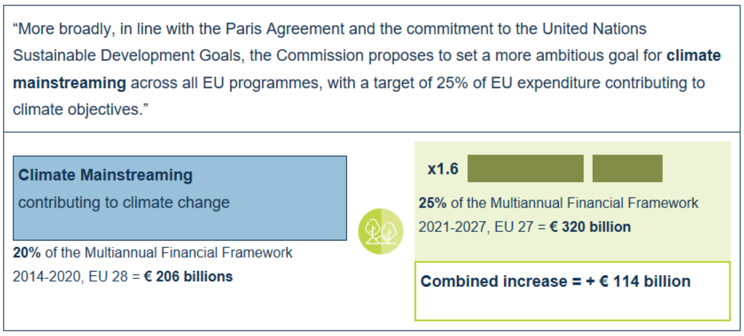
[9] See also KPI N°4

[10] https://ec.europa.eu/transport/themes/strategies/news/2016-07-20-decarbonisation_en

decrease vulnerability to climate change and enhance their capacity to adapt to the effects of climate change. The EU's 2013 strategy on adaptation aimed to make Europe more climate-resilient, focusing on three key objectives: promoting action by Member States, 'climate-proofing' action at EU level and supporting better-informed decision-making. At the end of 2018, DG CLIMA released its report on **the evaluation of the 2013 EU Adaptation Strategy**[11]. It shows that the strategy has delivered on its objectives, with **progress recorded** against each of its eight individual actions. The report outlines how Europe is still vulnerable to climate impacts within and outside its borders. Adaptation can and should be a powerful ally of sustainable development and disaster risk reduction efforts. The EU policy must seek to create synergies between these policies to avoid or reduce future damage. The evaluation suggests areas where **more work needs to be done** to protect vulnerable regions and sectors.

**LIFE Climate Action** supports mitigation and adaptation projects and will provide EUR 864 m in co-financing for climate projects between 2014 and 2020. Beneficiaries from 23 Member States have been awarded funding. During EU Green Week 2018 the EU awarded the most innovative, inspirational and effective LIFE projects. For example, in the field of climate action, the project "Crops for better soil (Spain)"[12] showed that organic farming methods can return carbon content to vulnerable soils and make them economically viable again. For the next multi-annual financial framework (MFF) 2021-2027, the Commission has proposed to **increase funding for LIFE by almost 60 %**.

In addition, the Commission has **integrated climate action into all major EU spending programmes,** otherwise known as "climate mainstreaming". In particular, the cohesion policy, regional development, energy, transport, research and innovation, the Common Agricultural Policy and the EU's development policy have all experienced climate mainstreaming, making the EU budget a driver of sustainability. The EU set out to spend an average of **at least 20% of its budget on climate-relevant expenditure in 2014-2020.** The latest available data shows that such expenditure accounted for 20,1% of the budget in 2017[13]. On average, the budget trend would deliver EUR 206 bn (19,3% of the budget) under the current multiannual financial framework (MFF).




Building on this success, in May 2018 the Commission proposed to raise the level of ambition for climate mainstreaming across all EU programmes for the next EU budget for 2021-2027 with a **target of 25% of EU expenditure** contributing to climate objectives. This 25 % target equates to EUR 320 bn, an increase of EUR 114 bn in comparison to the 2014-2020 period.

But **public money will not be enough** — the financial sector must throw its full weight behind the fight against climate change. To meet our 2030 climate and energy objectives, the EU needs at least EUR 180 bn of extra investment in energy efficiency,

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11 SWD(2018) 461

12 http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3921

13 SEC(2018) 250

renewable energy and clean transport every year until 2030. In March 2018, the EU presented the first blocks of its strategy for a financial system that supports the EU's climate and sustainable development agenda, with the first-ever **EU Action Plan on Sustainable Finance**[14].The **Action plan** consists of 10 legislative and non-legislative measures to mobilise finance for sustainable investments and sustainable growth.

The **evaluation of the Ozone Depleting Substances** Regulation was launched in 2018 to examine the actual implementation and performance of the regulation and ensure that it is fit for purpose. The final results are foreseen for the end of 2019.

## International climate action - key achievements in 2018

The EU, being accountable for only 10 % of global greenhouse gas emissions, needs to combine forces with countries around the world to give weight to the fight against climate change. Three years after the adoption of the Paris Agreement, the 24th Conference of the Parties to the UNFCCC (COP24) took place in December 2018 in Katowice, Poland. The EU went to COP24 with one key objective: to adopt an ambitious, clear and comprehensive rulebook that will enable countries around the world to implement the Paris Agreement on the ground. To pave the way for conclusive discussions in Katowice, the EU continued and re-enforced its trilateral ministerial cooperation with Canada and China by hosting a major Ministerial Meeting on Climate Action (MoCA) in Brussels, in June bringing together some 35 key Ministers and their senior negotiators to find solutions to the outstanding political issues. Furthermore, on the occasion of their 20th Summit in July, the EU and China came forward with a specific Leaders' Statement on Climate change and clean energy. This statement reiterated their shared commitment to finalisation of the rulebook and multilateral climate governance thereby adding momentum to the international process. In Katowice, the EU reached its objective and negotiated the "Paris rulebook", i.e. a manual that will allow for a global implementation of the goals. It adopted **common rules and guidelines in all key areas** of mitigation, adaptation and finance. An agreement was also reached on a universal transparency and accountability system. The rulebook set common rules to **track countries' progress** with their nationally determined contributions (NDCs) and adaptation efforts. It also strengthens the principle that all **finance flows must be made sustainable** and support the fight against climate change. This represents a major shift in the political discourse of climate finance.

COP24·KATOWICE 2018
KONFERENCJA NARODÓW ZJEDNOCZONYCH
W SPRAWIE ZMIAN KLIMATU

Next to the adoption of the rulebook, a key deliverable of COP24 was the **Facilitative "Talanoa" Dialogue**, where Parties considered how to promote more ambitious climate action now and in their next round of national climate commitments.

Furthermore the EU continued to provide **financial support to developing countries** in the context of the global goal agreed in Copenhagen to mobilise 100 billion dollars a year by 2020 and through to 2025, from a variety of sources. In 2017 alone, the EU and its Member States contributed a total 20.4 billion euro in climate finance – which is well over 40% of the total provided by developed countries.

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[14] COM/2018/097 final

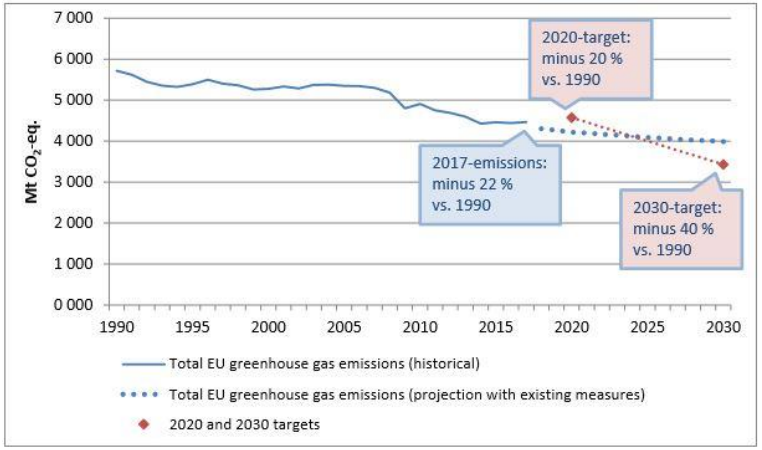
In parallel to COP24, the EU continued to promote bilateral and multilateral measures that go in the same direction as the Paris Agreement. The **Florence Process** brought together representatives of key stakeholders with emissions trading programs including the EU, China, California, Canada, Quebec, New Zealand and others in order to address issues of common interest. It gathered in Florence, Italy in May 2018 for the second time and provided a unique forum for exchange, mutual learning and enhanced cooperation between carbon markets. In this context, in 2018 the EU ratified the first linking agreement between EU and Swiss carbon markets. The EU also agreed to strengthen its bilateral cooperation with three strategic partners: **New Zealand, China and California,** who share the EU's view of emissions trading as a cost-effective policy tool and are committed to the deployment of low carbon technologies, to a greater alignment of their respective carbon market and to collaborating closely on carbon pricing.

In addition, the EU stressed the need to see climate action as a central element for the modernisation of the European economy and industry at the **Global Climate Action Summit (GCAS)** that took place in San Francisco, California in September 2018. It further maintained its leadership role on climate action at the **"One Planet Summit"** that took place in New York in September 2018.


In 2018, the EU ratified the **Kigali Amendment to the Montreal Protocol**, which will bring about a global phasedown of hydrofluorocarbons (HFCs), which are powerful greenhouse gases. HFCs, used mainly in refrigeration, air conditioning and heat pump equipment, are thousands of times more harmful to the climate than $CO_2$. In response to the rapid growth of HFC emissions, the 197 parties to the Montreal Protocol adopted the Kigali Amendment in 2016 to gradually reduce their global production and consumption. Global implementation of the Kigali Amendment would prevent up to 80 bn tonnes $CO_2$ equivalent of emissions by 2050. The EU decided to tackle the use of HFCs in its domestic legislation starting in 2015. This truly ambitious practice goes far beyond the current obligations under the Protocol, which foresees the beginning of the phasing down only in 2019.

As part of the international cooperation on climate change, DG CLIMA is actively involved in the work performed by the **International Civil Aviation Organization (ICAO)** and the **International Maritime Organisation (IMO)**. In 2018, the EU and its Member States played a central role in making progress towards establishing rules for the operationalisation of the **Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)** in order to tackle $CO_2$ emissions in the aviation sector. An agreement on the first set of rules (Monitoring, Reporting and Verification) was reached, with key aspects for the integrity and effectiveness of the scheme still to be completed in 2019. The EU also facilitated the adoption of the **IMO strategy** to reduce greenhouse gas (GHG) emissions from international shipping that contains a clear GHG emission reduction objective of at least 50 % by 2050 compared to 2008 levels. This is a concrete illustration of European unity and of the global leadership of Europe in the fight against climate change.

## b) Key Performance Indicators (KPIs)

| **Most Relevant KPI 1:**<br><br>Reduction of greenhouse gas emissions (EU 28)<br><br><br>Source: European Commission progress report COM(2018) 716 final. | ☺ | **Progress toward meeting the 2020 objective of -20 % reduction of greenhouse gas (GHG) emissions (headline target EU 2020 strategy)**<br><br><br><br><br>**Target**: -20% of greenhouse gas emissions by 2020 compared to 1990<br><br>EU climate legislation for both the EU Emissions Trading System and the non-ETS sectors, combined with its implementation in the Member States, has greatly contributed to the considerable progress made in cutting GHG emissions in the EU. The EU is on track to achieve - even overachieve - the target of reducing GHG emissions by 20 % by 2020. In 2017, according to preliminary data, EU greenhouse gas emissions were 22% below the 1990 level.<br><br>As Member States' projections indicate that emissions will decrease further, the EU expects to meet its 2020 target. In 2017, emissions were 0,6% higher than in 2016. The increase mainly came from the transport sector and industry. However, the decoupling of economic activity from GHG emissions continued as the growth in emissions was significantly lower than the economic growth.<br><br>With the policies already in place, emissions in 2030 are projected to be 30% below the 1990 level. This shows that there is still a gap of 10 % to bridge in order to reach the 2030 target. To meet this target, Member States will have to formulate ambitious policies and measures to reduce emissions further. |
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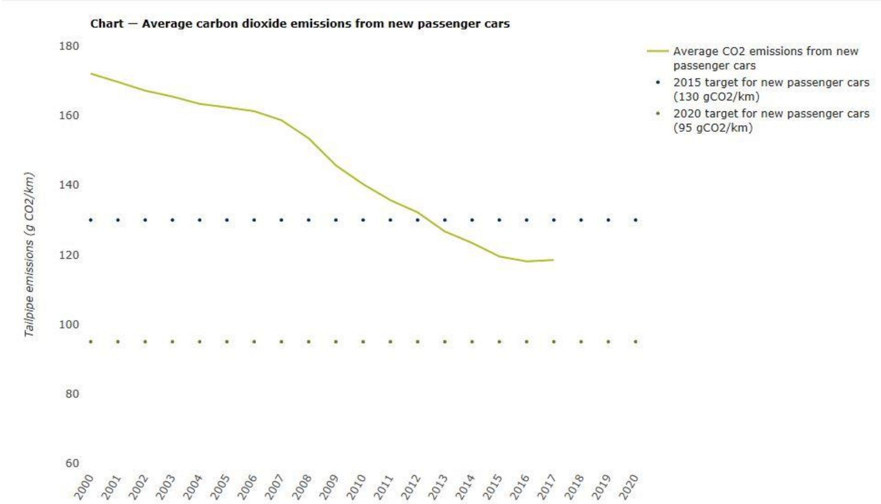
| **Most Relevant KPI 2:**<br><br>Average $CO_2$ emissions from cars (specific objective 3)<br><br>Source: European Environment Agency (EEA), Briefing No 15/2018 | 😐 | **$CO_2$ emissions from new cars**<br><br><br><br>**Target:** By 2021, the fleet average emission to be achieved by all new cars must be 95 grams of $CO_2$ per kilometre.<br><br>Since monitoring under the current regulation started, average $CO_2$ emissions from newly registered passenger cars have decreased by 15 %, from an average of 140,3 g $CO_2$/km in 2010 to an average of 118,5 g $CO_2$/km in 2017. The 2015 target of 130 g $CO_2$/km was met in 2013, 2 years before the deadline.<br><br>However, provisional data show that average emissions slightly increased by 0,4 g $CO_2$ /km in 2017, the first increase since monitoring started. In 2017, petrol passenger cars became the best-selling vehicles in the EU, constituting almost 53 % of sales. Diesel cars made up 45 % of new registrations. In order to meet the 2021 target of 95 g $CO_2$/km for passenger cars, additional efforts are still required since average $CO_2$ emissions will need to further decrease by almost 20%.<br><br>The new 'Worldwide harmonized light vehicles test procedure' (WLTP) was introduced in September 2017. It is anticipated that it will lower the divergence between laboratory test and real world emissions. |

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<td>Most Relevant KPI 3:<br><br>Progress towards the EU "HFC phase-down" (specific objective 2) [15]<br><br><br>Source: European Environmental Agency, EEA</td>
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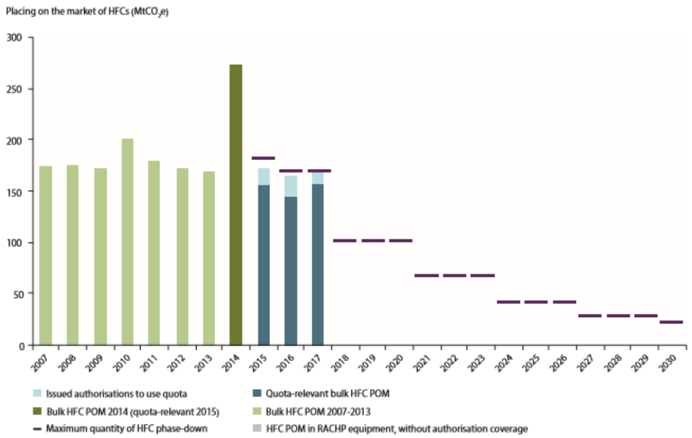
## Progress towards the EU "HFC phase-down"




**Notes:** POM, placing on the market. Values from 2007 to 2013 are based on the reporting obligations of the old F-Gas Regulation ((EC) No 842/2006) and are therefore not fully comparable with data from 2014 onwards (based on the obligations of the new F-Gas Regulation ((EU) No 517/2014)). Similarly, the maximum quantities of the EU HFC phase-down may be recalculated for 2019 and are for indicative purposes only.

**Sources:** EC, 2011, 2014 and 2018; EEA, 2017 and 2018b.

**Target**: Starting in 2015, the amount of hydrofluorocarbons (HFCs) that can be placed on the EU market is annually capped by a limited HFC quota, which is being progressively reduced in what is referred to as the 'EU HFC phase-down'[16].

Fluorinated greenhouse gases (F-gases) are amongst the most powerful greenhouse gases. HFCs account for 85 % of present F-gas supply and are used primarily as refrigerants in refrigeration, air conditioning and heat pump (RAC) equipment. As set out in the F-gas Regulation HFC phase-down, in 2015 the initial total allocation was 183,1 $MtCO_2e$ (Megatonne of $CO_2$ equivalent). In 2016 and 2017, the first stage of reduction applied and only 170,3 $MtCO_2e$ was allocated (93 % of the 2015 allocation)[17] The EU is on track to meet the HFC phase-down, complying with these annual targets. In 2017, EU-wide placing on the market (POM) of HFCs was 0,4 % below the 2017 overall market limit set by the quota system.
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[15] In 2018, compared to KPIs identified in DG CLIMA Strategic Plan 2016-2020, one KPI was revised and substituted to reflect and report on the latest key policy developments: the indicator related to the EU phase down of hydrofluorocarbons (HFCs) replaced the indicator related to the 'depletion of the ozone layer'. While the global phase-out of ozone-depleting substances was a success story for many years, it has led to a large increase in the use of other types of gases to replace them in various applications. The substituting fluorinated gases ('F-gases'), including hydrofluorocarbons (HFCs) are very powerful greenhouse gases and their emissions are rising incrementally. Therefore, in 2016, the Parties to the Montreal Protocol agreed to add the hydrofluorocarbons (HFCs) to the list of controlled substances. In addition, at the EU level, the F-gas Regulation entered into force in 2015, capping the amount of HFCs that can be placed on the EU market annually ('EU HFC phase-down'). It appeared appropriate, therefore, to update the indicator in question.

[16] It is to be noted that values until 2013 are based on the reporting obligations of the old F-Gas Regulation EC 842/2006 and are therefore not fully comparable with data from 2014 onwards.

[17] In addition, from 2017 onwards also HFC imported inside in refrigeration, air conditioning and heat pump (RAC) equipment needs to be included under this cap, equivalent to 9 % of the original baseline

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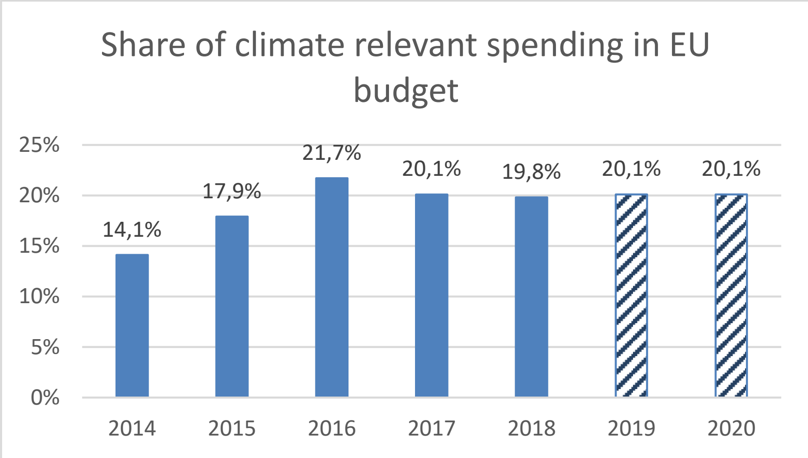
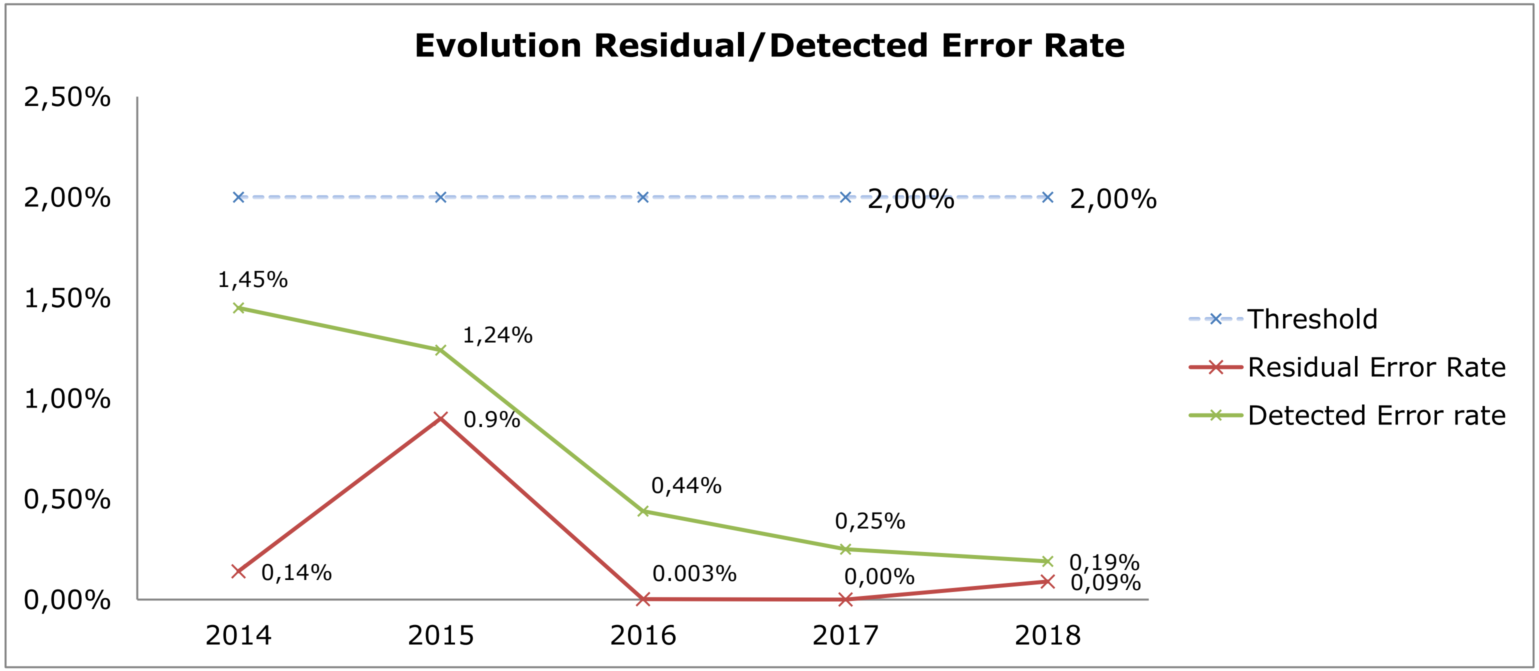
| **Most Relevant KPI 4:**<br><br>Proportion of climate related spending (mainstreaming) in the EU budget (specific objective 5)<br><br>Source: EC, Draft Budget Report 2019 SEC(2018) 250<br><br>*NB: The tracking methodology is set up in accordance with the 'Rio markers methodology' (0%, 40% and 100% climate dimension). The climate share indicated in the programme statements of the distinct financial programmes of the EU budget is accounted for and added up to an estimated amount for the whole draft budget as compiled by DG Budget.* | 😐 | **Proportion of climate related spending (mainstreaming) in the EU budget**<br><br><br><br>Target: At least 20% (on average) by 2020<br><br>The 20% climate mainstreaming target is a political commitment from the Commission endorsed by the European Council for the current Multiannual Financial Framework (MFF) 2014-2020.<br><br>The progress towards the 20% target has been monitored closely on an annual basis by DG Budget and DG Climate Action in the annual budgetary procedure. The mainstreaming percentages recorded evolved positively until 2016 and slightly decreased afterwards: from to 14,1% in 2014 to 17,9% in 2015, 21,7% in 2016, 20,1% in 2017 and 19,8% in 2018. It is expected to reach 20,1% both in 2019 and 2020 (current estimates).<br><br>It shows that the policy of climate action mainstreaming is delivering results. The mainstreaming target has been a key driver for integrating climate action systematically into individual spending programmes. On average, the budget trend would overall deliver EUR 206 billion (19,3% of the budget) under the current multiannual financial framework (MFF). Building on this success, on 2 May 2018 the Commission proposed a more ambitious target of 25% of expenditure contributing to climate objectives under the next (2021-2027) MFF. |

| **Most Relevant KPI5:**<br><br>Residual error rate (RER) in the sub-programme Climate Action of the LIFE programme 2014-20 (specific objective 5)<br><br>Source: European Commission, Draft Budget Report 2019 SEC(2018) 250 | ☺ | **Amount at risk - Residual Error Rate (RER)**<br><br><br><br><br>**Target:** Residual Error Rate should be lower than 2%<br><br>The detected error rate (DER) based on ex-post audits of grants of the **former** LIFE+ programme was 0,19% for 2018. The residual error rate (RER) after corrections was 0,09%. |
|---|---|---|

## c) Key conclusions on Financial management and Internal control (executive summary of section 2.1)

In accordance with the governance arrangements of the European Commission, (the staff of) DG CLIMA conducts its operations in compliance with the applicable laws and regulations, working in an open and transparent manner and meeting the expected high level of professional and ethical standards.

