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ANNEXES 1 to 3

ANNEXES
to the
COMMUNICATION TO THE COMMISSION
Greening the Commission



European
Commission



COMMUNICATION TO THE COMMISSION

Greening the Commission

ANNEXES

Directorate General
Human Resources and Security



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ANNEX A: USING EMAS ACHIEVEMENTS TO PROVIDE DETAILED REPORTING AND COMPARISON

To determine the level to which it aims to reduce its GHG emissions by 2030, the Commission uses its EMAS achievements and experience.

Change to the EMAS scope and achievements

EMAS scope

Since 2001, the Commission has developed and implemented the eco management and audit scheme (EMAS) Regulation¹, which has resulted in the integration of environmental concerns into its daily operations, delivering major environmental, organisational and financial benefits over the last 20 years.

In 2005, the Commission was the first EU institution to obtain formal EMAS registration, for part of its buildings and activities in Brussels². Since then, the Commission has substantially and progressively extended the organisational scope of the scheme to cover the Commission's largest sites in Europe: Brussels, Luxembourg, JRC in Ispra (Italy), Geel (Belgium), Petten (Netherlands), Seville (Spain) and Karlsruhe (Germany), along with DG SANTE in Grange (Ireland).

Over the years, to have a more complete view of the environmental impact of its activities, the Commission extended the EMAS scope:

- In 2005, the EMAS was limited to Brussels, covering eight buildings. Since 2014, it covers around 60 buildings in Brussels and the Commission's eight largest sites in Europe.
- In 2018, the Commission included emissions from the energy embedded in the material of its buildings and IT equipment, from purchased goods and services, and from its waste.
- In 2020, the Commission initiated steps to include executive agencies, Commission

¹ [EMAS – Environment – European Commission \(europa.eu\)](https://european-commission.europa.eu).

² In detail, eight buildings, corresponding to 200.000 m² and hosting five Directorate Generals and Services.

Representations in Member States in the EMAS scope. This will be done gradually.

- In 2021, as a priority, the Commission has started to consider how to assess the environmental impact of home working.

In the 2022 Environmental Statement, more information will be given on the environmental impact of home working.

As part of the EMAS scheme, the Commission publishes its objectives, the actions planned and the results achieved, as certified by external verification, in its annual environmental statements³.

Overall level of progress in reducing GHG emissions 2005-2019

The Commission has thus already implemented and continues to implement a wide range of measures⁴ to ensure the environmental sustainability of its operations. Since EMAS registration in 2005 and until 2019⁵, the Commission has achieved the following significant results⁶:

- Energy for buildings = -65% (MWh/person)

³ See footnote 1.

⁴ The EMAS Global annual action plan contains around 500 actions (past and present) across all sites and seeks to improve the Commission's environmental performance in various areas.

⁵ Since this Communication uses 2019 data as reference point (last year when the Commission's activities were carried out at their full potential, before the COVID pandemic), for consistency purposes, the figures used to illustrate the results of EMAS actions cover the 2005-2019 period. Figures have slightly changed with 2020 results. See [EMAS – Environment – European Commission \(europa.eu\)](https://european-commission.europa.eu)

⁶ Brussels site. Data for 2005 cover 8 buildings. Today's data cover around 60 buildings.

- CO₂ emissions for buildings* = -86%⁷ (tonnes/person)
- Office paper = -71% (sheets/person/day)
- Water use = -58% (m³/person)
- Non-hazardous waste = -38% (tonnes/person)

Overall, the per capita costs for buildings' energy consumption have reduced by more than half, representing accumulated savings of over EUR 100 million (2005-2019).

In 2019, the carbon footprint of the Commission⁸, resulting from its activities, represented 189 120 tonnes of CO₂ equivalent⁹. Table 1 below gives a detailed breakdown of GHG emissions¹⁰ by source.

⁷ CO₂ emissions reduction exceeds that of energy consumption as electricity has been purchased from 95% renewable sources since 2009.

