EUROPEAN COURT OF AUDITORS

EMAS
VERIFIED ENVIRONMENTAL MANAGEMENT
LU-000004

ISO14001 CERTIFIED
VINÇOTTE

Environmental statement

2022

Including results for 2021
Full translation of the 2022 environmental statement

About this report

This environmental statement provides stakeholders and the public with information on the ECA's environmental performance and activities for 2021. Its aim is to raise awareness of our environmental management policies.

The ECA was officially registered in the eco-management and audit scheme (EMAS) under No LU-000004 on 30 March 2017. The certificate issued by the Luxembourg authorities was renewed for a three-year period on 16 June 2022.

This document has been drafted in accordance with the EMAS III Regulation[1] and is available on our *website*.

It was adopted by the EMAS steering committee on 27 September 2022 and verified by Vinçotte during an external audit carried out on 17, 18, 24 and 25 October 2022.

[1] Commission Regulation (EU) 2018/2026 of 19 December 2018 amending Annex IV to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) and Commission Regulation (EU) 2017/1505 of 28 August 2017 amending Annexes I, II and III to Regulation (EC) No 1221/2009 of the European Parliament and of the Council allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

Contents

Foreword

New environmental challenges

The ECA is fully committed to protecting the environment, both in its audit activity and in its administrative management. The number of audits related to environmental issues and the implementation of the 17 UN Sustainable Development Goals continues to increase year on year.

In June 2022, our environmental certification under the Eco-Management and Audit Scheme (EMAS) was renewed, demonstrating our continued commitment since 2014.

In 2021, the COVID-19 pandemic continued to have an impact on the ECA's activities. But it also had a positive influence on our environmental performance. Some measures taken during the pandemic have been made permanent, creating a new hybrid way of working. In the coming months and years, we will need to take stock of these changes and reflect on how they can help us to use our buildings more efficiently. We will also need to pay attention to preserving these environmental gains as we resume our activities.

The European Green Deal establishes an ambitious target of net-zero greenhouse gas emissions in Europe by 2050. The ECA is also reflecting on a longer-term environmental strategy. In the coming months we will have a new action plan for 2023-2025 that will be even more ambitious than the previous one and reflect this new ambition.

I hope that this statement will give you an overview of the work we have done, thanks to both the individual and collective efforts of all our colleagues. I would like to thank them very much for their active support, and I am confident that we will continue to make progress together in the coming years, furthering our joint commitment to protecting the environment.

Zacharias Kolias
Secretary-General

Executive summary

Our environmental results for 2021 are still significantly affected by the COVID-19 pandemic, as shown in ***Table 1***:

- energy consumption continues to decrease as a result of lower building use and the end of certain measures applied during the pandemic (reduced operating time of ventilation systems);
- business trips have resumed for audit missions, but have not yet returned to their pre-pandemic level;
- an increase in purchases of goods and services, particularly purchases related to IT and the K2 building renovation project, led to an increase in greenhouse gas emissions between 2020 and 2021.

Table 1 — Summary of environmental results in 2021

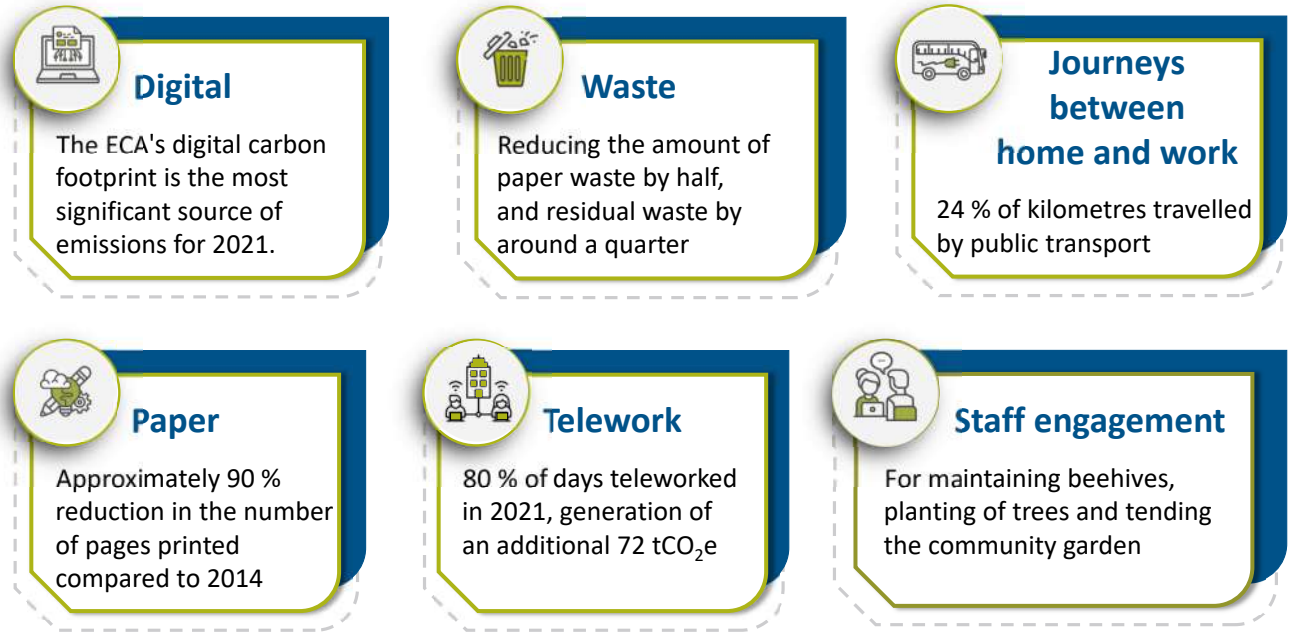
INDICATORS PER FULL-TIME EQUIVALENT STAFF MEMBER[2]		IN ONE YEAR	SINCE 2014
Electricity	3.67 MWh/FTE	-6.7 %	-32.5 %
Heating	3.27 MWh/FTE	-11.6 %	-19.7 %
Paper	2 000.0 pages/FTE	-12.6 %	-88.8 %
Emissions	7.94 tCO_2e/FTE	+17.4 %	-31.5 %
Waste[3]	77.99 kg/FTE	-18.7 %	-51.1 %
Water	5.94 m^3/FTE	-52.4 %	-55.9 %

Source: European Court of Auditors.

[2] FTE: full-time equivalent staff member.

[3] Measurement parameters are not equivalent between 2014 and 2021.

Figure 1 – 2021 in figures



Source: European Court of Auditors.

II Due to the COVID-19 crisis, most of the targets and objectives set for the 2020-2022 period had already been met by 2021. However, a rebound is expected in the years to come, the extent of which will vary according to how the crisis develops further, and on any restrictive measures which may apply to audit missions and to work on the ECA's premises.

III In October 2021, we took the decision to make our teleworking arrangements permanent, allowing staff to telework for 10 days each month. We expect this decision to have a positive impact on our emissions in the long term. We also launched an internal consultation on how to adapt the use of our buildings to fit the new circumstances, and to cope with the expected arrival of new staff members to audit the new NextGenerationEU instrument.

01.

Introduction

Introduction

This environmental statement is the seventh such annual report published by the ECA. It was prepared in accordance with the requirements of Regulation (EC) No 1221/2009, Annex IV of which was amended by Commission Regulation (EU) 2018/2026 of 19 December 2018.

The first part of this statement presents the ECA and its buildings.

The ECA

01 Established in 1977 and based in Luxembourg, the ECA is the European Union's external auditor.

02 It was set up to audit the EU's finances. Its audit work covers the EU budget and policies, mainly in areas related to growth and jobs, value added, public finances, environment and climate action. The ECA audits both budget revenue and expenditure.

03 Through our independent, professional, high-impact audit work, we assess the economy, effectiveness, efficiency, legality and regularity of EU actions in order to improve accountability, transparency and financial management, thereby bolstering citizens' confidence and allowing the current and future challenges facing the EU to be more effectively addressed.

04 We want to be at the forefront of public finance auditing and contribute to a more resilient and sustainable European Union, one which is true to its founding values.

05 The ECA operates as a collegiate body of 27 Members, one from each EU Member State. The Members are appointed by the Council after consultation with the European Parliament for a renewable term of six years. Members elect one of their number as President for a renewable term of three years. The Court has five Chambers, to which Members and auditors are assigned. Audit tasks are carried out by the ECA's staff under the supervision of the Members assigned to their Chamber.

06 The President of the Court acts as a first among equals. He chairs Court meetings, and ensures that Court decisions are implemented and that the institution and its activities are soundly managed.

07 The Secretary-General is the ECA's most senior member of staff. The holder of the position is appointed by the Court for a renewable period of six years. The Secretary-General is responsible for the ECA's administration and staff. He supervises the Directorate for Human Resources, Finance and General Services, the Directorate for Information, Workplace and Innovation, and the Language and Editorial Directorate.

08 Our strategy for 2021-2025 contains three strategic objectives:

- improve accountability, transparency and auditing across all types of EU action;
- focus our audits on the areas and themes where we can add the most value;
- provide strong audit assurance in a challenging and changing environment

09 We carry out our audits in accordance with international auditing standards and the International Code of Ethics for Public-Sector Auditors, which we apply in the specific EU context. These standards ensure the quality, professionalism and efficiency of our work. We also contribute to the development of standards in the framework of our international cooperation activities.

10 The results of the ECA's work are used by the European Commission, the European Parliament, the Council and the Member States to oversee and, where necessary, improve the management of the EU budget. The ECA's work is an important basis for the annual discharge, a procedure in which Parliament decides, on the basis of a recommendation from the Council, whether the Commission has implemented the previous year's budget satisfactorily.