The Commission has adopted a set of internal control principles, based on international good practice, aimed to ensure the achievement of policy and operational objectives. The financial regulation requires that the organisational structure and the internal control systems used for the implementation of the budget are set up in accordance with these principles. DG CLIMA has assessed the internal control systems during the reporting year and has concluded that the internal control principles are implemented and function as intended. Please refer to AAR section 2.1.3 for further details.

In addition, DG CLIMA has systematically examined the available control results and indicators, including those aimed to supervise entities to which it has entrusted budget implementation tasks, as well as the observations and recommendations issued by internal auditors and the European Court of Auditors. These elements have been assessed to determine their impact on the management's assurance as regards the achievement of control objectives. Please refer to Section 2.1**Error! Reference source not found.** for further details.

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented. The Director General, in his capacity as Authorising Officer by Delegation has signed the Declaration of Assurance albeit qualified by a reservation concerning the security of the EU ETS.

## d) Provision of information to the Commissioner

In the context of the regular meetings during the year between the DG and the Commissioner(s) on management matters, also the main elements of this report and assurance declaration, including the reservation envisaged on the security of the EU ETS, have been brought to the attention of Commissioner Miguel Arias Cañete, responsible for EU Climate Action and Energy policies, on 22 March 2019.

# 1. KEY RESULTS AND PROGRESS TOWARDS THE ACHIEVEMENT OF GENERAL AND SPECIFIC OBJECTIVES OF THE DG

## 1.1 Achievement of general policy objective(s)

As presented in its Strategic Plan 2016-2020[18], the mission of DG CLIMA is to foster the transition towards a low-carbon and climate resilient economy in the EU as a contribution to fighting climate change, and to support the protection and recovery of the ozone layer.

This mission was materialised as one of the 10 strategic priorities for 2014-19 adopted by the Juncker Commission, namely **"A resilient Energy Union with a forward-looking climate policy"**. Thus, DG CLIMA contributes first and foremost to this key general policy objective, which has been integrated into the **Energy Union Strategy** adopted by the Commission. Moreover, DG CLIMA also contributed to the achievement of two other priorities, namely "Creating Jobs and Boosting Growth and Investment in Europe" and making the EU "a Stronger Global Actor".

### Climate challenges

The once remote-seeming dangers of climate change are today a reality – also in Europe[19]. Global warming is transforming our environment, increasing the frequency and intensity of extreme weather events. Over the last few years, Europe has experienced extreme heatwaves. In summer 2018, temperatures in the Arctic Circle were 5 °C higher than usual. Large parts of Europe suffered from severe droughts, while flood events have particularly affected Central and Eastern Europe in recent years. Climate-related extremes such as forest fires, flash floods, typhoons and hurricanes are also causing massive devastation and loss of lives.

In October 2018 the Intergovernmental Panel on Climate Change (IPCC) issued its Special Report on the impacts of global warming of 1,5 °C above pre-industrial levels and related global greenhouse gas emission pathways. Based on scientific evidence, this demonstrates that human-induced global warming has already reached 1 °C above pre-industrial levels and is increasing at approximately 0,2 °C per decade. If international climate action is not stepped up, global average temperature increases could reach 2 °C soon after 2060 and continue rising thereafter.

The current changes to our planet's climate have serious consequences for human health, biodiversity, ecosystems and the goods and services they provide as well as for many social and economic sectors, including agriculture, tourism, and energy production.

[18] Strategic Plan 2016-2020 DG Climate Action

[19] *"10 Trends Reshaping Climate and Energy",* European Political Strategy Centre (EPSC), 8 December 2018

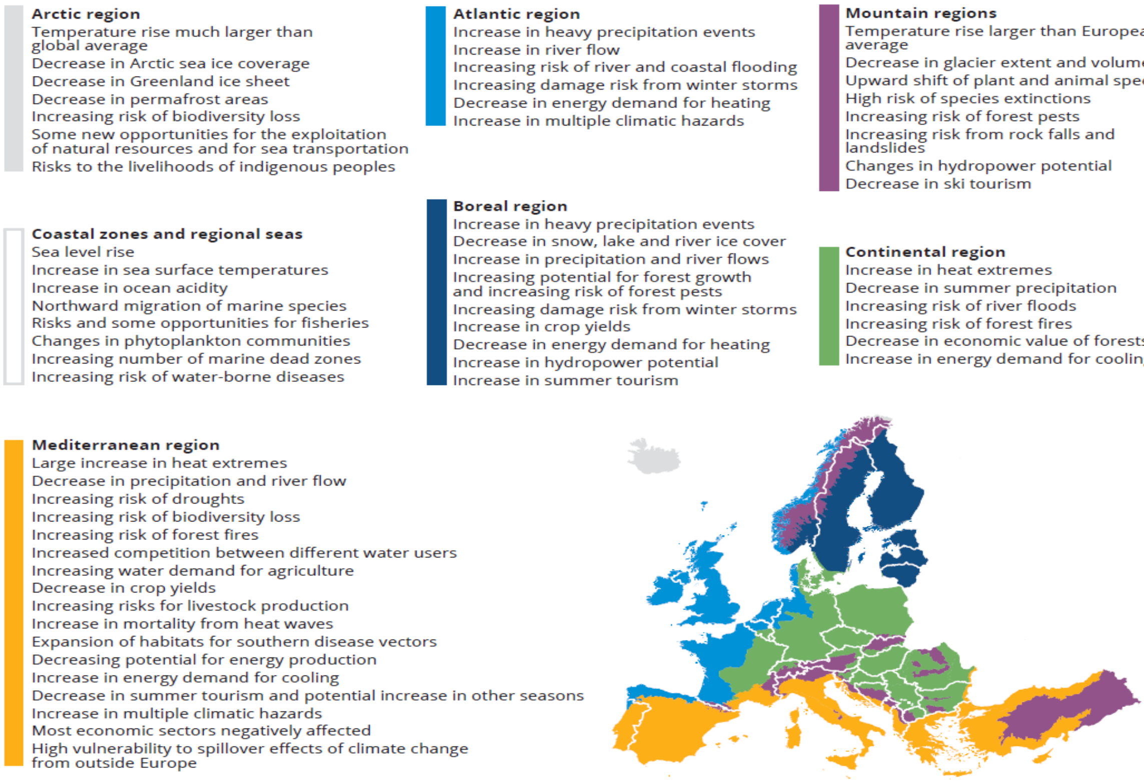



Figure 2: *Climate change impacts in Europe*
*Source: COM(2018) 773 final*

In this context, the action of DG CLIMA is driven by the need to take collective EU action to protect the planet, citizens and ecosystems from the impacts of climate change and the depletion of the ozone layer.

Consequently, **DG CLIMA has developed a full-fledged policy strategy oriented toward mitigation and adaptation to climate change**. The first is based on the reduction of greenhouse gas (GHG) emissions, while the second aims to anticipate the adverse effects of climate change and prevent or minimise their negative impact. Furthermore, the DG CLIMA takes initiatives both domestically (within the EU) and internationally (promoting international action).

The policies aimed at tackling climate change are especially challenging for policymakers as they foresee long-term goals and global impacts. While the EU accounts for less than 10 % of global GHG emissions, the work of DG CLIMA is yielding positive results in terms of the reduction of GHG emissions and decarbonisation of the European economy.

### Reduction of GHG Emissions

By 2007, the EU had already set targets to **reduce its GHG emissions for 2020 by 20 %** from 1990 levels. As illustrated in the Figure 3, the EU is well on track to meet its 2020 target. In 2017, EU GHG emissions were down by 22% compared to 1990. As Member States' projections indicate that emissions will decrease further, the EU expects to meet its 2020 target. However, a slight increase in GHG emissions was observed in 2017 (emissions were 0,6% higher than in 2016). This increase was mainly due to the transport and industry sectors.

As its contribution to the 2015 Paris Agreement on climate change, the EU has committed to **cut domestic GHG emissions by at least 40 % by 2030 compared to 1990.** To that effect, in 2018 DG CLIMA ensured that the last pieces of the necessary key legislation were proposed or adopted to cut emissions in the power sector, energy-intensive industries, road transport, waste, agriculture, land use, forestry and buildings. DG CLIMA has now established both a robust framework and the supporting tools to implement, monitor compliance and promote investments. DG CLIMA has now put in place the legal framework to ensure that the **EU's 2030 climate targets** will be reached. The EU is the only major economy in the world that has fully translated into legislation the steps to be taken to meet its Paris Agreement pledges.

Last summer the EU also raised its level of ambition on renewable energy and energy efficiency, with higher targets for improving energy efficiency (32,5 %) and for renewable energy (32 %). These objectives will lead to **steeper emission reduction** for the whole EU and, provided the legislation is fully implemented, EU emissions are **estimated to be cut by 45% by 2030**. This would exceed the EU's own targets under the Paris Agreement and serves to reaffirm its commitment to remain at the forefront of global climate action.

With the policies already in place, emissions in 2030 are projected to be **30% below the 1990 level**[20]. This shows that there is still a gap of 10 % to bridge in order to reach the 2030 target. In order to meet their obligations under the new legislation, Member States will have to formulate ambitious policies and measures to reduce emissions further.

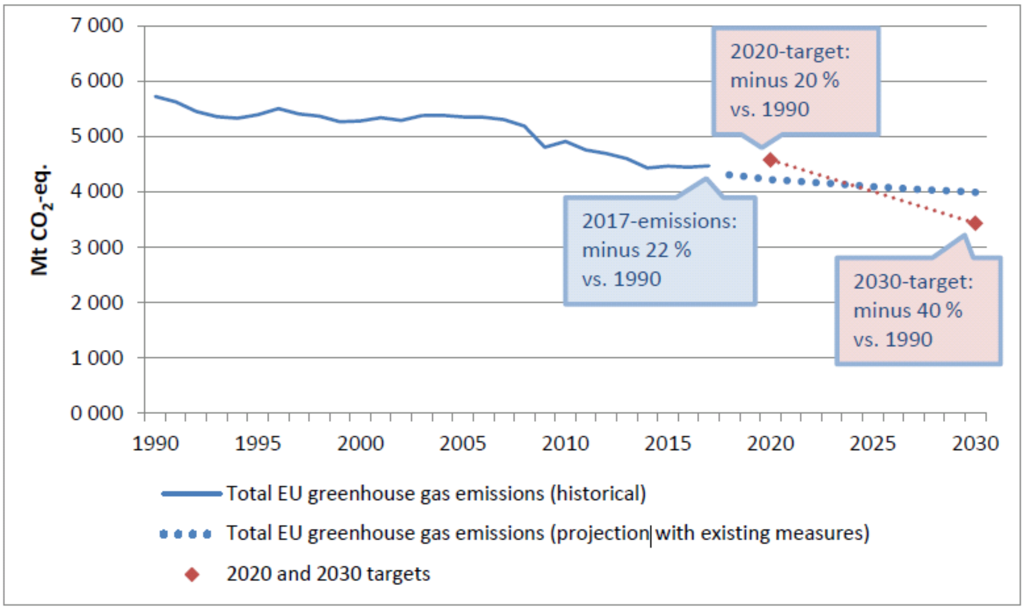



***Figure 3:*** Total EU GHG emissions (historical emissions 1990-2017, projected emissions 2018-2030) (Mt $CO_2$-eq.) and GHG reduction targets

***Source:*** EU and the Paris Climate Agreement progress report, COM(2018) 716 final

Over the **past four years**, EU emissions **reduced by 3%.** Most of the reduction has taken place in the **energy supply sector, where emissions are down 11 %** compared to 2013. Lower emissions from energy use in buildings, waste management and energy use in industry have also contributed. On the other hand, emissions from

[20] based on projections from the Member States, mostly from March 2017.

transport, agriculture and international aviation have increased over the last four years. Transport emissions have increased by 7 % compared to 2013, mainly due to growing emissions from road transport. Emissions from industrial processes have varied from year to year, showing no clear trend.

## GHG intensity of the economy

The transition to low-carbon economic growth is essential for a successful global climate strategy. The EU sees this transition as an opportunity to boost investment, promote growth and create green jobs.

Positive results in terms of **decarbonisation of the European economy** are reflected in Figure 4. It measures progress in terms of carbon intensity of the economy, which is the ratio of greenhouse gas emissions to Gross Domestic Product (GDP). Besides the slight increase in GHG emissions observed in 2017, the decoupling of economic activity from GHG emissions continued as the growth in emissions was significantly lower than that of the economy. The EU's economy now emits half as much $CO_2$ per unit of GDP as in 1990. This tendency in the reduction of the carbon intensity continued in 2017, with an increase in industrial and economic activities and an overall increase of 2,4 in Gross Domestic Product (GDP) compared to previous year. Overall, the **EU cut emissions by 22 % from 1990 to 2017, while the economy grew by 58 %.**

The decoupling of growth and GHG emissions is a proven result of primarily EU legislation and technological improvements, together with the deployment of low-carbon technologies.[21] These efficiency gains show that growth, employment and climate action can go hand in hand.

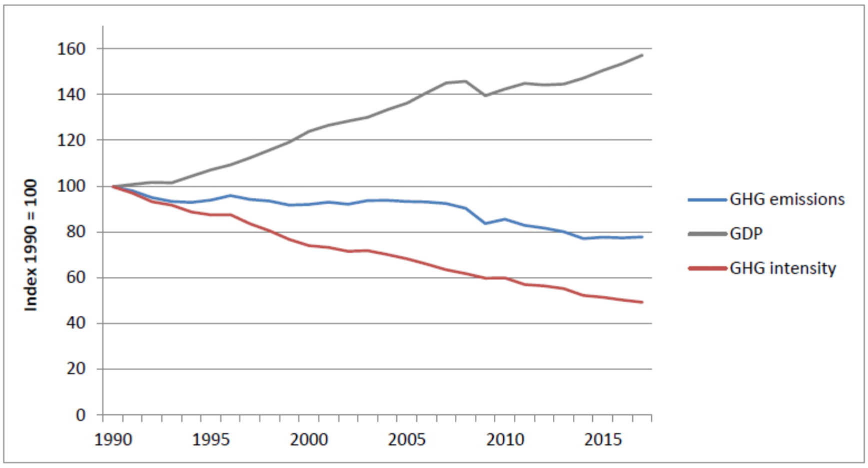



***Figure 4:*** The EU's GHG emissions, real GDP and GHG emission intensity (1990 = 100)

***Source:*** EU and the Paris Climate Agreement progress report, COM(2018) 716 final

[21] Decomposition analysis of the changes in GHG emissions in the EU and Member States. Final Report by ICF international (2016). Available: https://ec.europa.eu/clima/sites/clima/files/strategies/progress/docs/dca_report_en.pdf

## EU long-term strategy

Three years ago, when 195 countries adopted the Paris Agreement, the Intergovernmental Panel on Climate Change (**IPCC**) was charged with the task of informing countries of **what action was needed to limit global warming to 1,5 °C**, and what might happen if countries would fail to do so. The answer provided by science is clear: the **Special Report** published in October 2018 unequivocally confirms that limiting global warming to 1,5 °C is necessary to avoid the worst impacts and reduce the likelihood of extreme weather events. Its conclusions indicate that global emission reduction in all sectors are crucial and that further action is needed in mitigation and adaptation, notably to reach the temperature goal as set out in the Paris Agreement. The report shows that achieving the 1,5 °C is achievable, provided we act now and use every tool at our disposal. Countries will need to raise their collective ambition and must deliver on these goals in order to achieve a **carbon neutral economy** as soon as possible this century.

Commissioner for Climate Action and Energy, **Miguel Arias Cañete, said:** *"The EU has put in place the legislation to meet its Paris commitment for 2030. It is now time* ***to look at the longer term perspective*** *and to set out a strategy for where EU climate policy is heading* ***by 2050****. This is central to meet the Paris Agreement goals of keeping global temperature rise below 2 degrees Celsius and to pursue efforts to 1.5 degrees Celsius. (…)"*

Highlighting the urgency of the global climate challenge, the report provides a timely input for DG CLIMA's strategy proposal for long-term EU greenhouse gas emissions reduction. At the end of 2018, DG CLIMA together with the Directorate-General for Energy (DG ENER) and with contributions from a wide range of policy DGs, put forward a proposal for a **strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050**[22]**.** In preparation for this proposal, earlier in 2018 the Commission organised a two-day stakeholder event in Brussels gathering nearly 900 participants, bringing together a broad range of stakeholders from business, research and civil society. It was followed by a public consultation seeking further input from citizens and stakeholders, with more than 2800 responses received.

**A strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050**


The strategy is a comprehensive vision for the modernisation of the economy, industry and the financial sector. It sets out how Europe can lead the world to **climate neutrality** by investing in realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance and research, while also ensuring social fairness for a just transition, in all regions of the EU. This work will be an important building

[22] *A Clean Planet for all - A European strategic long - term vision for a prosperous, modern, competitive and climate neutral economy,* COM(2018) 773 final

block for the future.

The strategy put forward **demonstrates that this is possible and makes economic sense:** our economy needs serious modernisation and decisive action to maintain and regain competitiveness, to re-industrialise and regain technology leadership, to renovate our cities and improve our quality of life. Hence the low-carbon transition is as much an opportunity as it is a challenge. The European vision was presented to our global partners at the 24th Conference of the Parties (COP24). With the strategy on the table, an EU-wide debate is initiated that should allow the EU to **adopt a long-term strategy and submit it to the United Nations Framework Convention on Climate Change (UNFCCC) by 2020**, as requested under the Paris Agreement.

### Evaluation of the 7th Environment Action Programme (EAP)

The **7th Environment Action Programme (EAP)** is the agreed framework for EU environmental and climate policy-making until 31 December 2020. It aims to improve the state of the EU's environmental and citizens' wellbeing, whilst contributing to the EU's broader objectives of smart, sustainable and inclusive growth.

The 7th EAP is **currently being evaluated** to assess whether this agreed framework is really helping the EU and its Member States to deliver the nine priority objectives in a smart way, including the objective of turning the Union into a resource-efficient, green and competitive low-carbon economy.

**Preliminary results** of the evaluation show that having a strategy for EU environment and climate policy-making provides added value and has helped providing more predictable, faster and better-coordinated actions in environment and climate policy. The 7th EAP is broadly in line with good governance practice and is largely coherent with the political agenda both in Europe and globally. However, the programme could have benefited from more strategic actions and from better prioritisation by having a limited set of actions. It would also have benefited from a monitoring mechanism to ensure ownership and delivery of commitments as well as clear and agreed indicators to measure progress. Final results are not yet available as the evaluation will be completed by mid-2019.

## 1.2 Achievement of specific policy objectives

**SO 1: Ensuring further development and ensuring a well-functioning EU carbon market, via the EU ETS, towards further reduction of GHG emissions by energy power and heat generation installations, by energy-intensive industries and by domestic aviation**

The **EU ETS (Emissions Trading System),** the world's first major carbon market, proved that putting a price on carbon and trading in it can work. The EU ETS operates in **31 countries**[23] and limits emissions from more than **11000 heavy energy-using installations** (power stations & industrial plants) **and airlines** operating between these countries. It covers around 45 % of the EU's greenhouse gas emissions.

The sectors covered by the ETS have a specific target reduction of 21 % for 2020 and 43 % for 2030 compared to 2005. The EU **remains on track to meet its domestic objectives** since emissions from stationary installations covered by the EU ETS fell by 26% between 2005 and 2017. This decrease was mostly driven by reductions in emissions in the EU power sector. Ex post evaluation of climate policies shows that the reduction in emissions was largely the result of changes in the combination of fuels used to produce heat and electricity[24].

In 2017 the **EU power sector reduced** its greenhouse gas emissions for the sixth year in a row. Emissions of **industrial installations**, however, **slightly increased**, leading to an overall increase in ETS emissions by 0,18 % in comparison to 2016. While this breaks the decreasing trend since 2013, it can be explained by the highest growth in real GDP since 2011. **Verified emissions from aviation continued to grow**, marking an increase of 4,5 % compared to 2016. The EU ETS has a very **high compliance rate**: in 2017, as in previous years, around 99 % of the emissions were covered by the required number of allowances on time.