⁸ Corporate GHG emissions accounting under EMAS usually captures life-cycle emissions from procured goods and services, even if they occur outside the EU (unlike reporting by Member States, which includes only emissions that occur on their territory and follow the international accounting rules under the Paris Agreement). Thus, they do not include upstream emissions outside the territories concerned.

The Paris Agreement is a legally binding international treaty on climate change, adopted within the framework of the United Nations Framework Convention on Climate Change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015, and entered into force on 4 November 2016.

⁹ It should be noted that emissions linked to experts' travel that has been subsidised by the Commission to attend meetings and events are not included in the 2019 EMAS scope. According to the 'feasibility and scoping study for the European Commission to become climate neutral by 2030', this travel represented approximately 30 000 tonnes of CO₂ equivalent. The Commission will gradually incorporate this in its CO₂ accounting.

¹⁰ The calculation takes into account all GHGs from the Kyoto Protocol as well as non-Kyoto gases and water vapour due to aviation activities (as recommended by the Bilan Carbone method and the GHG Protocol), as all these gases also impact on climate change. All GHGs such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), refrigerants (HFCs, PFCs, CFCs), are converted into CO₂ equivalent using the Intergovernmental Panel on Climate Change (IPCC) 100-years global warming potential coefficients.

The 2021 environmental statement¹¹, covering the environmental impact of the Commission's activities in 2020, sets out the impact that the COVID pandemic had on the Commission's GHG emissions during that period. In particular, there was a drastic reduction in GHG emissions associated with the work place and business travel. Electricity-related emissions were also reduced, as were those linked to commuting, catering and waste, illustrating the impact of the absence of staff in buildings and of physical meetings or travel.

The measurement of the future reduction of GHG emissions

While the Commission participates in implementing the European Green Deal, it is also important to understand the different nature of the EU-level target and the Commission's corporate target.

This Communication is mainly based on the 2019 activities covered under the EMAS scope (see figure 3 below), since this is the most complete one. It also uses the 2019 EMAS data¹² as a reference point for future reporting, measurement and comparison across time, since these data are the most representative (2019 is the last year before the COVID pandemic changed the way the Commission carried out its activities).

However, reference to past levels of GHG emissions is also necessary to illustrate overtime the Commission's progress in reducing its environmental impact, as Member States do in the European Green Deal or Paris Agreement where 1990 is the baseline. However, the point

¹¹ See [2021 Environmental Statement](#).