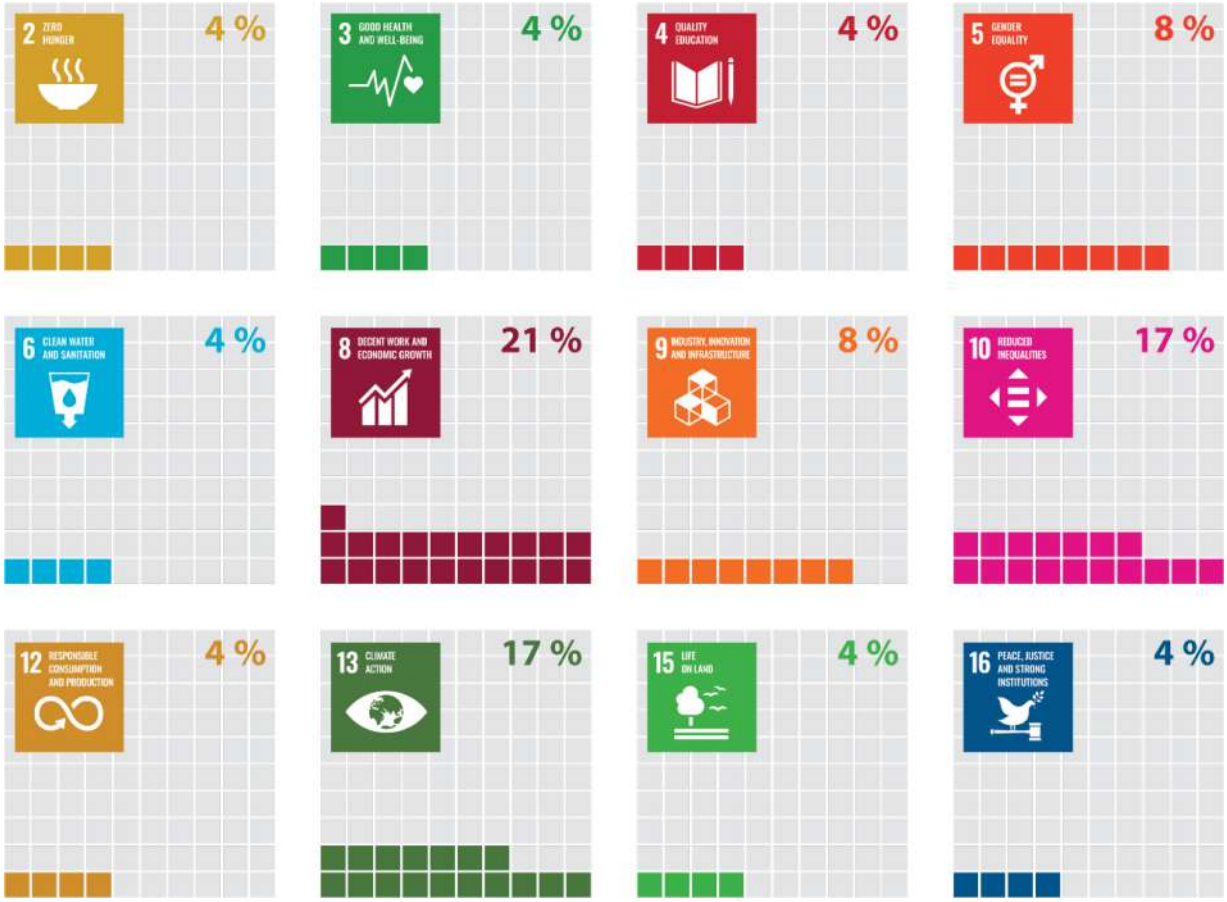
11 The European Court of Auditors publishes the results of its audit work in different types of reports depending on the type of audit carried out: annual reports, specific annual reports and special reports. It also publishes opinions and reviews.

12 The positive environmental impact of the ECA's reports is not easily measurable. However, environmental audits and audits related to the Sustainable Development Goals are becoming an ever greater part of the ECA's work. One of the audit chambers, Chamber I – Sustainable use of natural resources, exclusively audits topics related to the environment and sustainable development:

- climate change and energy;
- environment;
- agriculture and rural development;
- maritime affairs and fisheries;
- health, food safety and consumers.

13 Around 75 % of all special reports published in 2021 covered at least one of the UN Sustainable Development Goals. In 2021, 29 % of the reports were directly related to climate action, biodiversity protection and sustainable consumption, as illustrated in ***Figure 2***.

Figure 2 – Percentage of special reports related to each UN Sustainable Development Goal

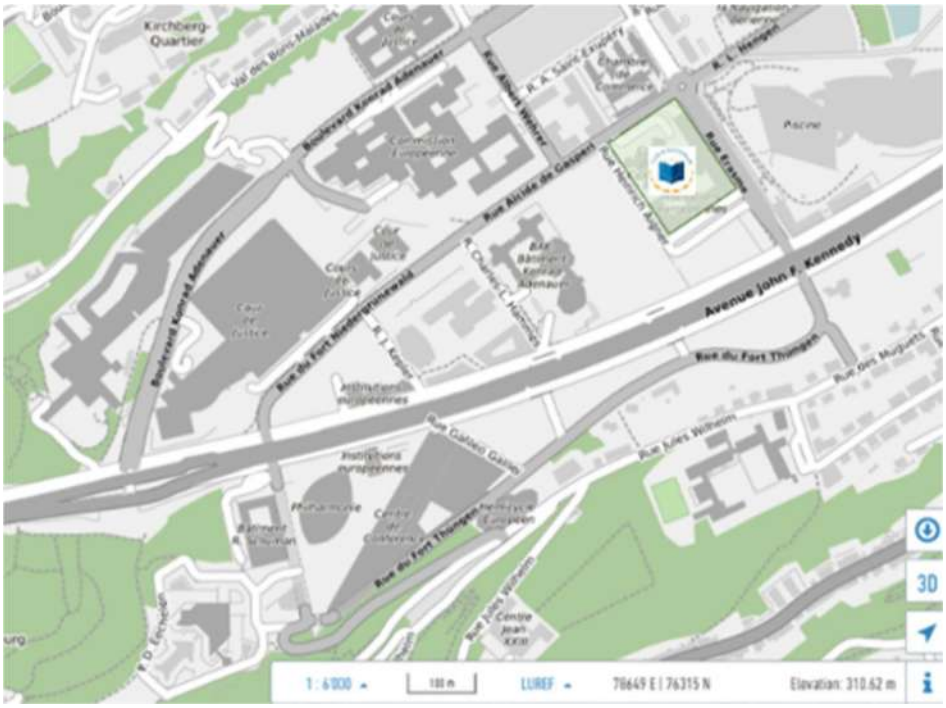


Source: data assembled by the European Court of Auditors; icons from the United Nations website.

The ECA's buildings

14 The ECA employs around 950 members of staff (auditors, translators and administrative staff) from all EU Member States. It currently owns and occupies three buildings (K1, K2 and K3), located in the heart of the European quarter of Kirchberg in Luxembourg. The total area of the premises is 18 473 m².

Figure 3 – Map of Kirchberg – 1: 6 000



Source: geoportal.lu.

Figure 4 – Aerial view of the buildings in the European quarter

Source: European Court of Auditors.

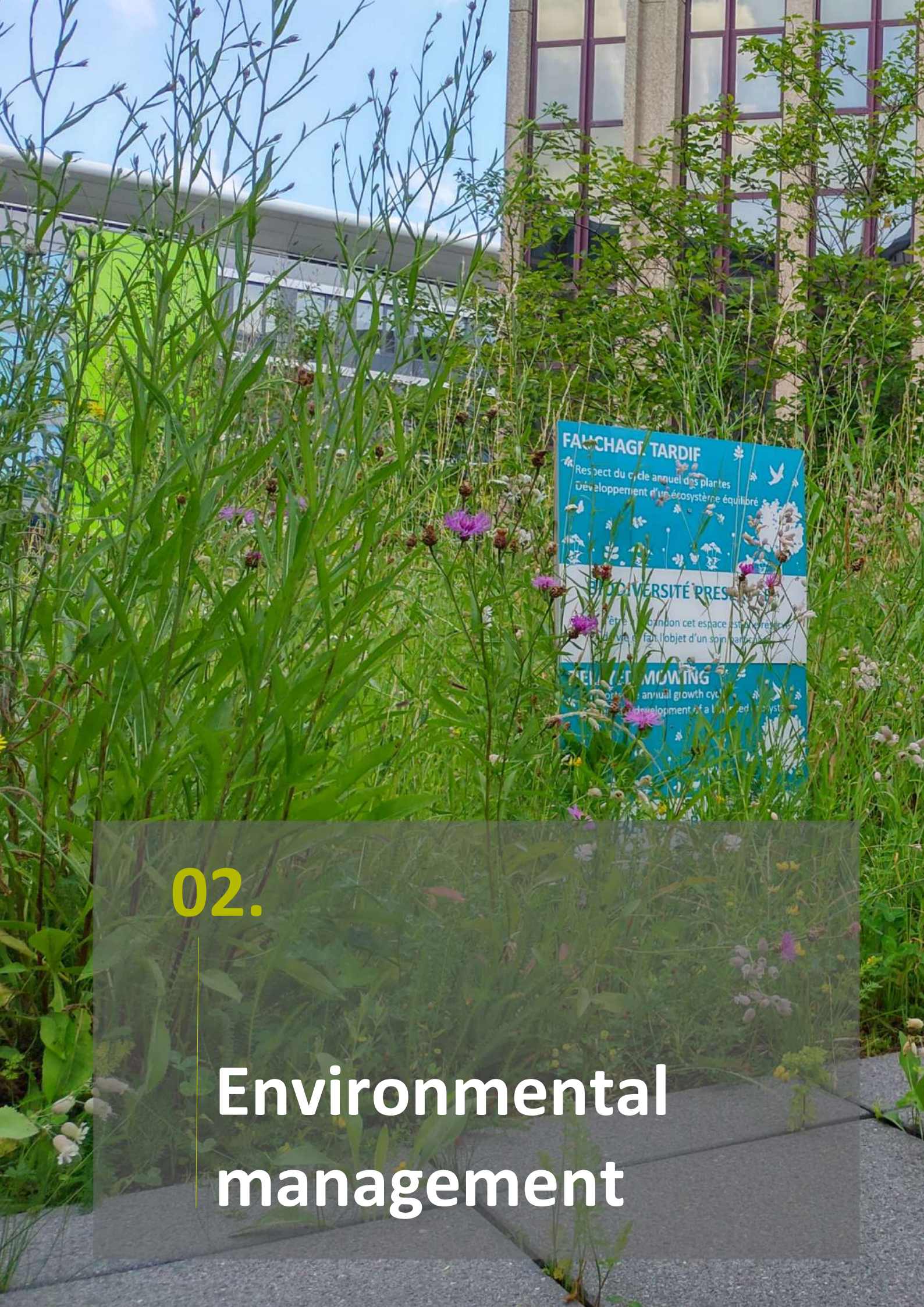
Table 2 – Detailed information on the ECA's buildings

Building	K1	K2	K3
			
Year of construction	1988	2003	2012
Basement	- 3 levels - 225 parking spaces - archives and workshops - library	- 2 levels - 192 parking spaces - sports centre	- 2 levels - 165 parking spaces - workshop and printing - kitchen and archives
Floors	- ground floor: accreditation pavilion and offices - six floors of office space including Members' cabinets and the Court's meeting room - 7th floor: equipment rooms	- ground floor: office space, foyer and conference room with 22 interpreting booths - five floors of office space - 6th floor: equipment rooms	- training centre, cafeteria and canteen - five floors of office space - 6th floor: equipment rooms, lounge and reception rooms

Source: European Court of Auditors.