Efforts to **reduce the surplus of allowances** on the carbon market are starting to bear fruit. In 2017, the surplus had declined for the third year in a row by an overall amount of almost half a billion allowances. As of 2019, the Market Stability Reserve will further reduce the surplus by 24 % of its overall amount each year until 2023. The Market Stability Reserve will start by reducing auction volume by almost 265 m allowances over the first 8 months of 2019.

The **auctioning of EU ETS allowances** generated EUR 14,2 bn in revenues for the Member States in 2018. Member States generally spend 80 % of their auction revenue on climate and energy related purposes, for example investments in renewable energy and energy efficiency.

The EU is **putting in place legislation** to reduce emissions by at least 40 % by 2030. In 2018, the Council and the European Parliament adopted the **revised EU ETS Directive**, which will apply for the period 2021-2030. It includes a cap declining by 2,2 % annually from 2021 onwards, corresponding to an additional reduction of around 556 m tonnes of carbon dioxide in the period 2021-2030 compared to the current annual decline of 1,74 %.

DG CLIMA is also elaborating the **implementing legislation** to ensure that practical

[23] All 28 EU countries plus Iceland, Liechtenstein and Norway

[24] *"Trends and projections in Europe 2018, Tracking progress towards Europe's climate and energy targets"*, EEA report N° 16/2018

rules and tools are available on time for the start of the fourth trading period (2021-2030). This work began in 2018, with the adaptation of several instruments e.g. the Union Registry, the free allocation rules and a new carbon leakage list that will be in place for the entire 4th trading period of the EU ETS.

**The carbon leakage list** for the period 2021-2030 was published in 2018. It identified 63 sectors and subsectors exposed to the risk of carbon leakage. Carbon leakage refers to the situation where businesses transfer their industrial production, especially in energy intensive industries, to countries with less strict greenhouse gas emission policies. To safeguard the competitiveness of these industries, sectors prone to carbon leakage receive a higher share of free allowances. The new carbon leakage list will cover the entire 10-year period of Phase 4 of the EU ETS, thus providing regulatory certainty and stability to industry sectors.

### SO 2: A fair and operational framework for MS aiming for a further reduction of GHG emissions in the non-ETS sectors in the EU (agriculture, forestry, land use, buildings, transport, waste) (= EU Effort Sharing Decision, use of Fluorinated-gases and consumption of Ozone Depleting Substances)

> The EU has to reduce the GHG emissions of the non-ETS sectors by 10% until 2020 and by 30% until 2030.

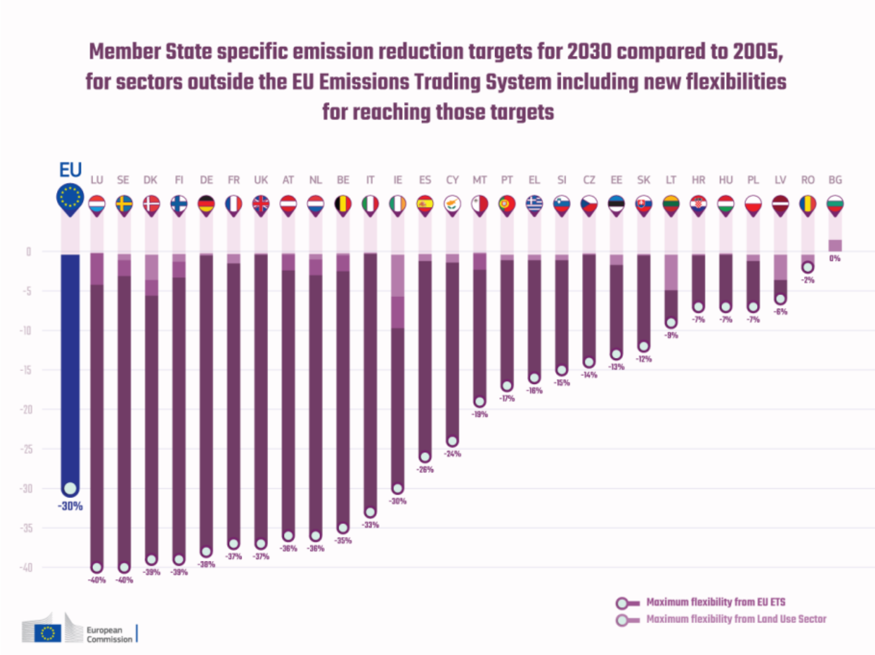
The EU is on track to meet the **2020 targets for the sectors not covered by the EU ETS.** These sectors include transport, buildings, agriculture, small industry and waste. They account for more than 55 % of the EU's total domestic emissions. The Effort Sharing Decision (ESD) in force establishes binding annual greenhouse gas emissions targets for Member States for the period 2013-2020. The national targets have been agreed unanimously based on relative wealth.

The EU already over-achieves on its 2020 target. **Emissions covered by the ESD were 11% lower in 2017 compared to 2005.** According to national projections, emissions in 2020 should be 16% below the 2005 level, exceeding the 2020 target of a 10% reduction. Since the system was launched in 2013, EU-wide emissions have been significantly below the total limit each year. However, transport emissions have risen by 7% and emissions from agriculture by 2%, while those from other sectors have decreased.

### Completing the EU's 2030 climate and energy framework: Member States binding targets for 2021-2030 and integration of LULUCF sector

In 2018, an agreement on how to distribute the EU commitment to reduce non-ETS emissions by 30% by 2030 between Member States was reached. This **Effort Sharing Regulation** sets national emission reduction targets for the period 2021–2030 for all Member States, ranging from 0 % to -40 % from 2005 levels. Collectively, they will deliver a 30 % reduction in EU emissions from the sectors covered by 2030.

The basic framework of the new regulation is similar to the system for the period 2013-2020. Member States will have emission reduction trajectories that will determine their annual allocations for 2021-2030.




Two new flexibilities allow Member States to use emission allowances under the EU ETS and credits from the land use sector to contribute to a limited extent towards achieving their targets.

In addition, a limited new reserve will be set up for lower income Member States that exceed their national targets for 2013-2020 and face challenges in meeting their new targets, on the condition that the EU as a whole achieves the 30 % reduction target for 2030.

Another important new measure agreed for 2030 is the inclusion of the **land use and forestry sector** in our climate framework. This is in line with the Paris Agreement, which points to the critical role of land use in reaching long-term climate mitigation objectives. At present, the EU's land stores more emissions than it emits and the LULUCF Regulation focuses on creating incentives at least to preserve this situation.

The **land use, land use change and forestry (LULUCF) Regulation** sets out a binding commitment for each Member State to achieve net zero debits from the sector. It will ensure that greenhouse gas emissions from the sector are offset by at least an equivalent removal of $CO_2$ from the atmosphere in the period 2021 to 2030. For instance, deforestation has to be compensated by an equivalent afforestation effort, or by improving sustainable management of existing forests beyond a projected benchmark.

## Use of fluorinated gases and consumption of ozone-depleting substances

Since 2015, the EU has been implementing a wide phase-down of hydrofluorocarbons (HFCs), a type of fluorinated gas (F-gas). The EU phase-down of HFCs was huge in 2018 with **a step-down to 63 % of the 2009-2012 baseline**[25]**.** This supply squeeze has raised HFC prices but has led to other challenges, such as an incentive for higher illegal trade, necessitating greater enforcement work and targeted stakeholder interaction. DG

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[25] Since HFC in equipment is also included from 2017 onwards, the real step-down is actually lower than 55% of the original baseline (see page 15)

CLIMA worked closely with the Directorate-General for Taxation and Custom Unions (DG TAXUD) to introduce automated customs' information to further combat illegal trade.

In 2018, DG CLIMA launched the **evaluation of the Ozone Depleting Substances Regulation** to examine the actual implementation and performance of the regulation. This evaluation responds to the political commitment taken in the Regulatory Fitness and Performance programme (REFIT), which aims to keep the entire stock of European Union (EU) legislation under review and ensure that it is fit for purpose. Citizens and stakeholders were consulted through an open public consultation and a stakeholder workshop. Feedback received was generally quite encouraging on all five evaluation criteria[26]. The final results are foreseen for the end of 2019.

### SO 3: Further decarbonisation of the transport sector in the EU beyond 2020 through development and implementation of harmonised policies (in cooperation with other DGs like DG MOVE, GROW…)

Transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. GHG emissions from transport have been increasing since 2014. **By 2016, transport emissions were 26,1% higher than 1990.**

#### Strategy on low-emissions mobility

To respond to this challenge, the European Commission adopted in 2016 a **Strategy on low-emissions mobility,** supporting a global shift towards a low-carbon economy and responding to the increasing mobility needs of people and goods. By 2050, GHG emissions from transport will need to be at least 60 % lower than in 1990 and be firmly on the path towards zero. Emissions of air pollutants from transport that harm our health will have to be reduced drastically.

In the last two years, the Commission has adopted three comprehensive packages of measures on mobility to reduce emissions from road transport and to implement the European strategy for low-emission mobility[27].

#### New targets for cars, vans and heavy-duty vehicles for the period after 2020

The Commission has presented a legislative proposal setting **new $CO_2$ emission standards for passenger cars and vans in the EU for the period after 2020.** At the end of 2018 the co-legislators provisionally agreed on new $CO_2$ emission standards. Emissions from new cars will have to decrease by 37,5 % by 2030 and by 31 % by 2030 for vans, compared to 2021 levels.

[26] The 5 evaluation criteria assessed are : relevance, effectiveness, efficiency, coherence and EU added value.

[27] https://ec.europa.eu/transport/themes/strategies/news/2016-07-20-decarbonisation_en

Commissioner for Climate Action and Energy, Miguel **Arias Cañete said:** *"All sectors must contribute to meet our climate commitments under the Paris Agreement. That's why, for the first time ever, we are proposing EU standards to increase fuel efficiency and reduce emissions from new heavy-duty vehicles."*

In addition, in 2018 the Commission completed its agenda for a low-emission mobility system by putting forward the first ever **$CO_2$ emissions standards for new heavy-duty vehicles.** Lorries, buses and coaches produce around a quarter of $CO_2$ emissions from road transport in the EU and around 6 % of the EU's total $CO_2$ emissions. In 2025, average $CO_2$ emissions from new trucks would have to be 15 % lower than in 2019. For 2030, an indicative reduction target of at least 30 % was set. Complementary to the $CO_2$ targets, the legislative proposal included an **incentive system for zero- and low-emission vehicles.** This system of super credits would accelerate the introduction into the market of such vehicles, including zero-emission buses, by rewarding those manufacturers investing more in innovative technologies. This initiative complemented the recently adopted Regulation[28] on monitoring and reporting $CO_2$ emissions and fuel consumption from new heavy-duty vehicles. The proposal on heavy-duty vehicles would lead to significant benefits and contribute to the achievement of the EU's commitments under the Paris Agreement through the reduction of around 54 m tonnes of $CO_2$ in the period 2020 to 2030, equivalent to the total annual emissions of Sweden. To simulate $CO_2$ emissions and fuel consumption data of heavy duty vehicles (HDVs), the Commission developed a software tool called **VECTO** (Vehicle Energy Consumption calculation Tool). This tool shall be used for determining $CO_2$ emissions and fuel consumption from Heavy Duty Vehicles with a Gross Vehicle Weight above 3500kg. From 1 January 2019 the tool will be mandatory for new trucks under certain vehicle categories in application to the certification legislation[29] under type approval.

In addition, the Commission has put forward an action plan for batteries ("The European Battery Alliance")[30] and has proposed the revision of three directives (the Eurovignette Directive, the Clean Vehicle Directive and the Combined Transport Directive[31]).

### 2020 targets for cars and vans

Since monitoring started in 2010, and based on laboratory tests, **average $CO_2$ emissions of new cars**[32] in the EU have fallen by 22 g $CO_2$/km – a 16 % decrease. The average emissions level of a new car sold in the EU in 2017 was 118,5 grams of carbon dioxide ($CO_2$) per kilometre, well below the 2015 target of 130 g. However, average emissions slightly increased by 0,4 g $CO_2$/km in 2017, the first increase since monitoring started. Manufacturers will have to further reduce emissions in the coming years in order to meet the EU target of 95 g $CO_2$/km by 2021.

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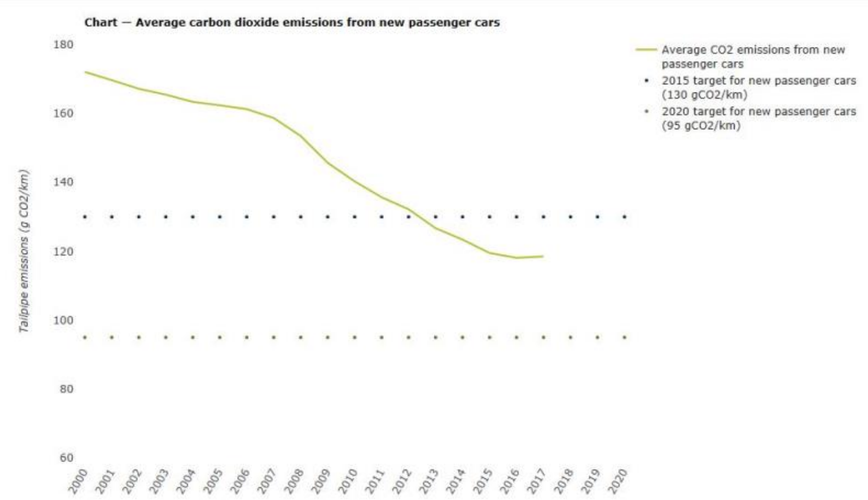
[28] Regulation 2018/956 of 28 June 2018.

[29] Regulation (EU) 2017/2400 of 12 December 2017.

[30] With the strategic action plan for batteries, the Commission is promoting a European approach covering the whole value chain of the batteries ecosystem, and focusing on sustainability, starting with the extraction and processing of raw materials, the design and manufacturing phase of battery cells and battery packs, and their use, second use, recycling and disposal in a circular economy context. Cf. COM(2018) 293 final, Annex 2.

[31] https://ec.europa.eu/transport/modes/road/news/2017-05-31-europe-on-the-move_en
http://europa.eu/rapid/press-release_IP-17-4242_en.htm
http://europa.eu/rapid/press-release_IP-17-4242_en.htm

[32] See also KPI N°4




**Source:** European Environment Agency (EEA), Briefing No 15/2018
**Target:** By 2021, the fleet average emission to be achieved by all new cars is 95 grams of CO2 per kilometre.

Manufacturers will have to reduce emissions further to meet the targets of 95 g $CO_2$/km by 2021 for cars and 147 g $CO_2$/km by 2020 for vans.

Based on laboratory tests, a **new van sold in the EU in 2017** emitted on average 156 grams of $CO_2$ per kilometre, which is below the 2017 target of 175 g. In 2017, those vehicles emit 7,7 g less $CO_2$/km than those sold in 2016. This is the highest annual reduction since $CO_2$ standards for vans came into force. However, further efficiency improvements are still needed to reach the target of 147 g $CO_2$/km set for 2020.

In 2015, the so-called "Dieselgate scandal" revealed that some carmakers were using "defeat devices" to produce significantly lower emissions during official tests than during normal driving. A recent Briefing paper issued by the European Court of Auditors (ECA)[33] presents the main actions taken at EU and Member State level and describes changes made to the system for measuring vehicle emissions after September 2015. Many legislative changes have been introduced to the EU system of vehicle emissions checks such as changes related to the role of the European Commission, the testing of vehicles in circulation, the laboratory test, *et cetera* (see box below).

**Laboratory versus real-world conditions**

For the annual compliance check with $CO_2$ targets, all EU Member States report $CO_2$ emission levels from new vehicles annually. These are measured under standardised

[33] *"The EU's response to the "dieselgate" scandal"*, ECA, Briefing Paper, February 2019

laboratory conditions, following the requirements of the New European Driving Cycle (NEDC) test procedure for type-approval. This cycle provides $CO_2$ emission values that are comparable between different vehicles and manufacturers, but it does not necessarily represent real-world driving conditions.

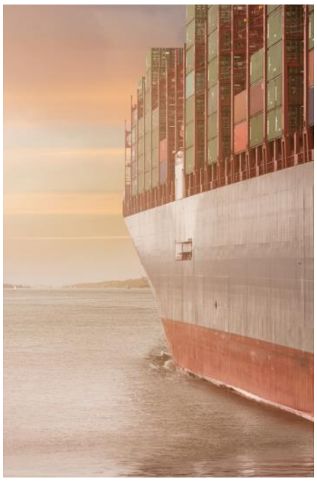
There is now wide recognition of the increasing divergence between real-world $CO_2$ emissions and those measured according to the NEDC test procedure. In order to address this increasing gap, the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) has been mandatory in the EU for all new vehicle types since September 2017 and will be mandatory for all new passenger cars from September 2018. Starting from 2021, the emissions targets will be based on the WLTP.

***Towards a successful transport sector in the EU: challenges to be addressed***
***Landscape Review***

In December 2018, the European Court of Auditors published a '**Landscape review'** that describes and analyses what the EU does in the **field of transport.** It focuses on infrastructure investments funded by the EU budget and also presents a state of play in key areas such as the **decarbonisation of transport**.

Drawing from its observations and recommendations, the Court made a horizontal review of the **key challenges** faced by the development and financing of transport in the EU. In particular, it noted that **shifting goods from roads to other more environmentally friendly transport modes** such as rail and maritime/inland waterways could help reduce transport emissions, which are mainly concentrated in the road sector.

### The monitoring, reporting and verification (MRV) system for EU shipping



**GHG emissions from the maritime sector** are substantial and are likely to increase significantly in the future if nothing is done. As a first step to reduce emissions from this sector, the EU has put in place a system for the monitoring, reporting and verification of $CO_2$ emissions from maritime transport[34]. From January 2018, large ships using ports in the European Economic Area are required to monitor their $CO_2$ emissions on a per voyage basis. In 2019, these ships will have to report their verified annual aggregated $CO_2$ emissions.

In 2018, the EU prepared a proposal to revise EU legislation in order to take appropriate account of the global data collection system for fuel oil consumption of ships established by the International Maritime Organisation (IMO). The proposal aims to facilitate the harmonious implementation of the two systems, while preserving the objectives of the current EU legislation.

Finally, DG CLIMA is taking action to reduce GHG emissions from the aviation sector in Europe and works with the international community to develop measures with global

[34] Regulation (EU) 2015/757

reach. Domestically, $CO_2$ emissions from aviation have been included in the EU emissions trading system (EU ETS) since 2012 (see SO 1 related to the EU ETS). DG CLIMA is also particularly involved in the work performed by the International Civil Aviation Organisation (ICAO) (See SO7 on international negotiations).

### SO 4: Increased resilience of EU society against the effects of climate change by 2020 via effective support to MS respecting the subsidiarity principle (adaptation)

The Paris Agreement calls on Parties to **increase the resilience** of their societies, decrease vulnerability to climate change and enhance their capacity to adapt.

The urgency of global climate action was highlighted by the international scientific community in the recent report of the Intergovernmental Panel on Climate Change (IPCC), which announced that temperatures have already risen by 1 °C because of human activity and that the planet could pass the 1,5 °C threshold as early as 2030 if emissions continue at the current rate.

The EU's 2013 strategy on adaptation to climate change aimed to make Europe more climate-resilient, focusing on three key objectives: promoting action by Member States, 'climate-proofing' action at EU level and supporting better-informed decision-making.

Commissioner for Climate Action and Energy Miguel **Arias Cañete** said: *"Our collective work on **adaptation** has shown we not only know more but can also do more to prevent the worst climate impacts projected by 2050. The need to adapt remains and it has actually grown, as impacts of past emissions unfold through heatwaves, storms, forest fires at high latitudes or destructive floods. This evaluation provides a credible basis for the EU policy on adaptation to explore new directions, improvements and also alignment with international developments since 2013."*

**Evaluation of the EU Adaptation Strategy**

On 12 November 2018, DG CLIMA released its report on **the evaluation of the 2013 EU Adaptation Strategy**[35]. Adapting the EU regions and economic sectors to the impacts of climate change is now more urgent than forecast in the EU's 2013 adaptation strategy.

The evaluation shows that the strategy **has delivered on its objectives, with progress recorded against each of its eight individual actions.** Between 2013 and 2018, the number of Member States with a national adaptation strategy went from 15 to 25. The EU has been promoting and monitoring actions through LIFE projects and the

[35] SWD(2018) 461

Covenant of Mayors for Climate and Energy. It has contributed to improve adaptation knowledge and has guided a wide range of the EU's own key policies and funding programmes. The report nevertheless outlines how Europe is still vulnerable to climate impacts within and outside its borders. The Commission's PESETA III project has identified a range of those impacts in Europe and provided some insights into socio-economic consequences and adaptation options.

Adaptation can and should be a **powerful ally of sustainable development and disaster risk reduction efforts.** EU policy must seek to create synergies between the three policies to avoid future damage and provide for long-term economic and social welfare in Europe and in partner countries. The evaluation also suggests areas where more work needs to be done to prepare vulnerable regions and sectors and provided food for thought for the UN climate change conference (COP24) that took place in December 2018 in Katowice, as well as adaptation reporting requirements in the context of the governance of the Energy Union.

**Key findings:**

- The current strategy is still relevant and the Commission will be guided by its objectives. Important lessons have been learned in the evaluation process. The strategy has been a reference point to prepare Europe for the climate impacts to come, at all levels.
- Knowledge, adaptation modelling and region-specific intelligence has been generated by the EU's Horizon 2020 research programme and projects and by the Commission's own internal scientific services (Joint Research Centre).
- Major infrastructure projects financed by the EU budget have become climate-proof and will withstand sea level rise, flooding or intense heat.
- In the future, effort must be made to ensure most or all EU cities count on a thorough adaptation plan to protect citizens from both extreme and slow-onset climate hazards. The plans should also cater for specific vulnerabilities of certain communities, e.g. the EU's Outermost Regions, and the different risks faced by the very diverse regions on the European continent.
- Adaptation must support and be supported by the protection of the EU's biodiversity (also known as nature-based solutions).
- The contribution of the private sector to enhance society's resilience must be encouraged: the Commission's efforts will continue to be channelled through its Action Plan on Financing Sustainable Growth and the subsequent legislative proposals adopted in 2018.
- Climate services for specific adaptation needs should develop into business opportunities, based on reliable and standardised data and the incentives provided by Copernicus and other European Earth observation initiatives.