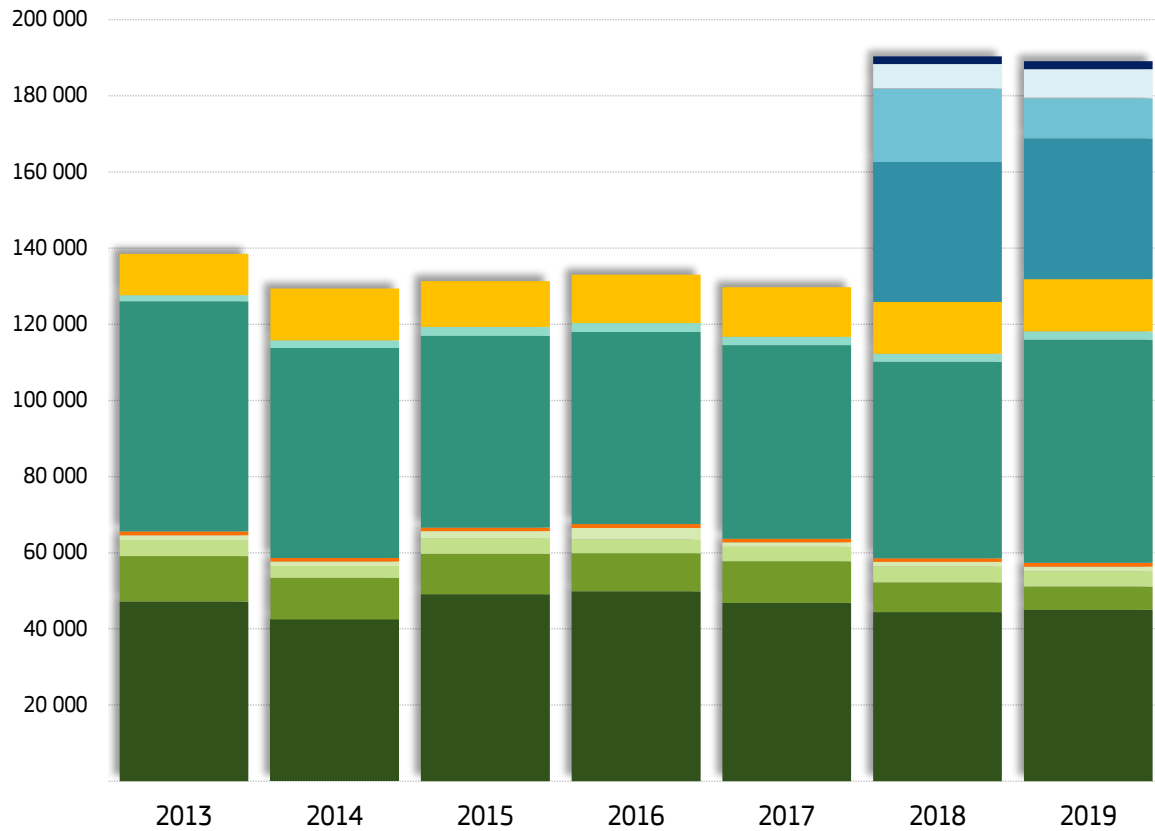
¹² The reference point of this Communication are the 2019 data as published in the 2020 environmental statement since it was the latest source available at the time of the assessment. The recently published 2021 report contains slightly adjusted absolute figures for 2019, but broadly confirms the percentage contributions of different sources of emissions. See footnote 11.

of reference for the Commission cannot be 1990, since at that time, it had a totally different size and scope of activities than today, in particular after the 2004 enlargement.

Instead, the Commission uses 2005 as a baseline in this Communication to illustrate its overall progress overtime because this was the first year GHG emissions were reported through EMAS registration. As the 2005 EMAS scope was more limited than the current one, it was necessary to calculate some retroactive estimates: between 2005 and 2019, the Commission estimates that it has reduced its GHG emissions by 35%. Based on that and information provided in Annex B, it is safe to say that by implementing the measures in this Communication the Commission aims to reduce its GHG emission by 60% by 2030 compared to 2005, or 38% compared to 2019¹³.

¹³ As stated in the text of the Communication (footnote 5), the scope of activities and emissions of the Commission cannot be directly compared to those of a Member State or the EU-27. The Commission's GHG emissions only occur in certain, specific economic sectors, and depend on the performance of goods and services available on the market. Nevertheless, for transparency and information purposes a best estimate comparison was made between the Commission's target, and the EU 2030 target, adjusted to a common reference year of 2019. The total ambition level of the Commission for the period 2019-2030 (38%) is higher than the one projected at EU level (23%) for the concerned sectors.

Figure 3. Reported emissions of GHG (tCO₂e) generated by the Commission from 2013 to 2019, as reported in the 2020 EMAS environmental statement¹⁴



	2013	2014	2015	2016	2017	2018	2019
Total reported CO₂e (tonnes)	138 502	129 438	131 363	133 043	129 784	190 371	189 120
Staff commuting	10 850	13 691	12 061	12 725	13 086	13 611	13 699
Missions (excluding air)	1 635	1 999	2 339	2 375	2 198	2 169	2 191
Missions (air, RFI 2)	60 446	55 112	50 327	50 444	50 833	51 589	58 612
Vehicle fleet - fuel consumption	952	967	978	1 003	948	949	944
Buildings - coolant losses	1 258	1 121	1 840	2 962	1 182	1 143	1 165
Buildings - district heating/cooling	4 226	3 125	4 120	3 651	3 728	4 196	4 112
Buildings - electricity	11 965	10 959	10 554	10 009	10 958	7 843	6 085
Buildings - fuels for heating	47 170	42 465	49 145	49 874	46 851	44 410	45 017
Fixed assets - buildings						36 700	37 049
Fixed assets - IT						19 298	10 497
Fixed assets - vehicles						161	162
Goods and service contracts						6 300	7 455
Own waste						2 003	2 132

