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European Commission

Annual Activity Report 2024

DIRECTORATE-GENERAL FOR CLIMATE ACTION

Contents

DG CLIMA IN BRIEF

The European Commission's Directorate-General for Climate Action (DG CLIMA) is responsible for EU policy, legislation and action to **tackle climate change**. For the first 11 months of 2024, DG CLIMA was under the political guidance of the **Commissioner for Climate Action**, Mr Wopke Hoekstra andthe **Vice-President for European Green Deal, interinstitutional relations and foresight,** Maroš Šefčovič. On 1 December 2024, the **Commissioner for Climate, Net Zero and Clean Growth**, Mr Wopke Hoekstra started his second term in the College of Commissioners for 2024-2029 with continued responsibility for DG CLIMA. DG CLIMA leads the Commission's efforts to **fight climate change and turn the EU into a climate-neutral and resilient society**, focusing on priorities of the new Commission like the Clean Industrial Deal and the target to reduce emissions by 90% by 2040. It develops and implements policies and legislation to help the EU reach its **2030 climate targets and net-zero greenhouse gas emissions by 2050** in a way that enables **clean growth for the EU economy**, helps implement the EU's industrial strategy, and ensures a social and fair transition for all.

DG CLIMA promotes action to make the EU better prepared for growing climate-related risks in order to **strengthen societal resilience and protect people and prosperity**. It works with partners across the world to encourage and support climate action by other countries and regions

DG CLIMA had around **330 staff members** at the end of 2024. Close to 90% of staff are active in **policymaking and implementation**. DG CLIMA has been led by **Kurt Vandenberghe** its Director-General since January 2023.

DG CLIMA is implementing its mission in five complementary ways.

1.It is developing cost-efficient **EU climate legislation and other policy tools** to (i) radically accelerate emission reduction, (ii) increase **resilience** so as to meet the objectives and the 2030 climate target, and the 2050 climate neutrality objective set out in **the European Climate Law and (iii) support industrial decarbonisation and clean technology in particular in view of the proposed 90% climate target for 2040 and in line with the Clean Industrial Deal**. DG CLIMA is also working with Member States to ensure the effective steering of investments, and implementation and enforcement of climate legislation and policies.

2. It is implementing and developing (i) **the EU Emissions Trading System (EU ETS)** (including the Union registry, which is managed in-house and contains sensitive information); (ii) existing and future international cooperation on carbon markets; and (iii) agreements linking the ETS with other carbon markets in the world.

3. It is: (i) leading the EU's **international negotiations** on climate change and ozone-depleting substances; (ii) working with the international community and key partners to ensure implementation of the Paris Agreement; and (iii) building on bilateral relations with non-EU countries to encourage them to take decisive climate action.

4. It is **encouraging Member States** to plan, carry out and finance measures for the **green energy transition** through the national energy and climate plans (NECPs), the Recovery and Resilience Facility (RRF) and the European Semester.

5. It is investing in a just transition towards a low-carbon and climate-resilient economy, through the **LIFE programme**, the **Innovation Fund**, **the Modernisation Fund** and the **Horizon Europe** framework programme. It delegates and supervises the implementation of the grant components of three financing programmes to the **European Climate,**

Infrastructure and Environment Executive Agency (CINEA). It contributes to the **mainstreaming** of climate action into the EU budget.

EXECUTIVE SUMMARY

This annual activity report is a management report of the Director-General of the Directorate-General for Climate Action 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 coordination, executive and management functions it exercises, as laid down in the Treaties (1).

A. Key result and progress towards achieving the Commission's general objectives and department's specific objectives

Climate change impacts continued to increase in 2024, inflicting suffering in the EU and around the world. 2024 was globally the hottest year on record, following the exceptional 2023. 2024 was the first year in which the global temperature was more than 1.5°C above the pre-industrial level. September and October of 2024 saw catastrophic flooding in central Europe and in Valencia. The **UN's Intergovernmental Panel on Climate Change** ([2]) confirmed in its sixth assessment report that the increased severity and frequency of such events is the result of man-induced climate change; and reiterated the urgent need to cut global emissions. EU-wide public opinion polls show Europeans' **overwhelming concern and support** for the climate measures taken at EU level.

The past few years have been challenging. The COVID-19 pandemic hit the global economy severely. The high energy prices, inflation and geopolitical tensions resulting from **Russia's war of aggression against Ukraine** and the crisis in the Middle East have highlighted the economic and strategic vulnerabilities that come with dependence on fossil fuels, which are the main drivers of climate change. Against this backdrop, the EU has shown that the **European Green Deal** is the answer to both the energy security and the climate challenges. In 2024, the EU demonstrated its determination to implement the European Green Deal to become climate neutral and resilient by 2050, ensuring sustainable competitiveness and supporting EU industry in the net-zero transition.

In 2024, the EU continued to show that **economic growth and reduction of greenhouse gas (GHG) emissions** can go hand in hand. The EU reduced GHG emissions **by 37% in 2023** compared with 1990 ([3]), while gross domestic product (GDP) grew by 68% over the same period. The **EU GHG emissions fell by 8.3% in 2023**, compared to 2022, marking the largest annual decrease in emissions on record. Another record set in 2023 was the **16.5% decrease in emissions from power and industrial installations listed under the EU Emissions Trading System (ETS)**. In 2023, the EU ETS generated EUR 43.6 billion of revenue for climate-action investments.

([1]) Article 17(1) of the Treaty on European Union.
([2]) Sixth Assessment Report — IPCC
([3]) See key performance indicator (KPI) 1 presented in Section B of this executive summary.

2024 saw a shift towards **implementing** the commitments made under the European Green Deal, **supporting the Member States** as well as **EU industry** in their transition to net zero; and inspiring and supporting **other GHG emitters** to cut their GHG emissions.

DG CLIMA's most important achievements in 2024 are listed below.

- It carried out a detailed impact assessment for, and consulted stakeholders on, an **EU-wide GHG target for 2040** leading to a recommendation for a 90% net GHG emission reduction target, as well as an EU **industrial carbon management strategy**.
- It continued to prepare the **implementing legislation** stemming from the revision of the EU's climate legislation as part of the **'Fit for 55' package**. This includes acts to implement: (i) the strengthened EU ETS (including the revised provisions for aviation) and extend it to cover the maritime sector, making the EU the first jurisdiction globally to put an explicit carbon price on emissions from the maritime sector; (ii) the new ETS for buildings and road transport; and (iii) the Social Climate Fund. It also concerned rules to implement the revised Effort Sharing Regulation, the revised Regulation on land use, land use change and forestry (LULUCF) and the revised Regulation on CO_2 emission standards for cars and vans. Altogether, the DG adopted around 40 delegated and implementing acts.
- Together with the European Environment Agency, it steered the first-ever **European Climate Risk Assessment.** It also and coordinated the Commission's input into this scientific report.
- It continued to implement the **Mission on Adaptation to Climate Change** to support regional and local authorities and communities to become more climate-resilient.
- It finalised the assessment of all draft updated NECPs and supported Member States to deliver the final **updated NECPs** ([4]) for 2021-2030. It launched infringement proceedings against Member States that had not submitted their final updated NECPs on time and infringement proceedings for non-communication of measures transposing ETS directives.
- It responded to the priorities of the Green Deal Industrial Plan, by awarding the first six projects under the **first EU-wide auction** under the Innovation Fund **on renewable hydrogen.** A new auction for renewable hydrogen was launched at the end of 2024 with a budget of **EUR 1.2 billion, including EUR 200 million for projects producing renewable hydrogen with maritime offtakers.**
- It facilitated the successful conclusion of interinstitutional negotiations to adopt a revision of the **CO_2 emission standards for heavy-duty vehicles**, in order to contribute to meeting the stepped-up 2030 and 2050 climate objectives, and to foster innovation in zero-emission technologies.
- It supported dialogue with stakeholders from the automotive sector, by organising an **Automotive Industry Summit** chaired by Commissioner Hoekstra on how to

([4]) By 20 February, 22 Member States had submitted their final updated NECP.

create a business case for the European Green Deal, and a follow-up workshop on ways to broaden the uptake of zero-emission cars.

- It facilitated the successful conclusion of the interinstitutional negotiations to adopt ambitious rules on **fluorinated GHG (F-gases)** and **ozone-depleting substances (ODS)**. These rules will further reduce emissions of these gases and provide incentives to use climate-friendly alternatives and achieve better control.
- It facilitated progress in the interinstitutional negotiations on the Commission's proposal for a voluntary framework to reliably **certify high-quality carbon removals** in order to boost innovative carbon removal technologies and sustainable carbon-farming solutions.
- In the context of the 29th UN Climate Change Conference of the Parties (COP29) in Baku, it **led the EU international negotiations**.
- It engaged with **multilateral and bilateral partners** to convince and support other countries to increase their climate ambition. Progress was also made in implementing existing **Green Alliances** (Japan and Norway) and **Green Partnerships** (Morocco and South Korea).
- Achieved new milestones under the Vietnam (which the EU co-leads) and Indonesia **Just Energy Transition Partnerships**.
- To intensify its carbon market diplomacy, DG CLIMA set up a dedicated **Task Force on international carbon pricing and markets**. The task force has started to engage with priority non-EU countries to help them develop their own carbon pricing mechanisms and promote the climate integrity of international carbon markets.
- It supported the financing of the **green transition**, notably by supporting investment in innovative low-carbon technologies and facilitating the mainstreaming of climate-related spending into the **EU budget**. The **Innovation Fund portfolio is set to be worth EUR 12 billion in the beginning of 2025. It includes around 200 innovative projects** for energy intensive industries, renewable energy, carbon capture, use and storage, energy storage or net-zero transport and buildings. 2024 was also the fourth year of operation of the **Modernisation Fund**. By the end of 2024, it had disbursed around EUR 15.4 billion in 11 beneficiary Member States. Nearly EUR 380 million **was** spent on climate and environment projects under the **LIFE programme** in 2024, including for clean energy transition.
- It co-led the design and implementation of research and innovation activities in area of energy, transport and climate under **Horizon Europe**.
- It continued supporting the measures under the Recovery and Resilience Facility contributing to the achievement of the 2030 climate targets and climate neutrality objective.
- The **European Climate Pact** further solidified its role as a flagship initiative to engage the public in climate action in the EU.

B. Key performance indicators

KPI 1 **Greenhouse gas emissions** ([5])	☺	**Target**: -55% reduction of net GHG emissions by 2030 compared with 1990 (i.e. including emissions and removals from land use, land use change and forestry – LULUCF and emissions from international maritime and aviation). **Result:** EU net domestic emissions in 2023 (including LULUCF) were 37% lower than in 1990. This was broadly in line with the linear path to achieve the EU's 55% reduction target by 2030. However, the pace of emission abatement must increase to meet the 2030 target. **Source:** DG CLIMA, 2024 Climate Action Progress Report.
KPI 2 **Climate mainstreaming into the EU budget** ([6])	☺	**Target:** at least 30% of the EU's 2021-2027 budget must be spent on climate-relevant expenditure. **Result:** the preliminary estimates of the climate contribution of the main programmes in 2021-2027 is 34.32% (estimation based on commitment appropriations). **Source:**Statements of estimates 2025, Directorate-General for Budget.
KPI 3 **Outreach and engagement activities in Member States** ([7])	☺	**Target:** 6 **Result:** 26 roadshow stops, numerous workshops and bilateral interactions on specific policy areas, at DG as well as technical level **Source:** DG CLIMA.
KPI 4 **Number of Member States with adaptation plans** ([8])	☺	**Target:** all EU Member States with adaptation strategies and/or plans by 2024. **Result:** all 27 Member States met this target **Source:** Climate-ADAPT.
KPI 5 **Estimated risk at closure**	☺	**Target**: risk at payment and risk at closure should be lower than 2%. **Result**: the detected error rate (DER) is estimated to be 0.40% in 2024. The adjusted average recoveries and correction (ARC) rate is 0.0%, so the estimated risk at payment and at closure remains 0.40%. **Source**: DG CLIMA.

([5]) See impact indicator 1 in Annex 2 ('Performance tables').
([6]) See impact indicator 4 in Annex 2 ('Performance tables').
([7]) In the second implementation phase, the pledging programme has been replaced by a new partnership approach. Therefore, this indicator was replaced by number of outreach activities.
([8]) See the result indicator related to specific objective 1.5 in Annex 2 ('Performance tables').