Figure 5 – Aerial view of the ECA's buildings

Source: European Court of Auditors.



02.

Environmental management

Environmental management

This section presents the ECA's environmental management system (EMS).

15 The ECA's environmental management system (EMS) complies with EMAS III standards[4] and meets the certification requirements of international standard ISO 14001: 2015. Developed by the European Commission, the EU Eco-Management and Audit Scheme (EMAS) is a management tool for organisations to evaluate, report on and improve their environmental performance.

16 The EMS aims to improve the ECA's environmental performance by minimising the impact of its activities on the environment, in particular through more efficient use of energy and natural resources, and better waste management. It helps to make buildings more functional, economical and comfortable for occupants. The EMS also raises staff members' awareness of their environmental impact and of good environmental practices both at work and at home.

How the EMS works

17 We carry out a regular environmental review to identify the potential effects of our activities on the environment. The analysis covers the following:

- internal and external risks that could affect the EMS or the ECA's ability to achieve environmental objectives (contextual analysis);
- stakeholder needs and expectations;
- opportunities related to the ECA's environmental aspects;
- environmental aspects and impact;
- legal requirements and other obligations relating to the environment.

18 We identify the most significant risks and draw a distinction between direct and indirect environmental aspects. Based on this review we define our environmental policy, on the basis of which an environmental programme composed of several objectives is drawn up.

19 To ensure these objectives are achieved within a reasonable time frame, we devise thematic action plans and adopt any procedures necessary, taking into account the significant elements identified.

[4] Commission Regulation (EU) 2018/2026 of 19 December 2018 amending Annex IV to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) and Commission Regulation (EU) 2017/1505 of 28 August 2017 amending Annexes I, II and III to Regulation (EC) No 1221/2009 of the European Parliament and of the Council allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

20 Internal EMAS-trained auditors regularly check on both the implementation of the environmental programme, and the EMS's compliance with EMAS and other requirements. Regulatory compliance audits are carried out in all three ECA buildings, and lead to the drawing up of a compliance action plan.

21 The conclusions of these audits are examined at regular management reviews chaired by the Secretary-General. In these reviews, performance indicators are analysed to assess the efficiency of the environmental programme.

22 The environmental statement, which is published on the ECA's *website*, sets out the objectives of the institution's environmental programme and the results achieved.

Scope of the EMS

23 The EMS applies to the ECA's activities in the broadest sense, i.e. the activities of all ECA staff, as well as others working on the premises, such as service providers. It covers all the premises occupied by the ECA, consisting of three separate buildings.

Table 3 — Occupation of buildings on 31.12.2021

Building	Total gross surface area (m^2)[5]	Occupants[6]
K1	23 720	339
K2	18 619	103
K3	28 245	648
No fixed workplace[7]	/	13
Total	70 584	1 103

Source: European Court of Auditors.

Governance of the environmental management system

24 The ECA's EMAS project owes its success to close cooperation between **the EMAS team**, **the EMAS steering committee** and **internal EMAS auditors**, as well as actions taken by **individual staff members**. Their combined efforts ensure that the ECA's environmental management system operates smoothly and produces tangible results.

[5] Total gross surface area calculated in accordance with DIN 277, measured from the outer perimeter of the construction elements that mark the boundaries of the building, including coverings, measured at floor level.

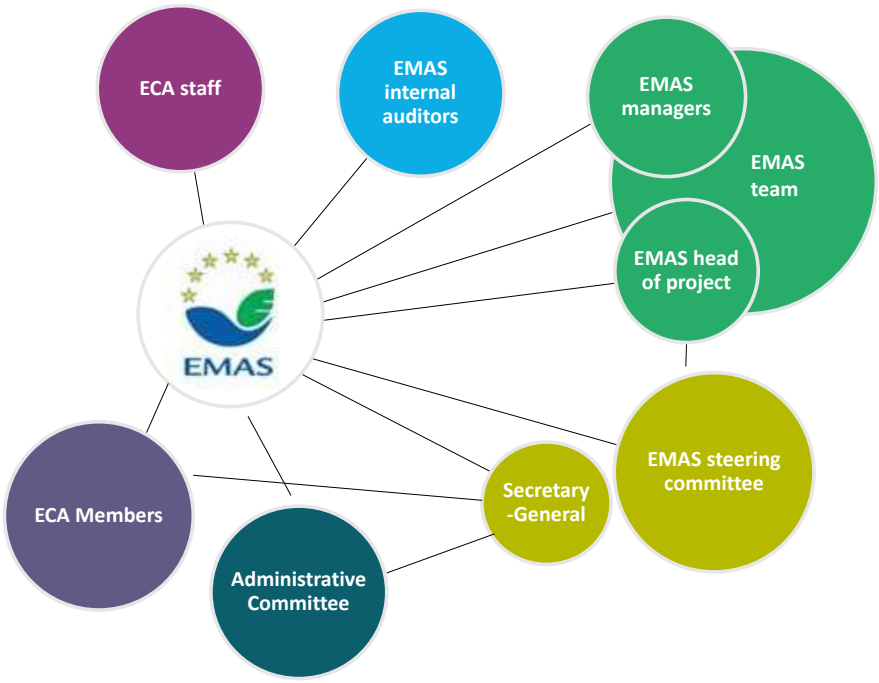
[6] Occupant: any person working at the ECA (staff or external service provider).

[7] Some new colleagues, service providers and trainees do not have an allocated office due to the travel and working conditions brought about by COVID-19.

25 ***Figure 6*** shows the ECA's environmental governance structure.

- The **ECA's Members** adopt the ECA's environmental policy and are kept informed of the EMS's performance.
- The **Administrative Committee** is regularly informed of the progress of the environmental management system activities and makes suggestions on environmental actions, objectives and goals.
- The **EMAS steering committee** supervises EMS activities, promotes continuous improvement and is accountable for the system's effectiveness. It sets environmental targets, reviews the environmental policy and action plan, and approves the environmental statement.

Figure 6 – EMAS governance at the European Court of Auditors



- The **EMAS steering committee** is chaired by the **Secretary-General**. The committee comprises the directors of the departments concerned with environmental management, as well as a representative of the ECA's audit chambers.
- The **head of the EMAS project** is responsible for coordinating the maintenance of the EMS, reporting to the EMAS steering committee on progress made in implementing the environmental programme and objectives, and organising awareness-raising campaigns and internal environmental audits.
- **The staff responsible for EMAS** support the operational monitoring of the EMS within their respective departments and implement the measures entrusted to them.
- The **manager** and **staff responsible for the EMAS project** comprise the **EMAS team.** The EMAS team circulates relevant information within the ECA.

- The **internal EMAS auditors** carry out internal environmental audits in accordance with the audit plan.
- **All ECA staff** are expected to adhere to the practices adopted under EMAS, and continually strive to reduce the environmental impact of their day-to-day work.

Environmental policy

26 The ECA's environmental policy sets out the institution's commitment to continuously improving its environmental performance. It has been communicated to everyone working for the Court (staff and external service providers) and is publicly available on the institution's *website*.

COUR DES COMPTES EUROPÉENNE

LA POLITIQUE ENVIRONNEMENTALE DE LA COUR DES COMPTES EUROPÉENNE

Conformément à l'engagement de l'Union européenne en faveur de l'environnement, la Cour des comptes européenne (la Cour) est investie d'une responsabilité particulière en ce qui concerne la réduction constante de l'incidence environnementale de ses activités.

À cette fin, la Cour a mis en place un système de management environnemental conformément au règlement EMAS de l'UE, en vertu duquel la Cour s'engage à:

- *minimiser l'incidence environnementale des activités quotidiennes;*
- *améliorer constamment les résultats en matière d'environnement;*
- *respecter toutes les dispositions législatives et obligations pertinentes en matière d'environnement.*

En particulier, la Cour s'engage à:

- *mettre en place des mesures pour prévenir la pollution et réduire les émissions de dioxyde de carbone;*
- *promouvoir l'utilisation efficiente de l'énergie et à prendre des mesures pour diminuer la consommation d'électricité et d'eau;*
- *garantir une utilisation plus efficiente du papier afin d'en réduire la consommation;*
- *intégrer des critères environnementaux dans ses procédures de marchés publics;*
- *recourir aux meilleures pratiques en ce qui concerne la gestion des déchets;*
- *encourager l'ensemble du personnel à agir dans une perspective de durabilité et à contribuer activement à la réalisation des objectifs de cette politique.*

La Cour est résolue à mettre en œuvre et à poursuivre la politique environnementale décrite ci-dessus et à en informer le personnel, les contractants et toute autre partie intéressée.

Les engagements en matière d'environnement doivent se traduire en mesures spécifiques tenant compte des exigences en matière de ressources humaines, matérielles et financières. Le système de management environnemental doit être conçu de manière à présenter un bon rapport coût-efficacité.

Cette politique environnementale et le système de management environnemental s'appliquent aux activités de la Cour des comptes européenne au sens large du terme, à savoir celles de l'ensemble du personnel et des autres employés (y compris les sous-traitants travaillant sur les lieux, le personnel en mission et les agents sur le chemin du travail). Ils concernent les trois bâtiments que la Cour occupe au 12, rue Alcide De Gasperi, à Luxembourg.

Luxembourg, le 27 février 2018

Eduardo Ruiz García
Secrétaire général

Klaus-Heiner Lehne
Président

Analysis of environmental aspects and impact

27 Once a year, the ECA carries out an analysis of the environmental aspects of its activities on the environment and their impact. This analysis describes environmental aspects, classifies them as direct or indirect and indicates the values attributed to each of them according to the assessment of their significance.