¹⁴ Some emissions, estimated to be approx. 5% of the total emissions, could not be reported in 2019 for technical reasons. These were integrated into the 2021 EMAS exercise resulting in slight modification of emission distribution. See footnote 11.

ANNEX B: OVERVIEW OF THE COMMISSION'S GOALS, BY SOURCE OF EMISSIONS, 2019-2030

Objective: -60% GHG emissions 2005-2030, corresponding to approximately -38% GHG emission 2019-2030

The table below lists the existing GHG emissions measures linked to activities managed within the scope of EMAS in 2019, taken from the 2020 environmental report¹⁵. Emissions from experts' travel, where travel costs are borne by the Commission have been added, on the basis of the 2020 feasibility study's estimation. The table aims at detailing the ambition in terms of GHG reduction for each activity. The Commission will continue to improve accounting of its emissions and reductions by integrating in particular the impact of teleworking.

Source of emissions		Emissions in 2019		Action	Target @ 2030		Contribution to total Commission footprint reduction
		kt CO2eq			kt CO2		
Buildings operations and fixed assets	Office space in Brussels	94	35	Reduction of office surface by 200k sqm or 37%	-13	-28,5	-5,9%
				Energy efficiency investments/renovations	-5,5		-2,5%
	Office space in Luxembourg		7	Move to JM02 / Post building	-3,5		-1,6%
	Other buildings		52	Real estate management	-5,5		-2,6%
Increased energy efficiency		-1		-0,5%			
Mobility	Missions	61		Reduction of business travel GHG emissions by 50%	-31		-13,9%
	Staff commuting (BRU)	13,9	11	Financial support for all sustainable modes of commuting (public transport, cycling, walking) + parking fee (with exemptions)	-4,5	-5,0	-2,1%
	Staff commuting (other sites)		2	In Lux (12% of staff) public transport free of charge and OIL reimburse part of cross-border public transport. For other staff (20%) is spread across the world, the Commission will continue to promote the most sustainable options	-0,2		-0,1%
	Vehicle fleet		0,9	Progressive replacement of older vehicles with EV (or PHEV in the initial phase) - climate neutrality by 2027	-0,3		-0,1%
IT (fixed) assets	IT equipment (servers, pc's, laptops, etc.)	10,5		Shifting to more energy efficient devices via systematic GPP Mitigation of equipment needs by reducing unnecessary data use	-3		-1,4%
Goods and services, own waste		10		Extended recourse to GPP for all purchases Constant push for waste reduction.	-0,6		-0,3%
Subsidised travel	Expert group travel	30		Reduction of subsidised travel GHG emissions by 50%	-15		-6,8%
Total		219			-83		

corresponding to approximately -38% from 2019 to 2030

corresponding to -60% from 2005 to 2030

¹⁵ The recently published 2021 Environmental Statement contains slightly adjusted data for 2019 that reflect the data that were not integrated in the 2020 report for technical reasons. It broadly confirms however the percentage contributions of different sources of GHG emissions. See footnote 11.

ANNEX C: ACTION PLAN

Preliminary remarks:

This action plan is designed to implement the communication on Greening the Commission. It describes the actions that the Commission intends to put in place or has already started to implement in order to achieve corporate climate neutrality by 2030. Many of these actions are continuous or regular over time, hence no specific timeline is specified.

The progress review of the communication in 2024, as described in the communication, will also cover this action plan.