C. Key conclusions on internal control and financial management

DG CLIMA has systematically examined the available control results and indicators, as well as the observations and recommendations issued by the internal auditor and the European Court of Auditors. These elements have been assessed to determine their impact on management's assurance about the achievement of the control objectives. Please refer to Section 2 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. Improvements are necessary mostly in the domain of staff matters. The Director-General, in his capacity as Authorising Officer by Delegation, has signed the Declaration of Assurance albeit qualified by a reservation concerning the IT security EU ETS.

D. Provision of information to the Commissioners

In the context of the regular meetings during the year between the DG Climate Action and the Commissioners on management matters, the main elements of this report and assurance declaration, including the reservation(s) envisaged, have been brought to the attention of Executive Vice-President Teresa Ribera, responsible for Clean, Just and Competitive Transition and Commissioner Wopke Hoekstra, responsible for Climate, Net Zero and Clean Growth.

1. KEY RESULTS AND PROGRESS TOWARDS ACHIEVING THE COMMISSION'S GENERAL OBJECTIVES AND SPECIFIC OBJECTIVES OF THE DEPARTMENT

Introduction

As presented in the strategic plan for 2020-2024, the mission of the Directorate-General for Climate Action (DG CLIMA) is to formulate and implement EU climate policies and strategies, so that the EU can become the **first climate-neutral and climate-resilient continent by 2050**.

DG CLIMA is leading the Commission's efforts to **fight climate change at EU and international level**. It plays a leading role in developing and facilitating the implementation of cost-efficient policies and legislation to deliver on **the European Green Deal**, while ensuring the competitiveness of EU industry and a just transition, in line with the priorities of the new Commission.

DG CLIMA promotes innovative decarbonisation technologies to tackle global warming. It maintains ambitious global leadership in climate action, protecting the ozone layer, and strengthening international and domestic carbon markets. It plays a role in greening finance; facilitating changes in behaviour across our society; and ensuring the mainstreaming of climate action into the EU budget, and into EU and Member States' policies.

Reduction of greenhouse gas (GHG) emissions

The EU is proving that climate action and economic growth can go hand in hand. The EU has achieved steady decreases in its GHG emissions since 1990, reaching **–37% in 2023** ([9]) compared to the year before. Over the same period, its **gross domestic product (GDP) grew by 68%**.

The EU's net GHG emissions decreased **by around 8% in 2023** compared to the year before, continuing the 30-year downward trend. This is the largest annual fall in several decades excluding the peak year of the pandemic.

([9]) The EU GHG emission aggregate, which better reflects the exact legal scope as provided by the European Climate Law, is obtained by adding the EU-27 emissions from international aviation and maritime transport regulated under EU law to the EU-27's total domestic GHG emissions (including LULUCF net emissions or removals), as presented in the Climate Action Progress Report (COM(2024) 498 final).

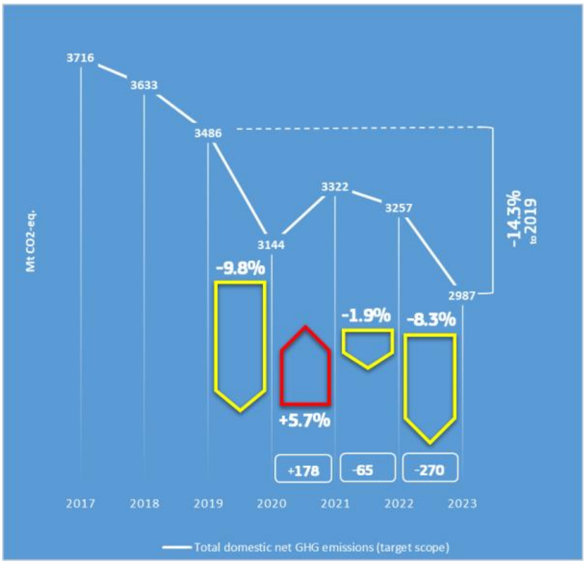

Figure 1: EU net greenhouse gas emissions (target scope)

A reduction of 134 MtCO2-eq per year (about 5% of 2023 emissions) is needed on average from now until 2030, of which 12 MtCO2-eq net removals as contribution to the 2030 LULUCF target. The EU and its Member States need to significantly **step up their implementation efforts** with **supporting investment flows**.

With the **'Fit for 55' package** adopted by co-legislators in 2023, the EU is now focused on implementing this legislative package.

Specific objective 1 – MITIGATION ([10])

Competitiveness of EU industry in the net-zero transition

In June 2024, the Net-Zero Industry Act (NZIA) entered into force as an initiative of the Green Deal Industrial Plan, which aims to strengthen the **competitiveness of the EU's net-zero industry** and to lead the global transition to climate neutrality. The plan aims to create a predictable and simplified regulatory environment, enable faster access to sufficient funding, turn skills into quality jobs, and support open trade for a resilient supply. As part of this, the Commission has also proposed the Critical Raw Material Act and a reform of the electricity market. Hydrogen is one of the key technologies of the NZIA and DG CLIMA has launched the **second auction under the Innovation Fund on renewable hydrogen** (see specific objective 3 on finance below).

The NZIA aims to scale up net-zero technology manufacturing in the EU to provide at least 40% of the EU's annual deployment needs by 2030 and to set an EU-level objective of **50 million tonnes of annual CO_2 storage capacity by 2030**.

In her 2023 State of the Union, President von der Leyen announced a series of Clean Transition Dialogues, to strengthen the Commission's engagement with industry and social

([10]) Full title in DG CLIMA's 2020-2024 strategic plan: *"Climate neutrality to be achieved by 2050 through a well-functioning EU carbon market and a fair regulatory framework for the EU and its Member States to reduce emissions"* partners and to help implement the European Green Deal. The Communication on the Clean Transition Dialogues published in April 2024 takes stock of these dialogues and gives input for building blocks that can contribute to a strengthened industrial approach for a sustainable EU.

The Innovation Fund has been central in helping Europe bring low-carbon technologies to market and supporting industry in the net-zero transition. It is already supporting 205 of the most innovative and impactful projects with €EUR 11.9 billion through a combination of grants and auctions. The fund ensures that new solutions are available to decarbonise hard-to-abate sectors such as cement and steel manufacturing, while also supporting the EU-based manufacturing of low-carbon technologies - from batteries to wind turbines and heat pumps.

2040 climate target and industrial carbon management

In 2024, DG CLIMA continued the preparatory work for setting an **EU-wide GHG emission target for 2040**. In February 2024, the Commission published a Communication ([11]) with a detailed impact assessment ([12]) on possible pathways to reach the agreed goal of making the EU climate neutral by 2050. Based on this impact assessment, the Commission **recommended a 90% net GHG emission reduction by 2040** compared to 1990 levels, launching a discussion with all stakeholders. This recommendation is in line with the advice of the European Scientific Advisory Board on Climate Change. An amendment to the European Climate Law to include the 2040 climate target is planned for early 2025.

In February 2024, the Commission adopted the **Industrial Carbon Management Communication**, which provides details on how these technologies could help to reduce emissions by 90% by 2040 and reach climate neutrality by 2050. In the **NZIA**, the Commission has proposed that the EU develops at least 50 million tonnes of CO_2 storage capacity per year by 2030. Based on the **impact assessment for the recommended EU climate target for 2040**, this figure will need to grow to around 280 million tonnes by 2040. The Industrial Carbon Management Communication sets out a comprehensive policy approach to deliver on these targets. Underpinning the Communication, a **new Joint Research Centre (JRC) study sheds light on the key role that CO2 transport infrastructure** can play in the successful large-scale deployment of industrial carbon management technologies.

GHG emissions reduction under the EU ETS

GHG emissions from power and industry installations covered by the **EU ETS saw the highest annual decrease to date in 2023** (-16.5% compared with 2022), while verified emissions from aircraft operators increased by around 9.5%, leading to a total decrease in emissions of 15.5% in 2023, compared to 2022 levels. The most important driver for the

([11]) COM(2024) 63 final
([12]) SWD(2024)63 final

record decrease in EU ETS emissions was the power sector, with emissions from electricity production in 2023 down by 24% compared to 2022. This decrease is due to a substantial increase in renewable electricity production (primarily wind and solar), and gas replacing coal ([13]). With this development, ETS emissions are now around 47% below 2005 levels and well on track to achieve the 2030 target of -62%.

In 2024, DG CLIMA continued the preparation of several pieces of **implementing legislation** for the strengthened EU ETS (with the inclusion of maritime emissions), a new ETS for buildings and road transport, and the revision of the EU ETS for aviation). It also started to prepare for the operationalisation of the Social Climate Fund ([14]). In 2024, DG CLIMA also worked on assessing the transposition of ETS directives implementing the strengthened EU ETS by Member States that have notified their transposition measures to the Commission (see 'Special objective 2 – Monitoring and Enforcement').

GHG emission reduction under the Effort Sharing Regulation

In 2022, EU-wide emissions in the **Effort Sharing Regulation sectors** remained 3.1% below the aggregated emissions limit. Yet eight Member States exceeded their annual emissions allocations.

Outside the ETS, GHG emissions from **buildings, agriculture, small industry, waste and transport** went down by 2% overall in 2023 (compared to 2022). However, there were significant divergences between these sectors, which are covered by the **Effort Sharing Regulation (ESR).** The reductions were driven by the buildings sector, decreasing by around 5.5% in 2023 compared with 2022, followed by agricultural emissions which decreased by 2% in 2023 compared with 2022. Emissions from the transport sector, which accounts for over one third of total effort sharing emissions, reduced by less than 1% compared with 2022 ([15]). The Commission assessed in its Climate Action Progress Report whether Member States made sufficient progress towards their obligations under the ESR. While it was not possible to draw any final conclusions as Member States are in the process of updating their national energy and climate plans (NECPs) the Commission identified 14 Member States at risk of not making sufficient progress. The Commission has engaged with these Member States on their efforts to ensure compliance with the ESR.

Road transport

Despite the increasing shift towards electric vehicles, most **road transport** in the EU still relies on the combustion of petrol and diesel, which causes harmful air pollutant emissions and GHG emissions that contribute to climate change. Road transport is responsible for about 24% of the EU's GHG emissions and the only sector where GHG emissions are still

([13]) 2024 Climate Action Progress Report, COM(2023) 653 final.
([14]) Directive (EU) 2023/959
([15]) Regulation (EU) 2023/857

above 1990 levels. **CO_2 emission standards for new cars and vans** and for **heavy-duty vehicles** are key drivers for reducing road transport GHG emissions.

Average CO_2 emissions from **new cars and new vans** registered in the EU continued to decrease in 2023 ([16]) and were 28% below 2019 levels for cars and 11% for vans. This is a continuation of the downward trend in CO_2 emissions observed since 2020, when stricter targets started applying and is due to the surge in the share of zero-emission vehicle registrations. In 2023, 15.5% of new cars and 8% of new vans had no tailpipe emissions (up from 2.2% and 1.4% respectively in 2019).

The **revised Regulation on CO_2 emission standards for heavy-duty vehicles** entered into force in July 2024, introducing **more ambitious targets**: a 45% reduction in CO_2 emissions from 2030, increasing progressively to a 90% reduction from 2040 (see Figure 2).

All **new urban buses** will have to be zero-emission by 2035 (and 90% from 2030).

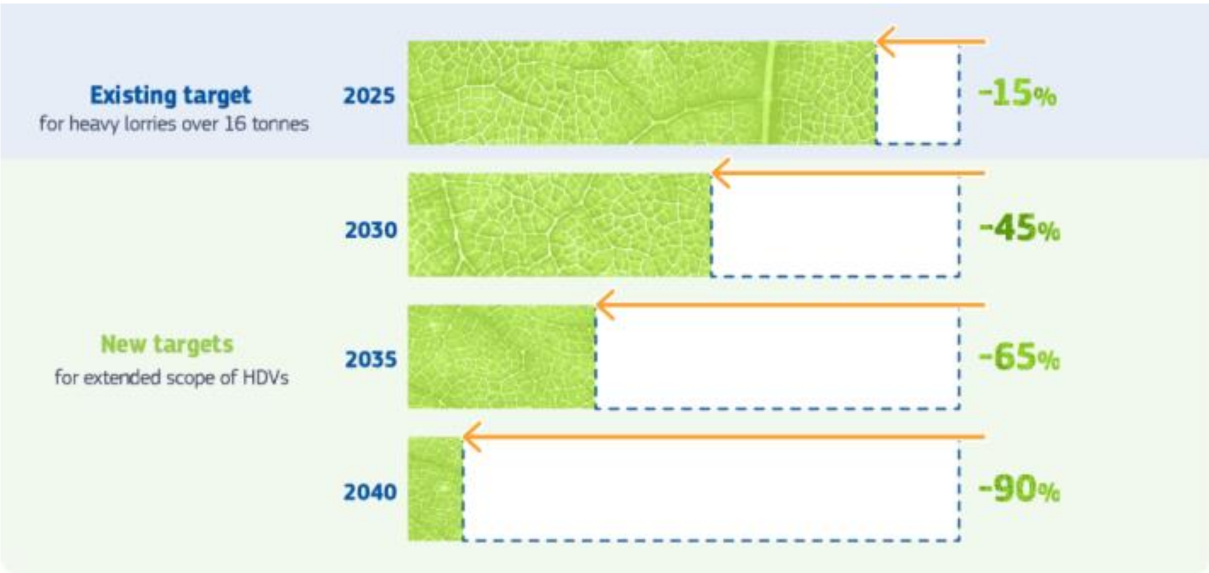

Figure 2: New CO_2 emission targets for heavy-duty vehicles (HDVs)

Land use, land use change and forestry (LULUCF)

The net carbon removals in the land sector have declined at a worrying rate in recent years ([17]). Member States' projections indicate that the EU is currently **not on track to**

([16]) The year-on-year decrease was from 108.1 gCO_2/km to 106.6 gCO_2/km for cars (-1.4%) and from 183.8 gCO_2/km to 180.9 gCO_2/km (-1.5%) for vans.