28 The direct aspects associated with the ECA's activities are those over which the ECA has direct management control. Indirect aspects result from interactions with third parties and are those which the ECA can only influence.

Table 4 — Significant environmental aspects

Environmental aspect	Environmental impact	Activities
 Air emissions	– Greenhouse effect – Air pollution	– Work-related travel, commuting of staff and Members – IT equipment – Event organisation and participation
 Energy consumption	– Depletion of natural resources – Greenhouse effect	– Building occupancy – IT equipment – Event organisation and participation – Heating, ventilation and cooling of premises, including COVID-19-related requirements
 Consumption of natural resources	– Depletion of natural resources – Air, soil and noise pollution – Reduced biodiversity – Ozone layer depletion	– Purchases of IT equipment – Work-related travel, staff commuting – ECA vehicle leasing – Event organisation and participation
 Waste generation, storage and treatment	– Air, water and soil pollution – Depletion of natural resources	– Cleaning, maintenance and renovation work – Office activities

Source: European Court of Auditors.

29 These aspects are assessed on the basis of three criteria: frequency, severity and control. Details of all significant aspects of the ECA's activities for this year are listed in ***Table 4***. The table takes into account the measures already in place, in addition to the impact of COVID-19.

30 Compared to previous years, some aspects are no longer considered significant, such as document printing and visitors' travel. Other aspects have been better controlled because they are occurring less frequently: this is the case for organising and participating in events and for work-related travel. Other

aspects, such as the purchase and increased use of IT equipment in the context of teleworking, have been classified for the first time as having a significant impact on the environment. Some new aspects have become more significant, such as implementing exceptional heating and ventilation measures to safeguard staff health.

2020-2022 environmental programme

31 For the 2020-2022 period, the ECA has established an environmental programme aimed at addressing various themes identified in the course of its environmental analysis and reducing the impact of the significant environmental aspects of its work. This programme is currently divided into two sections: an action plan comprising 47 actions divided into 8 topics, and a communication and training plan based on 3 objectives.

2023-2025 environmental programme

32 The ECA is currently preparing its next environmental programme to further reduce its environmental impacts. As in the past, this programme will have two parts: an action plan broken down into eight themes, and a communication and training plan.

Figure 7 – Renewal of the Court's EMAS certification on 16 June 2022

Source: Ministry of Environment, Climate and Sustainable Development.

03.

Our environmental performance

Our environmental performance

This section presents the ECA's environmental results for the 2020-2022 period.

The ECA evaluates its environmental performance using the environmental performance indicators in Annex IV to Regulation (EC) No 1221/2009, and the benchmarks of excellence set out in the sectoral reference document (SRD), Commission Decision (EU) No 2019/61.

33 The ECA has already largely achieved most of its environmental objectives for the 2020-2022 period, mainly due to COVID-19. The situation could change in the coming years depending on the development of the crisis, which is still ongoing at the time of writing.

Table 5 – General and specific objectives for 2017-2022

Topic	General and specific objectives for the 2020-2022 period	Target achieved in 2021?
 **Energy consumption**	**Objective 1 — Reduce energy consumption** Reduce **electricity** consumption (MWh) per full-time equivalent staff member (FTE) by 3 % over three years Reduce **standardised heating** energy consumption (MWh) per FTE by 3 % over three years	
 **Rational use of resources**	**Objective 2 — Reducing consumption of resources** Reduce the **amount of paper** consumed per FTE per year by 20 % over three years Reduce the **number of pages printed** per FTE per year by 30 % over three years Each year, the **number of items of IT equipment** older than five years as a proportion of the total number of items of IT equipment must be at least 35 %.	
 **Air emissions**	**Objective 3 — Reducing CO_2 emissions** Reduce **CO_2 emissions** from auditor travel per FTE by 20 % over three years Reduce the number of business trips to Brussels by private car by 20 % over three years The **number of teleworking days** and flexible working hours as a proportion of the total number of working days must be at least 15 % each year Reduce **CO_2 emissions from staff commuting** by 20 % per FTE over three years Reduce **CO_2 emissions from the ECA's car fleet** by 3 % over three years Reduce **CO_2 emissions from power supply** by 15 % pre FTE over three years	

Topic	General and specific objectives for the 2020-2022 period	Target achieved in 2021?
Waste	**Objective 4 — Reducing waste generation** Reduce **waste** generation by 3 % over three years reduce the generation of non-recycled waste by 5 % over three years At least 75 % of waste produced annually must be sorted. Reduce organic **waste** generation by 20 % over three years	✓
Green procurement	**Objective 5 — Incorporating more environmental considerations into public procurement** The proportion of procurement procedures (above €60 000) classed as being less environmentally friendly must not exceed 60 % (by number and value) of all procurement procedures with an environmental impact. The proportion of procurement procedures (above €60 000) classed as being moderately environmentally friendly must increase to at least 30 % (both in number and value) of all procurement procedures with an environmental impact.	✗
Water	**Objective 6 — Maintain water consumption at reference level** Maintain annual water consumption per FTE at its reference level	✓
Biodiversity	**Objective 7 — Enhancing biodiversity on the premises (new target)**	✓
Compliance with regulatory provisions	**Objective 8 — Compliance with regulatory requirements** Ensure that the annual level of non-compliance is zero.	✓

(Reference year: 2019, excluding data related to the ongoing K2 renovation project)

Source: European Court of Auditors.

Assumptions and data

34 These results are presented in the form of ratios, as required by Regulation (EU) 2018/2026. The indicators therefore relate to the number of staff expressed in FTEs. The number of FTEs is the number of staff in proportion to their working time. On 31 December 2021, the number of FTEs was 954.50, the highest since 2014.

35 The ECA uses external providers for a number of services (maintenance of buildings and installations, IT development, etc.). In order to ensure the reliability and reproducibility of the data from one year to the next, these providers have never been taken into account in the calculation of the indicators since the EMS was set up.

36 We have compared all the 2019 results reported in this statement with those of 2019, which was the reference year for the second EMAS cycle (2021–2022) at the ECA. Data related to the ongoing renovation of the K2 building is excluded from these results in order to maintain an equivalent and comparable scope of activity over time.

37 Most of the information needed to monitor the ECA's environmental performance is available from 2014 onwards. We therefore also compared all the 2021 results reported in this declaration with those from 2014 where possible. However, due to the unavailability of some data during the first EMAS cycle (2014-2016) and the addition of indicators for the third EMAS cycle, a comparison between 2014 and 2021 is not always possible.

38 For each topic, more details on methodological assumptions can be found in Annex I and more detailed data on environmental performance can be found in Annex II.

Energy

39 The energy required for the ECA's day-to-day activities comes from the consumption of natural resources, some of which are non-renewable.

40 The ECA is connected to the district heating network of the City of Luxembourg, powered by a cogeneration plant operating with an energy mix which included 49 % biomass in 2021. The heat supplied by the district network is used to heat buildings and produce domestic hot water.

41 Electricity consumption is mainly for powering the IT infrastructure, cooling the premises, ventilation, lighting, operating lifts, catering and printing. The electricity purchased comes from 100% renewable resources. In 2021, it came from geothermal energy produced in Iceland.

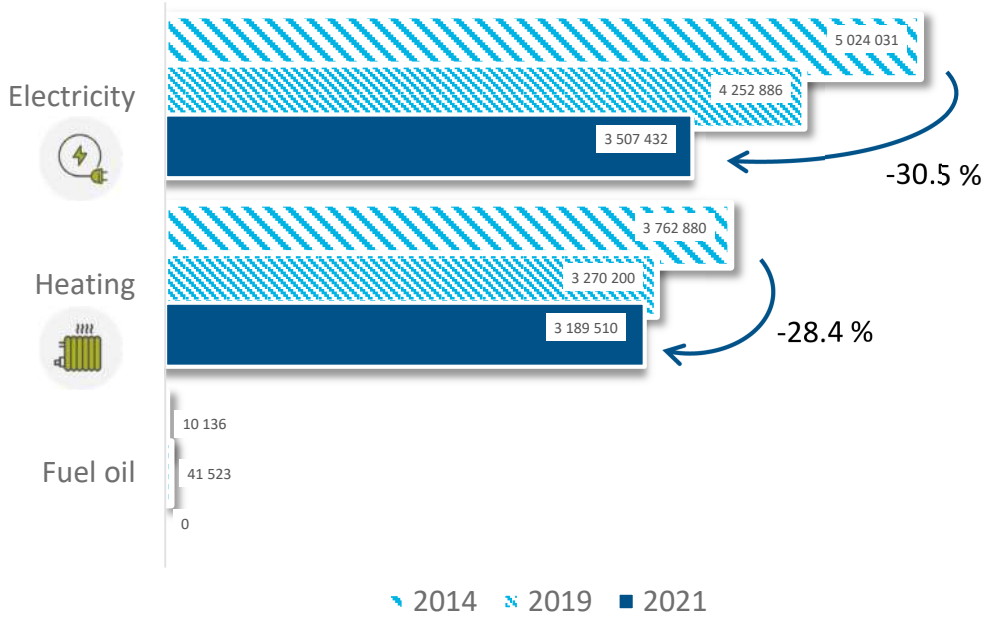
42 The ECA also uses small quantities of fuel oil to power its generators.

General and specific objectives

- Reduce electricity consumption per FTE by 3 % over three years (reference year: 2019).
- Reduce the consumption of standardised heating energy per FTE by 3 % over three years (reference year: 2019).

Results

Figure 8 — Energy consumption since 2014 (kWh)



Source: European Court of Auditors.

Table 6 — Summary of results for energy

Energy consumption		2021	Progression 2019-2021	Progression 2014-2021
Gross energy consumption by activity	Total electricity consumption (MWh)	3 507	-17.5 %	-30.2 %
	Total heating consumption (MWh)	3 190	-2.5 %	-15.2 %
	Corrected total heating consumption[8] (Mwh)	3 126	-11.2 %	-28.4 %
	Fuel oil (MWh)	0	-100.0 %	-100.0 %
Total gross energy consumption	Total energy consumption (MWh)	6 697	-11.5 %	-23.8 %
	Corrected total energy consumption (MWh)	6 633	-14.9 %	-23.5 %
	Renewable energy consumption (MWh)	5 080	-16.4 %	-41.4 %
	% of renewable energy	76 %	/.	/.
Relative energy consumption (per FTE)	Electricity (MWh per FTE)	3.67	-20.2 %	-32.5 %
	Heating (MWh/FTE)	3.34	-5.7 %	-18.0 %
	Heating, corrected value (MWh/FTE)	3.27	-13.7 %	-19.7 %
	Fuel oil (m^3/FTE)	0.00	-100.0 %	-100.0 %

Source: European Court of Auditors.