**The evaluation package** contains assessments of each of the Member States' national adaptation strategies[36] (or the process leading to those strategies, where they are not yet adopted). A report[37] has been sent to the European Parliament and to the Council of the EU.

[36] SWD(2018) 460

[37] COM(2018) 738

In addition, in 2018 **the EU Covenant of Mayors,** which brings together more than 9 200 local and regional authorities across the Europe, celebrated its 10th anniversary. The event showcased how local governments develop integrated climate change mitigation and adaptation strategies to improve the energy efficiency of buildings, transport or lighting, make greater use of renewable energy, and brace for climate hazards. By implementing and funding the Covenant of Mayors office, DG CLIMA and DG ENER inform, mobilise and support local authorities. The Commission also ensures that the relevant EU funds and financial instruments can support the Covenant signatories in their actions.

## SO 5: Optimisation and sound and efficient management of financial incentives 2014-20 to support the innovation-based shift towards a low carbon and climate-resilient EU economy (through the EU budget 2014-2020 and the (ETS) funds, in cooperation with all DGs)

### LIFE programme

The LIFE programme is the EU's funding instrument for the environment and climate action. It has been running since 1992 and has co-financed more than 4500 projects across the EU and in third countries. The programme has contributed over EUR 4 bn to the protection of the environment and climate and mobilised over EUR 9 bn in total. At any given moment, some 1 100 projects are ongoing. The budget for the LIFE Programme for 2014–2020 is set at EUR 3,4 bn, and has sub-programmes for environment and climate action.

**LIFE Climate Action** supports projects in the development of innovative ways to respond to the challenges of climate change in Europe. It supports mitigation and adaptation projects and will provide EUR 864 m in co-financing for climate projects between 2014 and 2020. Beneficiaries from 23 Member States have been awarded funding, with Italy and Spain attracting the most.

**Success story of a LIFE action grant**

LIFE VINEYARDS4HEAT (V4H)[38] - Vineyards for carbon footprint reduction: a sustainable strategy to use biomass for heat and cold in wineries. (June 2014 to May 2017, EU contribution EUR 518 473, of the EUR 1,3 m budget)

From an environmental point of view, the European wine sector faces challenges. EU growers currently produce more than 25 m tonnes of woody remains from pruning every year. Most of this waste is left to decompose or is burnt in situ. The field burning of agricultural residue produces methane ($CH_4$) and nitrous oxide ($N_2O$), both greenhouse gases.

The VINEYARDS4HEAT project demonstrated how farmers could use agricultural biomass from vine pruning as a local source of renewable energy. Rather than going to waste, this biomass has been providing clean and affordable heat. The project results are already yielding environmental, economic and social benefits for the Penedès region (Catalonia) by cutting local energy bills, reducing greenhouse

[38] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5085

gas emissions and leading to the creation of green jobs. The biomass boilers installed generate over 400 000 kWh of thermal energy each year. The project has prevented some 240 tonnes of $CO_2$ emissions.

The project could benefit the winemaking sector at large. It field-tested a solution for other vineyards to cut their carbon footprint in the future and laid down the technical and managerial groundwork to demonstrate the benefits of its so-called Vineyards Virtuous Circle (VVC). The project has reached out to the broader public through dissemination activities, and has set out a long-term strategy to extend the VCC model across vineyards in other regions.

During the EU Green Week 2018, the EU awarded the best LIFE projects in the categories of nature, environment and climate action. The LIFE Awards recognise the most innovative, inspirational and effective LIFE projects. In the field of climate action, the following three outstanding projects received the "Best LIFE project" award:

- **LIFE+ AGRICARBON (Spain)**[39] – Helped farmers in southern Spain switch to more sustainable and precise agricultural techniques that were found to store 30 % more carbon in the soil.
- **Crops for better soil (Spain)**[40] – Showed that organic farming methods can return carbon content to vulnerable soils and make them economically viable again.
- **EKO-LIFE (Austria)**[41] – Encouraged citizens of the Vorarlberg region to reduce their carbon footprint through lifestyle changes, and then become 'change ambassadors' to multiply the impact.

If applied widely, these projects can have a highly positive impact on the environment, boosting economic growth and providing significant benefits for European citizens.

In addition to grants for projects and organisations, the LIFE programme supports climate action through two **financial instruments,** the Private Finance for Energy Efficiency (PF4EE) and the Natural Capital Financing Facility (NCFF) which are implemented by the European Investment Bank (EIB).

The **Private Finance for Energy Efficiency (PF4EE)** provides access to affordable commercial financing for energy efficiency investments. It thus supports Member States in making progress towards the EU's energy efficiency targets. The management of the instrument is entrusted to the European Investment Bank (EIB). Thanks to the EUR 72 m guarantee provided by the LIFE programme, the EIB can sign long-term loans with commercial banks that will enable them to finance final recipients (i.e. residential housing companies and businesses) at more favourable conditions. At the outset of the PF4EE, support of total investment up to about EUR 540 m was expected. By the end of 2018,

[39]http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.createPage&s_ref=LIFE08%20ENV/E/000129

[40] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3921

[41] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3921

nine agreements were signed with intermediary banks. Implementation of operations on the ground have started in six countries[42]. So far, a total sum of EUR 54,5 m has been guaranteed, out of which only EUR 17,3 m has been used to back up loans to final recipients worth EUR 54,2 m. Since the signature of the first collateral agreement, investments supported by the PF4EE have generated primary energy savings of 124,39 Gwh/year and reduced the level of $CO_2$ emissions by 28 219 tons of $CO_2$. Nevertheless, the deployment has been more challenging and slower than expected. The EIB launched a new call of expression of interest in December 2018 and has identified potential applicants among commercial banks in four additional Member States[43]. Further measures are being put in place to reinforce the capacity and knowledge of participating banks, and to simplify the procedures both for the banks and their clients.

**PF4EE project - Energy efficiency in social housing**

Thanks to the loan provided by BELFIUS Bank under the PF4EE, on 15 June 2016, the EDF Luminus Company and the Anderlechtse Haard – a large social housing company in Brussels managing 3 700 social flats - signed the **first multisite energy efficiency agreement** in Belgium that aims to improve energy performance of the technical equipment of buildings. Different measures will be implemented such as the installation of thermostatic valves, electrical equipment, solar panels etc.

With a total lending of EUR 3,75 m coming from the PF4EE (representing 90 % of the total investment cost) this provides Anderlechtse Haard with an affordable commercial financing for their investments that will make them save 5 324 000 kWh on a yearly basis, representing a 52 % reduction of electricity consumption and a 10 % reduction of gas consumption. Thanks to the savings of EUR 266 000 on its energy bill, the social housing company will pay back its investment within 12 years.

This project is a perfect example of how the Private Finance for Energy Efficiency (PF4EE) addresses the limited access to adequate and affordable commercial financing for energy efficiency investments. It is also a very tangible step towards meeting European's climate and energy efficiency target of minus 20% by 2020 and minus 32,5% by 2030.

The **Natural Capital Financing Facility (NCFF)** provides funding to support projects promoting the preservation of natural capital in the Member States, including adaptation to climate change. The main aim is to demonstrate that natural capital projects can generate revenues or save costs whilst delivering on biodiversity and climate adaptation objectives. The total budget for the Investment Facility amounts to between EUR 100 and EUR 125 m for 2014 - 2021. Between nine and 12 operations are expected to be financed until the end of 2021. Following the recommendations of the mid-term evaluation of the LIFE programme, several adjustments have been introduced in the management of the NCFF in agreement with the EIB. These include more flexibility on the provision of technical assistance, the prolongation of the implementation period without additional financing, the opening of a guarantee facility and some targeted promotional activities to stimulate the potential demand.

[42] Czech Republic, Spain, France, Portugal, Italy and Belgium.

[43] Poland, Austria, Latvia and Slovenia.

The first operation under the NCFF was signed in 2017. In 2018, the following three projects were signed:

- EUR 12,5 m invested in a specialised fund focusing on sustainable forestry in Ireland
- EUR 15 m to develop a new area of business in pro-nature areas in Croatia such as eco-tourism, sustainable agriculture and forestry and development of nature-based solutions to support climate adaptation
- EUR 5 m to support the implementation of nature-based adaptation solutions outlined in the Athens Resilience Strategy for 2030 to enhance the overall resilience of the city to climate change (see box below)

**Athens Resilient City and Natural Capital**

*Urban resilience and climate adaptation in Greece*

Amount: EUR 5m

Country: Greece

Signed: July 2018

***In July 2018 the EIB signed a EUR 5m loan to the City of Athens to support the implementation of its 2030 Resilience Strategy.***

***Investments enhancing the city's green and blue infrastructure will be supported. Examples of what the loan can support include regeneration and greening of public and abandoned spaces; unsealing of surfaces to improve water infiltration; sustainable urban drainage systems to mitigate flash floods; creation of green corridors between greened areas; and natural restoration of Lycabettus hill.***

***Athens is the first city in Greece to have developed an integrated Climate Action Plan for adaptation and mitigation.***

Source: European Investment Bank Group

### NER 300 programme and Innovation Fund

NER 300 is one of the world's largest funding programmes for innovative low-carbon energy demonstration projects. Some 39 projects in renewable energy and carbon capture and storage in 20 different Member States have been awarded EUR 2,1 bn in funding from the auction of 300 m ETS allowances.

Six projects have gone into operation, while 11 have reached the final investment decision stage. The projects in operation represent EUR 2,463 bn of total investments, against NER 300 awards of EUR 260 m. They generate 3,1 TWh eq. of renewable electricity a year, which results in annual savings of 1,3 Mt $CO_2$.

Nordsee One is a 332 MW offshore wind project built between December 2015 and December 2017. It is one of the first projects to successfully deploy a 6 MW wind turbine on a giant monopile foundation. The turbines are equipped with various innovative features, including stronger bearings and blades designed to harvest more wind and therefore increase power output. The project is designed to sell power to approximately 400 000 households for at least 25 years.

It has been awarded EUR 70 m NER 300 programme funding.

In the revision of the ETS Directive, an Innovation Fund was created to support innovation in low-carbon technologies and processes. The Innovation Fund will build on the lessons learned and the experience from the existing NER 300 programme, but will have a broader scope. It will be financed through the monetisation of at least 450 m ETS allowances.

In October 2018, the European Court of Auditors (ECA) published a Special Report on "Demonstrating carbon capture and storage and innovative renewables at commercial scale in the EU"[44]. This report identified several weaknesses in the current governance of the NER 300 programme and issued a series of recommendations. Those recommendations were taken into account during the preparation and the design of the Innovation Fund. For example, issues raised by the ECA concerning the project selection and decision making procedures, the flexibility of the future instrument to respond to market and technology developments and measures to ensure accountability were assessed and included in the proposal on the Innovation Fund made by the Commission. Concretely, the programme implementation and selection procedures were streamlined at the EU level. Further, up to 40% of the support will be provided as pre-payment, before financial close of projects, while the remaining support will be provided along the project construction and operation, in function of the specific financing needs of projects. The Innovation Fund will thus share the risk with investors in these new technologies, and not only reward successful projects ex-post as was the case under the NER300 programme.

### Sustainable Finance

However, **public money will not be enough** — the financial sector must throw its full weight behind the fight against climate change. To meet our Paris targets, the EU needs around EUR 180 bn in extra investment every year until 2030 in energy efficiency, renewable energy and clean transport. In March 2018, the EU presented the beginning of its strategy for a financial system that supports the EU's climate and sustainable development agenda with the first-ever **EU Action Plan on Sustainable Finance**[45].

[44] Special report N°24/2018

[45] COM/2018/097 final

The **Action plan** consists of 10 ambitious legislative and non-legislative measures to mobilise finance for sustainable investments and sustainable growth. The first legal proposals were put on table in May 2018, including a proposal to agree on an EU-wide classification system — or 'taxonomy' — that will lead to common definitions for what is green and what is not. This would help investors easily recognise and fund climate-friendly activities. The taxonomy will also enable the development of EU labels for green financial products, green bonds and funds. More and more people want their savings to be invested in environment-friendly projects, but face difficulties in finding an easy and trustworthy offer. The EU's financial sector – and capital markets in particular – have the potential to become global leaders in this ambitious agenda, inspiring others to follow. The low carbon transition is not only inevitable, but can also create new opportunities: in 2014, private investments in EU circular economy sectors were already estimated at EUR 120 bn, which is equivalent to 0,8 % GDP, an increase of 58 % since 2008.

### EU long-term budget 2021-2027 – LIFE budget and climate mainstreaming

In May 2018 the Commission proposed its long-term budget (multi-annual financial framework) 2021-2027.

Climate Action and Energy Commissioner Miguel Arias Cañete said: *"A **stronger LIFE programme** will play an important role in expanding investments in climate action and clean energy across Europe. By continuing to support climate change mitigation and adaptation, LIFE will also continue to help the EU deliver on its climate goals and commitments under the Paris Agreement and the United Nations Sustainable Development Goals."*

For the next long-term EU budget 2021-2027, the Commission has proposed to **increase funding by almost 60 % for LIFE**, the EU programme for the environment and climate action. This represents the largest proportional increase among the EU funding programmes, with a proposed budget of EUR 5,45 bn between 2021 and 2027.

In addition, the Commission has **integrated climate action into all major EU spending programmes** (also called "climate mainstreaming"), in particular cohesion policy, regional development, energy, transport, research and innovation, the Common Agricultural Policy as well as the EU's development policy, making the EU budget a driver of sustainability. The EU set out to spend an average of at least 20% of its budget on climate-relevant expenditure in 2014-2020. The latest available data show that such expenditure accounted for 20,1% of the budget in 2017[46]. On average, the budget trend would deliver EUR 206 bn (19,3% of the budget) under the current multiannual financial framework (MFF).

Building on this success, in May 2018 the Commission proposed to raise the level of ambition for climate mainstreaming across all EU programmes, with a target of 25 % of EU expenditure contributing to climate objectives. This 25 % target equates to EUR 320 bn, an increase of EUR 114 bn in comparison to the 2014-2020 period.

[46] SEC(2018) 250

## SO 6: Implementation of the Energy Union Strategy towards an enhanced climate and energy governance mechanism including streamlined reporting and planning post 2020 (coordination with DG ENER)

In 2018, DG CLIMA provided its expertise and support to ensure agreement by the co-legislators on **the regulation on the governance of the energy union and climate action.** The Regulation was adopted in December 2018[47] as part of the "Clean Energy for All Europeans" package.

The **new governance system** will help to ensure that the EU and its Member States achieve their 2030 goals as regards GHG emission reductions, renewables and energy efficiency. It ensures a transparent and coordinated planning, reporting and monitoring process, and promote closer cooperation between EU countries in these areas. It provides consistent monitoring mechanisms for calculating the greenhouse gas emissions so that the EU meets its reporting obligations under the Paris Agreement.

As part of the governance system, each Member State is invited to present their policies and measures towards 2030 in **national energy and climate plans (NECPs)** for the period 2021-2030. Under these NECPs, Member States are expected to propose ambitious policies and measures to ensure that they meet their ETS, Effort Sharing and LULUCF targets. In that context, DG CLIMA provided technical assistance and capacity building to support Member States to improve GHG inventories and GHG projections. By the end of 2018, 19 Member States had submitted their draft NECPs to the Commission but in the meantime all other Member States have also done so. These draft plans will be analysed by the Commission, who may issue recommendations for their improvements, and are due to be finalised by Member States by the end of 2019.

In addition, progress towards climate targets are analysed every year in the context of the European Semester, a yearly cycle of economic policy coordination.

## SO 7: Ambitious contribution to effective international negotiations on climate action (including bilateral cooperation and climate diplomacy, UNFCCC, Kyoto, Paris, ICAO, IMO) and ozone layer (Montreal) related

The EU is responsible for only 10 % of global greenhouse gas emissions, the effective fight against climate change requires action from all countries across the world. To promote ambitious global action, DG CLIMA has a key leading role in the EU's participation in international negotiations on climate related topics.

### COP 24 in Katowice

On the international stage, EU action aims for the implementation of the ambitious climate action deal agreed by all United Nations Framework Convention on Climate Change (UNFCCC) Parties at the conference in Paris in December 2015.

Three years after the adoption of the Paris Agreement, the 24th Conference of the Parties to the UNFCCC (COP24) took place in Katowice,

COP24·KATOWICE 2018
KONFERENCJA NARODÓW ZJEDNOCZONYCH
W SPRAWIE ZMIAN KLIMATU

[47] Regulation (EU) 2018/1999 of 11 December 2018

Poland, in December 2018. Back in 2015, Parties agreed to finalise by 2018 the rules and guidelines needed to enable the implementation of the Paris Agreement. The EU went to COP24 with one key objective: to adopt an ambitious, clear and comprehensive rulebook that will enable countries round the world to implement the Paris Agreement on the ground. In Katowice, the EU negotiated the "Katowice rulebook", i.e. a 'manual' that will allow for a global implementation of the goals of the Paris Agreement, and adopted **common rules and guidelines in all key areas** (mitigation, adaptation, finance), as well as a universal transparency and accountability system.

At the core of the Katowice rulebook are the modalities, procedures and guidelines of the transparency framework with common rules to **track countries' progress** with their nationally determined contributions and adaptation efforts.

The rulebook also strengthens the principle that all **finance flows must be made sustainable** and support the fight against climate change. This represents a major shift in the political discourse of climate finance.

Next to the adoption of the rulebook, a key deliverable of COP24 was the **Facilitative ''Talanoa'' Dialogue**, where Parties considered how to promote more ambitious climate action now and in their next round of national climate commitments.

Against the backdrop of a challenging geopolitical situation, the outcome demonstrated that multilateral processes remain valid and relevant platforms for tackling global challenges. Working effectively with range of allies and coalition partners across the different geographical groupings the EU played a pivotal role in brokering a deal that secured robust and operational rules that cater for maximum transparency and tracking of progress on different countries targets. The EU's climate diplomacy efforts carried out through the extensive network of EU Delegations around the world contributed to this outcome

### Other multilateral and bilateral cooperation

In parallel to COP24, the EU continued to promote bilateral and multilateral measures that go in the same direction as the Paris Agreement.

The EU, China and Canada played a pivotal role in leading this process through the already established **Ministerial on Climate Action (MoCA)**. The EU demonstrated leadership by promoting a conversation concerning ambition amongst the major economies, who are also the world's major emitters.

In May 2018, for the second year in a row, carbon market experts from around the globe gathered for a workshop in Florence, Italy. The **Florence Process** brings together representatives of key jurisdictions with emissions trading programs **including the EU, China, California, Canada, Quebec, New Zealand, and others**, in order to address issues of common interest. It is a unique forum for exchange, mutual learning and enhanced cooperation between carbon markets. The participants provided an update on most recent developments in their respective carbon markets and discussed future **perspectives of carbon market cooperation** with a panel of experts.

In 2018, the first carbon market linking agreement was ratified by the European Parliament and the Council. It links the EU ETS with the Swiss emissions trading system. This will allow participants in the EU ETS to use allowances from the Swiss system for compliance and vice versa. It expands opportunities for cutting emissions and the economies of scale, thereby reducing the cost of fighting climate change.

At the **China-EU Summit** in July 2018, both sides reaffirmed their commitment to advance the implementation of the Paris Agreement and intensify their cooperation on climate change and clean energy. They also acknowledged emissions trading as a cost-effective policy tool with significant potential to contribute to a low-carbon economy and the necessary innovation and deployment of low carbon technologies.

Climate Action and Energy Commissioner Miguel Arias Cañete said: "Further developing **cooperation between the two largest emission trading systems** of the world is not only in our mutual interest but also necessary to tackle common challenges in the mid- and longer term."

The EU stressed the need to see climate action as a central element for the modernisation of European economy and industry at the **Global Climate Action Summit (GCAS)** that took place in San Francisco, California in September 2018. Organised by the Governor of California, Jerry Brown, the summit highlighted the central role of non-state actors in climate action. At this summit, the **EU and California** Governor Jerry Brown agreed to strengthen bilateral cooperation on carbon markets. They renewed and deepened their joint commitment for a greater alignment of their respective carbon market and for collaborating closely on carbon pricing.

Finally, in the margins of the COP 24 negotiations in Katowice, the EU and **New Zealand** agreed to **strengthen their bilateral cooperation on emissions trading systems.** They agreed to step up their cooperation, intensifying exchanges on carbon markets to best contribute to the objectives of the Paris Agreement and together contribute to the promotion of emissions trading as a climate mitigation policy. Regular technical and policy meetings will be held to discuss the key design features and implementation of their emissions trading systems, respective developments and possible implementation challenges, with a view to exploring options towards enhanced cooperation between the two systems.

### Kigali amendment to the Montreal Protocol

In 2018, the EU ratified the **Kigali Amendment to the Montreal Protocol**, which will bring about a global phasedown of hydrofluorocarbons (HFCs), which are powerful greenhouse gases.

HFCs, used mainly in refrigeration, air conditioning and heat pump equipment, are thousands of times more harmful to the climate than $CO_2$. In response to the rapid growth of HFC emissions, the 197 parties to the Montreal Protocol adopted the Kigali Amendment in 2016 to reduce gradually their global production and consumption.

Global implementation of the Kigali Amendment would prevent up to 80 bn tonnes $CO_2$ equivalent of emissions by 2050. The EU decided to tackle the use of HFCs in its domestic legislation starting in 2015 (see Specific Objective 2 above). This truly ambitious practice goes far beyond the current obligations under the Protocol, which foresees the beginning of the phasing down only in 2019.

### International action in the field of aviation and maritime transport

With air traffic steadily growing, both in the EU and globally, the share of aviation as part of transport emissions has gradually increased, making the aviation industry's contribution to the fight against climate change ever more important.

As part of the international cooperation on climate change, DG CLIMA was actively involved in the work performed by the **International Civil Aviation Organization (ICAO)**. In 2018, the ICAO Council made some progress towards establishing rules of the **Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)** to compensate aviation emissions beyond 2020 levels. Key rules for the effectiveness of the scheme are still to be agreed, for example concerning the avoidance of double counting, sustainable criteria for eligible fuels etc. Offsetting allows airline companies to compensate for their emissions by financing a reduction in emissions elsewhere, but this is actually useful only if the EU and its Member States are playing a central role in pushing for an environmentally meaningful outcome. Participation and implementation by all states around the world will be fundamental for the system to deliver on its objectives.