([17]) Source: Data (europa.eu).

reach its 2030 objective of removing an additional 42 million tonnes of CO_2 from the atmosphere. [18]

DG CLIMA together with the European Environment Agency have published a **LULUCF Handbook** [19] to support Member States to design and implement of their land sector policies.

Better land, soil and forest monitoring will help target action on measures that unlock the highest climate benefits. To ensure high-quality **EU-certified carbon removals**, in 2024, DG CLIMA supported the co-legislators to adopt the regulatory EU framework for the certification of carbon removals [20], which will certify carbon removals and soil emission reductions that also generate co-benefits for biodiversity and soil health in case of carbon farming.

The F-Gas and Ozone Regulations

In 2024, **the co-legislators** adopted the proposals for more ambitious regulations on **fluorinated GHG (F-gases)** [21] and **ozone-depleting substances** [22]. Both Regulations **entered into force in March 2024**. The new rules are fully in line with the policies to achieve the EU's climate objectives. In addition to further reducing emissions, they also facilitate better enforcement. Prices for hydrofluorocarbons (HFCs) have risen moderately in 2024 due to the declining quotas for placing them on the market. This supports the use of climate-friendly alternatives, while providing sufficient quota to satisfy demand for HFCs as refrigerant in equipment. A shift to avoid HFCs is currently taking place in domestic (monobloc) heat pumps. The quota system has been strengthened by the new F-gas Regulation.

Under the new F-gas rules, the amount of **HFCs** that can be placed on the market will be **significantly reduced** over time and **will even reach zero in 2050**. As a result, climate-warming HFCs will be phased out completely.

Specific objective 2 – MONITORING AND ENFORCEMENT [23]

[18] Regulation (EU) 2023/839.
[19] Handbook on the updated LULUCF Regulation EU 2018/841 - Guidance and orientation for the implementation of the updated regulation.
[20] COM(2022) 672 final.
[21] COM(2022) 150 final.
[22] COM(2022) 151 final.
[23] Full title in DG CLIMA's 2020-2024 strategic plan: 'The EU climate legislation is monitored through the Energy Union Governance, is properly applied and enforced, and is mainstreamed in the European Semester process'.

To ensure effective and complete implementation at national level of the revised 2030 energy and climate targets, Member States were required to submit their final **updated NECPs for 2021-2030** by the end of June 2024. Together with DG Energy, DG CLIMA has assessed these final plans. When drafting the plans, Member States were required to take into account the Commission's recommendations following the submission of their draft updated NECPs. The assessment of the draft plans showed that the draft updated NECPs bring us closer to meeting the EU's 2030 targets and to implementing recently agreed legislation but are not yet sufficient to meet the EU's climate and energy targets for 2030.

DG CLIMA is currently conducting an in-depth analysis based on the 22 final updated NECPs that were submitted in time or by mid-January 2025.

DG CLIMA continued **infringement proceedings** for delayed submission of **long-term strategies** and initiated **infringement proceedings** against Member States for **delayed submission of their final updated NECPs** ([24]).

As the draft updated NECPs fell short of achieving the climate target of reducing net GHG emissions by at least 55% by 2030 compared to 1990, the final NECPs need to demonstrate a significant increase in efforts to reduce emissions. Member States also need to significantly step up their efforts on climate adaptation aspects of their NECPs. In its recommendations, the **Commission called on Member States to increase their efforts** on GHG emissions reduction and removal and to set out clearer plans for adapting to climate change. It also invited them to better prepare for an increased uptake of renewables and to strengthen energy efficiency measures. Additional efforts are also needed to empower consumers, improve energy security and help EU companies become more competitive. Greater efforts will be necessary to ensure access to available sources of funding and stimulate the crucial investments required for the competitiveness of EU industry.

In September 2024, the Commission published a report on the functioning of the Regulation on the Governance of the Energy Union and Climate Action, accompanied by a detailed evaluation ([25]). The report concludes that in a rapidly evolving political and geopolitical context, the Regulation has played an **important role in keeping the EU on track to meet its 2030 targets by making planning and reporting more coherent, integrated and simpler.**

To ensure proper functioning of the updated EU ETS system in the future, in January 2024, DG CLIMA opened formal **infringement cases** against 26 Member States for non-

([24]) As required by the Governance Regulation.
([25]) Report on the functioning of the Governance Regulation - European Commission

communication of measures transposing the EU ETS directives. The Member States were obliged to transpose the ETS Directive and the ETS Directive on aviation by 31 December 2023. In July 2024, DG CLIMA initiated another 26 infringement cases for non-communication of transposition measures covering the ETS 2 provisions of the ETS Directive, which the Member States were obliged to transpose by 30 June 2024. All ETS-related proceedings have been closed for Austria, Denmark and Sweden.

DG CLIMA undertakes to regularly assess whether rules and legislation are still fit for purpose or check where there is potential for simplification. In 2024, the evaluation of the car labelling directive (Directive 1999/94/EC of the European Parliament and of the Council relating to the availability of consumer information on fuel economy and CO2 emissions in respect of the marketing of new passenger cars) was launched. In particular, it assesses the car labelling rules against the current context.

The evaluation of the Governance Regulation, published in September 2024, identified scope for further streamlining the reporting obligations and processes under the Regulation, for instance improving the sequencing and timing of different obligations and streamline overlaps in requirements. These findings will be considered in the revision of the Governance Regulation foreseen for mid-2026.

The evaluation of the Land Use, Land-Use Change and Forestry (LULUCF) Regulation will evaluate whether the Regulation is still fit for purpose and look at the potential for simplification and savings in regulatory costs.

A first interim evaluation of the operating rules of the Modernisation Fund was launched, after four years of implementation. It will explore potential actions for simplification and burden reduction in the implementation of the Fund. Also on the Innovation Fund an evaluation was launched. The Innovation Fund grant process was recently simplified with expected savings of around EUR 1 to 2 million euros per year. The burden on vehicle manufacturers in implementing the Euro 6 Regulation was reduced by reducing the number and the complexity of testing procedures, through the revision of Regulation (EC) No 595/2009 on type approval of motor vehicles and engines with respect to emissions from heavy-duty vehicles.

DG CLIMA has continued to work to ensure that climate priorities are fully reflected in the **European Semester process** and the roll-out of the **recovery and resilience plans** which support Member States in putting forward critical reforms and investments to rapidly phase out the EU's dependence on Russian fossil fuels.

DG CLIMA continued its work on boosting synergies between **green and digital transitions** efficiently using digital and space technologies for climate action, decarbonisation of key sectors and to address climate risks (adaptation, early warning, and disaster risk management). Special focus was on AI for climate mitigation and adaptation. DG CLIMA worked closely with other DGs, in particular DG Communications Networks, Content and Technology and DG Defence Industry and Space, on fully using projects like **Destination Earth for climate action**.

DG CLIMA increased its cooperation with the European Space Agency (ESA) under the joint initiative on **Space for Climate Action**. Since May 2024 a seconded National Expert from ESA has been supporting DG CLIMA in the uptake of space and satellite data, in particular in the areas of urban initiatives for climate, LULUCF, carbon dioxide removal, and GHG monitoring. DG CLIMA also strengthened its cooperation with the European Centre for Medium-Range Weather Forecast and EUMETSAT.

DG CLIMA has been involved in the assessment of solar radiation modification (SRM). Following the Commission's request, the Group of Chief Scientific Advisors and the European Group on Ethics in Science and New Technologies delivered two non-binding scientific recommendations on 9 December 2024. They provided important scientific insights, calling for a moratorium on the use of SRM and emphasising the need for further work on governance for SRM research and potential deployment, as well as on SRM assessment, detection and modelling capacity, and transparency.

Specific objective 3 - FINANCE ([26,27])

A robust carbon price allowed the EU ETS to raise **EUR 43.6 billion in auction revenue** in 2023, mostly directly for national budgets. Of this amount, EUR 33 billion went directly to Member States. Of the remaining revenue, EUR 7.4 billion was supplied to the ETS Innovation Fund and the Modernisation Fund (see Chapter 6) and EUR 2.8 billion was supplied to the Recovery and Resilience Facility (RRF), which Member States use to advance the clean energy transition and boost energy security.

Under RRF, each national Recovery and Resilience Plan has to contribute to the green transition with at least 37% of their total allocation, and currently 42.5% of the total financing envelope of the RRF, equal to EUR 275 billion is dedicated to this type of measures. The RRF is at the heart of the REPowerEU funding, mobilising EUR 60 billion of investments aimed at saving energy, boosting renewable energy generation and reducing the EU's reliance on Russian fossil fuels.

([26]) Full title in DG CLIMA's 2020-2024 strategic plan: *'Climate-related spending is mainstreamed in the EU budget and in private funds to finance the green and just transition and to invest in particular in low carbon and other climate innovations'.*

([27]) In line with the criteria for a strengthened common control approach to provide reasonable assurance of the reliability of performance information about EU budget spending programmes, DG CLIMA has put in place an assurance process based on a strong control framework and procedures to identify potential significant weaknesses. This assurance framework covers the DG's financial programmes and activities, and the entrusted entities involved. No issues were identified.

With an estimated revenue of EUR 40 billion from the EU ETS between 2020 and 2030 depending on the carbon price, the **Innovation Fund** provides financial support to companies to invest in cutting-edge low-carbon technologies and accelerate the EU's transition to climate neutrality. The results of the 2023 Innovation Fund call were published in the second half of October 2024 – 85 projects were pre-selected for grants which are set to receive EUR 4.8 billion of Innovation Fund support in total. With these projects, the Innovation Fund portfolio would increase to around 200 projects under implementation, receiving around EUR 12 billion of grant support. This 2023 call had a record budget of EUR 4 billion and received 337 applications.

The first-ever Innovation Fund auction in 2023 attracted 132 bids from 17 countries across Europe, requesting funds for an amount that was 15 times greater than the available budget. The results of the evaluation were published at the end of April 2024. The selected projects submitted bids between EUR 0.37 and EUR 0.48 per kilogram of renewable hydrogen produced and, based on the pay-as-bid design of the pilot auction, they will receive Innovation Fund grants ranging from EUR 8 million to EUR 245 million. Payments will only be provided upon presentation of certified and verified volumes of renewable hydrogen. The grant agreements were signed in October 2024 by six projects, which are set to receive almost EUR 700 million of Innovation Fund support in. More information on the portfolio of ongoing projects can be found in the interactive Innovation Fund dashboard ([28]).

DG CLIMA and the European Climate, Infrastructure and Environment executive Agency (CINEA) launched **three calls** for proposals under the Innovation Fund with a total budget of EUR 4.6 billion, including one for auctions under the European Hydrogen Bank and a dedicated call for the production of batteries for electric vehicles.

([28]) Innovation Fund project portfolio dashboard

Following the successful **first auction on renewable hydrogen** with a budget of EUR 800 million, in 2024, DG CLIMA launched the **second auction under the Innovation Fund on renewable hydrogen**. It will allocate **€1.2 billion** from ETS revenues to support producers of hydrogen categorised as renewable fuel of non-biological origin that are located in the European Economic Area (EEA). The aim is to support the creation of the still incipient market for renewable hydrogen in Europe, with a mechanism that targets the green premium and that provides transparency of information. This second auction also puts emphasis on the contribution of projects to the creation of a competitive European industry and to the security of supply of essential goods. EUR 200 million from this call are reserved for the production of renewable hydrogen with maritime offtakers.