Results analysis

43 Since 2014, the ECA's corrected total energy consumption has steadily decreased. From 2019, however, this decrease was limited by the pandemic and the measures taken to protect the health of staff. The prolonged use of office ventilation systems is an example of a precaution taken by the ECA which has proved to be relatively energy-intensive.

44 The ECA's electricity consumption has decreased every year since 2014. This decrease is the result of energy optimisation efforts over time and reduced staff presence in the ECA's buildings since the start of the pandemic.

[8] Heating consumption is corrected on the basis of *Facteur climatique* f_{klima} (climate factor $f_{climate}$) for the annual meteorological adjustment (see details in Annex I).

45 Electrical consumption in 2021 is lower due to teleworking, but displays the same characteristics as the average consumption over the last five years:

- February, April and December have fewer working days or are holiday periods, resulting in lower consumption;
- consumption increases in June, July and August, due to greater use of air-conditioning installations.

46 Night-time electricity consumption is similar to that recorded in the past, and remains very close to the average of the last five years.

47 The decrease of around 5 % in electricity consumption between 2020 and 2021 can be explained by:

- the predominance of teleworking throughout the year, which was not the case in 2020;
- a reduction in the use of ventilation, which has been out of use at weekends since December 2020 and over an even shorter period of time per day since June 2021;
- the shutdown of ventilation installations in the K2 building for renovation works since the start of September 2021.

48 Heating consumption increased in absolute terms by 7.6 % between 2020 and 2021. Corrected heating consumption, on the other hand, fell by 9.9 % over a year, with 2021 being a much colder year than 2020. Overall, the increased use of ventilation units to respond to health recommendations had a negative impact on heating consumption, even though corrected heating consumption was lower than in 2020.

49 The fuel tanks of the generating sets were filled following a major power cut in 2019. In 2021, no new orders for fuel oil were needed, as was the case in 2020. Generating sets are not equipped with fuel consumption meters. The method used to measure consumption since 2014 is based on bills rather than consumption estimates, which explains why it is considered to be zero.

Actions taken

50 The following actions continued to be applied in 2021 and may either have been specific to one building in particular, or concern all ECA buildings:

- follow-up of the findings of the building energy performance studies and checks in order to constantly improve the energy performance of buildings;
- optimisation of lighting settings and frequent revision;
- regular heating checks to avoid overconsumption;
- gradual replacement of old laptops with more efficient models and tablets;

- raising awareness among colleagues about the overnight electrical consumption of computers when teleworking; asking them to switch off their laptops at home in the evening;
- following the analysis of possible savings and the test carried out at the beginning of 2021, works to replace the lighting equipment in the car parks of the K1 and K2 buildings started in 2021 and continued until March 2022;
- at the beginning of 2022, an automatic system was put in place for closing the doors of the delivery bay in order to prevent heat being lost;
- the renovation of the K2 building continued throughout 2021, with the replacement of ageing lighting equipment in the corridors by more efficient appliances with LED bulbs;
- the replacement of the K1 technical installations started in September 2021 and should eventually lead to a reduction in the energy consumption of the building.

Action interrupted as a result of COVID-19

51 Awareness-raising campaign using "ECO" Post-its to remind staff to switch off lights. This campaign may or may not be resumed, depending on the development of the health crisis and the presence of staff on site.

Future measures

52 The target of reducing both electricity and heating consumption per FTE by 3 % over three years has been set for the 2020-2022 period (reference year: 2019).

53 For the 2023-2025 period, the targets (still under discussion) would be to reduce consumption per FTE by 30 % over three years for electricity and by 20 % for corrected heating energy (base year: 2019).

54 an energy audit of the ECA's K2 and K3 buildings will be carried out in 2022 in order to find new potential areas where energy consumption could be reduced. This audit will serve as a basis for identifying actions to be taken in the coming years.

55 Further measures are envisaged to achieve this twofold objective:

- continue to reduce the number of operating hours of ventilation equipment, in line with the development of the pandemic;
- reduce temperature of ventilation units by 1°C in winter and increase it by 1°C in summer
- increase the temperature of the computer room to 22°C;
- analyse the energy consumption of the cooling installation in the K3 building, following the installation of the meters, in order to find ways of saving energy;
- install a meter on the cooling installations in the K1 building;

- analyse possibilities to reduce the temperature in certain office areas by 1°C in winter and increase it by 1°C in summer;
- continue to replace obsolete lighting and light bulbs with LED appliances and light bulbs, depending on budget availability;
- analyse the possibility of adding motion detectors in certain common areas (corridors, staircases, etc.) and carry out the work according to budget availability;
- analyse the possibility of transferring the data centre from the K3 building to an external data centre;
- start a discussion within the institution about partially closing unoccupied areas of the buildings if staff presence is low enough to justify it.

Resource efficiency

56 In the past, resource efficiency management has centred on paper use and consumption. Paper is mainly used for two purposes.

- It is used in photocopiers and printers for office activities (mainly A4 paper, 100 % recycled or FSC® origin and 75 g/m² since October 2021). Data on this is obtained from printer usage records.
- Paper is also used to produce communication materials to promote ECA activities and products. Several types of paper are used only by the ECA Printshop and external publication services. Data about this is based on the quantities of printouts ordered.

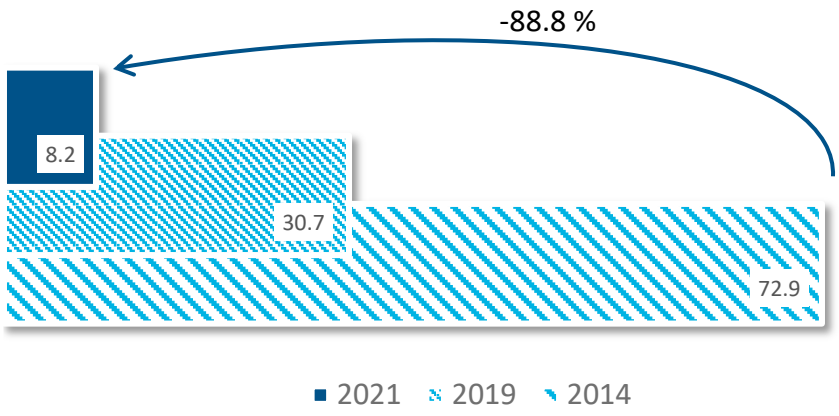
57 The 2020-2022 environmental programme includes an additional indicator on the lifespan of IT equipment, with the aim of increasing the lifetime and use of such equipment and raising awareness of the problem of the supply of rare-earth elements.

General and specific objectives

- Reduce the **amount of paper** consumed per FTE each year by 20 % over three years (reference year: 2019).
- Reduce the **number of pages** printed per FTE each year by 30 % over three years (reference year: 2019).
- Each year, the **number of items of IT equipment** older than five years as a proportion of the total number of items of IT equipment must be at least 35 %.

Results

Figure 9 – Number of pages printed per FTE per day



Source: European Court of Auditors.

Table 7 — Summary of results for paper

Paper consumption		2021	Progression 2019-2021	Progression 2014-2021
Gross annual consumption	Pages printed/photocopied (office work)	1 786 391	-71.1 %	-83.3 %
	Publications	122 698	-82.8 %	-97.9 %
	Total pages (office work + publications)	1 909 089	-72.3 %	-86.9 %
	Quantity of paper (kg)	9 624	-40.9 %	No data
Relative annual consumption	Pages printed/photocopied (office work per FTE)	1871.5	-72.1 %	-83.8 %
	Total pages (office work + publications per FTE)	2000.1	-73.2 %	-88.8 %
	Total pages (office work + publications per FTE per day)	8.20	-73.3 %	-88.8 %
	Quantity of paper (kg/FTE)	10.1	-42.9 %	No data

Source: European Court of Auditors.

58 The indicator on IT equipment lifetime has been calculated as follows.

- Number of items of equipment: 11 120.
- Number of items of equipment in service for more than 5 years: 5 077.
- Proportion of IT equipment over 5 years old: 46 % in 2021.

Results analysis

59 The ECA's paper-related objectives for the three-year period have been achieved and greatly exceeded, mainly due to the extensive use of teleworking since the beginning of the pandemic. The total number of pages printed per FTE decreased further, by 12.6 %, between 2020 and 2021.

60 With an average of 8.2 pages per working day and per FTE for office activities, the Court consumes 46 % fewer pages than the benchmark of excellence set out in the SRD for the public administration sector, i.e. 15 pages per day per FTE. The number of pages used for office activities per day and FTE has fallen by two thirds since 2019.

61 Thanks to the quality of laptops and the less frequent replacement policy in place, the 35 % target for IT equipment over 5 years of age has been exceeded.

Actions taken

62 In 2021, we continued the measures already in place to reduce paper consumption, which still apply in 2022:

- widespread teleworking throughout 2021 in the context of the pandemic;
- use of multifunctional printers with 'follow me' secure printing technology with double-sided printing configuration;
- extension of the implementation of an integrated computerised document management system and widespread use of electronic signatures;
- extension of the electronic-only system for invoices and order form signatures;
- automatic shutdown of computers on the ECA's premises at midnight;
- significant increase in the number of e-learning and paperless training courses;
- use of paper that is 100 % recycled or from a sustainable source;
- since October 2021, the ECA has been ordering 75 g/m² paper instead of 80 g/m²;
- increasing the number of online resources offered by the library.

63 A policy for the minimum renewal of IT equipment is in place which allows the lifetime of equipment to be extended as much as possible. Unless it stops working, equipment is replaced at the following rates.

- All data centre equipment: once every seven years.
- Laptops: no more than once every five years.
- Mobile phones: no more than once every three years unless the user specifically asks for a change;
- Screens and keyboards: kept in service until they stop working; failing that, no more than once every five years.