In 2018, the EU was actively engaged within the **International Maritime Organisation (IMO)**, the UN agency overseeing international shipping. Shipping currently represents 2-3 % of global $CO_2$ emissions and this could reach 10 % by 2050 if no action is taken. In spring 2018 an initial IMO strategy was adopted to reduce greenhouse gas (GHG) emissions from international shipping. During these talks, the EU advocated the highest level of ambition and played an instrumental role in securing this deal with our international partners. The strategy contains a clear GHG emission reduction objective of at least 50 % by 2050 compared to 2008 levels, with a view to phase out the GHG emissions of the sector as soon as possible this century.

# 2. ORGANISATIONAL MANAGEMENT AND INTERNAL CONTROL

This section explains *how* the DG delivered the achievements described in the previous section. It is divided into two subsections.

The first subsection reports the control results and all other relevant information that support management's assurance on the achievement of the financial management and internal control objectives[48]. It includes any additional information necessary to establish that the available evidence is reliable, complete and comprehensive, and that it appropriately covers all activities, programmes and management modes relevant to the DG.

The second subsection deals with the other components of organisational management: human resources, better regulation principles, information management and external communication.

## 2.1 Financial management and internal control

Assurance is an objective examination of evidence provides an assessment of the effectiveness of risk management, control and governance processes.

This examination is carried out by management, which monitors the functioning of the internal control systems on a continuous basis, and by internal and external auditors. Its results are explicitly documented and reported to the Director General. The reports produced are:

- the annual reports and declarations by AOD and AOSDs in which all financial transactions are verified

- the reports from Authorising Officers in other DGs managing budget appropriations in cross-delegation

- the reports on control results from entrusted entities in indirect management such as the European Investment Bank (EIB) as well as the result of the Commission supervisory controls on the activities of these bodies and participation as observer in the management board meetings of the Executive Agency for Small and Medium-sized Enterprises (EASME)

- the contribution by the Director in charge of Risk Management and Internal Control Coordinator, including the results of internal control monitoring at the DG level

- the reports on recorded exceptions, non-compliance events and any cases of 'confirmation of instructions' (Art 92.3 FR)

- the reports of the ex-post audits

- the limited conclusion of the Internal Auditor on the state of internal control, and the observations and recommendations reported by the Internal Audit Service (IAS)

- the observations and the recommendations reported by the European Court of Auditors (ECA)

- The annual review report of the DG Climate Action Advisory Committee on public

[48] Art 36.2 FR: a) effectiveness, efficiency and economy of operations; b) reliability of reporting; c) safeguarding of assets and information; d) prevention, detection, correction and follow-up of fraud and irregularities; and e) adequate management of risks relating to the legality and regularity of underlying transactions

procurement (CPAC report)

- DG Climate Action Risk Advisory Committee; embedded in the meeting of senior management on resources

- Periodic report and dashboards to management on resource issues.

These reports result from a systematic analysis of the evidence available. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in a complete coverage of the budget delegated to the Director General of DG CLIMA.

This section reports the control results and other relevant elements that support management's assurance. The structure is as follows: (a) Control results, (b) Audit observations and recommendations, (c) Effectiveness of the internal control system, resulting in (d) Conclusions on the impact as regards assurance.

### 2.1.1 Control results

This section reports and assesses the elements identified by management that support the assurance on the achievement of the internal control objectives[49]. The DG's assurance building and materiality criteria are outlined in the AAR Annex 4. Annex 5 outlines the main risks together with the control processes aimed at mitigating them and the indicators used to measure the performance of the relevant control systems.

## Financial Overview

**DG CLIMA's overall responsibilities for the budget "Climate Action"**

DG CLIMA activities are associated with the Title 34 "Climate Action" of the budget of the European Commission, coordinates and monitors its implementation. Title 34 contains expenditure related to:

- administrative expenditure in the 'climate action' policy area
- climate action at Union and international level

The table that follows gives a financial overview of Title 34.

[49] 1) Effectiveness, efficiency and economy of operations; 2) reliability of reporting; 3) safeguarding of assets and information; 4) prevention, detection, correction and follow-up of fraud and irregularities; and 5) adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programs as well as the nature of the payments (FR Art 36.2). *The 2nd and/or 3rd Internal Control Objective(s) (ICO) only when applicable, given the DG's activities.*

**Financial overview Title 34 "Climate Action"**

| Title Chapter | Heading | Commitments (M EUR) | | Payments (M EUR) | |
|---|---|---|---|---|---|
| | | Commitment Appropriations | Commitments made | Payment Appropriations | Payments Made |
| 34 01 | Administrative Expenditure in the "Climate Action" policy area | 6,9 | 6,7 | 6,9 | 3,4 |
| 34 02 | Climate action at Union and international level | 128,6 | 128,5 | 60,8 | 58.5 |
| **34** | **Title 34 total** | **135,5** | **135,2** | **67,7** | **61,9** |

Please note that the expenditure related to officials and temporary staff in the "Climate Action" policy area is managed by PMO, and therefore the relevant amounts are not included in the tables that follow.

Of the two items presented in the table above, the expenditure related to climate action at Union and international level represents the more important part in quantitative terms. This report will therefore focus primarily on this part of the budget. The table below provides an overview of the budget implementation on 31 December 2018.

**Financial overview of operational expenditure title 34 "Climate Action"**

| Expenditure | Commitments (M EUR) | | Payments (M EUR) | |
|---|---|---|---|---|
| | Commitment Appropriations | Commitments made | Payment Appropriations | Payments Made |
| *Support expenditure for the programme for the environment and climate action (LIFE) – Sub-programme for climate action (34 01 04 01) ** | 3,3 | 3,1 | 3,3 | 0,5 |
| Reducing Union greenhouse gas emissions (34 02 01) | 74,5 | 74,4 | 29,6 | 28,2 |
| Increasing the resilience of the Union to climate change (34 02 02) | 38,0 | 38,0 | 19,0 | 18,9 |
| Better climate governance and information at all levels (34 02 03) | 14,0 | 14,0 | 10,7 | 10,1 |
| Contribution to multilateral and international climate agreements (34 02 04) | 0,9 | 0,9 | 0,9 | 0,9 |
| European Solidarity Corps – Contribution from the LIFE sub-programme for climate action (34 02 05) | 0,5 | 0,5 | 0,4 | 0,4 |
| Completion of former climate action programmes (34 02 51) | 0,0 | 0,0 | 0,0 | 0,0 |
| Pilot projects and preparatory actions (34 02 77) | 0,7 | 0,7 | 0,4 | 0,0 |
| **TOTAL** | **131,9** | **131,6** | **64,1** | **59,0** |

*Non-differentiated appropriations, automatic carry-over of payment appropriations to 2019 for the amount of RAL

The table that follows gives an overview of the commitments made in 2018 under the operational budget of Title 34.

**Financial overview of commitments in year 2018 under title 34 "Climate Action"**

| *COMMITMENTS (M EUR)* | *Conventions* | *Financial Instruments* | *Grants* | *Procurement* | *Total* |
|---|---|---|---|---|---|
| *Support expenditure for the programme for the environment and climate action (LIFE) – Sub-programme for climate action (34 01 04 01)* | | | | 3,1 | 3,1 |
| Reducing Union greenhouse gas emissions (34 02 01) | | 25,0 | 37,7 | 11,8 | 74,4 |
| Increasing the resilience of the Union to climate change (34 02 02) | | | 35,9 | 2,1 | 38,0 |
| Better climate governance and information at all levels (34 02 03) | | | 9,4 | 4,6 | 14,0 |
| Contribution to multilateral and international climate agreements (34 02 04) | 0,9 | | | | 0,9 |
| European Solidarity Corps – Contribution from the LIFE sub-programme for climate action (34 02 05) | | | 0,5 | | 0,5 |
| Completion of former climate action programmes (34 02 51) | | | | | |
| Pilot projects and preparatory actions (34 02 77) | | | | 0,7 | 0,7 |
| **TOTAL** | **0,9** | **25,0** | **83,4** | **22,3** | **131,6** |

These figures confirm that the main method of implementing the budget in DG CLIMA in 2017 is still direct management (grants), as these represent 63.4 % of the total amount of commitments made. The table that follows gives an overview of the payments made in 2018 under the operational budget of Title 34.

**Financial overview of payments in year 2018 under title 34 "Climate Action"**

| *Payments (M EUR)* | Conventions | Financial Instruments | Grants | Procurement | Total |
|---|---|---|---|---|---|
| *Support expenditure for the programme for the environment and climate action (LIFE) – Sub-programme for climate action (34 01 04 01)* | | | | 0,5 | 0,5 |
| Reducing Union greenhouse gas emissions (34 02 01) | | 5,0 | 15,8 | 7,5 | 28,2 |
| Increasing the resilience of the Union to climate change (34 02 02) | | | 16,0 | 2,9 | 18,9 |
| Better climate governance and information at all levels (34 02 03) | | | 7,2 | 3,0 | 10,1 |
| Contribution to multilateral and international climate agreements (34 02 04) | 0,9 | | | | 0,9 |
| European Solidarity Corps – Contribution from the LIFE sub-programme for climate action (34 02 05) | | | 0,4 | | 0,4 |
| Completion of former climate action programmes (34 02 51) | | | | 0,0 | 0,0 |
| Pilot projects and preparatory actions (34 02 77) | | | | | |
| **TOTAL** | **0,9** | **5,0** | **39,3** | **13,9** | **59,0** |

DG CLIMA is accountable for the part of the budget it implements itself and for what has been implemented by DGs and services having received a cross sub-delegation from DG CLIMA. In 2018, DG CLIMA directly managed 58 % of its budget expressed in terms of payments. 42 % of the payments went to other entrusted bodies to be ultimately implemented by them. The table that follows focuses on the part of the budget implemented by DG CLIMA itself and from services having received a cross sub-delegation from DG CLIMA.

| Expenditure (M EUR) | 2018 commitment appropriations | 2018 commitments made | 2018 payment appropriations | 2018 payments made |
|---|---|---|---|---|
| **Administrative expenditure in the "Climate Action" Policy Area 34 01** | | | | |
| **Voted appropriations (C1) 34 01** | | | | |
| Administrative expenditure (34 01 02) | 1,6 | 1,6 | 0,4 (*) | 0,3(*) |
| LIFE support expenditure (34 01 04 01) | 2,0 | 1,9 | 2,0 | 0,5(*) |
| **Other appropriations (C4, C8) 34 01** | | | | |
| Administrative expenditure (34 01 02) | 0,0 | | 0,2 | 0,1 |
| LIFE support expenditure (34 01 04 01) | | | 1,4(*) | 1,4 |
| **Total 34 01** | **3,7** | **3,5** | **5,7** | **2,3** |
| | | | | |
| **Climate Action at Union and at international level in the "Climate Action" Policy Area 34 02** | | | | |
| **Voted appropriations (C1) 34 02** | | | | |
| Reducing Union greenhouse gas emissions (34 02 01) | 36,9 | 36,8 | 13,8 | 12,5 |
| Increasing the resilience of the Union to climate change (34 02 02) | 0,8 | 0,8 | 1,5 | 1,4 |
| Better climate governance and information at all levels (34 02 03) | 1,8 | 1,8 | 3,1 | 2,1 |
| Contribution to multilateral and international climate agreements (34 02 04) | 0,9 | 0,9 | 0,9 | 0,9 |
| Completion of former climate action programmes (34 02 51) | | | 0,0 | 0,0 |
| Pilot project - Making efficient use of Union climate finance: using roads as an early performance indicator for REDD+ projects (34 02 77 02) | 0,0 | | 0,0 | |
| Pilot project - Making efficient use of Union climate finance: using roads as an early performance indicator for REDD+ projects (34 02 77 03) | 0,0 | | 0,0 | |
| **Other appropriations (C5) 34 02** | | | | |
| Completion of former climate action programmes (34 02 51) | 0,0 | | 0,0 | |
| **Total 34 02** | **40,3** | **40,2** | **19,3** | **16,9** |
| **Grand total** | **44,0** | **43,7** | **25,0** | **19,2** |

** Non-differentiated appropriations, automatic carry-over of payment appropriations to 2019 for amount of RAL PMO is managing part of these payment appropriations. The amount indicated is the one which solely concerns DG CLIMA.*

# Cross sub-delegations

## Cross sub-delegations given

As mentioned above, DG CLIMA has entrusted parts of its budget to other DGs through cross sub-delegations given (to DGs ENER, ENV, JRC). In all these cases, the DG's supervision arrangements are based on a memorandum of understanding with delegated DGs and defined reporting obligations. All delegated AODs have given reasonable assurance in their reports on the correct use of funds (the legality and regularity of transactions and sound financial management).

**Overview of DG CLIMA funds implemented by other services, but where DG CLIMA is accountable**

| Fund Management Centre | Committed (M EUR) | Paid (M EUR) |
|---|---|---|
| **CLIMA/ENER** | | 0,40 |
| **CLIMA/ENV** | | 0,23 |
| **CLIMA/JRC** | | 0,09 |
| Total | | 0,72 |

## Cross sub-delegations received

On the other hand, DG CLIMA is also implementing parts of the budget of other DGs through cross sub-delegations received (from DG DEVCO, DG NEAR).

DG CLIMA is managing a small number of actions under cross sub-delegation agreements with DG DEVCO (GPGC- Global Public Goods and Challenges). The GPGC is part of the EU's response to helping developing countries tackle increasing environmental and climate challenges and contribute to the achievement of the global Sustainable Development Goals (SDGs). Through the GPGC, the EU has earmarked resources to help developing countries and partner organisations addressing environmental and natural resource and climate management issues.

DG CLIMA is also managing some contracts under cross sub-delegation agreements with DG NEAR (IPA-Instrument for Pre-Accession Assistance) aiming to support IPA II beneficiaries in their transition towards a low emission and climate-resilient economy.

**Overview of funds implemented by DG CLIMA, but where other DGs are accountable:**

| Fund Management Center | budget line | Committed (EUR) | | Paid (EUR) | |
|---|---|---|---|---|---|
| DEVCO/CLIMA | 21 02 07 01 | L1 | 2.200.000,00 | on C1 | 4.100.000,00 |
| | 21 02 07 01 | L2 | 5.900.000,00 | on RAL | 3.389.652,44 |
| | | **sub-total** | **8.100.000,00** | **sub-total** | **7.489.652,44** |
| | 21 02 05 61 | | | RAL | 564.534,98 |
| | | **total** | **8.100.000,00** | **total** | **8.054.187,42** |
| NEAR/CLIMA | 22 02 04 01 | | | RAL | 148.171,40 |

DG CLIMA has given reasonable assurance in its reports to the AODs on the correct use of funds.

### Co-delegations

The major part of the budget under Title 34 (LIFE action grants) is implemented through a type I co-delegation[50] to the Executive Agency EASME. A smaller part of the budget is implemented by other DGs under a type II co-delegation (details in table below)[51]. A small amount of the administrative expenditure is implemented (payments only) by PMO through a type III co-delegation.[52]

In all cases, each AOD must account for the use of the appropriations in his annual activity report.

The table below is therefore provided for information only. It aims to facilitate consolidation of budget implementation as accounted for in the AAR of DG CLIMA and has to be taken into account for the financial discharge of expenditure under Title 34.

[50] split of appropriations on the same budget line/powers of a given budget line are co-delegated between a number of AODs, all at the same level

[51] part of appropriations on a given budget line is co-delegated by a primary AOD to a secondary AOD for performance of certain administrative services

[52] the AOD of a DG commits and then co-delegates payments to EU offices (e.g. PMO pays contract agents' salaries and meetings expenses)

**Overview of funds under Title 34 implemented under co-delegation**

| Expenditure (M EUR) | Type of co-delegation | Co-delegation with | Committed | Paid |
|---|---|---|---|---|
| Voted appropriations (C1) **34 01** | | | | |
| Other Management Expenditure (34 01 02 11) | Type II | HR | 0,04 | 0,02 |
| Other Management Expenditure (34 01 02 11) | Type III | PMO | | 1,07 |
| LIFE support expenditure (34 01 04 01) | Type II | DIGIT | 1,10 | 0,00 |
| LIFE support expenditure (34 01 04 01) | Type II | ENV | 0.13 | 0,00 |
| Other appropriations (C8) **34 01** | | | | |
| Other Management Expenditure (34 01 02 11) | Type II | HR | | 0,02 |
| Other Management Expenditure (34 01 02 11) | Type III | PMO | | 0,05 |
| LIFE support expenditure (34 01 04 01) | Type II | DIGIT | | 1,61 |
| **Total 34 01** | | | **1,28** | **2,77** |
| Voted appropriations (C1) **34 02** | | | | |
| LIFE (34 02-01, -02, -03) | Type I | EASME | 85,21 | 38,95 |
| LIFE (34 02-01, -02, -03) | Type II | DIGIT | | 0,01 |
| LIFE (34 02-01, -02, -03) | Type II | ESTAT | | 1,46 |
| LIFE (34 02-01, -02, -03) | Type II | JRC | 1,30 | |
| LIFE (34 02-01, -02, -03) | Type II | COMM | 0,02 | 0,04 |
| LIFE (34 02-01, -02, -03) | Type II | DGT | 0,04 | 0,04 |
| LIFE (34 02-01, -02, -03) | Type II | EAC | | 0,52 |
| LIFE (34 02-01, -02, -03) | Type II | ENV | 0,11 | 0,04 |
| LIFE (34 02-01, -02, -03) | Type III | OP | | 0,04 |
| LIFE (34 02-01, -02, -03) | Type II | TAXUD | 0,38 | 0,15 |
| Other appropriations (C4) | | | | |
| LIFE (34 02-01, -02, -03) | HT I | IEEA | | 0,01 |
| **Total 34 02** | | | **87,06** | **41,25** |
| **GRAND TOTAL** | - | - | **88,34** | **44,02** |

## Budget implementation of tasks entrusted to other services and entities

### Executive Agency for Small and Medium-sized Enterprises based in Brussels (EASME)

Since 2014, DG CLIMA has been responsible for the management of the climate action sub-programme under the Programme for the Environment and Climate Action (LIFE) At the same time, DG CLIMA and DG ENV, in accordance with the Commission's commitment to simplify the management of financial programmes, following a cost-benefit analysis, externalised the implementation of the major part of the LIFE budget to EASME. The Commission maintains political responsibility for the projects externalised, while the financial responsibility (operational and financial implementation) is transferred to the Agency. According to the LIFE Regulation, at least 81 % of its budget is allocated to grants, which is managed by EASME. The remaining part of DG CLIMA budget is spent on procurement actions and for the two financial instruments managed by the European Investment Bank (EIB).

In April 2018, EASME launched the annual call for proposals for action grants to help implement and shape EU policies on environment and climate change. In the climate action domain, the call for proposals closed on 12 September 2018. Out of the 124 proposals submitted, 51 were for climate change adaptation, 62 for climate change mitigation and 11 under climate governance and information. The proposals were submitted by coordinating beneficiaries from 21 Member States; 45 % of the proposals were submitted by public bodies; 19 % by private non-commercial bodies, and 36 % by private commercial bodies, representing an increase in applications compared to the previous year. In the evaluation process, 11 mitigation projects, 13 adaptation projects and 5 governance/information projects were selected. The total available budget was EUR 48.7 m. DG CLIMA also plays a direct role in processes such as the definition of the EASME’s annual work programme, in collaboration with other parent DGs, and in the evaluation of the EU added value of some projects. Furthermore, the DG participates as an observer in the Agency's Steering Committee meetings, which meet regularly.

### European Investment Bank (EIB) in Luxembourg

In December 2014, two new financial instruments funded by the LIFE programme and the EIB were launched. The first is the Natural Capital Financing Facility (NCFF), aimed at providing loans and investments promoting the preservation of natural capital, including adaptation to climate change. The second is the Private Finance for Energy Efficiency (PF4EE) financial instrument, which aims to increase private financing for investments in energy efficiency projects.

As regards the NCFF, the EIB will contribute up to EUR 125 m of financing for investment until end of 2021. The European Commission will contribute EUR 50 m as a guarantee for the investments, and EUR 10 m for a support facility for project preparation and monitoring. Beneficiaries and financial intermediaries provide significant additional financing. The main aim of the NCFF is to demonstrate that natural capital projects can generate revenues or save costs, whilst delivering on biodiversity and climate adaptation objectives.

The NCFF establishes a pipeline of replicable, bankable projects that serve as a "proof of concept" and that demonstrate to potential investors the attractiveness of such projects. The size of NCFF projects is typically up to EUR 15 m.

A first operation, Rewilding Europe Capital, was signed in 2017 and three further operations were signed in 2018 (Irish Sustainable Forestry Fund, City of Athens, Croatian Bank for Reconstruction and Developments). Total payments to the EIB up to 2017 amount to EUR 12 745 000 - EUR 3,25 m in 2014, EUR 8.5 m in 2015 and EUR 0,9 m in 2017. No payments were made in year 2018. An amendment to the Delegation Agreement was signed in October 2017 in order to extend the implementation period until and including 2021 and extend the maximum duration of contracts between the EIB and final beneficiaries from 15 to 25 years.

**Private Finance for Energy Efficiency** (PF4EE) is a financial instrument (EUR 80 m for 2014-2017) aiming at increasing investment in energy efficiency projects. At the outset of the PF4EE, support of total investment up to about EUR 540 m was expected, with an objective to sign operations in six to 10 Member States.

In 2018, nine deals were signed (with intermediary banks in CZ, ES, FR, BE, PT, IT, HR, EL, CY), but EUR 20.5 m remained to be committed. The existing Delegation Agreement was amended with a view to facilitate the deployment of the instrument. Main features include: extending the implementation period to end of 2019, eliminating the 15 % funding limit per commercial bank, providing a longer time period (up to 60 months instead of 36 months) for the commercial banks to sign loans with the final recipients. EIB launched a new call of expression of interest in December 2018.

A total amount of EUR 38 126 667 has been paid to the EIB. The remaining balance is EUR 41 873 333, which includes signature of new collateral agreements, the top-up of existing agreements, payments to the Expert Support Facility and the fees to the EIB.