Renewable hydrogen has a critical role to play in the EU's future energy mix (particularly for the decarbonisation of heavy industry and some transport sectors) by replacing fossil fuels.

The Innovation Fund can respond to urgent policy priorities. In December 2024, a EUR 1 billion call for proposals was launched to support projects related to the manufacturing of battery cells for electric vehicles in order to strengthen Europe's industrial capacity and leadership in this net-zero technology. This support aims to ensure that battery production capacity in the EU /European Economic Area is ready to respond to increased demand for electric vehicles, in line with the mandatory standards on CO2 emission performance of light- and heavy-duty vehicles.

Additionally, EUR 200 million is made available to the European Investment Bank (EIB) for blending operations with the InvestEU Green Transition product. This support should help to finance battery value chain projects, allowing the EIB to make investments that would otherwise be considered too risky.

In its fourth year of operation, the **Modernisation Fund** provided a total of EUR 5.6 billion in support of77 projects in 11 EU countries to help modernise their energy systems; reduce GHG emissions in energy, industry and transport; and improve energy efficiency. In December 2024, the Commission adopted the eight disbursement decisions under the fund. On this basis, the EIB made payments for a total of EUR 2.7 billion to 11 beneficiary Member States ([29]). Total funding from the Modernisation Fund since January 2021has now reached EUR 15.4 billion.

As part of the 2024 call for proposals, on 18 April, the **LIFE programme** made available EUR 92 million for climate change mitigation and resilience projects, of which EUR 30 million specifically dedicated to strategic integrated projects. Later in the year, in October 2024, DG CLIMA (together with DG Environment and DG Energy, and with CINEA's support)

([29]) 2024 Climate Action Progress Report, COM(2023) 653 final.

awarded grants to 133 new projects across Europe as part of calls under the LIFE programme, making available a total of EUR 380 million available to projects conserving nature, protecting the environment, taking climate action and transitioning Europe to clean energy. Since the beginning of the programming cycle, the Commission has granted **more than EUR 307 million to 108 projects** across Europe under on climate change mitigation and adaptation. The allocated amount represents more than half of the EUR 529 million of total investment needs for these projects, the remainder coming from national, regional and local governments, public-private partnerships, businesses, and civil society organisations. ([30])

The **EU's 2021-2027 budget** (both the multiannual financial framework (MFF) and the NextGenerationEU instrument, with the Recovery and Resilience Facility (RRF) at its core) is an important enabler of the green transition. It is currently expected to contribute EUR 658 billion to climate action in the period up to 2027. This is 34% of the EU's total budget ([31]) and exceeds its 30% climate-spending target. This target is underpinned by programme-specific spending targets (for instance, under the European Regional Development Fund (30%), the Neighbourhood, Development and International Cooperation Instrument – Global Europe (30%), the Horizon Europe programme (35%), the Cohesion Fund (37%), the common agricultural policy (40%), the Connecting Europe Facility (60%), and the LIFE programme (61%)). While it is key to ensure these targets deliver as planned, work also started on the next MFF, to support EU competitiveness, accelerate decarbonisation and preparing for growing climate risks, both internally in the EU and externally.

Investment in research and innovation is essential to generate knowledge and scientific basis, as well as to develop solutions for the transition towards climate neutrality and resilience. Overall, **Horizon Europe** will contribute at least 35% of its EUR 95.5 billion budget to climate objectives in 2021-2027. Horizon Europe had invested over EUR 14.7 billion in climate action by the end of 2023. This covers, among other things, projects in the thematic areas of climate science, energy supply, storage and systems, clean transportation, industry decarbonisation, climate adaptation, carbon removals, and agriculture.

Climate action is also mainstreamed in the context of the RRF. All national Recovery and Resilience Plans have to contribute to the green transition with at least 37% of their total allocation, and currently 42.5% of the total financing envelope of the RRF, equal to EUR 275 billion is dedicated to this type of measures. The RRF is at the heart of the REPowerEU funding, mobilising EUR 60 billion of investments aimed at saving energy, boosting renewable energy generation and reducing the EU's reliance on Russian fossil fuels.

([30]) Details about the LIFE programme's implementation, including performance information are available in the programme statements of the Draft general budget.

([31]) The Commission's 'statement of estimates' was published in preparation for the draft budget 2024. The projected amount reflects loans currently requested in the Recovery and Resilience Facility and excludes the innovation and modernisation funds.

Specific Objective 4 – COMMUNICATION AND DIALOGUE ([32])

EU-wide public opinion polls showed that an overwhelming majority of **Europeans are concerned** about climate change, support EU action to address it, and are taking action themselves ([33]). The involvement and commitment of the public, regions, local communities and all stakeholders are crucial to the success of the European Green Deal.

In 2024, , DG CLIMA continued and strengthen its outreach to the general public via various communication channels to build public support for EU climate policy and action, encourage public debate on climate and behavioural change, as well as tackle climate disinformation. These channels were the **EU Climate Action website** (2.5 million visits in 2024), **social media** (over 404 000 followers on **Facebook, X, LinkedIn and Instagram**, with 500 000 interactions in 2024) and **two external newsletters**. DG CLIMA's In our communication activities were guided by its communication strategy for 2023-2024.

One area of focus in **communications** was addressing the growing trend of disinformation about climate change. In 2024, DG CLIMA's communications team ran a small pilot campaign with influencers in Finland, France, Italy, Poland and Czechia, which yielded positive early results. The influencer campaign will be expanded in 2025 and supplemented with a broader pilot communications campaign to strengthen societal resilience against climate disinformation.

DG CLIMA also engaged with the public and stakeholders via specific initiatives. The **European Climate Pact** further solidified its role as a flagship initiative to engage the public in climate action in the EU. Its network expanded to include over **800 dedicated volunteer Pact Ambassadors and, as a new feature, now also includes 52 partner organisations**, strengthening its role as a catalyst for change. Through **305 events** in all 27 Member States, the Pact effectively raised awareness of the EU's climate policies and encouraged local action across diverse communities. The Pact's capacity to foster impactful partnerships was underscored by notable close collaborations with key stakeholders for joint actions, including Commission D-Gs (Environment, Communication, Energy, Maritime Affairs and Fisheries, Education, Youth, Sport and Culture, Research and Innovation , Regional and Urban Policy), the JRC, Commission Representations, and initiatives such as the Committee of the Regions, the Mission on Adaptation to Climate Change and the Covenant of Mayors for Climate and Energy underscored the Pact's capacity to foster impactful partnerships.

As part of its efforts to strengthen the outreach to stakeholders, DG CLIMA ran a **roadshow on EU climate and energy policy**, which was well received by all parties involved – from national government representatives to different stakeholders on the

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([32]) Full title in DG CLIMA's 2020-2024Strategic plan: *'A voice and a space is given to citizens, cities, regions and all stakeholders to design and implement climate actions, share information, launch grassroot activities and showcase solutions that others can follow through the Climate Pact and the EU Covenant of Mayors'.*

([33]) Special Eurobarometer on Climate Change, July 2023.

ground. From March to December, a series of visits were organised to 26 Member States (all except Italy).

On 10 April 2024, the DG supported dialogue with stakeholders from the automotive sector, by organising an **automotive industry summit** chaired by Commissioner Hoekstra on how to create a business case for the European Green Deal. A follow-up workshop on ways to broaden the uptake of zero-emission cars was organised on 4 July 2024.

On 15 July 2024, the second annual **EU Day for the Victims of the Global Climate Crisis** took place, honouring those lost to and affected by the climate crisis. The ceremony held in Brussels was attended by Commissioner for Crisis Management Janez Lenarčič and representatives of the Belgian government. This day also serves as a call to action to minimise the impact of climate change wherever we can and build resilience to protect lives and livelihoods held in Brussels was attended by Commissioner for Crisis Management Janez Lenarčič and representatives of the Belgian government. This day also serves as a call to action to minimise the impact of climate change wherever we can and build resilience to protect lives and livelihoods.

In September 2024, a high-level **round-table on how to manage climate risks and damages** brought together around 100 participants to discuss the way forward for strengthened climate risk management, in follow-up to the first European Climate Risk Assessment and the Commission Communication on managing climate risks. Participants called for bold action on climate resilience and discussed structural changes, actionable tools and financing for the future.

The 29th UN Climate Change Conference of the Parties (COP29) in Baku in November 2024 was another important moment for communication. The EU pavilion hosted an exhibition and networking space for the two-week conference, allowing stakeholders from around the world to engage with the EU's climate policies.

Specific objective 5 – ADAPTATION AND RESILIENCE ([34])

From extreme heatwaves and devastating droughts to deadly forest fires and rising sea levels that erode coastlines, climate change is already taking a heavy toll ([35]). **Losses from weather and climate-related disasters are significant** and increasing over time. Between 1980 and 2023, weather- and climate-related extremes caused economic losses of assets estimated at EUR 738billion in the EU Member States (22% of which between 2021 and 2023 ([36])). Climate risks will continue to intensify, with the Intergovernmental

([34]) Full title in DG CLIMA's 2020-2024strategic plan: *'EU society (people, nature and welfare) is increasingly climate-resilient, adapted and equipped, protected and insured against the adverse impacts of climate change'.*
([35]) Warmest January on record, 12-month average over 1.5°C above preindustrial levels | Copernicus
([36]) Economic losses from weather- and climate-related extremes in Europe, EEA

Panel on Climate Change (IPCC) assessing the window of opportunity to avert the worst consequences as 'brief and rapidly closing' ([37]).

In March 2024, the European Environmental Agency published the first-ever **European Climate Risk Assessment (EUCRA)** commissioned and jointly steered by DG CLIMA. This independent scientific report identified that 8 out of 36 major climate risks for Europe require urgent action today, and that if no appropriate action is taken, all risks may become critical or even catastrophic in the future. The EU and its Member States are not sufficiently prepared, nor keeping pace with the rapidly growing risks and impacts.

In response to the findings of the EUCRA report, the March 2024 **Commission Communication on managing climate risks - protecting people and prosperity** demonstrates the Commission's resolve to take the risks and concerns seriously and tackle them head-on. This policy document sets out how the EU can effectively get ahead of the growing climate-related risks and systematically build greater resilience to climate change impacts. The direction of travel indicated in the Communication is the starting point for a dialogue with stakeholders during the current term of office **building towards the European Climate Adaptation Plan** announced by President von der Leyen in her Political Guidelines.

In October 2024, the European Court of Auditors adopted a special report on EU climate adaptation, in which it concluded that while the overall EU framework for adaptation policy was sound, there were weaknesses and gaps in its implementation ([38]). Besides others. The Court of Auditors recommended, among other things, to improve reporting on climate adaptation, better develop and promote EU tools for climate adaptation, and ensure that all relevant EU-funded projects are adapted to the current and future climate conditions.

The European Climate Law together with the EU Adaptation Strategy have set the long-term direction of travel and increased investment predictability by providing for continuous progress on adaptation.

Specific objective 6 - INTERNATIONAL NEGOTIATIONS ([39])

In 2024, DG CLIMA participated in several **international exchanges**, including the Copenhagen Climate Ministerial, the Petersberg Climate Dialogue, the Ministerial on Climate Action, COP29 in Baku (Azerbaijan), and the 60th sessions of the subsidiary bodies of the United Nations Framework Convention on Climate Change in Bonn. Through its participation in **multilateral negotiations** and **bilateral dialogues,** DG CLIMA is engaging with other major GHG emitters to raise the collective efforts for the global transition to climate-neutral and resilient economies.

([37]) Sixth Assessment Report — Intergovernmental Panel on Climate Change (IPCC).
([38]) Special report 15/2024: Climate adaptation in the EU | European Court of Auditors.
([39]) Full title in DG CLIMA's 2020-2024Strategic plan: *'The level of ambition of other greenhouse gas emitters is increased thanks to the EU's leading role in climate diplomacy in line with the Paris Agreement and SDG 13'.*

DG CLIMA **led the EU's international negotiations** at COP29 in November 2024. The EU negotiators succeeded, together with partners from around the world, in achieving several positive outcomes. Parties to the Paris Agreement succeeded in agreeing on the two mandates of COP29: (i) a new goal on climate finance for developing countries and (ii) adopting the guidance to fully operationalise international carbon markets under Article 6 of the Paris Agreement – thus finalising the Paris Agreement's 'rulebook'. Countries agreed to a new climate finance goal of at least USD 300 billion per year by 2035 for developing countries, with developed countries taking the lead, and developing countries being encouraged to make contributions on voluntary basis. It calls on all stakeholders to work together to enable the scaling up of financing to developing country parties for climate action from all public and private sources to at least USD 1.3 trillion per year by 2035. This decision also responds to a longtime request of developing countries for more climate finance to be channelled via the regime's funds (Global Environmental Facility, Green Climate Fund, Adaptation Fund and Fund for responding to Loss and Damage by deciding to 'pursue efforts to at least triple [their] annual outflows" from 2022 levels by 2030. The decision also calls for improvements in easing access to and the effectiveness of climate finance, as well as reforms of the international financial architecture. It calls on parties to strengthen their enabling environments, in a nationally determined manner, with a view to increasing climate financing.