REDUCING GREENHOUSE GAS EMISSIONS

Use more efficient, sustainable, and climate-resilient buildings and office space. Target 2022-2030: -30% GHG emissions

#	Objectives	Actions and milestones	Lead
1	Brussels: buildings, energy efficiency	Renovation, rent and purchase of buildings: reduction of 25% of overall surface and 50% of number of buildings to manage by 2030, improvement of the environmental impact of the building stock, impact on running costs Ongoing implementation of the new building policy in Brussels launched in 2021.	OIB with BUDG, HR, SCIC
2	Brussels: implement green office space	Gradual implementation of dynamic collaborative space 2021: launch in Brussels	
3	Luxembourg: buildings, energy efficiency	Construction of and move to Jean Monnet II building by 2026; Office of Publications move to Mercier/Post building in 2023	OIL with BUDG, HR, SCIC
4	JRC sites: buildings, energy efficiency	Renovation of buildings, construction of new buildings	JRC with BUDG, HR
5	On-site energy production (photovoltaic panels, cogenerations, heat pumps)	Brussels: Finalise the feasibility study to install photovoltaics panels (2022) Luxembourg: Install photovoltaics panels in JMO2 JRC: Assess the feasibility of on-site energy production in JRC's site development plans	OIB, OIL, JRC with BUDG, HR
6	Climate-resilient buildings and work space	Conduct a vulnerability and risk assessment covering the buildings of the Commission in all its sites; preventive measures to address identified risks, including information to staff on potential climate change impacts affecting their work space and commuting, and on methods to enhance their preparedness and to adapt to impacts.	OIB, OIL, JRC, COMM with HR, CLIMA

Reduce GHG emissions linked to business travel and use more sustainable travel modes. Target 2022-2030: -50% GHG emissions by 2024

#	Objectives	Actions and milestones	Lead
7	Smart and intelligent staff business travel	Revise by the end of 2022, and implement the Commission's internal guidelines on missions integrating updated rules on greening business travel Shortly after adoption, pledge from all Commission departments to start immediately greening their business travel.	HR with BUDG, PMO
8	Monitoring the level of GHG emissions of staff business travel	Monitor the level of GHG emission linked to business travel at service level through IT tool integrated in the mission management information system (MiPS). Develop this IT tool further to implement increased granularity of transport type and reporting function for services. Promote the use of existing tool from the travel agency (NEO) enabling greener choice for travels and accommodations	PMO with HR
9	External experts travel (experts for whom the Commission bears the travel cost under its administrative budget)	Monitor the level of GHG emission linked to external experts' travel Implement new approach for the organisation of meetings and travels	PMO with HR SG, LS
10	Remote events	Install adequate infrastructures in meeting and conference rooms for hybrid meetings, conferences and events, including interpretation options and internet connection Measure the trend of use of hybrid and VC meetings: define criteria	SCIC, BUDG OIL, OIB

Increase green mobility for commuting. Target 2022-2030: -45% GHG emissions

#	Objectives	Actions and milestones	Lead
11	Teleworking	Evaluate the emissions linked to teleworking and assess the timeframe for including emissions linked to teleworking under the Commission's corporate target; first reporting expected by the end of 2022	HR, OIB, OIL, JRC
12	Mobility and commuting	Enhance and implement new mobility plans covering building facilities and means of transport (mobility hub, incentives to use public transports, etc.) - end 2022 In Luxembourg, reduce car parking spaces by 35% by 2026 when moving to new office buildings Enhance communication and participation to events: Vélo en mai, Green Mobility day - recurrent actions in the framework of EMAS and fit@work Align with Fit@work, fit@home	OIB, OIL with BUDG, HR
13	Corporate fleet	Gradually replace service car fleet with low or zero emission vehicles, to be completed by 2027 at the latest, including a target of -50% by 2022	OIB/COMM with BUDG, OIL

Optimise IT operations and assets, in coherence with the forthcoming internal digital strategy. Target 2022-2030: -30% GHG emissions