After 4 years of implementation, the PF4EE instrument has been audited by the Internal Audit Service (IAS). The overall objective of the audit was to assess the adequacy, efficiency and effectiveness of internal controls put in place by DG CLIMA and to monitor and supervise the implementation and performance of the two financial instruments under the LIFE 2014-2020 Programme. The IAS recognised the ongoing efforts made by DG CLIMA to coordinate the monitoring activities and decisions towards the EIB and acknowledges the good cooperation and exchange of best practices with DG ENV. The final report includes three recommendations, notably to improve the visibility and promotion of the EU contribution in this instrument, to strengthen the supervisory processes currently in place by conferring a more prominent role to the Steering Committee and to consider on-the-spot controls.

The Commission has put in place control and monitoring processes in order to verify whether the internal control system set up by the EIB is efficient and effective. For instance, Commission management (Directors and Heads of Unit of both DGs) participate in the Steering Committees. The EIB provides financial statements and operational progress reports twice a year; these are then scrutinised by the financial unit CLIMA.A.4 and by the operational unit in DG CLIMA. In addition, where appropriate, the Commission may perform on-the-spot checks of the Financial Intermediaries or Final Recipients on representative and/or risk-based samples of transactions, in cooperation with the EIB as stipulated in Article 6c of the Delegation Agreement.

### Management's assessment

### Budget coverage

The Annual Activity Report instructions[53] provide that the assessment by management should cover the DG's significant budget areas. 88.02 % of payments authorised in 2018 relate to ABB activity 3402 (climate action at Union and international level) and 11,98 % relate to the budget chapter 3401 (administrative expenditure). As shown in the table below, the payments authorised and made in 2018 amount to EUR 19,2 m. In 2018, only EUR 150 000 payments for LIFE grants were made by the DG itself. The majority of payments were implemented through procurement and financial instruments. The control strategies for procurement under ABB activity 34 02 are further explained in the Internal Control Templates in Annex 5.

**Overview of payments authorised in 2018:**

| Expenditure (M EUR) | ADMIN | CONVENTIONS | FINANCIAL INSTRUMENT | GRANTS | PROCUREMENT | Support | Grand Total |
|---|---|---|---|---|---|---|---|
| Administrative expenditure (34 01 02 11) | 0,42 | | | | | | 0,42 |
| LIFE support expenditure (34 01 04 01) | | | | | | 1,88 | 1,88 |
| LIFE & Completion LIFE (34 02-01, -02, -03 -051) | | | 5,00 | 0,15 | 10,89 | | 16,04 |
| Multilateral Climate Agreements or MCA (34 02 04) | | 0,86 | | | | | 0,86 |
| Sub-total voted appropriations | 0,42 | 0,86 | 5,00 | 0,15 | 10,89 | 1,88 | 19,20 |

### a) Key control indicators

The assessment by management is based on the results of key controls performed in 2018, notably ex-ante controls and controls during project implementation. The financial circuits put in place in DG CLIMA are based on a thorough risk assessment and reflect the financial environment, the organisational capacity and an analysis of the budget implementation. The financial circuits currently in place have been approved by DG BUDG.

*Key control indicators:*

| 1. Input indicators (resources devoted) | 2018 | 2017 | 2016 * |
|---|---|---|---|
| Ex-ante financial initiation (FTE) | 3 | 1,5 | 1,5 |

[53] As a rule of thumb at least 90% of the "payments made" as per AAR Annex 3 Table 2 (2018 AAR Instructions)

| | | | |
|---|---|---|---|
| Ex-ante financial verification (FTE) | 0,6 | 1,5** | 1,25 |
| Controls at CPAC / (ENVAC until October 2017) meetings and programming (FTE) | 0,4 | 0,5 | 0,5 |
| IAS/ECA (FTE) | 0,2 | 0.5 | 0.5 |
| 2. Output indicators (controls during project implementation) | 2018 | 2017 | 2016 |
| Procurement: number of procurement files reviewed by CPAC (ENVAC until October 2017) | 7 | 11 | 9 |
| Procurement: number of negative opinions by CPAC | 0 | 0 | 0 |
| Number of exceptions registered (ICS 8) | 0 | 1 | 1 |
| | | | |
| 3. Other indicators | 2018 | 2017 | 2016 |
| Number of payments exceeding legal delays | 2/299 = 0,7 % | 13/331 = =3,9 % | 25/346 = =7,23 % |
| Number of European Ombudsman | 0 | 0 | 0 |
| Number of OLAF cases | 0 | 0 | 0 |

| | | | |
|---|---|---|---|
| Detected error rate | 0,19 % | 0,25 % | 0,44 % |

*The indicators for year 2016 concern the Shared Resource Directorate of DG ENV and DG CLIMA. DG CLIMA took direct responsibility for its financial arrangements on October 1st 2017, with the creation of Unit CLIMA.A.4 Financial Resources and Planning

**Ex-ante financial verification is adjusted to reflect the control environment in the new finance Unit CLIMA.A.4.

***Notes to the control indicators:***

- **Ex-ante controls (procurement):** The CLIMA Procurement Advisory Committee (CPAC) performs the procurement reviews, which remain highly important. Following the recommendations of an IAS audit of DG CLIMA procurement in 2016, from 2017 onwards CPAC mandates include also the assessment of a sample of procedures for establishing specific contracts under framework contracts. No negative CPAC opinions were issued in 2018 on DG CLIMA files. However, over 90 % of the scrutinised files were fine-tuned (e.g. better argumentation of points allocated, clearer assessment of selection and award criteria) following CPAC recommendations. Standard verification controls in the financial circuit contributed to other, non-material adjustments for a number of files concerning both procurement and administrative budget expenditure (conferences, meetings, etc.).
- **IAS (FTE):** In DG CLIMA's finance unit 0,2 FTE is dedicated to the coordination and follow-up of the work necessary to implement recommendations and draft action plans in response to the audits performed by the Internal Audit Service and the European Court of Auditors.
- **Exception reporting:** The are no recorded exceptions for year 2018.
- **Payment delays:** The total number of DG CLIMA payments in 2018 (297) decreased slightly compared to 2017 (331 payments). In 2018, only 2 (0.93 % of total) of all DG CLIMA's payments were paid late as compared to the legal deadlines, which is a noticeable improvement compared to 2017, where 3.9 % of payments were late. The additional efforts made in 2018 to reduce the number of late payments were proven to be effective.
- All **cross-sub delegated** AODs have provided reasonable assurance in their reports on the correct use of funds in 2018.

### Conclusion

Budget implementation tasks entrusted to other services and entities in DG CLIMA concern the executive agencies (EASME) and the EIB for the financial instruments Natural Capital Financing Facility (NCFF) and Private Finance for Energy efficiency (PF4EE).
DG CLIMA is satisfied with the governance structure of EASME and the dialogue and cooperation established. In terms of EIB, considering the slow uptake of the loans by the final beneficiaries, the risk of irregularities or loss of assets is currently insignificant. In addition, the EIB sent its anti-fraud strategy to DG CLIMA in 2015 that is adequate and compliant with Commission standards.
For the 2018 reporting year, the cross-sub delegated Authorising Officers by Delegation have reported reasonable assurance on the delegated budget managed by them. They have not signalled any material control issues.

### *Coverage of the Internal Control Objectives and their related main indicators*

#### *Control effectiveness as regards legality and regularity*

DG CLIMA has set up internal control processes aiming to ensure the adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned. The control objective is to ensure that the final amount at risk related to payments authorised in 2018 does not exceed 2 % of the amount in ABB activity 34 02. As DG CLIMA was managing a very small number of grants under the new GPGC programmes of DG DEVCO in 2018, ex-post audits aiming at detection and correction of potential fraud, errors and irregularities are carried out only on request by DG DEVCO/NEAR, in cases where there is suspicion of fraud or irregularity. No such cases were indicated in 2018. In addition, for procurement, the risk of payment-related errors is considered insignificant as a) there is an extremely limited number of pre-financings, b) in case of partial delivery the full amount is not paid and c) technical reports and deliverables required for the payments are discussed with the contractor and before final payment approved. The risk of errors related to the selection and award process is deemed low in the light of the existing ex-ante control systems (CPAC, 4 eyes principle in the financial circuit), controls and meetings during the management of the contract.

Thorough ex-ante controls apply to procurement-related transactions in DG CLIMA. In addition to the mandatory initiator/verifier controls of all commitments and payments, procurement specialists in the financial unit systematically provide advice and support to the operating units in DG CLIMA for the whole lifecycle of a contract, i.e. from the drafting of the terms of reference until the final payment and/or de-commitment.

In addition, the specific procurement advisory committee CPAC performs verifications of tendering procedures of all contracts above EUR 500.000, plus of a sample of contracts of lower value. Value and type of procedures are the main factors of the risk-based approach of CPAC.

Therefore, reasonable assurance can be provided given the following building blocks:

1. robust ex-ante controls performed at various stages in the financial circuit
2. quality advice by procurement experts to the desk officers and authorising officers in the operating units
3. independent and positive CPAC verifications

4. guidance on how to deal with DES[54] cases
5. no significant errors and weaknesses detected by the internal and external auditors

no fraud cases or Ombudsman cases flagged

For financial instruments, the risk of payment-related errors is considered insignificant in 2018. Additionally, the control environment of EIB is satisfactory and aligned with the Commission standards.

### *Estimation of the Detected Error Rate (DER), the Amount at Risk, and the residual error rate (RER)*

In 2018, only one payment - amounting to EUR 150 000 – was made for LIFE grants in DG CLIMA. Due to the absence of a significant number of transactions, for the calculation of the error rate for LIFE grants 2014-20, the error rate for LIFE+ grants for the period prior to 2014 is used as explained below.

The ex-post audit team in DG ENV sampled 29 of the 213 LIFE grants for which final payment was made. The sample was based on a random selection through the Monetary-Unit Sampling (MUS) methodology. The detected error rate (DER) of 0,19 % in LIFE+ grants is therefore a reliable estimate and representative for the whole population of grants.

A comparison with previous years is possible, as the audit selection process has been consistent for years. In addition, 119 so-called MUS based audits were performed over the last five years. This large number of audits provides strongly a reliable estimation for the error rates.

A multi-annual comparison of the yearly Detected Error Rates shows that the rates are relatively low.

| Audit year - AAR year 2018 | | 2014 | 2015 | 2016 | 2017 | 2018 | CUMULATIVE FIGURES |
|---|---|---|---|---|---|---|---|
| **DER** | | **1,45 %** | **1,24 %** | **0,44 %** | **0,25 %** | **0,19 %** | N/A |
| Auditable population | amounts | 92.613.550 | 131.938.211 | 210.942.654 | 205.948.574 | 195.390.688 | 641.442.989 |
| | nb of grants | 133 | 165 | 273 | 224 | 213 | 795 |
| Selected randomly and audited | amounts | 43.387.239 | 39.542.925 | 44.383.526 | 45.213.849 | 58.204.687 | 172.527.540 |
| | nb of audits | 29 | 29 | 30 | 31 | 29 | 119 |
| Representativity | % population | 47 % | 30 % | 21 % | 22 % | 30 % | 27 % |
| Recommended recovery | amounts | 630.359 | 491.476 | 196.723 | 112.601 | 110.913 | 1.431.159 |
| | % of audited | 1,45 % | 1,24 % | 0,44 % | 0,25 % | 0,19 % | 0,83 % |
| DER applied to auditable population | B | 1.345.552 | 1.639.849 | 934.970 | 512.896 | 372.330 | 4.433.268 |
| Recoveries issued the audit year | C | 908.976 | 478.912 | 699.225 | 140.195 | 204.805 | 2.227.307 |
| Net result | B-C=D | 436.577 | 1.160.937 | 235.745 | 372.701 | 167.525 | 2.205.961 |
| **RER** | **D / auditable populatio** | **0,47 %** | **0,88 %** | **0,11 %** | **0,18 %** | **0,09 %** | **0,34 %** |

[54] EDES = Early Detection and Exclusion System

| | n | | | | | | |
|---|---|---|---|---|---|---|---|

The current low error rates, some of the lowest of all EU programmes, are the result of:

- Ex-ante controls, including good guidance from the start of the project, on the spot monitoring during the projects, and meticulous checks before final payments

- Ex-post verifications, which cover a substantial proportion of grants and amounts, thus probably deterring fraudsters

Good articulation of ex-ante and ex-post controls over time has also been decisive. The best example was when ex-post auditors analysed the causes of errors and detected that personnel costs were the most likely to be at risk: the ex-ante controllers adopted the conclusions and improved, from as early as 2010, their guidance for timesheets. This decision, the result of internal cooperation, proved to be instrumental in leading to a lower error rate.

In the near future, one can expect that the DER will not decrease further but will remain stable well below 2 %.

Detailed calculations on the amount of risk at closure can be found in the table below.

The level of error is defined as *the best estimation by the authorising officer by delegation, taking into account all relevant information and using professional judgement of the value of the expenditure found to be in in breach of applicable regulatory and contractual provisions at the time the financial operations were authorised*. Since the level of error is an estimation, in the calculation of the amount of risk and for certain categories, it is expressed as a range, a fact that reflects the variations in the underlying assumptions that are summarised as follows:

1. For grant payments, the error rate for LIFE grants is used as it has been presented above
2. The error rate for procurement payments is estimated to be 0 - 0,15 %. The risk of error in procurement is minimal, however a conservative approach in the error rate estimation has been followed
3. For payments for conventions and financial instruments the estimated error rate is 0%
4. For administrative and support payments there is a higher level of risk and therefore the error rate is 0.15 - 0.5 %
5. ***The Commission can entrust budget implementation tasks to entities that demonstrate a level of financial management and protection of the EU's financial interest equivalent to that of the Commission. This is verified by carrying out an ex-ante assessment, a Pillar Assessment (PA) of the entity. The FR also ensures that existing pillar assessments continue to apply until they are revised (Art. 279.2).*** The vast majority of DEVCO grants managed by DG CLIMA are granted to pillar assessed organisations , making the error risk is very low. However, in the estimation of the error rate, a range is used again, and includes as its upper limit the error rate used by DG DEVCO, which manages the same type of grants.

The error rates that are the basis for the calculation of the amount at risk are presented in the following table:

### Estimated overall amount at risk at closure

| DG CLIMA | "payments made" (FY; m€)[55] | *minus* new prefinancing (in FY; m€) | *plus* cleared prefinancing (in FY; m€) | **= "relevant expenditure" (for the FY; m€)** | Average weighted detected error rate range (DER %) | Estimated overall range of amount at risk *at payment* (FY; €) | Average Recoveries and Corrections (*adjusted* **ARC**; %) | estimated future corrections [and deductions] (for FY; €) | **estimated overall range of amount at risk *at closure* (€)** |
|---|---|---|---|---|---|---|---|---|---|
| *(1)* | *(2)* | *(3)* | *(4)* | *(5)*= (2) – (3) + (4) | *(6)* | *(7)*= (5) x (6) | *(8)* | *(9)*= (5) x (8) | *(10)*= (7) – (9) |
| Procurement | 10,89 | 0 | 0,10 | 10,99 | 0 % - 0,15% | 16.485 | 0 % | 0 | 16.485 |
| Conventions | 0,86 | 0 | 0 | 0,86 | 0 % - 0,5 % | 0 | 0 % | 0 | 0 |
| Financial Instruments | 5,00 | 0 | 0 | 5,00 | 0 % - 0,5 % | 0 | 0 % | 0 | 0 |
| Grants | 0,15 | 0,15 | 0 | 0,00 | 0,19 % | 0 | 0 % | 0 | 0 |
| Administrative | 0,42 | 0 | 0 | 0,42 | 0,15 % - 0,5 % | 2.100 | 0 % | 0 | 2.100 |
| Support | 1,88 | 0 | 0 | 1,88 | 0,15 % - 0,5 % | 9.400 | 0 % | 0 | 9.400 |
| **TOTAL DG CLIMA** | **19,20** | **0,15** | **0,10** | **19,15** | **0.002 % - 0,15%** | **27.985** | **0 %** | **0** | **27.985** |
| **CROSS-SUBDELEGATIONS** | | | | | | | | | |
| **DEVCO (services)** | 0 | 0,23 | 0,23 | 0,00 | 0 % - 0,5 % | 0 | 0 % | 0 | 0 |
| **DEVCO (subventions)** | **8,05** | **5,84** | **4,89** | **7,10** | **0,15 % - 1,33 %** | **10.650-94.430** | **0 %** | **0** | **10.650-94.430** |
| **NEAR** | **0,15** | **0** | **0** | **0,15** | **0 % - 0,5 %** | **0-750** | **0 %** | **0** | **0-750** |

[55] Amount as per Annex 3, table 2: Outturn on payment appropriations in 2018. According to this table, the payment appropriations authorised for Administrative Expenditure in the "Climate Action" policy area (budget chapter 34 01) is EUR 5 315 405.77. Out of this amount EUR 1 217 567.20 is deducted, which concerns payments done by PMO. Similarly the payment appropriations authorised for "Climate action at Union and international level" (budget chapter 34 02) is EUR 19 316 182.75. Out of this amount, EUR 463 695.19 is deducted which concerns payments carried out by other DGs under co-delegation.

In the context of the protection of the EU budget, at the Commission's corporate level, the DGs estimated overall amounts at risk and their estimated future corrections are consolidated.

For DG CLIMA, the estimated overall amount at risk *at payment*[56] for the 2018 expenditure is in the range of EUR 383 – EUR 27.985. This is the AOD's best conservative estimation of the amount of *relevant expenditure*[57] during the year 2018 (EUR 19.2 m) not in conformity with the applicable contractual and regulatory provisions at the time the payment is made[58].

Given that the major share of DG CLIMA's expenditure concerns procurement - which is not subject to any on the spot ex-post controls and thus does not lead to any financial recoveries/corrections – and those financial instruments not mature enough yet for on the spot ex-post control, the overall amount at risk at closure is also estimated at EUR 3 450 – EUR 95 750.

[56] In order to calculate the weighted average error rate (AER), the *detected or equivalent* error rates have been used; *see note 6 to the table*.

[57] "*relevant expenditure*" during the year; *see note 5 to the table.*

[58] "*payments made*" or *equivalent; see note 2 to the table*.

- ***Cost-effectiveness and efficiency***

Based on an assessment of the most relevant key indicators and control results, DG CLIMA has assessed the cost-effectiveness and the efficiency of the control system and reached a positive conclusion.

**Cost efficiency and cost-effectiveness**

The principle of efficiency concerns the best relationship between resources employed and results achieved. The principle of economy requires that the resources used by the institution in the pursuit of its activities are made available in due time, in appropriate quantity and quality, and at the best price. This section outlines the indicators used to monitor the efficiency of the control systems, including an overall assessment of the costs and benefits of controls.

Procurement – cost of controls

The overall cost of controls for procurement amounts to EUR 773.800. This amount encompasses the costs incurred in both the financial and the operational units.

The efforts identified above to control procurement procedures over their whole lifecycle justify the estimated 0.15 % error rate in the procurement cycle in 2018. The planned procurement programme of the DG has been implemented, with no errors or irregularities detected.

Grants - cost of controls

The overall cost of controls for grants amounts to EUR 299.827. This amount encompasses the costs from both the financial and the operational units.

Indirect Management (cost of controls)

The overall cost of controls for indirect management amounts to EUR 120.943 This amount encompasses the costs from both the financial and the operational units.

In addition, the cost of controls of the Financial Instruments includes the management fees charged by the EIB which for 2018 amount to EUR 1 170 041.09 for PF4EE. There were no fees paid for NCFF.

**Overall conclusion on cost effectiveness of controls**

The control cost efficiency is assessed by comparing the control costs at DG CLIMA level only (excluding the fees payed to EIB for indirect management) over the budget managed (payments made in 2018).

The total costs of control at DG CLIMA level for procurement, grants and financial instruments is EUR 1.194.570. This amount encompasses the costs from both the financial unit and the operational units.The total amount of payments made by DG CLIMA in 2018 for procurement, grants and financial instruments including payments made for DG DEVCO and DG NEAR under cross sub-delegation amount to EUR 24.246.519 m.

Overall, during the reporting year the controls carried out by DG CLIMA for the management of funds were **cost effective, as the cost of controls (EUR 1.194.570) as a percentage of the budget managed (EUR 24.246.519) amount to 4,9 %.**

**"The corporate methodology for the estimation, assessment and reporting on the cost-effectiveness of controls was revisited in September 2018 and applied for the first time in the 2018 annual reporting. The difference of the estimated cost of controls as compared to previous years derives from this new methodology and does not reflect any substantial change in the DG's control strategy. "**

In 2018, the AOD used the possibility foreseen in FR Art 66.2 to differentiate the frequency of DG's controls considering the cost of controls compared to the risks involved in small transactions. Because of this examination, the number of actors in the financial circuit has been reduced for low risk transactions that are to be handled in a fully centralised financial circuit in the DG CLIMA finance unit. Standard administrative expenditure, 1st pre-financing payments, registration of invoices, de-commitments and accounting corrections are all considered as low risk transactions. Under a simplified centralised workflow, the AOS can be asked also to act as verifying agent.

### Control efficiency

Time to grant

The "time to grant" is the period between the final deadline to submit a proposal and the signature of the grant agreements. The maximum length is 9 months as defined in Article 128.2 of the FR. There was no call for proposals launched in 2018 by DG CLIMA.

Time to pay

Four different maximum payment days are applicable depending on the type of contract. In 2018, 99.33 % (297) of all payments (299) were made respecting the maximum payment delays.

Details on time to pay can be found in Annex 3, Table 6.

Time to inform

The time-to-inform indicator starts from the final date for submission of complete proposals up to the time of informing the applicants of the outcome of the evaluation of their applications.

There was no call for proposals launched in 2018.

### Fraud prevention and detection

The anti-fraud strategy in place for the year 2018 was initially adopted in the year 2011, revised in March 2016 and is currently under revision. This Anti-Fraud Strategy is structured around the following anti-fraud objectives:

1. Documentation of the conducted Fraud Risk Assessment ("Prevention")

2. Dissemination of anti-fraud measures and raising fraud awareness within DG CLIMA ("Prevention") ("Detection")
3. Developing and communicating fraud indicators / "Red Flags" ("Detection")
4. Developing Early Detection and Exclusion (EDES) guidelines and internal guidance on EDES-flagging
5. Following up on fraud cases ("Investigation", "Sanction/Recovery")

Each objective has a clearly structured roadmap, with indicators to monitor implementation, clear identification of units responsible, and target dates by which the objectives need to be carried out.