Together, the EU, its 27 Member States and the European Investment Bank are the biggest providers of climate finance in the world. In 2022, they **mobilised EUR 28.5 billion** to support developing countries in the fight against climate change.

All these aspects should be welcomed as, in addition to reaffirming developed countries' leadership, they recognise the role of multilateral development banks as well as contributions from other stakeholders, and the need for structural reforms to mobilise climate finance at scale and improve accessibility and effectiveness.

However, the COP failed to follow up on the commitments made in the **first Global Stocktake** under the Paris Agreement, including on the global efforts on energy transition. Despite persistent efforts by the EU and our progressive partners, our proposals to create space to discuss collective progress towards these goals were rejected by less progressive countries. Texts proposed by the COP Presidency as part of the final package on the follow-up to the Global Stocktake and on a just transition work programme were considered insufficient on mitigation action, so discussions on these matters will resume in Bonn in June 2025. By comparison, the decision on the pre-2030 mitigation ambition and implementation highlighted some key actionable solutions on mitigation in cities, buildings and urban systems.

COP29 also provided further guidance on the definition of indicators for assessing progress towards the global goal on adaptation. It sets a maximum number for indicators to be negotiated during the Bonn session in June 2025 - the set deadline for finalising the work – so as to adopt them at COP30.

At COP29, the EU hosted an information hub – an exhibition space to present its work on EU climate action. Via five different thematic areas, visitors were able to: (i) discover the

EU's plan to become climate-neutral by 2050; (ii) learn about the EU's climate action beyond its borders; (iii) dive into the challenges of adapting to climate change; (iv) explore the ways the EU engages with different communities and stakeholders to bring about greater climate ambition; and (v) focus on the different themes of the COP29 calendar, from energy and education, to health, nature and oceans.

DG CLIMA also negotiated for the EU on technical matters at the Meeting of the Parties to the Montreal Protocol and the Conference of the Parties to the Vienna Convention in November 2024. Good progress was made on important issues such as relevant emissions from the chemical production sector, developing a coherent global emissions monitoring system and strengthening the Protocol's institutions.

To intensify its carbon market diplomacy, DG CLIMA set up a dedicated **task force on carbon markets**, to amplify efforts to replicate the success of the EU ETS by encouraging and supporting other jurisdictions to introduce or improve their own carbon pricing mechanisms. The task force will also enable the EU's engagement with stakeholders to ensure the climate integrity of international carbon markets and their alignment with Paris Agreement objective.

In 2024, DG CLIMA made progress in implementing existing **green alliances with Japan and Norway** and a **green partnership with Morocco and South Korea** bystrengthening dialogue and cooperation in areas of relevance to the green transition. DG CLIMA also played a role in reaching new milestones under the Just Energy Transition Partnerships for Vietnam (which the EU co-leads) and Indonesia. Both countries adopted investment plans that detail investment needs, the most transformative projects and the policy reforms to pursue in order to achieve the Just Energy Transition Partnership's objectives. DG CLIMA also actively supported the Just Energy Transition Partnership with South Africa, which was the subject of a senior official visit.

At the **High-Level Dialogue on Climate Change between the EU and Japan**, senior officials agreed to deepen their bilateral co-operation, and to work together towards achieving climate neutrality and tackling climate-related challenges. The meeting took place in Turin, Italy, in the margins of the G7 Ministerial Meeting on Climate, Energy and Environment.

The **EU-China High-Level Environment and Climate Dialogue** was the occasion to hold an open and frank dialogue on the EU and China's paths and policies to achieve carbon neutrality. The EU and China agreed on a list of deliverables for cooperation, which are being implemented by DG CLIMA, DG Environment and the Chinese Ministry of Environment and other Chinese Ministries.

DG CLIMA also held **high-level dialogues with other key countries such as Canada, Australia, and India**.

Ahead of **COP30 in Bélem** (Brazil) DG CLIMA launched a diplomatic initiative to encourage high ambition by large emitters when presenting their next nationally determined contributions. DG CLIMA also worked with other Commission departments to mainstream climate policy objectives into other policies such as trade (e.g. through Trade and sustainable development committees of Free trade agreements) and international innovation cooperation, and to facilitate the implementation of Carbon Border Adjustment Mechanism.

Finally, DG CLIMA contributed heavily to the external representation of the President, Vice-Presidents and the Commissioner for Climate Action so as to maintain high-level engagement of non-EU countries towards the objectives of the Paris Agreement and the green transition.

2. INTERNAL CONTROL AND FINANCIAL MANAGEMENT

Management monitors the functioning of the internal control systems on a continuous basis and carries out an objective assessment of their efficiency and effectiveness. Annex 7 provides a list and details of the reports that have been considered. The results of the above assessment are explicitly documented and reported to the Director-General.

2.1. Control results

Management uses control results to support its assurance and reach a conclusion about the cost-effectiveness of those controls, meaning whether the right balance between the following elements is achieved:

- **Effectiveness** The level of error found, based on the controls carried out.
- **Efficiency** The average time taken to inform or pay.
- **Economy** The proportionality between the costs of controls and the funds managed.

DG CLIMA's assurance-building and materiality criteria are outlined in Annex 5. Annex 6 outlines the main risks together with the control processes to mitigate them and the indicators used to measure the performance of the relevant control systems

2.1.1. Overview of the budget and relevant control systems (RCS)

DG Climate Action activities are spread over five main areas. All below areas of activity cover different expenditure relevant control systems:

- **LIFE programme** for the Environment and Climate Action. This is the largest segment in terms of budget implementation of which the vast majority relates to **procurement contracts**. The second-biggest part of this programme's budget was spent under the running **administrative agreements** with JRC, which constitutes 11% of expenditure. Grant implementation under LIFE programme is delegated to CINEA via a type II co-delegation.
- **Innovation Fund,** which supports innovation in low-carbon technologies and processes under the ETS. It is the second biggest spending action in DG Climate Action. In 2024, the in-house budget implementation consisted in providing: (i) the charge back services, mostly for **contributions to the eGrants and SEDIA platforms, (ii) REA validation services and (iii) corporate communication services.** The Innovation Fund also financed contribution agreements with the EIB. Grants under the programme are delegated to CINEA via a type II co-delegation.
- **External Actions** expenditure is covered by the 'Neighbourhood, Development and International Cooperation Instrument' (NDICI), and the Instrument for Pre-accession Assistance (IPA). The NDICI represents the largest part of the expenditure. This

mainly concerns **contribution agreements** under indirect management, which are managed by DG Climate Action via type II co-delegation from DG International Partnerships. It also covers **grants, procurement** under direct management and **contributions to international conventions.** More precisely, these contributions concern the support to the core budget of the United Nations Framework Convention on Climate Change (UNFCCC), to the core budget under the Kyoto Protocol, the annual fee payable to the UNFCCC for the international transaction log, the Montreal Protocol, and the Vienna Convention.

- Under **Horizon Europe, cluster 5 'Climate, energy and mobility'** and DG Climate Action implements a small amount of appropriations via co-delegation from DG Research and Innovation (DG RTD). The spending to implement the Mission of adaptation to climate change was executed through an **administrative agreement** and a **service level agreement** concluded in the previous year with, JRC and the European Environmental Agency. Furthermore, DG Climate Action implements part of its **staff budget** linked to the execution of this programme. This part of the budget is delegated to DG Human Resources and Security and the Office for the Administration and Payment of Individual Entitlements via a type III co-delegation for the execution of payments. Grant management is delegated to CINEA via a type II co-delegation from the lead parent DG Research and Innovation.
- **European Public Administration**, Heading 7 of the 2021-2027MFF, consisting in **expenditure related to officials and external staff as well as to meetings and conferences**. A large part of the budget is delegated to DG Human Resources and Security and the Office for the Administration and Payment of Individual Entitlements via a type III co-delegation for the execution of payments for instance for the **missions.** Via this segment DG Climate Action finances, the administrative support in the "Climate Action" policy area. This is the smallest part of the expenditure.

See the following charts and Annex 3 for details on the budget implementation of DG Climate Action and a detailed financial overview.

Figure 2: 2024 payments per action (in EUR million)

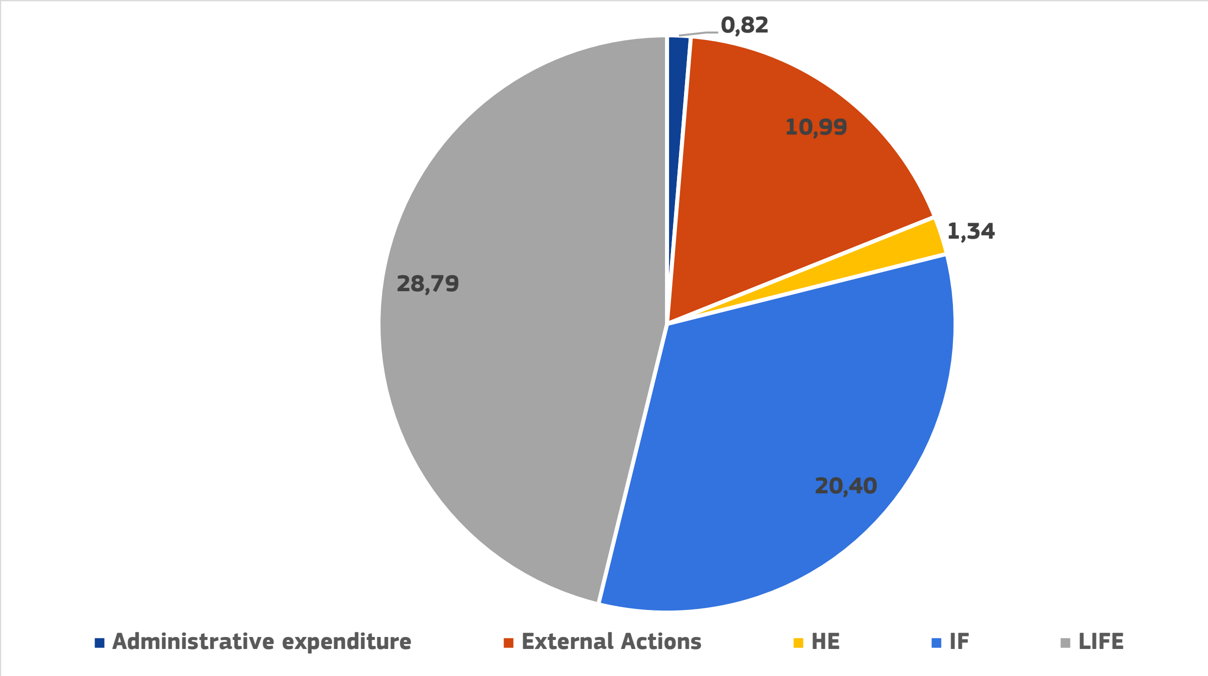
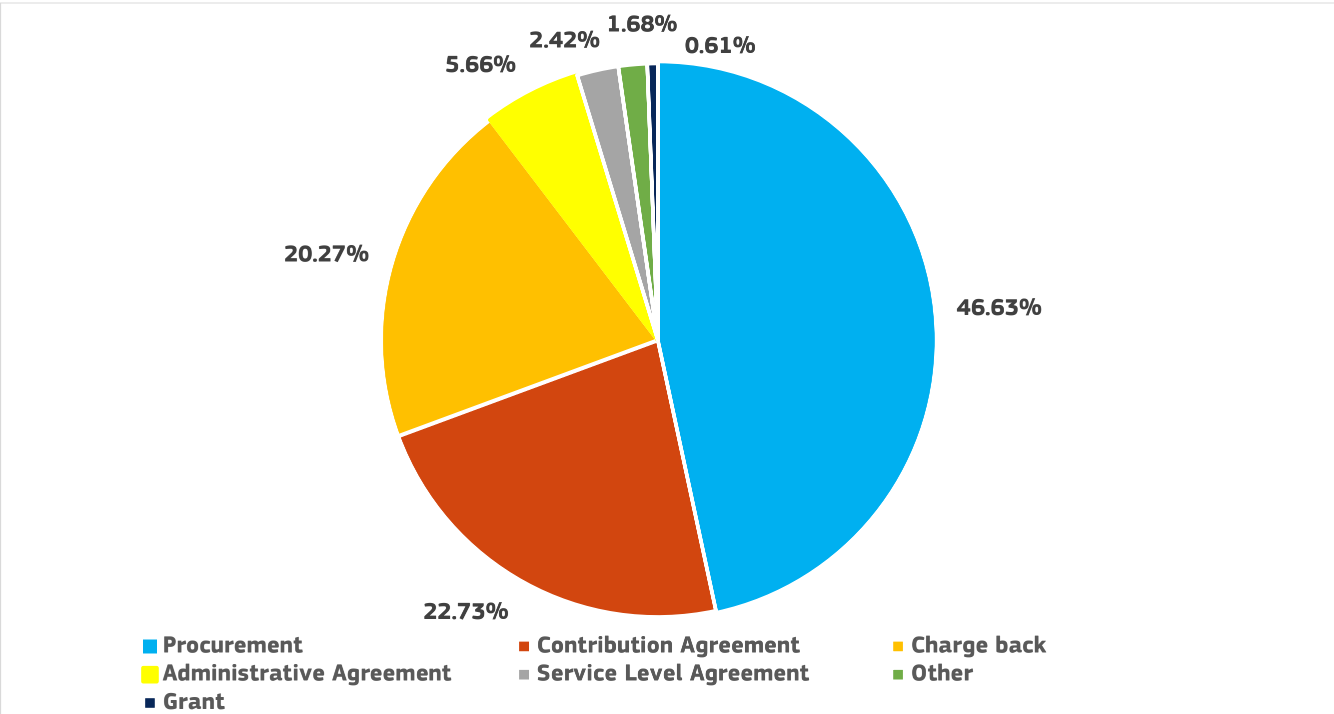