Measures interrupted as a result of COVID-19

64 Staff awareness campaigns to reduce paper consumption were suspended due to more teleworking. They will have to resume in the future in order to maintain the good habits adopted by ECA staff and thus prevent paper consumption from rising again.

Future measures

65 The following measures are either under consideration or will be implemented in the future:

- a project to digitise audit tasks and extend the use of electronic signatures both internally and externally will continue;
- the organisation of workshops on the purchase of IT equipment and the strengthening of environmental criteria in calls for tenders should lead to an increase in the lifetime of future equipment;
- reflection on gifts and promotional items to make them greener:
- staff awareness of problems related to the consumption of rare-earth elements and the consequences of mining.

Greenhouse gas emissions

66 Since 2014, the ECA has carried out an annual assessment of its greenhouse gas emissions to monitor efforts to reduce its carbon footprint.

67 Every year, we post detailed reports on our carbon footprint on our environmental management *webpage*.

68 For 2021, the carbon balance was calculated using a consistent carbon footprint methodology, which ensures continuity in comparing the results with those of previous years. The scope for calculating emissions from the ECA's activities was the same as in 2020.

69 A mobility survey was carried out between 16 and 23 March 2022 among all ECA staff. The aim was to assess emissions related to staff commuting (see ***Mobility*** chapter).

70 Telework-related emissions have also been taken into account using a simplified method. This method takes into account the electrical consumption of IT equipment used by staff and the heating resources consumed by working from home.

71 For 2021, we were able to estimate the number of days worked on the ECA's premises on the basis of the security teams' records at the entry points to the buildings. The percentage of days teleworked remained very high in 2021, with 80 % of days teleworked throughout the year, well above the initial target of 15 %.

72 As in 2020, IT-related emissions were assessed separately in the 'digital' category. The presentation of the results has been modified to include in this category all services related to the 'digital' chapter and the 'goods and services' chapter.

73 As the renovation works on the 5th floor of the K2 building were completed in July 2021, they were taken into account in the calculation of the carbon balance for 2021, including all technical installations (ventilation units, cooling units, etc.) delivered in 2021.

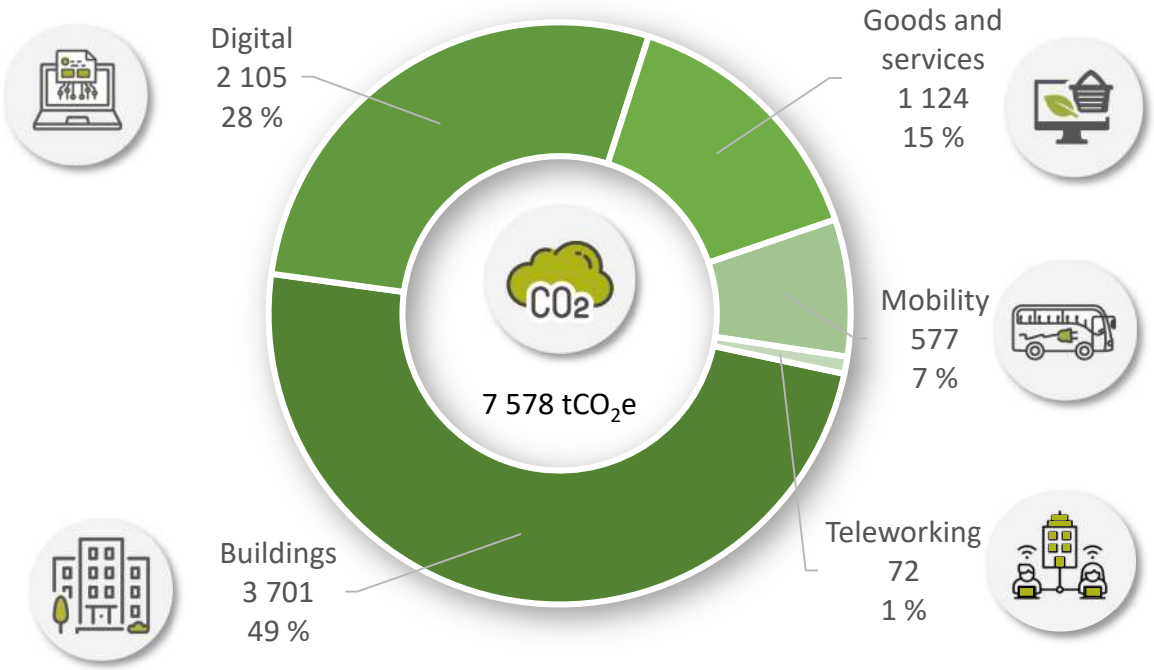
General and specific objectives

- reduction of CO_2 emissions from auditor travel by 20 % per FTE over three years (reference year: 2019);
- reduce the number of missions to Brussels using private cars by 20 % over three years (reference year: 2019);
- the number of teleworking days and flexible working hours ias a proportion of the total number of working days must be at least 15 % each year;
- reduce CO_2 emissions from auditor commuting by 20 % per FTE over three years (reference year: 2019);

- reduce CO_2 emissions from the car fleet by 3 % over three years (reference year: 2019);
- reduce CO_2 emissions from fuel by 15 % per FTE over three years (base year: 2019).

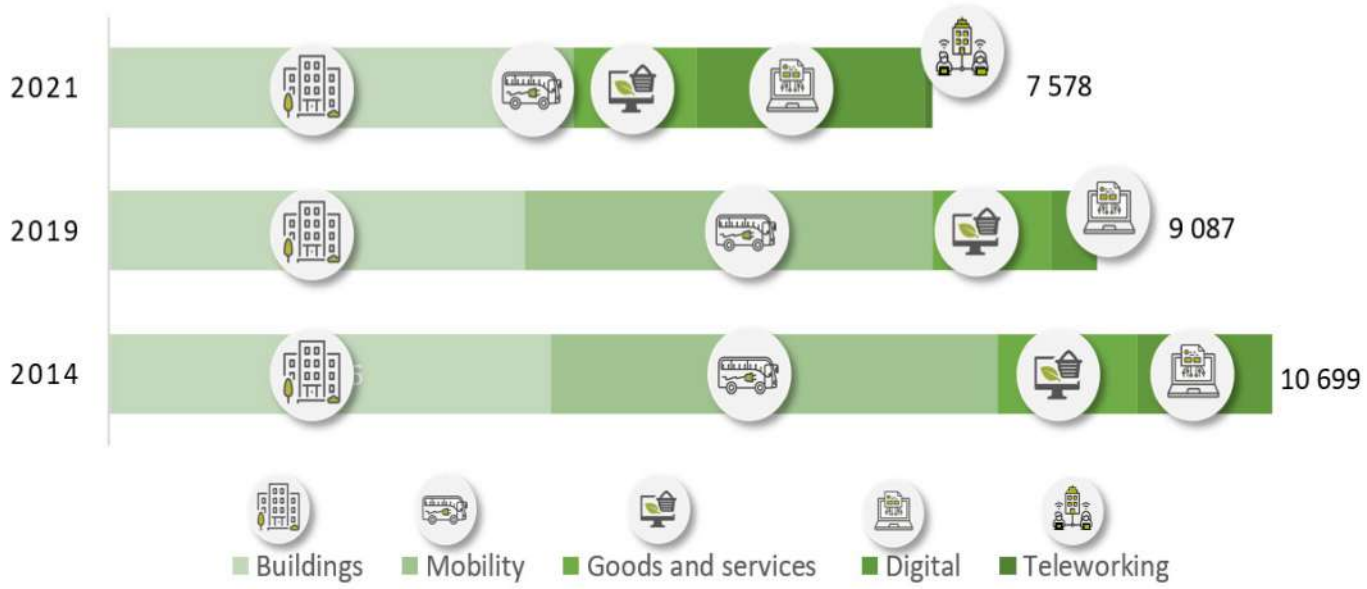
Results

Figure 10 – Emissions in 2021



Source: Argest and EcoAct consultancy firms.

Figure 11 – Evolution of greenhouse gas emissions since 2014 (tCO_2e)



Source: Argest and EcoAct consultancy firms.

Table 8 – Summary of results for emissions

Emissions – Carbon footprint method		2021	Progression 2019-2021	Progression 2014-2021
Gross annual emissions	Total emissions (tCO_2e)	7578.0	-19.7 %	-29.2 %
	Total emissions from food/power (tCO_2e per FTE)	91	-67.7 %	-57.1 %
Relative annual emissions	Total emissions (tCO_2e per FTE)	7.94	-22.3 %	-31.5 %
	Total emissions from food/power (tCO_2e per FTE)	0.10	-68.8 %	-58.5 %

Source: Argest and EcoAct consultancy firms.

Results analysis

74 All targets over a three-year period (2020-2022) have already been met to a very large extent.

75 The outcome of the carbon footprint exercise for 2021 was strongly affected by the impact of COVID-19. Unlike in past years, the largest proportion of emissions is not accounted for by individual travel. Instead, it is accounted for by information technology.

Actions taken

76 In 2021, the ECA took the following emissions-reduction measures:

- extensive use of teleworking since 16 March 2020 due to COVID-19;
- continued use of MS Teams and authorisation of Zoom and Webex tools;
- a new teleworking policy, Hybrid Working, was adopted in October 2021. Staff can now telework for 10 days each month;
- encouraging dietary change by highlighting vegetarian and vegan menus on the intranet.

Future measures

77 A collaborative project to establish a roadmap to reduce emissions by 2030 will identify new actions and reduction opportunities that will serve as a basis for the 2023-2025 Action Plan. The aim here is to set an emissions reduction target by 2030 and 2050.

78 The measures that could be taken in this context are as follows:

- increase in the number of vegetarian and vegan meal options, and promotion to staff;

- reflection on the use of the ECA's buildings in order to optimise the use of space following the decision to allow staff to work in hybrid mode;
- testing of electric ECA vehicles and shuttles and negotiating with the other institutions to allow the charging of vehicles during missions to their premises;
- continue to raise staff awareness of the impacts of rising greenhouse gas emissions, for example by organising workshops, such as the climate fresco;
- raising staff awareness of the requirements of the European Green Deal and setting up action plans to reduce greenhouse gas emissions in the other European institutions.