Its actions, like adoption of fraud indicators (red flags) for grants and procurement, training and awareness actions like the annual reminder on whistleblowing continued their implementation in 2018. In addition, fraud awareness was raised by the Finance Unit, which provided tailor-made info sessions on anti-fraud strategy background, red flags etc.

It should be noted that the anti-fraud strategy is not limited to financial management. For example, activities involving management of sensitive/confidential information may be exposed to fraud and can entail considerable reputation risks. DG CLIMA is revising the anti-fraud strategy in light of the experience of the last three years and auditors' recommendations. This has also involved a specific risk assessment. The revised anti-fraud strategy of the DG for the years 2019-2021 is currently at the stage of adaptation.

During the reporting year, no fraud case was reported, neither by DG CLIMA nor by OLAF. In addition, those anti-fraud measures already in place, notably the controls performed through ex-ante controls, did not identify any cases of fraud or potential fraud in 2018.

### Other control objectives: safeguarding of assets and information, reliability of reporting, significant intangible assets

DG CLIMA, being the business owner and manager of the EU ETS policy tool, is responsible for safeguarding the accuracy, integrity and reliability of relevant market sensitive data managed by the system.

As a result, DG CLIMA handles EU ETS sensitive but non classified information on a daily basis. In order to ensure a coherent protection of this sensitive but non-classified information, DG CLIMA developed the ETS Classification policy in 2017. The markings developed through this policy were adopted by DG HR-DS[59] and are thus applicable Commission-wide. In 2018 a new IT security committee was established as part of the resources management forum. DG CLIMA has organised regular training sessions for DG CLIMA staff on the handling of ETS sensitive

[59] DG HR-DS - Security Notice 01 Revision 10 dated of 5 June 2014 "The use and application of markings"

information, has implemented IT measures and action plans to secure and protect data and has established an EU Registry Steering committee.

No leaks or breaches of confidential data or violation of data integrity were reported in 2018

As regards the delegation of the implementation of the two financial instruments to the European Investment Bank ("indirect management"), DG CLIMA has received reasonable assurance from the EIB that in all material respects the information set out in the Financial Statements is in accordance with the accounting standards, is complete, accurate and applies a professional degree of care and diligence to the execution of the tasks entrusted to it in the Delegation Agreement.

According to the assessment done during the accounting closure, there was no impairment of intangible assets in DG CLIMA in 2018.

Two projects have been in the process of being depreciated since 2015. The depreciation was booked during 2015 closure and it will be automatic for the next eight years for the 1st project and for the next five years for the 2nd.

## 2.1.2 Audit observations and recommendations

### Court of Auditors

#### ECA Annual Report 2017 (published in 2018)

The Annual report of the Court of Auditors on the implementation of the budget concerning the financial year 2017 was published on 4 October 2018. Chapter 1 of this report provides information on the statement of assurance and gives an overview of the findings and conclusions on the reliability of accounts and the regularity of transactions. According to the Clearing Letter DG CLIMA received in May 2018, the Court of Auditors did not have further comments on the selected transaction from the DG.

Main activities and spending on climate action are included under Chapter 7 "natural resources" of the ECA Annual Report. The Annual Activity Reports were prepared in line with the Commission's internal instructions, and the method used to calculate the error rate did not point to any methodological problem. No error was detected in the sample of DG CLIMA.

#### ECA Special Reports (SR)

DG CLIMA was involved as associated DG in several special reports published by ECA, but was only nominated for one as lead DG:

- **SR 05/2018 – Renewable energy for sustainable rural development: significant potential synergies, but mostly unrealised (published 01/03/2018)**

ECA states that the EU's renewable energy policy is not explicit enough in establishing the conditions for successfully linking renewable energy to rural development. The specific funding available for rural development could play a role in achieving EU and national renewable energy targets, but Member States did not always prioritise renewable energy projects that could make a contribution to sustainable rural development. DG CLIMA is associated DG in two recommendations.

- **SR 24/2018 – Demonstrating carbon capture and storage and innovative renewables at commercial scale in the EU: intended progress not achieved in the past decade (published 23/10/2018)**

The Special Report led by DG CLIMA examined whether EU actions to support the commercial-scale demonstration of carbon capture and storage (CCS) and innovative renewable energy technologies between 2008 and 2017 through the European Energy Programme for Recovery (EEPR) and New Entrance Reserve 300 (NER300) were well designed, managed and coordinated. In addition, it explored whether NER300 and EEPR had made the expected progress in helping CCS and innovative renewables advance towards commercial deployment.

The ECA concluded that neither the EEPR nor the NER300 programme succeeded in deploying CCS in the EU. Whereas the EEPR contributed to the development of the offshore wind sector, NER300 did not achieve the intended progress in supporting the demonstration of a wider range of innovative renewable energy technologies. The ECA found that the design of NER300 limits the Commission and Member States' ability to respond effectively to changing circumstances. Additionally, the ECA concluded that to enhance the coherence of EU support to low carbon demonstration projects the coordination and accountability arrangements of the relevant Commission departments required improvement. The ECA issued five recommendations, of which all accepted in full by the Commission. The NER300 programme did not achieve the intended progress in supporting the demonstration of a wider range of innovative renewable energy technologies, but the EU is now preparing to launch another off EU Budget Fund (the Innovation Fund) to replace NER300 starting in 2020. The Court's recommendations are intended to address the weaknesses identified and strengthen the design of future programmes.

The recommendations relate to the following areas:

- Increasing the potential for effective EU support to low carbon energy innovations
- Improving project selection and decision-making procedures for the future Innovation Fund
- Ensuring flexibility of the Innovation Fund to respond to market and technology developments
- Better Commission coordination for more coherent targeting of EU support
- Ensuring accountability

- **SR 25/2018 – Floods Directive: progress in assessing risks, while planning and implementation need to improve (published 20/11/2018)**

For this report, ENV was lead DG and DGs CLIMA, ECHO, REGIO and JRC were associated. The auditors found that the Floods Directive improved coordination between the Member States and the Commission as well as knowledge sharing and best practices. They found that all Member States they visited have begun implementing the flood risk management plans, but that improvements are needed. However, major challenges remain concerning the need for much fuller integration of climate change, flood insurance and spatial planning into flood risk management. There is a lack of up-to-date knowledge on the likely impact of climate change on the incidence of floods. Therefore, DG CLIMA is involved in the following recommendations:

- Rec. 6 – Better integrate the effects of climate change into flood risk management
- Rec. 7 – Raise public awareness of the benefits of flood insurance and seek to increase coverage

- **SR 33/2018 – Combatting desertification in the EU: a growing threat in need of more action (published 18/12/2018)**

ENV was in the lead again for this report, while DGs CLIMA, AGRI, RTD, the EEA and the JRC were associated. The auditors visited five EU Member States affected by desertification: Spain, Italy, Cyprus, Portugal and Romania and examined whether the risk of desertification in the EU was being effectively and efficiently addressed. They found that, while desertification and land degradation are current and growing threats in the EU, the Commission does not have a clear picture of the challenges and the steps taken to combat desertification have limited coherence. ECA made the following recommendations:

- Rec.1 – Understanding land degradation and desertification in the EU
- Rec.2 – Assessing the need to enhance the EU legal framework for soil
- Rec.3 – Achieving land degradation neutrality in the EU by 2030

### ECA Follow-up audit

- **SR 06/2015 – Follow-up audit Implementation EU ETS – Summary of the last meeting we had with ECA**

In the framework of the Court's annual follow-up of audit findings, Chamber 1 is currently following up the Court's recommendations in all ECA Special Reports published in 2015, including ECA SR 06/2015 on "The integrity and implementation of the EU ETS".

In September 2018, DG CLIMA received the follow-up questionnaire focusing on the Commission's actions taken towards ECA SR 06/2015 recommendations and their state of implementation. During the discussions on the three different clusters of recommendations (market oversight, the Union Registry, and MRVA) in full, the questions of the Court focussed mostly on three topics. The first was the harmonisation of the ETS MRVA regulatory framework achieved in phase 3 and the implementation of sanctions. The second was to assess the effects of the entering into force of the revised financial market legislation for carbon market oversight. Finally, the effectiveness of the Union Registry's operation. DG CLIMA provided updated input on each recommendation and received the Clearing Letter on 14 January 2019, ECA considered that out of 12 recommendations addressed to the Commission:

- 8 were implemented
- 3 were implemented in some respects
- 1 was implemented in most respects

The results of the follow-up to the audit will be included in the ECA's Annual Report 2018.

### Internal Audit Service (IAS)

#### (Limited) conclusion on the state of internal control

The Internal Auditor of the Commission concludes that the internal control systems in place for the audited processes are effective, except for the observations giving rise to the 'very important' recommendations (as listed below per audit process). These recommendations still need to be addressed in line with the agreed action plans.

#### Follow-up audit on Public Procurement

In August 2018, DG CLIMA received the note on audit conclusions for the follow-up of outstanding recommendations from the IAS audit on public procurement in DG CLIMA. The objective of this engagement was to assess the progress made on audit findings. Based on the assessment of the state of implementation, the IAS concluded that the remaining open recommendations had been implemented adequately and effectively and could therefore be closed. These concern Recommendation N°2 (very important) on Procurement Process and Recommendation N°3 (important) on Contract Management and Payments. DG CLIMA organised five different procurement-related trainings for all staff but also targeted courses for newcomers. These trainings were promoted through EU learn, the Intranet and DG HR's Learning & Development newsletter. For Authorising Officers, special financial training is required. CLIMA.A.4 issued a note listing 12 available trainings and highlighted their importance in the internal control survey. These actions confirm that DG CLIMA is committed to ensuring that staff at all levels including newcomers, assistants, policy officers and middle-management attend relevant training related to public procurement and other financial matters.

#### Audit on LIFE financial instruments: effectiveness and efficiency of the current framework

This audit was officially announced on 24 January 2018. The two audited instruments were:

- Natural Capital Financing Facility (NCFF), for which DG ENV and DG CLIMA are co-responsible
- Private Finance for Energy Efficiency (PF4EE), for which DG CLIMA is responsible

Taking into account the pioneering nature of these two financial instruments, the IAS concludes that both DG CLIMA and DG ENV have put in place adequate supervisory processes to monitor the implementation of the financial instruments overall. However, very important weaknesses regarding visibility and promotion of the EU contribution remain. The IAS also highlighted two further important weaknesses related to the functioning of the Steering Committee and to the monitoring of the implementation of the financial instruments, which should be addressed in order to strengthen the supervisory processes currently in place.

Very important recommendation 3: Visibility and promotion of the EU Contribution

Original due date: 30/06/2019

The audit found that a number of the Commission's obligations regarding the visibility and promotion of the EU contribution had not been fully met and/or effectively monitored in practice. In addition, although there had been ad-hoc discussions and exchanges between the EIB and the Commission Designated Services (DSs) on promotion and visibility activities required under the Delegated Agreements (DAs), there was, at the time of the audit, no communication plan in place for LIFE financial instruments (FIs). This would have provided for a more structured basis for coordination between the key players and facilitate more effective monitoring of these activities. This risked negatively affecting the uptake of the instruments and ultimately the achievement of the policy objectives of these instruments.

The IAS recommended that the DGs should regularly verify that the requirements of the DAs on promotion and visibility are respected in practice and formally raise any issues with EIB as appropriate. They should agree, together with EIB, on a communication plan for the promotion and visibility of the LIFE FIs which builds on existing communication channels and which provides for a stronger role of the LIFE programme national contact points. This should be regularly monitored in the Steering Committee meetings and adjusted as necessary.

DG CLIMA provided an action plan that was deemed satisfactory to mitigate the risks identified.

### Audit on the management of the security of EU ETS IT system

A second follow-up audit was performed in the first quarter of 2017, which concluded that two key sub items of the action plan remained open. It concerned Recommendation 1 on the "Implementation of the ETS's security controls" (rated very important), which has been outstanding for more than 6 months. The IAS had inquired in June 2018 about the progress on the action plan and DGs CLIMA and DIGIT had confirmed the progress as per the plan, with a migration to the Secure Hosting Services environment in DIGIT successfully achieved on 7 June 2018. The completion of the Business Impact Assessment (first phase of the 2018 risk assessment) and Risk Assessment using the corporate IT risk assessment methodology (PILAR) were provided by DIGIT Dir. S.

DG CLIMA reported the two remaining sub-recommendations as "ready for review" on 31 January 2019.

## Audit on the processes for managing and sharing data on agri-environmental-climate issues in DG AGRI, DG CLIMA, and DG ENV (2016)

☐ Very important Recommendation 1: Mapping of information needs and available data related to agri-environmental-climate issues

Original due date: 30 June 2018 – Updated target date: 31 December 2019 - 7 months overdue at the cut-off date of this report (31 October 2019) – 18 months of expected delay.

The audit found that there is no comprehensive and coordinated inventory of information needs, together with a list of already available agri-environmental-climate data. Existing inventories are limited in scope and not always shared amongst DGs AGRI, CLIMA and ENV. In addition, there is insufficient coordination on agri-environmental-climate indicators. This means that services are unlikely to be aware of all data that might already exist. This may in turn lead them to incur additional and unnecessary costs and could mean that the policy making process suffers insofar as key existing data is not used. Furthermore, there is a risk that additional data is collected unnecessarily in order to drive similar, but not identical indicators. There is also a reputational risk for the Commission in publishing similar indicators with different values and without a clear explanation as to the differences. Therefore, DGs AGRI, CLIMA and ENV will (taking into account the role played by the main EU data providers) reinforce the coordination and sharing of agri-environmental-climate data and related indicators. They will also establish a coordinated inventory of agri-environmental-climate information needs and available data.

☐ Very important Recommendation 2: Coordination of Member States (MS) reporting requirements and reuse of data

Original due date: 1 March 2018 – Updated target date: 31 March 2019 - 11 months overdue at the cut-off date of this report (31 January 2019) – 13 months of expected delay.

The audit found that there is insufficient coordination by the three DGs of the MS reporting requirements concerning agri-environmental-climate data, including insufficient reuse of collected data. In addition, in spite of the requirements of the Inspire Directive for sharing spatial data for environmental purpose, the spatial data collected by MS under the Common Agricultural Policy (CAP) is not available for environmental/climate policy in certain MS and in the Commission. Thus, the quality of data may be at risk due to the inability to crosscheck between different sources. There is also a risk of increased administrative and cost burden on both MS and the Commission arising from the need to collect additional data, which may already exist. Moreover, key data may not be available to support the policy design, monitoring and assessment processes. Therefore, DGs AGRI, ENV and CLIMA will actively coordinate between themselves and with the European Environment Agency and Eurostat to ensure better consistency and, where possible, simplification through more effective re-use of collected data in MS reporting requirements. In particular, this can be included in the European

Commission's Regulatory Fitness and Performance Programme (REFIT) aimed at making EU law simpler and reducing the regulatory costs. In addition, the three DGs will clarify with the Legal Service what can be legally required from MS under EU legislation, regarding the sharing of CAP spatial data between public authorities at national level and with the European Commission and the EEA for environmental/climate purposes.

### 2.1.3 Assessment of the effectiveness of the internal control systems

The Commission has adopted an Internal Control Framework based on international good practice, aimed to ensure the achievement of policy and operational objectives. In addition, as regards financial management, compliance with the internal control framework is a compulsory requirement.

DG CLIMA has put in place the organisational structure and the internal control systems suited to the achievement of the policy and control objectives, in accordance with the standards and having due regard to the risks associated with the environment in which it operates.

Management assesses on a continuous basis the effectiveness of the internal control systems, in order to determine whether they work as intended and ensuring that any control weaknesses in the system are detected, analysed and considered for improvement. In addition, management performs specific assessments to ascertain whether the internal control systems and their components are present and functioning. The purpose of these management assessments is to provide reasonable assurance that the internal control principles adopted by the Commission are implemented and functioning in the DG, that the assessment findings are evaluated and that any deficiencies are communicated and corrected in a timely manner, with serious matters reported as appropriate.

#### Annual assessment of the internal control principles

On 19 April 2017, the Commission adopted a revised Internal Control Framework (ICF), aiming to move away from a purely compliance-based to a principle-based system, offering the services the necessary flexibility to adapt their internal control strategy to their specifics, while ensuring robust internal control and consistent assessment throughout the Commission.

The new ICF consists of five internal control components, 17 principles and their main characteristics. Each principle is measured through a set of indicators that are reviewed regularly and changed as necessary, for example following an internal reorganisation.

This annual assessment of the state of internal control in DG CLIMA was carried out in accordance with the methodology established in the "Implementation Guide of the Internal Control framework of the Commission".

The assessment of the new Internal Control Framework has not identified any major deficiencies. While there is scope for improvement in some areas, DG

CLIMA is confident that its internal control system as a whole - covering both financial and non-financial activities – is effective. DG CLIMA has the necessary procedures, staff skills and experience to identify and manage the main operational, financial and legal/regulatory risks with the exception of the security risk of the EU ETS Registry.

This conclusion is based on a thorough review of all available information, in particular:

1. **Inventory of the 17 internal control principles of the new Internal Control Framework (ICF).** The Internal Control Coordinator (ICC) carried out his own review of the 17 internal control principles. No particularly critical areas of improvement were identified, except the outstanding audit recommendation in the area of EU ETS security and governance supporting the IAS limited conclusion that DG CLIMA's internal control systems are partially effective. DG CLIMA and DG DIGIT are rolling out action plans to improve the ETS system security and an assessment of the risks and necessary/possible remedial actions versus ongoing.
2. Each year DG CLIMA asks managers (Directors and Heads of Unit) to complete **an anonymous survey related to the state of Internal Control in the DG.** The response rate was 73 % and the results are the following:
    - Feedback from management was positive, with a 100 % affirmative response, in the areas of Control environment component, specifically principle 1, commitment to integrity and ethical values where managers confirmed their knowledge and requirements concerning ethics and standards of behaviour. Almost 90 % of the participating managers said they are familiar with the procedures on how to report violations of the rules and the awareness of main financial and operational risks related to their specific responsibilities and tasks (whistleblowing). In addition, all the managers who responded to the questionnaire stated that they are aware of their responsibility in terms of internal control, specifically concerning ethics and integrity.
    - 100 % of participating managers think that the external communication of DG CLIMA is effective and supports the achievement of policy objectives related to their domain of activity. In addition, all managers said that the internal communication in DG CLIMA is satisfactory.
    - 100 % of participating managers answered positively when asked if objectives and indicators related to their Unit/Directorate are pertinent and facilitate performance management.
    - Only 73 % of participating managers confirmed that the authorising officers by sub-delegation in their Directorate Unit have followed the obligatory courses for AOSD and have satisfactory knowledge of the budget procedures in ABAC. This raises a concern that needs to be addressed rapidly.

3. The annual declarations by the Authorising Officers by sub-delegation. In this declaration, each AOS confirms that the commitments and payments authorised by him/her in 2018 are legal and regular and that the corresponding funds have been used for their intended purpose and in accordance with the principle of sound financial management. The AOS declarations do not indicate any (significant) weaknesses in the control system.

4. **Exceptions and non-compliance events**: DG CLIMA's tracking of exceptions and derogations from existing rules and procedures is aligned with the instructions received from DG BUDG. The objectives are to reinforce the consistent application of the reporting requirements, to adequately assess serious cases and to keep the number of exceptions and derogations at the lowest possible level. There was no case reported in 2018.

5. Information obtained from the **financial monitoring dashboards**: This tool was implemented in 2012 and has become an effective means of reinforcing senior management supervision. It is based on a set of reports and control indicators covering, for example, budget implementation, payment delays, recovery orders etc. The monitoring results, which are presented and discussed at senior management level on a regular basis (8 reports per year) are disseminated widely and do not indicate any significant weaknesses in the internal control system.

6. The twice-monthly "**Financial Priorities Report**", which was developed in 2014, gives each AOS a list of open invoices under his/her responsibility, indicating those that are approaching the payment deadline and is a useful tool to alert the managers of action needed.

7. DG CLIMA's **risk register**: A Risk Advisory Committee (RAC) is embedded within the management meeting on resources. Management was invited to flag all risks as part of the internal Management Plan 2018 process. On this basis, the risk register of the DG encompassing "critical" and "very important" risks was established. <u>The only critical risk</u> (residual critical risk as a result of mitigating measures) <u>the DG is managing is the security risk of cyber-attacks to the EU ETS registry</u>.

8. **OLAF fraud cases:** During the reporting year, no cases have been transmitted to OLAF by the DG or initiated by OLAF.

9. **The European Ombudsman.** No individual cases were brought to the attention of the Ombudsman in 2017.

10. **Review of sensitive functions:** Early 2018, DG CLIMA reviewed its way of identifying and managing **sensitive functions**. It concluded, that the function of Local Authorisations Manager (LAM, previously called LPM), inherited from the SRD, was no longer deemed sensitive. The LAM is in charge of managing the profiles and accesses of all financial actors in the financial system ABAC.

11. **Document management:**

    Having assessed the feasibility of introducing the electronic signatory to financial transactions, in March 2018 DG CLIMA in a first phase introduced a paperless procedure for calls for tenders, along with internal trainings to inform people. The next step, foreseen for early 2019, is to introduce the same kind of paperless procedure for commitments. Meanwhile DG CLIMA has volunteered for the migration to e-submission, a module of the new e-procurement system.

    Additionally, in view of the Commission's Strategy on data, information and knowledge management, the visibility of DG CLIMA's ARES files has been made open to the entire Commission conditional to legal, security or commercial restrictions. An official note was circulated in September 2018 to inform management.

    Actions undertaken regarding document management include awareness raising activities (e.g. specialised training and coaching) at all levels including managers and promotion of good practices. DG CLIMA also decided to give a dedicated coaching to each newcomer and a refresher training to all staff. In addition, in order to strengthen efficient management of information and data within the DG, DG CLIMA has implemented electronic archiving.

    In the DG, no leaks/breaches of confidential data or violation of data integrity were reported in 2018.

12. **Staff Allocation and Mobility**

    DG CLIMA paid particular attention to staff allocation and mobility during the course of 2018. Staffing levels in the DG grew slightly during the course of year, with the DG receiving four additional posts as part of the 2018 final allocation and two additional posts in the 2018 complementary allocation. Specific actions related to staff allocation and mobility were as follows:

    The DG underwent a minor reorganisation in September 2018, creating a new unit focusing on Legal Affairs, Inter-institutional Relations and Communication. The implementation of those organisational changes allowed the unit working on international activities to focus solely on its core business and the creation of further synergies between the inter-institutional, legal and communication teams. Vacant posts are continuously assessed as they arise and action is taken to fill them as quickly as possible.