Figure 3: 2024 payments per relevant control systems (in %)



In the area of **non-expenditure relevant control systems** DG Climate Actions is concerned by: (i) non-current and current financial assets; (ii) cash and cash equivalents; and (iii) the sensitive information. DG Climate Action, in collaboration with the EIB under indirect management, is responsible for the monetisation of the ETS allowances allocated to the Innovation Fund and the management of the assets thus generated. Additionally, the

Private Finance for Energy Efficiency (PF4EE) financial instrument managed jointly by DG CLIMA and the EIB is still active and holds assets. It is mostly the EIB who manages the above-mentioned non-expenditure financial assets under the contribution agreements signed with Commission. These assets consist mainly of bonds with different maturity dates as well as cash. The other sources of income were premiums for excess CO2 emissions from new passenger cars and partial recovery of pre-financing. In 2024, DG Climate Action **revenue** amounted to EUR 2 297 485 503,72.

DG Climate Action is responsible for safeguarding the accuracy, integrity and reliability of relevant market sensitive data managed by the system as the business owner and manager of the Union Registry.

DG Climate Action therefore handles EU ETS sensitive information in documents on a daily basis. In order to ensure consistent protection of this sensitive non-classified (SNC) information, DG Climate Action developed its own handling instructions for sensitive data. These instructions include security markings specific to the DG, which were taken over and adopted in 2014 by DG Human Resources and Security and subsequently carried over to its security notice revision in 2019[40].

Following this revision, DG Climate Action updated its internal policy for handling SNC documents covering the use of the DG Climate Action specific markings and the new Commission-wide security markings. The most recent version of these handling instructions dates back to December 2022 but a new version, incorporating the necessary updates, is being finalised.

Furthermore, DG Climate Action organises regular training sessions for its staff and newcomers on this specific policy. DG climate Action implements IT security measures and action plans to secure and protect data with the direct involvement of senior management. Internally, the DG CLIMA IT Steering Committee (at director level) advises the Director General on IT and security matters, including the safeguarding of assets.

In the course of 2024, DG Climate Action completed the preparatory work in the Union Registry for onboarding maritime companies into the EU ETS. It continued to prepare the new EU ETS for buildings, road transport and other industries. With this work, the assets held in the Union Registry in the form of EU allowances will continue to grow and combined with the development of the external risk environment seem to be outpacing the Commission's capacity and institutional mandate to strengthen existing security measures and implement new ones – particularly those related to regulatory compliance and risk exposure associated with financial instruments.

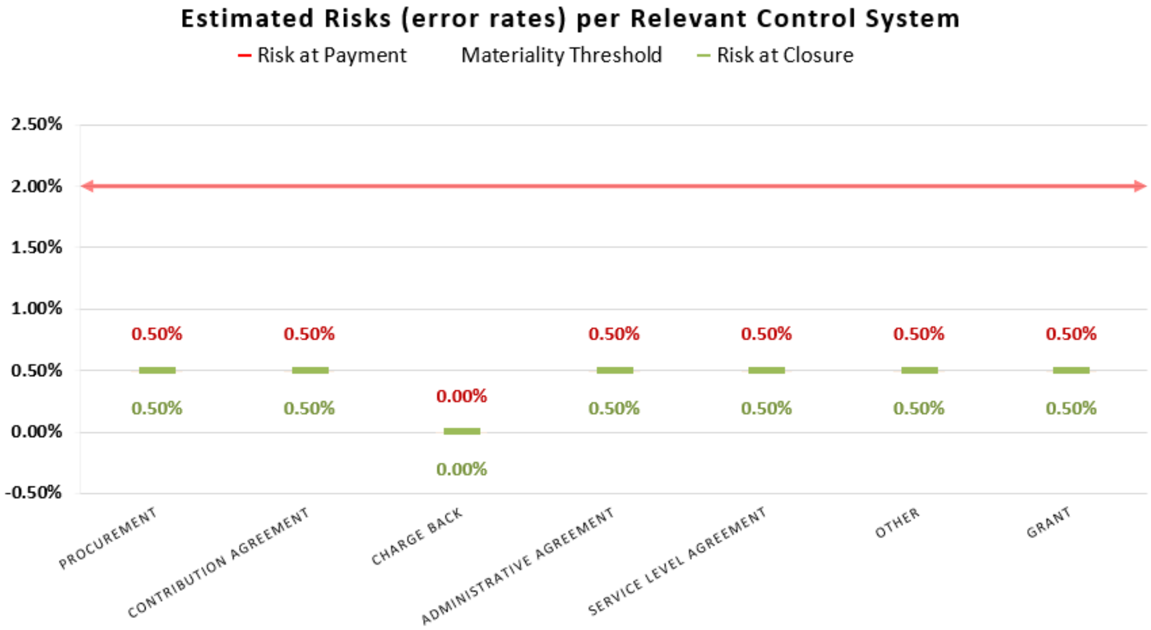
In April 2024 an interservice group led by DG Climate Action, comprising the Secretariat General, DG Budget, DG Digital Services, DG Financial Stability, Financial Services and Capital Markets Union, and DG Taxation and Customs Union presented the results of an in-depth cost and risk reduction analysis to the Corporate Management Board. The analysis recommended an external operating model. During the remainder of 2024 DG Climate Action explored different options for financing such a model with various stakeholders

(40) C(2019) 1904 on the Marking and handling of sensitive non-classified information.

inside the Commission but also with external stakeholders such as the Climate Change Expert Group and the European Climate Policy Group.

2.1.2. Effectiveness of controls

a) Assessment of control results per RCS for expenditure



Most of DG Climate Action's expenditure concerns relevant control systems linked to **procurement** (which is not subject to any ex-post controls). However, to enforce ex- ante control DG Climate Action has an additional ex-ante stage of control, namely Climate Action's Procurement and Advisory Committee (CPAC). This is an internal body composed of middle and senior managers providing an additional layer of verification for important public procurement procedures. The result of the committee's work is presented in the point 2.1.3.

In 2024, three procurement procedures were awarded based on a negotiated procedure without prior publication for the total of over 2,5 million EUR. Two of these procedures (of the highest value) are linked to the organisation of UNFCCC COP29 in Baku Azerbaijan and the third one is linked to the direct contract concerning the support on the monitoring, reporting and verification system for non-CO2 effects in aviation, stemming from the revision of the ETS Directive.

Another big share of DG Climate Action expenditure consists of **contribution agreements** with pillar-assessed organisations along with service level agreements with decentralised agencies and **administrative agreements** with the JRC. The vast majority of the grants managed by DG CLIMA are agreements awarded to identified beneficiaries.

On the basis of the above, DG Climate Action considers that the estimated overall 'risk at payment' for 2024 expenditure amounts to around EUR 0,27 million representing 0,40% of the DG's total relevant expenditure for 2024. This is the authorising officer by delegation's best, conservative estimation of the amount of relevant expenditure during the year not being in conformity with the contractual and regulatory provisions applicable at the time the payment was made.

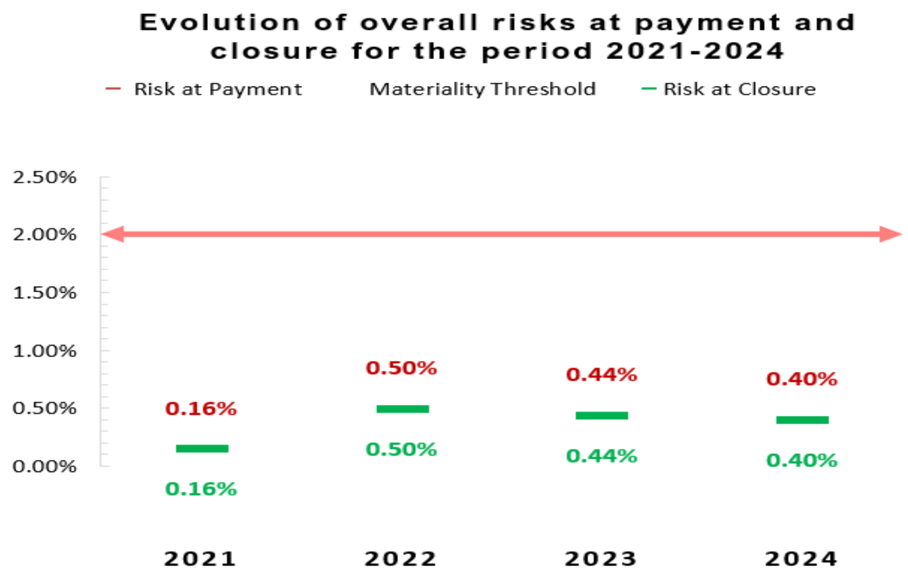
Also on the basis of the above DG Climate Action considers that for all types of expenditure, taking into consideration the comprehensive ex-ante controls, the fact that there were no ex post audits carried out in 2024, and the fact that no audits are planned for the near future, the estimated future corrections are equal to zero.

Hence, the estimated overall risk at closure for 2024 amounts to EUR 0,27million.

DG Climate Action is one of the parent DG's of the European Climate, Infrastructure and Environment Executive Agency (CINEA). Under the current MFF, on behalf of DG Climate Action, the agency is entrusted with the implementation of the LIFE programme, the Innovation Fund and the Horizon Europe programme. The DG has a seat in the CINEA's steering committee. Apart from this participation in the steering committee at the level of senior management, DG Climate Action supervises the work entrusted through regular reports and ad hoc contacts with the agency at the operational (e.g. unit) level. In addition, in collaboration with other parent DGs, DG Climate Action plays a direct role in the preparing and validating the agency operating budget as well as in drawing up of the annual work programme and/or the evaluation of calls for proposals. Finally, CINEA produces and disseminates reports as set out in the memorandum of understanding.

In its own annual activity report, CINEA has given assurance on the use of the corresponding resources and on the output indicators. As from the end of 2024, CINEA granted a consultation access to the CENTRICS application to every parent DG. In this application, all non-compliance and exception events are registered. DG Climate Action is satisfied with the cooperation with this EU body and with the internal control and risk management policy in place in CINEA.

b) Estimation of the overall risk at payment and risk at closure



As DG Climate Action carries out only ex ante controls, consequently for the risk at payment and risk at closure department DG Climate Action is using the Commissions' flat rate of 0,5% as a conservative estimate for low-risk type of expenditure.

c) Quantitative benefits of controls: Preventive and corrective measures

With its ex-ante controls, DG Climate Action has an effective mechanism in place for detecting and correcting errors. Ex-ante controls resulted to EUR 0.08 million. Please see details in annex 3 table 8.

This is similar to last year with EUR 0.02 million. The increase compared to 2023, is mostly explained by (attributed to) three credit notes correcting calculation errors of a higher value than the previous year.