Carbon contribution

79 Carbon offsetting is a financial mechanism that supports environmental projects to promote the reduction (e.g. a wind project) or sequestration (e.g. reforestation project) of greenhouse gases in the atmosphere. This is done after seeking to minimise CO_2 emissions resulting from the ECA's activity. The term "contribution" rather than "offsetting" is preferable because it is not possible to offset greenhouse gas emissions. This is an additional commitment from our institution contributing to continuous improvement, but which does not nullify our environmental impact.

80 Currently, the only carbon contribution made by the Court of Auditors is the purchase of certified green electricity. This contribution is certified by our provider, and is a transparent mechanism.

81 At present, there are no common European standards for the certification of quality carbon removals with real environmental benefits. The Court of Auditors has therefore chosen to wait for the new EU regulatory framework for the certification of carbon removal. This will ensure that selected carbon contribution projects are transparent and can safely and sustainably remove carbon from the atmosphere. The European Commission plans to propose this EU regulatory framework for the certification of carbon removals by the end of 2022.

Mobility

82 Mobility is an important part of the activity of the European Court of Auditors, which carries out its audits and meets audited parties on the spot. Between 2014 and 2019, mobility represented the ECA's main impact in terms of its carbon footprint.

83 Mobility at the Court is divided into three sectors:

- professional travel by auditors;
- visitor travel;
- daily travel by staff from home to the ECA's premises.

General and specific objectives

- reduction of CO_2 emissions from auditor travel by 20 % per FTE over three years (reference year: 2019);
- reduce the number of missions to Brussels using private cars by 20 % over three years (reference year: 2019);
- the number of teleworking days and flexible working hours in relation to the total number of working days must be at least 15 % each year;
- reduce CO_2 emissions from auditor commuting by 20 % per FTE over three years (reference year: 2019).

84 A mobility survey was carried out between 16 and 23 March 2022 among all ECA staff. Its aim was to understand:

- whether and how commuting patterns have changed in recent years;
- how this has influenced mobility choices.

85 The main findings of this survey are as follows.

- Over the years, the modes of transport used to travel to the ECA have become more diversified, and new modes of transport such as cars, bicycles and electric scooters are now part of many colleagues' daily lives.
- While the use of public transport has increased since 2017 among respondents, reaching 24 % of kilometres travelled, individual motorised vehicles remain the preferred means of travel to the workplace. Motorised vehicles account for 70 % of kilometres travelled for commuting, while 53 % of respondents live less than 10 km away from the ECA.
- There has been a sharp decrease in carpooling. The drop in carpooling is linked to the new system of hybrid working in place since the pandemic: to be able to carpool, staff currently need to find colleagues who do the same commute and work the same hours.

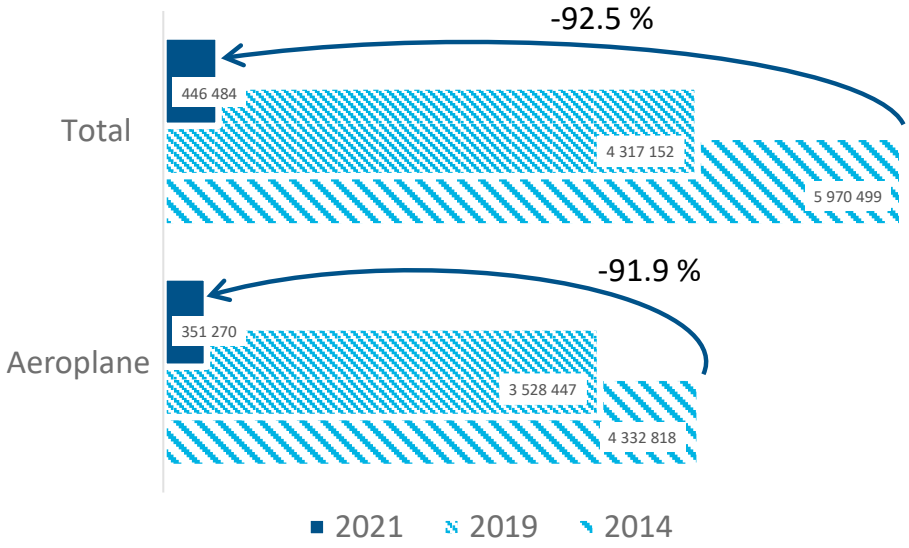
Results

Table 9 – Mobility related greenhouse gas emissions

Emissions – Carbon footprint method		2021	Progression 2019-2021	Progression 2014-2021
Gross annual emissions	Total emissions (tCO_2e)	7578.0	-19.7 %	-29.2 %
	Total emissions from auditor travel (tCO_2e per FTE)	85.0	-91.9 %	-94.2 %
	Total emissions from auditor commuting (tCO_2e per FTE)	305	-74.3 %	-81.4 %
	Total emissions from the ECA car fleet (tCO_2e)	170.0	-17.7 %	-38.8 %
Relative annual emissions	Total emissions from auditor travel (tCO_2e per FTE)	0.09	-92.1 %	-94.4 %
	Total emissions from staff commuting (tCO_2e per FTE)	5.5	-12.3 %	-36.8 %
	Total emissions from the ECA's car fleet (tCO_2e per car)	0.10	-68.8 %	-58.5 %

Source: Argest and EcoAct consultancy firms.

Figure 12 – kilometres travelled since 2014 (km)



Source: European Court of Auditors.

Table 10 — Overview of distances travelled by activity

Business travel		2021	Progression 2019-2021	Progression 2014-2021
Gross annual total	Total distance covered for business travel (in km):	446 484	-89.7 %	-92.5 %
	air travel (km)	351 270	-90.0 %	-91.9 %
	travel by private car (km)	28 212	-87.1 %	-92.7 %
Relative annual total	Total distance covered for business travel (in km per FTE)	468	-90.0 %	-92.8 %
Missions to Brussels	Number of missions to Brussels by private car	63	-85.9 %	N/A

Source: European Court of Auditors.

Results analysis

86 All targets over a three-year period (2020-2022) have already been met to a very large extent.

87 The result of the carbon balance for 2021 was again strongly influenced by the impact of the health crisis, with auditors' movements remaining very limited. The same was true of visits.

88 All emissions related to passenger transport fell sharply compared to 2019 and 2014, between 85 % and 90 %. This is due to teleworking and the reduction in the number of on-the-spot audits as a result of the pandemic. To a lesser extent, emissions from the use of the ECA's vehicles have also decreased.

Actions taken

89 Since March 2021, public transport has been free of charge throughout Luxembourg, which has led the ECA to change its support policy in this area.

90 In 2021, the ECA took the following emissions-reduction measures:

- continued teleworking thanks to hybrid working, which allows staff to telework for 10 days a month;
- following the renovation of the 5th floor of the K2 building, additional videoconferencing facilities were installed in meeting rooms of different sizes;
- encouragement of videoconferencing meetings using MS Teams, Zoom and Webex;

- a 6 % decrease in the number of vehicles in the Court's fleet and an extension of the fleet of low-CO_2 service cars (hybrid vehicles) following the introduction of fast charging stations;
- organisation of virtual visits for groups;
- signing a new interinstitutional agreement with Vel'oh, which entered into force on 1 January 2021. Staff members are entitled to free subscriptions and free journeys of up to 30 minutes;
- partial reimbursement of public transport (M-Pass) season tickets for cross-border workers since 1 January 2022;
- two staff-led groups were set up to discuss cycling and electric vehicles;
- promotion of active modes of transport to staff during the European Mobility Week.

Future measures

91 The following measures are either under consideration or will be implemented in the future:

- promoting carpooling, and in particular the carpooling application chosen by the Luxembourg government as soon as the health crisis allows;
- additional bicycle parking spaces in the K3 building in 2022, as well as changing rooms for cyclists;
- installation of ten chargers for hybrid and electric vehicles in the car park of the K3 building;
- testing of electric ECA vehicles and shuttles and negotiating with the other institutions to allow the charging of vehicles during missions to their premises;
- participation in an interinstitutional working group on improving the environmental impact of missions;
- reflections on the introduction of a carbon budget in the calculation of the cost of missions so that the choice of means of transport is based not only on the cost but also on the environmental impact of the means of transport chosen;
- raising staff awareness of scarce materials and the consequences of mining, raising awareness of carpooling, promoting the use of public transport and improving Luxembourg networks and active modes of transport.

Waste

92 The waste generated by the ECA results from catering, general office work, the upkeep and maintenance of its premises and technical facilities.

93 Waste is sorted by users (staff, logistics team, service desk, etc.) and is collected to be centralised at the delivery bay. Catering and maintenance providers sort and collect the waste arising from their activities. The waste is then transported to the various sites for recycling, disposal or recovery.

94 The ECA's waste is sorted into different categories (see Annex II). Its waste management system was awarded the 'SuperDrecksKëscht®' quality label, which was renewed in May 2022. This system operates with waste sorting bins installed in the ECA's corridors, as offices are not equipped with individual bins.

95 Continuous action is taken to limit waste at all levels:

- the mission monitoring system determines the amount of meals to be provided to clear food waste;
- a donation programme promotes the reuse and recycling of decommissioned IT equipment that is still in working order;
- the catering services provider has detailed statistics on food leftovers.

96 Since the beginning of the pandemic, new waste categories have needed to be handled (masks, gloves, protective gowns, etc.). Additional specific bins for these items have been placed on the premises. Communications to staff and collection procedures by service providers have also been adapted.

General and specific objectives

- Reduce waste generation per FTE by 3 % over three years (reference year: 2019)
- Reduce the generation of non-recycled waste by 5 % over three years (reference year: 2019)
- At least 75 % of waste produced annually must be sorted.
- Reduce organic waste production per FTE by 20 % over three years (reference year: 2019)

Results

Table 11 — Summary of results for waste

Waste		2021	Progression 2019-2021	Progression 2014-2021
Gross annual amount	Total waste generation (t), of which:	74 440.75	-61.6 %	-51.0 %
	food waste (kg)	1 855.57	-92.7 %	-90.5 %
	hazardous waste (kg)	18 459.48	-73.3 %	-5.6 %
	non-recycled waste (kg)	30 533.89	-76.9 %	N/A
	Rate of non-recycled waste	41 %	N/A	N/A
	Proportion of sorted waste	82 %	N/A	N/A
Relative annual amount	Total waste generated (kg)/FTE	77.99	-62.8 %	-52.6 %
	Total food waste generated (kg) per FTE	1.94	-93.0 %	-90.8 %
	Total hazardous waste generated (kg) per FTE	19.34	-74.2 %	-8.7 %
	Total non-recycled waste generated (kg)/FTE	31.99	-77.6 %	N/A

Source: European Court of Auditors.