#	Objectives	Actions and milestones	Lead
14	Consolidation of corporate data centres	Reduce the number of local data rooms gradually to at most 3 (end of 2022)	DIGIT
15	Data management efficiency	Launch an exercise to streamline IT and decommission obsolete systems and avoid unnecessary collection (2022)	DIGIT
16	Digital education	Reduce individual digital carbon footprint of staff through dedicated awareness raising campaigns on digital pollution	DIGIT with EMAS

Mitigate other sources of emissions

#	Objectives	Actions and milestones	Lead
17	Executive agencies	Executive Agencies to join the Commission's efforts in implementing the objectives of the communication, by 2023	HR with BUDG, RTD, SG, SJ, Executive agencies
18	Carbon calculator for events	Develop a carbon calculator to monitor emissions linked to Commission events, by the end of 2024	SCIC, JRC

CONSISTENCY WITH THE LEGISLATIONS OF THE EUROPEAN GREEN DEAL

Foster green and circular economy

#	Objectives	Actions and milestones	Lead
19	Commission purchase contracts	Extend gradually the use of Green public procurement to (all) tenders and contracts, through inter alia revised contract templates, integration of EU GPP criteria in technical specifications where they exist at core level, with the support of stronger guidance and training. Launch in 2022	BUDG with JRC, DIGIT, HR, ENV
20	Internal workflow	Interconnect the Common Procurement Vocabulary tools to the Public Procurement Management Tool by adding reference to Green Public Procurement criteria. Launch in 2022	JRC with BUDG, ENV, HR, DIGIT

Preserve and restore ecosystems and biodiversity

#	Objectives	Actions and milestones	Lead
21	Urban sites	Support small-scale actions in the framework of local legislation such as planting trees and evaluate potential further actions promoting biodiversity in urban sites, using in particular, as far as Brussels is concerned, the outcome of a recent study on options for improving biodiversity.	OIB, OIL, JRC
22	Non-urban sites	Belgium: evaluate possibilities of ecosystem and biodiversity programmes in Overijse (2022) JRC sites: Develop further ecosystem and biodiversity programmes	OIB JRC

Promote a fair, healthy and sustainable food system

#	Objectives	Actions and milestones	Lead
23	Food labelling	Aim to obtain an environmental labelling in canteens/cafeterias – including information about meals' environmental footprint ("good food" or equivalent in Brussels - first certifications by 2024; "SuperDreckskëscht" in Luxembourg)	OIB/OIL

STAFF PARTICIPATION

#	Objectives	Actions and milestones	Lead
24	Corporate HR Strategy	Ensure consistency with the corporate HR Strategy through actions, training, incentives to support staff in the transition and maintain/improve the Commission's attractiveness as committed green employer (recurrent actions)	HR
25	Staff commitment: awareness raising	Awareness raising campaigns, pledging, local actions, greening home offices, greener behaviours at work, on business trips, during events (recurrent actions)	HR
26	Staff commitment: engaging in actions	Participation of staff in the EU Climate Pact and registration of the Commission in 2022	CLIMA
27	Staff commitment: promote the communication objectives and actions	Staff advocacy; Integrate "greening of the Commission" into Back to School / Back to University" programmes and during Open door Day, communication campaign in 2022	COMM/HR
28	Greening of events	Review and promote internal guide for the organisation of events, meetings, conferences, detailing various aspects from conference rooms to audio visual equipment, through catering, printing, decoration, local travel, as well as other aspects such as printing and promotional items (2022)	SCIC, HR

COMMUNICATION

#	Objectives	Actions and milestones	Lead
29	Network of organisations to communicate on the actions of the Commission and share best practices	Reach out to other EU Institutions, bodies and agencies, Member States administrations or from third countries, international organisations for mutual exchange of best practices and potential common actions; make useful information available to staff members. In particular, launch a new phase of the work of the Environmental Management Inter-institutional Group in 2022	HR with ENV, COMM
30	Commission's commitment	Use existing activities to publicise the objectives of the communication on greening the Commission and assess the possibility to launch actions in Member States	COMM