In both cases these amounts are immaterial, as they constitute less than 1% of payments made by DG Climate Action in 2024.

d) Assessment of control results for non-expenditure items

As regards the delegation of the implementation of the Private Finance for Energy Efficiency (PF4EE) financial instrument, the monetisation of ETS allowances and the management of revenues of the Innovation Fund[41] to the EIB (indirect management), **DG Climate Action has received reasonable assurance from the EIB** that (i) in all material respects, the information set out in the financial statements complies with the accounting standards, and is complete and accurate; and (ii) the EIB applies a professional degree of care and diligence when carrying out the tasks entrusted to it in the contribution agreements.

To ensure the **safeguarding of digital assets and sensitive information**, DG Climate Action performs **regular risk assessments** of the Union Registry, which is the main information system underpinning the EU ETS. In 2019, this resulted in a challenging security plan composed initially of 12 comprehensive security measures. Eleven measures have been implemented; however two measures were closed and two new measures were created to cover the residual risk. Therefore the implementation of the remaining three measures is still ongoing but is expected to be completed in 2025. A risk assessment conducted in July 2022 proposed the implementation of a set of 10 additional security measures. The implementation of these measures started in 2023, in full cooperation with the Directorate General for Digital Services of them, seven have been implemented; the remaining three are in progress. Outstanding measures from these plans and measures resulting from the ongoing 2024 security plan will be implemented in 2025. In 2024, a minor incident occurred which was mitigated without consequences for the Commission or other stakeholders.

According to the assessment performed during the accounting closure process, there was no impairment of intangible assets in DG Climate Action in 2024.

e) Fraud: prevention, detection, and correction

DG Climate action has developed and implemented its own anti-fraud strategy since 2013, based on the methodology provided by OLAF. It is updated when necessary, in principle, every four years and was last updated in July 2021 following a fraud risk assessment**. The updated strategy for the period 2025-2028 is currently in the final stage of revision.** DG Climate Action anti-fraud strategy is being regularly monitored and its implementation reported to the management. In the area of EU ETS all necessary actions have been implemented or partially implemented.

As lead service for action 29 of the Commission Anti-Fraud Strategy Action Plan of July 2023, **DG Climate Action continued its efforts to minimise the potential fraud risks** associated with the EU ETS([42]).

([41]) In 2024 DG Climate Action managed around EUR 7.8 billion EUR of non-current financial assets.
([42]) Commission Anti-Fraud Strategy Action Plan - 2023 revision - Staff working document

There was no significant weakness to be handled and there were no OLAF financial recommendations to be addressed. There was one suspected fraud case in the climate area reported by DG Climate Action to OLAF in 2024.

Other results achieved during the year thanks to the anti-fraud measures in place can be summarised as follows:

The controls performed identified one case of potential fraud. The anti-fraud actions in different domains continue to be applied. DG Climate Action provides a recording of an antifraud awareness raising session, organised in collaboration with OLAF, to every newcomer to the DG. This and other actions (e.g.: on whistleblowing or potential conflict of interest communication) are contributing to the implementation of the DG Climate Action Anti-Fraud Strategy.

On the basis of the available information, DG Climate Action has reasonable assurance that the anti-fraud measures in place are effective.

2.1.3. Efficiency of controls

Management's Assessment is based on the results of key controls performed in 2024 in particular ex-ante controls and controls during implementation. The financial circuits put in place in DG Climate Action are proportionate, are based on a thorough risk assessment and reflect the financial environment, the organisational capacity and an analysis of budget implementation.

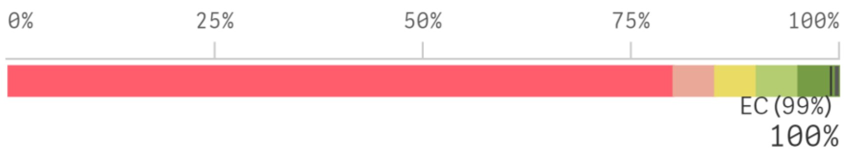
Key control indicators:

Output indicators (controls during project implementation)	2024	2023	2022
Procurement: number of procurement files reviewed by CPAC	9	7	6
Procurement: number of negative opinions by CPAC	0	0	0
Number of exceptions/non-compliance events registered (ICS 8)	6	1	2

In 2024 CPAC examined a record number of procedures. None of them received a negative opinion, which is very positive. However, in 2024 DG Climate Action also had a high number of non-compliances events. They mostly concerned the domain of procurement. The identified shortages should be addressed in the course of 2025.

In 2024, DG Climate Action received no direct complaint from the Ombudsman but was associated to three inquiries linked to requests for access to documents.

DG Climate Action's **Timely payments indicator** (i.e., payment accepted amount on time/ payment accepted amount in EUR), is presented below and shows that the vast majority of payments were made on time[43]. 99% of payments were processed in due time ([44]). This value is at the same level as the Commission's overall score.

Timely Payments	**CLIMA Score**	**EC Score**
	**100%**	**99%**

In 2024, DG Climate Action did not sign any grant agreement.

Based on the above DG Climate Action confirms the overall efficiency of controls in place.

2.1.4. Economy of controls

The principle of economy requires that the resources used by the institution in the pursuit of its activities be made available in due time, in appropriate quantity and quality and at the best price (see annex 7 for details).

DG Climate Action's cost of control per relevant control systems in 2024 was set out below:

Procurement/Service Level Agreements/Administrative Agreements and Other[45] – cost of controls

The overall cost of controls for procurement and mainly service level agreements amounted to EUR 1 308 220,00 (3.72% of funds managed, compared with 3.58% in 2023).

Grants – cost of controls

The overall cost of controls for grants amounted to EUR 45 032,00 (11.87% of funds managed, compared with 1,72% in 2023). This increase is linked to the fact that in 2024 only one payment for a grant agreement was processed.

Charge back – cost of controls

([43]) As specified in annex 3, 98,94% of payments were performed on time (in terms of number)
([44]) The 1% of delayed payments was due to human error
([45]) Mainly administrative expenditure and contributions to international conventions

The overall cost of controls for charge back amounted to EUR 10 209,00 (0.08% of funds managed, compared with 0.18% in 2023).

Contribution Agreements - cost of controls

The overall cost of controls for indirect management amounted to EUR 394 619,00 (2,78 % of funds managed, compared with 1,61% in 2023).

Overall, during 2024, the controls carried out by DG Climate Action for the management of funds proved that there is economy of cost, **because the cumulative cost of controls amounted to 2.82%, (EUR 1 758 080,00 for all expenditure relevant control systems as a percentage of the budget managed (EUR 62 343 517,07)). This is slightly higher than 2023 level of 2.61%.**

All the above amounts include the costs of both the financial and the operational units.

The non-expenditure items are managed mainly by the EIB under the relevant contribution agreements, so the internal DG CLIMA cost of control is marginal and can't be reported separately. This cost should be considered as a part of the total DG's costs of control reported above.

The contribution agreements with EIB provide for the management fees, which are not included in the above calculation.

2.1.5. Conclusion on the cost-effectiveness of controls

The control strategy framework applied is tailored to the needs and risks identified within DG CLIMA. It is an optimal combination to the variety of instruments and the cost linked to them.

Based on the most relevant key indicators and control results reported above, department DG Climate Action has assessed the effectiveness, efficiency and economy of its control system and **reached a positive conclusion on the cost-effectiveness of the controls for which it is responsible**.

2.2. Audit observations and recommendations

This section sets out briefly the state of play for all audit observations and recommendations reported by auditors related to internal control and financial management – including the limited conclusion of the Internal Auditor on the state of internal control. Further details for IAS and ECA audits can be found in Annex 8.

Where an audit has detected weaknesses affecting any internal control principle or the department's assurance, a detailed analysis is provided further below in section 2.3 and 2.4, accordingly.

Internal Audit Service

In its contribution to the 2024 Annual Activity Report process, the Internal Audit Service 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 listed in Annex 8.

Reported	Audit Title	Accepted Recommendation	State of play in 2024	Impact on the assurance for 2024
2023	Limited review of the EU ETS information system and its security controls	Very important : 1 a-c	☑	☑
		Very important : 2	☑	☑
2023	Implementation of the Innovation Fund in DG CLIMA and CINEA	Very important : 1	☑	☑
2024	implementation and monitoring of the EU Emission Trading System (EU ETS) in DG CLIMA	Very important : 1-10	📝	☑

☑ Action plan implemented and closed by IAS or ECA / No impact on the assurance

⏳ Action plan implementation is ongoing or awaiting review from IAS or ECA

📝 Preparation of the action plan

🚩 Impact on the assurance

European Court of Auditors

In 2024, the Court of Auditors did not issue any critical or very important recommendations related to financial management and internal control, and affecting the department's control systems.

2.3. Assessment of the effectiveness of internal control systems

The Commission has adopted an Internal Control Framework based on the highest international standards. ([46])

DG Climate Action has adapted the Internal Control Framework to their specific characteristics and organisational structure. The internal control systems are suited to achieving its policy and internal control objectives in accordance with the internal control principles, having due regard to the risks associated with the environment in which it operates.

In 2024 DG Climate Action continued with its efforts to maintain the performance of internal control principles. The annual assessment of the state of internal control in DG Climate Action was carried out in accordance with the methodology developed by DG Budget in the "Implementation Guide of the Internal Control framework of the Commission". In addition, an internal control survey was conducted. It was addressed to all managers of the DG. The results of the survey are used to assess the state of Internal Control Framework of the DG.

The assessment of the new Internal Control Framework, like in previous years, has not identified any major deficiencies apart from staffing. The imbalance between staffing ([47]) and the permanent excessive workload in the DG, along with a rapidly changing situation, where the reshuffling of staff is needed, remains a matter of concern and creates a tangible risk for a timely and high-quality achievement of the Commission's ambitious objectives to become climate neutral by 2050. Despite this major concern, and while there is scope for improvement in some areas, such as the effectiveness of back-up systems or the ambition to decrease in the number of appeals lodged, DG Climate Action 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, commitment and experience to identify and manage the main operational, financial and legal/regulatory risks.

In the area of audit, DG CLIMA has assessed the status of all ECA and IAS audit recommendations and concludes that due to the progress made last year the outstanding very important recommendations shouldn't be considered as having material impact on the effectiveness of the internal control system and in achieving its objectives.

DG Climate Action assessed its internal control system during the reporting year and has concluded that it is effective and the components and principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified relating to the above mentioned staff matters and the formalisation of the business continuity plan and relocation plans. The improvement and/or remedial measures during the 2024 assessment are envisaged are to be implemented in 2025 and in the coming years depending on the complexity of the issue.

([46]) The Committee of Sponsoring Organizations of the Treadway Commission Internal Control Integrated Framework, the golden standard for internal control systems.
([47]) DG CLIMA has identified a critical risk linked to lack of resources

2.4. Conclusions on the assurance

The information reported in this section stems from the results of management and auditor monitoring contained in the reports. These reports result from a systematic analysis of the available evidence. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in a comprehensive coverage of the budget delegated to the Director-General of Climate Action.

Therefore, the Director General can provide reasonable assurance in his declaration with one reservation related to the security and protection of the registry/operating mechanism of the EU ETS against, among other things, cyberattacks. Concerning this reservation, as the situation stands, the residual risks are still unacceptable from a business viewpoint. Since assurance cannot be reasonably provided that the current security measures could successfully prevent any system interruption the reservation cannot be lifted.

In conclusion, based on the elements reported above, 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 EU ETS system.

2.5. Declaration of Assurance and reservations

Declaration of Assurance

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 ([48]).

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, the work of the Internal Audit Service and 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 reservation should be noted: Reservation on reputational/legal/financial grounds related to remaining significant security weakness identified in the Union Registry of the Emission Trading System (EU ETS). More details are provided in annex 9.

Brussels, 31 March 2025

(e-signed)

Kurt VANDENBERGHE

([48]) True and fair in this context means a reliable, complete and correct view on the state of affairs in the DG/Executive Agency.

3. MODERNISING THE ADMINISTRATION

3.1. Human resource management

2024 was another eventful year for DG Climate Action also from the point of view of ***human resources management***.

In order to align with new political needs, a task force on international carbon markets was created and staffed, becoming operational in record time. During the spring, the selection process for the position of Deputy Director-General was completed and the College of Commissioners appointed the new Deputy Director- General, who took office in August. The end of the Commission's term of office brought changes at a higher level, necessitating the reshuffling of some staff between the Cabinets and the DG.