Inter-DG mobility is encouraged in DG CLIMA in view of the DG's efforts to mainstream climate change policy in other key policy areas of the Commission. Intra-DG mobility was continuously encouraged by publishing all vacancies in the DG’s weekly newsletter and by promotion of career discussions with staff.

The annual assessment of the functioning of the internal control systems in 2018 reassures management that as a rule, the internal control framework is implemented and functioning as intended with the exception of Principle 13, component 4 (in relation to ETS system security) where improvements are needed and which could have a significant impact on the assurance. In addition, DG CLIMA has taken measures to further improve the effectiveness of its internal control systems in the area of staff allocation and mobility, document management personal data protection and financial reporting.

## 2.1.4 Conclusions as regards assurance

This section reviews the assessment of the elements reported in sections 2.1, 2.2 and 2.3, as well as draws conclusions supporting the declaration of assurance and whether it should be qualified with reservations.

Concerning financial management (mainly procurement), the AOD's assurance relies to a large extent on the ex-ante verifications performed in 2018, namely the mandatory controls of all commitments and payments, the advice by procurement experts in the financial unit, and the reviews performed by CPAC. These controls effectively reduce the risk of significant errors being undetected to an acceptable level. In addition, the accounting controls performed by the accounting correspondent in 2018 in the frame of the accounting revision file also mitigate the risk of errors. These results confirm the high level of accounting quality and give reasonable assurance on the reliability of the financial statements and accounts.

The number of "exceptions" and "non-compliance events" reported in 2018 (no exception registered).

DG CLIMA is satisfied with close cooperation with the Executive Agency EASME and with the internal control and risk management in place in the Agency. Furthermore, the established governance structure works well and provides an additional layer of assurance: the DG participates, as observer, in the Agency's Steering Committee meetings and Task Force Meetings are regularly held at unit level. DG CLIMA supervises the work externalised through regular reports and ad hoc contacts with the Agency. In addition, in collaboration with other parent DGs, DG CLIMA plays a direct role in the definition of the annual work programme of the agency and/or evaluation of the calls for proposals. Finally, the Agency produces and disseminates quarterly reports as foreseen in the Memorandum of Understanding. In its own AAR, EASME has given assurance on the use of the corresponding resources and on the output indicators.

Additional assurance is obtained from the annual declarations by the Authorising Officers by sub-delegation, whereby they confirm that all financial transactions authorised by them in 2018 are legal and regular and in compliance with the principle of sound financial management.

Further assurance is received from the Authorising Officers in DG ENER, DG ENV and JRC regarding the cross sub-delegations granted to them.

In August 2018, DG CLIMA received the note on audit conclusions for the follow-up of outstanding recommendations from the IAS audit on public procurement in DG CLIMA that took place in 2017. Based on the assessment of the state of implementation, the IAS concluded that the remaining open recommendations had been adequately addressed and therefore the IAS closed them. These concern Recommendation N°2 (very important) on Procurement Process and Recommendation N°3 (important) on Contract Management and Payments.

The Internal auditor of the Commission (IAS) concluded that the internal control systems in place for the audited processes are effective, except for the observations giving rise to the 'very important' recommendations on the sharing of data between DGs AGRI, ENV and CLIMA of in relation to the governance of financial instruments. These recommendations still need to be addressed, in line with the agreed action plans.

According to management's self-assessment, all 17 Internal Control Principles were effectively implemented in 2018.

The Director General can provide the **reasonable assurance** in his Declaration albeit qualified by a **reservation**.

The reservation concerns a reputational/legal/financial and institutional risk, related to remaining significant security risks identified in the maintenance and operation of the Union Registry of the Emissions Trading System (EU ETS). Following the implementation of the last outstanding recommendations of the IAS audits on the management of the EU ETS, a new in-depth risk assessment has been done (as planned) by DG CLIMA in close cooperation with DIGIT and HR.DS. It should be recalled that this last recommendation concerned the transfer of the ETS Registry to the Commission most secure IT hosting system. This transfer was finally completed in the course of 2018. It was the expectation of successive Directors General that this transfer (together with the implementation of the other IAS recommendations) should reduce residual risks to an acceptable level. Nevertheless, the risk assessment has revealed that the residual risks of a successful cyberattack and other ‘feared business events’ are still considerably above an acceptable level.

Consequently, those risks will continue to threaten the confidentiality of the data, the integrity of the transactions, and the availability of the system for the Member States and the participating companies. This ultimately may result in legal disputes and reputational and financial consequences for the Commission as Institution. It should also be noted that the carbon price has increased significantly (threefold since 2010), and is now, in 2019, above 20€ per ton of $CO_2$. In addition, the emission 'allowances' (carbon assets) being traded are now considered as 'financial instruments' and regulated as such under the revised 'Markets in Financial Instruments Directive (MiFID).

As part of Commission's Risk Management methodology, in order to mitigate the remaining vulnerabilities, a new 'security plan' is currently being elaborated by DG CLIMA, in close cooperation with DG DIGIT. Pending the elaboration of this new security plan, as well as an evaluation of the resources needed for its implementation (including their availability), a timetable for lifting this reservation cannot be set.

Despite the reservation on the EU ETS security as noted above for which system I am ultimately responsible, DG Climate Action's internal control system is considered overall effective. Management has reasonable assurance that, overall, suitable controls are in place and are working as intended and risks are being appropriately monitored and mitigated, with the exception of the security risk of the EU ETS Registry.

### Overall Conclusion

Management's conclusions on the actual results of controls, their completeness and reliability and thus the assurance about the achievement of each of the relevant internal control objectives are satisfactory. The decision to maintain the reservation related to the security of the EU ETS Registry systems in the 2018 AAR is further elaborated in part 2.1.5.

The Director General has reasonable assurance that suitable controls are in place and working as intended; risks (like those relating to the legality and regularity of the underlying transactions) are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented.

Follow-up action plans are being implemented following the recommendations issued by the IAS in their audits reports on the sharing of data between DGs AGRI, ENV and CLIMA and in the audit on the governance of financial instruments.

The Director General, in his capacity as Authorising Officer by Delegation, can sign the Declaration of Reasonable Assurance albeit qualified by a reputational, legal, financial and institutional reservation concerning the security of the Union Registry for the Emissions Trading System (EU ETS).

## 2.1.5 DECLARATION OF ASSURANCE AND RESERVATIONS

*I, the undersigned,*

*Director General of DG Climate Action*

*In my capacity as authorising officer by delegation*

*Declare that the information contained in this report gives a true and fair view[60].*

*State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.*

*This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls and the limited conclusion of the Internal Auditor on the state of control. In addition, the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.*

*Confirm that I am not aware of anything not reported here which could harm the interests of the Commission.*

*However, the following reservations should be noted: Reservation on reputational/legal/financial and institutional grounds related to significant security risks identified in the maintenance and the operation of the Union Registry system of the EU Emissions Trading System (EU ETS), as reported in AARs since 2010 and as confirmed by the latest 2018 risk assessment exercise.*

*Brussels, 31 March 2019*

*[SIGNED]*

*Mauro PETRICCIONE*

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[60] True and fair in this context means a reliable, complete and correct view on the state of affairs in the DG.

### Reputational/institutional/legal/financial reservation on remaining security weakness in the EU ETS

| DG | |
|---|---|
| **Title of the reservation, including its scope** | Reservation on reputational/legal/financial and institutional grounds related to significant security risks identified in the maintenance and the operation of the Union Registry system of the EU Emissions Trading System (EU ETS), as reported in AARs since 2010 and as confirmed by the latest 2018 risk assessment exercise. |
| **Domain** | Central direct management in collaboration with national authorities- Administration of the Union Registry and Union Transaction Log by the Commission |
| **Programme and amount affected (= "(="scope")** | ABB Activity 34 02 : Climate action at Union and international level |

| | |
|---|---|
| **Reason for the reservation** | In all the AARs of the DG CLIMA since 2010, the DG has issued a reservation on reputational/legal/financial grounds related to security weaknesses identified in the software and operation of the Union Registry and Transaction Log for the Emissions Trading System.<br>Operational since January 2005, the Registry's system ensures the accurate accounting of allowances issued under the European Emissions Trading System. It is qualified as a critical IT system. In 2010-2011, several successful cyber-attacks occurred against national registries and theft of allowances was reported. Since the migration in June 2012 of the national registries to a single Union Registry operated by the Commission, the latter has been and still is clearly exposed to a reputational/institutional risk and legal/financial liabilities if new cyber-attacks or other fraudulent manipulations would succeed.<br><br>The IAS audit of 2015 recommended the move of the EU ETS to the most secure hosting service of the Commission (SHS), and to re-evaluate the risks immediately after. Following a successful migration in the course of 2018, it was the expectation of successive Directors General that this transfer (together with the implementation of the other IAS recommendations) should reduce residual risks to an acceptable level. Nevertheless, the risk assessment has revealed that the residual risks of a successful cyberattack and other 'feared business events' are still considerably above an acceptable level.<br><br>Consequently, those risks will continue to threaten the confidentiality of the data, the integrity of the transactions, and the availability of the system for the Member States and the participating companies. This ultimately may result in legal disputes and reputational and financial consequences for the Commission as Institution. It should also be noted that the carbon price has increased significantly (threefold since 2010), and is now, in 2019, above 20€ per ton of $CO_2$. In addition, the emission 'allowances' (carbon assets) being traded are now considered as 'financial instruments' and regulated as such under the revised 'Markets in Financial Instruments Directive (MiFID).<br><br>The risks did not materialise during the last years, which in turn has led to the absence of events affecting the Commission's reputation in 2016, 2017 and 2018. Still, the reservation cannot be lifted in the AAR 2018, first, because of the residual unacceptable risk level established by the 2018 risk assessment exercise and, second, due to the fact that the necessary security controls are not yet in place. |

| | |
|---|---|
| **Materiality criterion/criteria** | The significance of the events of 2010-2011 was assessed against the following 3 criteria:<br>- nature of the impact on reputation of the Commission vis-à-vis stakeholders to manage a market based instrument (=medium-term negative stakeholder perception with limited impact on ability of the Commission (DG CLIMA) to meet key objectives),<br>- breadth of awareness of the events (=international and national press coverage, pro-active communication with the MS in full transparency by the Commission via the dedicated website 'EU Climate Action', via a dedicated webpage to ETS on the Europa server and in the Climate Change Committee)<br>- duration: a series of incidents started in November 2010 continuing in January 2011 led to a suspension of trading of allowances on the 'spot' market that accounts for less than 20 % of the ETS. Another incident occurred in a national registry in October 2011. |
| **Quantification of the impact (="(=actual exposure")** | Reputational risk.<br>A Swiss cement company lodged a complaint against the Commission about (alleged) theft of allowances. This led to the recording of a contingent liability amounting to EUR 16.2 m in the accounts of DG CLIMA (annexes of this AAR). The General Court dismissed both the complaint and the ensuing appeal so the contingent liability was lifted in the 2016 accounts. Reputational risk with potential legal/financial liabilities. To quantify the actual exposure, different business impact scenarios were evaluated in the Risk Assessment process. The market value of the allowances in circulation is currently around 80bn€ (at the current average price of 20€/per ton CO2) |
| **Impact on the assurance** | The event falls within the scope of the declaration as it is a core activity managed by DG CLIMA with high visibility and media coverage to which considerable human and financial resources are and will continue to be allocated in the future. The EU ETS is a flagship instrument for achieving one of the headline targets of 2020: reduction of greenhouse gas emissions 20 % compared to 1990. The critical IT tool is managed in-house by the Commission. However, the weakness leading to this reservation does not invalidate the declaration of reasonable assurance by the Director General. |
| **Responsibility for the weakness** | The Commission as central administrator has a key role in the functioning of the EU ETS in managing the Union registry and the Union Transaction Log. |

| | |
|---|---|
| | In 2017, the (first) follow-up audit conducted by the Internal Audit Service acknowledged the significant progress made by DG CLIMA (with DIGIT and HR.DS) in defining a Security Plan and the corresponding implementation roadmap for the key security controls of the ETS. The Internal Audit Service concluded that only two key sub items of the original action plan remained open at the beginning of 2018. However, in this respect, a considerable further progress was made in 2018. First, the migration of the EU ETS platforms to the new Secured Hosting Services (SHS) provided by DIGIT in Luxembourg was successfully completed in June 2018. Secondly, DG CLIMA, in close cooperation with the associated services (DIGIT/HR-DS) re-assessed the significance of the remaining weaknesses and security controls that should be put in place. This risk assessment, finalised mid-January 2019 and based on a comprehensive Commission methodology, concluded that, while the security of the EU ETS system has improved significantly with the move to secure hosting services, overall, the EU ETS is still vulnerable and the residual risks of a successful cyberattack and other 'feared business events' are still considerably above an acceptable level. |
| **Responsibility for the corrective action** | **Conclusion**<br><br>DG CLIMA now considers the action plan following the (initial) IAS audit (and its follow-up audit) on the security and governance of the EU ETS fully implemented and has decided to submit this recommendation 'for review' by the IAS. It was the expectation of successive Directors General that this transfer (together with the implementation of the other IAS recommendations) should reduce residual risks to an acceptable level.<br><br>But the detailed risk assessment process concluded that the resulting residual risk, is still too high to be accepted. The ensuing legal, financial and reputational/institutional risks are still tangible.<br>As part of Commission's Risk Management methodology, in order to mitigate the remaining vulnerabilities, a new 'security plan' is currently being elaborated by DG CLIMA, in close cooperation with DG DIGIT. Pending the elaboration of this new security plan, as well as an evaluation of the resources needed for its implementation (including their availability), a timetable for lifting this reservation cannot be set. |

## 2.2 Other organisational management dimensions

Efficiency gains examples:

- DG CLIMA fully participated in the implementation of the corporate **synergies & efficiencies exercises** in the area of HR, IT, Communication and Logistics in 2018 and will continue implementing the agreed recommendations during the course of 2019. Additionally, DG CLIMA implemented further efficiency gains in these areas, for example, in 2018 DG CLIMA redeployed its Human Resources Business Correspondent team to the unit dealing with financial management and planning while retaining a direct reporting line to the Director-General on all HR matters and created a specific IT sector in charge of the oversight of all IT activities in the DG.

- A new unit focusing on Legal Affairs, Inter-institutional Relations and Communication was set up in the course of 2018. The implementation of this **organisational change** allowed the unit working on international activities to focus solely on its core business and aims at further synergies between the legal, inter-institutional and communication teams.

- In early 2018, DG CLIMA reviewed its way of identifying and managing **sensitive functions**. It concluded that the function of Local Authorisations Manager (LAM, previously called LPM), inherited from the Shared Resources Directorate (SRD), was no longer deemed sensitive. The LAM is in charge of managing the profiles and accesses of all financial actors in the financial system ABAC.

- In the field of **financial management**, following the entry into force in August 2018 of the new Financial Regulation 1046/2018 allowing multi-annual financing decisions, DG CLIMA prepared the first multi-annual Decision covering 2019 and 2020 using the new simplified template. This measure will contribute to streamlining the adoption process and will allow for an early start in launching the procurement procedures.

- Another efficiency measure concerns the introduction of first steps in 2018 of a **paperless policy**, especially regarding the use of the ARES e-Signatory for financial files, e-tendering and the further move to an electronic filing and archiving system. For example, in March 2018 a paperless procedure in Ares for the preparatory phase of calls for tenders was rolled out, with internal trainings to inform staff.

### *2.2.1 Human resource management*

While waiting for the end of the pilot exercise of the HR Modernisation project and implementing the revised HR processes, DG CLIMA's HR.BC team continued to define HR strategy and prepare HR decisions, supporting the DG in the human resources management area.

In the field of **equal opportunities**, DG CLIMA performs well in terms of female representation in middle management (36%) as well as in Non-Management AD posts with a rate of around 41 %. In 2018, DG CLIMA continued to support and to prepare women for future management posts, for example by appointing 3 highly competent women as Deputy Head of Unit and by encouraging a colleague from DG CLIMA to participate in the new Female Talent Development programme.

DG CLIMA further implemented its action plan following the Commission Staff survey 2016. A wide range of initiatives are being rolled out in areas such as senior and middle management communication, career development and learning, working conditions and facilities and well-being. In 2018, DG CLIMA focused its efforts on having a competent and engaged workforce by:

- Improving **staff well-being** by modernising DG CLIMA facilities (e.g. refurbishment of cafeteria), making it more comfortable for cyclists (e.g. installation of one extra shower), and more climate-friendly (e.g. installation of an electric bicycle charging station, an electric service bike, and bike racks).
- Implementing the new **learning and development programme** to make staff more efficient and skilled. For example, a training package for newcomers, a renewed programme of 'Management Pills' and an AST Network.
- Ensuring efficient **internal communication**, promoting a collaborative culture in which senior and middle managers interact with staff more openly and regularly and encouraging more face-to-face opportunities for interaction. Several initiatives were implemented in 2018, such as the distribution of a weekly internal newsletter, debriefings on important events by the Director General and more regular opportunities to meet bilaterally with the Director General/the Directors (e.g. the 'coffee with the Director General' initiative). In addition, a survey on internal communication was conducted end of 2018. It showed positive feedback on actions implemented so far as well as ideas for future actions.

### 2.2.2 Better regulation (only for DGs managing regulatory acquis)

In 2018, DG CLIMA continued to prepare its policy initiatives and manage the acquis under its responsibility in line with the **Better Regulation principles**. In 2018, DG CLIMA's **new initiatives** were prepared in an open, transparent manner, informed by the best available evidence and backed by the comprehensive involvement of stakeholders. All new initiatives were accompanied by an impact assessment, which was submitted to the Regulatory Scrutiny Board (RSB). A favourable opinion from the RSB was received for two initiatives on first submission and for two other initiatives after a second submission. DG CLIMA applied the 'evaluate first' principle, ensuring that relevant evidence is available to support the preparation of those new initiatives.

DG CLIMA also applied better regulation principles to **existing initiatives**, keeping climate regulatory acquis under review, ensuring it is covered by recent retrospective evaluation findings. The evaluation of the adaptation strategy was finalised in 2018 and received a positive opinion after its first submission to the

Regulatory Scrutiny Board (RSB). Two other evaluations are on-going, namely the evaluation of the General Union Environment Action Programme to 2020 (7th EAP with ENV in the lead) and the evaluation of the Ozone Regulation. The latter will contribute to the REFIT programme aimed at simplifying DG CLIMA's regulatory acquis and ensure that it is 'fit for purpose'.

In 2018, DG CLIMA monitored the **enforcement** of its acquis in line with the Commission's strategy. As regards infringements, 11 cases were closed: 10 concerning non-communication of measures transposing the Fuel Quality Directive (2015/652/EC) and one concerning the application of the ETS Directive. Informal dialogue with Member States through EU Pilots has been active to ensure compliance with notification obligations under the Shipping MRV Regulation, the F-gas Regulation and the Carbon Capture and Storage Directive.

### 2.2.3 Information management aspects

DG CLIMA further implemented its paperless policy, especially regarding the use of the ARES **e-Signatory**.

Having assessed the feasibility of introducing the **electronic signatory to financial transactions**, DG CLIMA introduced in a first phase in March 2018 a paperless procedure in Ares for the preparatory phase of calls for tenders, with internal trainings to inform staff. Meanwhile, DG CLIMA has volunteered for the migration to e-submission, a module of the new e-procurement system for electronic management of open calls for tender and is using E-Invoice handling payment requests and cost claims electronically.

Additionally, in view of the Commission's Strategy on sharing data, information and knowledge management, the DG was piloting in 2018 a policy to **open its files to other DGs in the document management system Ares**, conditional to legal, security or commercial restrictions.

A new decision on the **security of communication and information systems** in the European Commission was adopted in 2017 (2017/46) and a new regulation on **data protection** entered into force in December 2018[1]. A special effort was made to ensure compliance of all information systems owned by DG CLIMA with these new rules. In particular, DG CLIMA implemented the action plan on data protection adopted by the Commission on 7 November 2018. For example, a complete inventory of DG CLIMA's data processing operations was established. Its 11 notifications and associated privacy statements were systematically reviewed and work has started on updating these, with three privacy statements being finalised by the end of 2018 (i.e. privacy statements related to meetings, expert groups and contracts). In addition, there are no restrictions of data subjects' rights in DG CLIMA personal data processing's not complying with the requirements of Article 25 and thus no need for time being to revise legal acts or to adopt internal rules to regulate restrictions. Finally, an

[1] Regulation 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data

awareness-raising campaign among DG CLIMA staff was conducted with informative notes sent to staff, the organisation of two dedicated trainings and the dissemination of key information through DG CLIMA's intranet page.

### 2.2.4 External communication activities

DG CLIMA's external communication actions in 2018 focused on its main political priorities as well as supporting the European Commission's corporate communication actions. In particular, actions focused on building on the positive momentum of the Paris Agreement on climate change and on increasing awareness, understanding and support for climate action as part of efforts to implement the Paris Agreement, the Energy Union, and the 2030 Climate and Energy framework, alongside mainstreaming climate action into all major spending programmes. Some of the main communication moments were related to the legislative proposals completing the EU's 2030 climate and energy framework (Effort Sharing Regulation, LULUCF, decarbonisation of the road transport, etc.), the Commission's strategic vision for a climate-neutral Europe by 2050 and the annual UN climate conference (COP24).

DG CLIMA developed further communication actions around key Environment Council and European Council meetings, various international climate meetings and negotiations, programmes and initiatives such as the LIFE programme and the Global Covenant of Mayors for Climate and Energy.


Results of the communication activities were very positive, with continuous upward trends for web and social media, without paid promotion, as well as with positive feedback from audiences from countries all over the world. DG CLIMA also measures public attitudes toward climate change and EU climate action in regular Eurobarometer opinion polls[61]. The surveys consistently show high levels of public concern about climate change and of public support for climate action across the EU. According to the latest survey in 2017, 92 % of Europeans see climate change as a serious problem, 74 % see it as a "very serious" problem, and 79 % recognise that fighting climate change and using energy more efficiently can boost the economy and employment. A new Eurobarometer survey on climate change will be launched in spring 2019.

[61] Special Eurobarometer 459. Report on Climate Change from September 2017.