In DG Climate Action, many activities were organised to follow up on the results of 2023 staff survey. Following a consultation at different levels during the first half year, a follow-up action plan with 19 actions was created and approved in September. It focused on the main areas for improvement that emerged from the staff survey: professional future, wellbeing and work-life balance, inclusion and diversity, learning and development and on global actions. The action plan is currently being implemented: of nineteen actions, seven are in progress and twelve are already completed. Further HR actions were carried on in 2024. The learning and development area was better structured and executed, resulting in 16 team events and study visits throughout the year, including a management seminar. The newcomers welcome was further developed, improving the underlying measures and organising four meetings. DG Climate Action continued to offer these sessions enriched with new presentations on key policies. Meetings with trainees were opened to national experts in professional training (officials from public administrations working in DG Climate Action), with new aspects and with the participation of the Director-General. DG Climate Action also continued organising events for managers and staff on HR-related topics, as well as new well-being activities for staff. DG Climate Action continues to strive to maintain and promote contacts and collaboration, with the launch of a Heads of Unit network, a Deputy Head of Unit network, and an assistants' network, among other things.

In the field of equal opportunities, DG Climate Action achieved fair results in terms of women in management positions. In 2024 at senior management level 50% of managers are women. This is a lower rate than in 2023 due to the appointment of a man as the Deputy Director-General. A middle management level the gender balance fluctuated too: the proportion of women decreased to 39%, due to the appointment of two men as Heads of Unit. Overall, DG Climate Action has a 42% rate of women in management positions.

In 2022, DG Climate Action endorsed its **equality work plan** showing its commitment to integrate an equality perspective into its policies and its human resources strategy. In 2023, DG Climate Action also finalised its equality mainstreaming toolbox, also available on website of the Secretariat General's equality task force and it created a specific page on the Climate Action intranet to update staff on ongoing equality initiatives and training possibilities, in order to encourage more active engagement on this topic. During 2023, the DG also held an internal equality Conference with a focus on gender equality, and contributed to the Gender Equality Index of the European Institute for Gender Equality (EIGE)'s, focusing on the European Green Deal. DG Climate Action also continued its efforts to involve a diverse range of sectoral groups as Climate Pact Ambassadors. In 2024, equality considerations continued to be taken into consideration in the annual action plans to address equality issues in the DG. In terms of policy making, DG Climate Action ensured in its proposal for a social climate fund that, gender equality and equal opportunities will be considered by Member States when preparing and implementing their social climate plans, as well as in the context of the national energy and climate plans and the reporting obligations under the Governance Regulation. In line with the better regulation rules, the DG took into account equality considerations, with linkages to the just transition, in the impact assessment for the Communication on the 2040 climate target, as well as in the context of the Communication on resilience and adaptation (climate risks).

Internal communication, as part of the DG Climate Action communication strategy for 2023-2024, focused on providing staff with timely and useful information, encouraging sharing and learning, and supporting policy units with their internal communication needs.

DG Climate Action effectively uses internal communication channels (local intranet, weekly internal newsletter, e-mails, etc.). In June 2024, a new Climate Action intranet built on SharePointOnline was launched to replace 'My CLIMA' intranet. The content migration from the previous intranet to the new platform was largely completed by the summer of 2024. On this platform 90 news articles on policy, HR and social topics have been published.

In 2024, 28 internal events were organised to inform staff on relevant policy topics and other themes. Lunchtime conferences and townhall meetings attracted a high level of attendance, with an average of 50 participants for lunchtime conferences and 120 participants for debriefs with senior management. To facilitate information-sharing, resources such as standard presentations and lines-to-take are made available to all staff via shared folders and links in the daily press review. In the area of staff advocacy, colleagues also continued to give frequent presentations at the Commission's visitors' centre, as well as to participate in the back to school and back to university initiatives.

3.2. Digital transformation and information management

Digital Culture

In 2024 DG Climate Action continued its efforts to **foster** its staff's **digital culture** by performing a digital skills gap analysis within the different business units proposing IT training to specific profiles (managers/Policy Officers/Assistants) but also by promoting general IT training also available on EU Learn and on LinkedIn. DG CLIMA has organised internal workshops on the use of digital collaboration tools, with a focus on Microsoft products available also on mobile devices (Teams/SharePoint Online). In full consideration of the significant amount of sensitive non-classified information (SNC) managed by DG Climate Action these workshops and trainings focused on the security features of the new digital platforms. These sessions were complemented by quarterly general **cybersecurity** awareness trainings courses organised by DG Climate Action's security team.

Digital-ready EU Policymaking

The majority of DG Climate Action's IT efforts are in policy implementation, which entails web-based IT systems' development, security and maintenance. Most of these solutions are quite mature and operating in an "evolutive maintenance" mode. In particular, during 2024 several **digital transformation initiatives** followed DC Climate Action's policy and legal priorities. As a result, several **business processes** were **automated** in the main IT systems:

1. The Union Registry platform continued to incorporate maritime operators, initial developments to onboard Buildings and Road transport operators (ETS2); work also focused on delivering changes linked to updates of the ETS Registry Regulation updates.
2. The ODS/FGAS system increased its development pace, to include the updated Regulation's requirements (multi-year licenses, quota allocation) and the future external payments module.
3. The EU ETS Reporting tool module has also been extended to include the Annual Emissions Reports for the ETS2 phase as well as the ETS2 monitoring plan.
4. Data Initiatives were rolled out on the basis of the central EC Data Platform provided by DG DIGIT. These initiatives offer transversal coverage of Climate Action's reporting needs, are based on Microsoft Power BI, are anchored on strong a data, information and knowledge management, and enables digital-ready EU policymaking.

Furthermore, in line with this last point on data initiatives, DG Climate Action continued to invest in enriching its available datasets and improving their usability by embedding ready-made dashboards in its systems. In accordance with the dual-pillar approach, a pilot project was delivered in 2024, replacing the public EU ETS data portal with dashboards created in the EC data platform. Data stewards were identified in key units and added to an internal datahub page. These colleagues are responsible for the maintenance, quality and availability of DG Climate Action **data assets** that are part of the Commission-wide **data catalogue**.

Business transformation - Seamless digital environment

In the field of **data, information and knowledge management**, DG Climate Action progressed in implementing the principles of "data governance and data policies at the European Commission" in its key data assets. The main improvement action beyond the annual review of key data assets was a better documentation of the link between key data assets and status and improvement of the IT systems through which they are managed. For many key data assets, the latter are provided by the European Environment Agency. In addition to that, DG Climate Action with the EEA has been working in 2024 on improving the metadata (information on the data and on the quality of the data) for all the statistical products of DG Climate Action. This work will be completed in the course of the first quarter of 2025 and the new reports on the metadata will be made publicly available to the users on the website next to where the data are available for download. The first iteration of carbon market dashboards, using Microsoft Power BI, has been expanded and enhanced.

In addition, in 2024, DG Climate Action developed schemes to embed Power BI data dashboards into web applications, instead of developing specific web pages. A project to replace the EUTL Public website (EU ETS public data portal) with Microsoft Power BI has been completed. It facilitates and enhances capabilities for future data publication. An extensive preparatory work has been carried out to build a first DG Climate Action datahub, a single-entry point for the most used datasets in DG. The project was launched in December 2024 and its implementation is currently ongoing. It will improve awareness, reliability, accessibility and reusability of data. The implementation of data governance principles continues to progress and reached level of 83%.

Given the criticality of DG Climate Action's systems and the sensitivity of the data managed, security assurance and operations aspects were a critical and integral element of the information management approach. In 2024 DG Climate Action therefore ensured that every IT system had an updated **security plan**. These plans were first endorsed and later regularly monitored by the system owners. The implementation rate of security measures and the age of security plans are monitored in global KPIs as part of the IT Security and Risk Reports as a set of solid **security management processes**. Proof of DG Climate Action's commitment is its position as ninth in the overall rank in the latest Commission's Risk Maturity Quadrant for 2024, result excellent result taking into account the nature of the Information Systems.

Green, secure and resilient infrastructure

Personal Data Protection is an area in which both securing the acquis and continuing to improve compliance are ways to ensure the highest level of compliance. Securing the acquis was covered by insistence on appropriate identification and application of the bases for lawful processing, minimisation in all its aspects, choice of compliant processing contractors and continuous quality and compliance checks for all scheduled and ongoing processing activities. Due to extended staff shortage, the scheduled awareness raising activities had to be replaced by ad hoc trainings for targeted audiences in 2024.

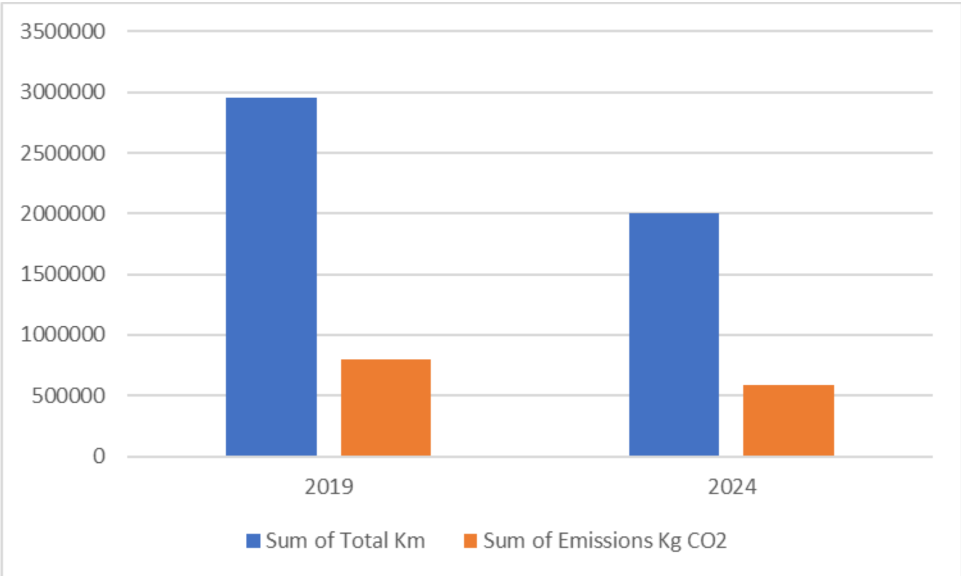
Compliance was served by the continuous focus on the quality of privacy statements and improvement of the follow-up tools, e.g. for the compliance monitoring of our processors and sub-processors.

No personal data breaches were reported in 2024 that were in any way related to DG Climate Action's processing activities.

3.3. Sound environmental management

DG Climate Action is fully committed to the Commission's objectives to reduce its environmental impact as an institution and as an employer, and to become climate-neutral by 2030.

Figure 4: DG Climate Action missions comparison between 2019 and 2024 (in km and CO2 emissions)



The number of missions carried out by DG Climate Action staff in 2024 (599 missions) has decreased by 29% compared to 2019 (842 missions). DG Climate Action has considerably decreased the number of kilometres travelled (by 32%) and reduced the carbon footprint from 800 169,25 kg of CO_2 in 2019 to 588 995,00 kg of CO_2 in 2024 representing a reduction of 26% in absolute number and by almost 54% per capita in line with the DG CLIMA pledge. In addition, many expert meetings were hybrid or totally virtual, thus significantly reducing GHG emissions from business travels.

In the VéloMai cycling competition DG Climate Action won the first prize in the category for best performance ratio for the seventh year in a row, showing again that DG Climate Action staff are dedicated to using sustainable commuting options.

DG Climate Action continues to encourage EcoE -Management and Audit Scheme (EMAS) actions and measures. Together with DG Environment, DG CLIMA is participating in greening the courtyard of the Breydel 2 building with plants and therefore improving the biodiversity of our working environment.

3.4. Examples of economy and efficiency

DG Climate Action continues to increase efficiency by centralising, within one unit, the management of all financial programmes it oversees and by adding of a new action under the Innovation Fund, namely **competitive bidding (auctions)**. The first call was a great success to the extent that a new call was launched in 2024. Auctions will expand the portfolio of support mechanisms, fostering faster and more cost-efficient support for the rollout of low-carbon technologies needed for the green transition.

In addition, the new features '**auctions-as-a-service' or 'grants-as-a-service'**, which allow Member States to contribute their own resources to support excellent projects evaluated positively under the Innovation Fund, significantly improve the economy and efficiency across the EU. It enables Member States to rely on the evaluations carried out by the Commission and projects do not need to re-apply to benefit from national support.

In 2024 DG Climate Action was one of the pilot DG that started to implement their frameworks contract via **e-contracting and MyWorkplace**. This way of working brought efficiency gains by improving transparency and enabling a more secure and standardised treatment of every specific contract.