Results analysis

98 Waste generation is strongly correlated with the on-the-spot presence of staff. The year-on-year decrease is therefore very significant, and the targets for the whole period were already achieved in 2020. A rebound is expected in the coming years, depending on COVID-19 developments.

99 The 2014 results do not include the waste heading “sludge” from the oil/water separators due to a lack of data, although these were systematically collected in subsequent years. Moreover, the measurement scope is not entirely comparable, as the Waste Register 2014 did not include service providers’ waste. The 2014 results are therefore not comparable with the results of subsequent years.

Actions taken

100 In 2020, a detailed analysis of waste processes led to the creation of a specific action plan, but its implementation was delayed by COVID-19.

101 In 2020, the ECA took the following steps to improve its waste management system:

- improve data quality through increased waste-weighing and including suppliers’ waste in ECA statistics;
- sending ink cartridges (excluding toner) to a repackaging company for reuse;

- extension of plastic sorting in view of the new possibilities offered by the Valorlux sorting system. All types of plastic can now be thrown into the recycling sorting bin, with the exception of black plastics;
- regular checks on the quality of waste sorting within ECA buildings;
- raising awareness of drinking water consumption by distributing a reusable bottle to each member of staff, rather than plastic water bottles;
- awareness-raising campaigns for staff, following the new instructions for sorting plastics.

Figure 13 – Reusable bottle distributed to all staff in November 2021

Source: European Court of Auditors.

Future measures

102 The established targets can be achieved by implementing the following actions:

- promotion of the use of greener office supplies and selective sorting of used small office supplies;
- continuation of teleworking policy and staff awareness campaigns on food waste and single-use plastic packaging.
- purchase of a scale to allow better monitoring of waste quantities and establishment of a chronological register of waste;
- separate sorting of cigarette butts and analysis of recycling possibilities and purchase of a tray to compost leaves collected from the site in autumn for reuse in the garden and green areas of the ECA.

Green procurement

103 The type, quantity and nature of goods and services purchased affect the ECA's environmental footprint. This is why we pay particular attention to environmental clauses in our public procurement procedures.

104 Public procurement is sustainable when a public authority seeks to purchase goods and services with the lowest possible negative environmental and social impact over their whole lifespan.

General and specific objectives

- The proportion of procurement procedures (above €60 000) classed as being less environmentally friendly must not exceed 60 % (by number and value) of all procurement procedures with an environmental impact.
- The proportion of procurement procedures (above €60 000) classed as being moderately environmentally friendly must increase to at least 30 % (both in number and value) of all procurement procedures with an environmental impact[9].

Results

Table 12 — Results for 2021

Public procurement		2021
Number	Very environmentally friendly	0
	Moderately environmentally friendly	0
	Less environmentally friendly	2
	Not environmentally friendly	3
	percentage of *not* and *less environmentally friendly* contracts	100 %
	percentage of *moderately* and *very environmentally friendly* contracts	0 %
Value	Very environmentally friendly	0
	Moderately environmentally friendly	0
	Less environmentally friendly	€ 283,231
	Not environmentally friendly	€ 763,615
	percentage of *not* and *less environmentally friendly* contracts	100 %
	percentage of *moderately* and *very environmentally friendly* contracts	0 %

Source: European Court of Auditors.

[9] For more details on methodological assumptions, see Annex 1.

Results analysis

105 None of the targets set for 2021 were achieved. Tendering procedures this year were few and very specific.

106 In the field of purchases, the results are also strongly affected by the COVID-19 pandemic: fewer contracts were concluded and, for some contracts, the ECA followed the recommendations of the Luxembourg government and the ECA's medical service and prioritised staff safety over environmental considerations. One of the contracts concerned the purchase of protective equipment and alcohol hand sanitiser. A second contract was for carrying out on-site PCR tests. In 2021, the ECA also had to renew contracts for which the ecological criteria are not applicable, such as newspaper licensing agreements.

Actions taken

107 To ensure that targets are met, the ECA promotes green public procurement by:

- analysing procurement procedures and their purpose in depth to ensure that they include environmental criteria;
- holding campaigns and seminars to raise staff awareness of green public procurement;
- providing green public procurement training for all departments involved in procurement procedures;
- placing high importance on environmental requirements in technical specifications and award criteria;
- having procurement procedures assessed by the Green Public Procurement Helpdesk, and providing support for the inclusion of green criteria at every stage of the procedure.

Future measures

108 If possible, the ECA will continue these measures in future, bearing in mind the COVID-19 crisis and the priority given to staff safety.

Water

109 Catering, lavatories, cooling and office cleaning account for most of the ECA's water consumption from the municipal network.

110 In line with its environmental policy, the ECA is committed to promoting the efficient use of water and preventing pollution.

General and specific objectives

- Maintain water consumption per FTE per year at its baseline value (reference year: 2019).

Results

Table 13 — Summary of water consumption results

Drinking water consumption		June 2021	Progression June 2019 – June 2021	Progression June 2014 – June 2021
Gross annual consumption	Total consumption (m^3)	5 674	-54.8 %	-54.4 %
Relative annual consumption	Total consumption (m^3/FTE)	5.94	-56.3 %	-55.9 %
	Total consumption (m^3/FTE/day)	0.02	-56.4 %	-55.9 %

Table 14 – Summary of rainwater consumption results

Rainwater consumption		2021	Progression 2019-2021	Progression 2014-2021
Rainwater consumption	Total consumption (m^3)	180	-9.1 %	26.3 %

Source: European Court of Auditors.

Results analysis

112 These results are based on invoices, which are drawn up annually in June. This is therefore the first year that the impact of the COVID-19 pandemic is visible in the results. Water consumption is directly linked to on-site presence. Logically, therefore, it has decreased significantly since the beginning of the pandemic and the use of teleworking.

113 The amount of water consumed, which amounts to 5.94 m^3/FTE/year, is below the baseline figure of 6.4 m^3/FTE/year as recommended in the DRS.

114 Rainwater consumption increased by 445 % between 2020 and 2021, following the return to service of the buildings, and of the main source of rainwater use, the fountain on the K3 terrace.

Actions taken

115 In the past, we have:

- reduced the water pressure in the taps in all of the ECA's buildings;
- installed tap aerators in all buildings;
- installed automatic taps in the K3 building;
- installed battery-free automatic taps as part of the renovation of the K2 building.

Future measures

116 We plan to take the following measures:

- analyse whether it would make sense to make more use of the K3 rainwater installation;
- continue staff awareness campaigns on water efficiency.

04.

Other environmental aspects

Other environmental aspects

Green canteen

117 The ECA has one canteen, two cafeterias and two events rooms. Catering is managed by an external contractor whose contract imposes high environmental standards. During 2021, catering activity gradually resumed, but the number of meals taken at the Court was still 65 % lower than in 2019.

Actions taken

118 We implemented the following measures, which were maintained in 2021:

- made a vegetarian or vegan dish available every day, even when the number of dishes offered has been reduced as a result of the health crisis;
- allowed users to adapt portion sizes by offering salads, fruit and side dishes in a buffet format, thus limiting food waste;
- put in place a system for monitoring food waste in the K3 cafeteria;
- ceased using plastic cutlery for receptions and events, and distributed mugs to staff to replace single-use coffee cups;
- promoted local, sustainable, organic and fair trade-labelled products

Future measures

119 The following actions are planned in the future:

- continue the project to reduce single-use plastics and stop the sale of beverages in plastic bottles;
- gradually introduce changes in eating habits to reach a target of one vegetarian meal per week on average per person, and increase the number of vegan options;
- continue to raise awareness of the impact of food on the environment;
- improve the quality of data on waste, and on the number of vegetarian and vegan meals served.

Biodiversity

120 Although the impact of the ECA's activities on biodiversity is not significant, the protection of biodiversity is one of the targets for the 2020-2022 period, though there are no numerical figures.

121 The ECA has various gardens and patios of great biological diversity, each with its own specific characteristics:

- a succulent garden is located to the left of the main entrance of K1;
- the garden to the right of the main entrance to K1 has been designed with plants that particularly attract butterflies and bees:
- the roof of the gallery linking the buildings and the conference room is covered in vegetation by design;
- between the K1 and K3 buildings there is a flower meadow which is mown only once a year;
- beehives were installed in 2019 between the K2 building and the gallery in a small plant garden;
- near the K2 cafeteria there is a terrace and lawn accessible to staff and, since 2022, there have been planters for the construction of a community garden.

Table 15 — Areas occupied by buildings and green areas

Biodiversity	2021	Progression 2020-2021
Total occupied area (m^2)	18 473	0
Total impermeable surface area (m^2)	16 442	0
Green spaces (m^2)	2 031	0
Green spaces/Total surface area occupied (%)	10.99 %	0

Source: European Court of Auditors.

Actions taken

122 The following actions have been taken to preserve biodiversity:

- inclusion of clauses in the maintenance contracts awarded by the ECA concerning the products and methods used for the maintenance of green spaces;
- introduction of labelling requirements for catering and cleaning services;
- late mowing in certain parts of the garden;
- maintenance of the ECA's beehives by a beekeeping club (this continued during the pandemic, and the first honey harvest was carried out in 2020).

- raising staff awareness of the state of forests in Luxembourg and the protection of biodiversity. In July 2021, a four-year active-training partnership was signed with the Natur & Emwelt Foundation. It involves an annual tree-planting session by ECA officials is organised, as well as forest visits. After the four years, 160 colleagues will have taken part in the project to plant and maintain 1 270 trees and 200 bushes, and 80 colleagues will have been made aware of the impacts of climate change and biodiversity extinction on forests in Luxembourg.

Future measures

123 The following actions may be taken in the future:

- a group of ECA gardeners was set up, and planters were set up at the end of 2021. The first planting season will take place in 2022;
- creation of a seed library at the ECA library;
- analysis of the possibility of setting up an on-site composter for some of the ECA's green waste;
- analysis of the possibility of installing animal shelters (for insects, bats or birds) according to budget availability;
- launch of a reflection on the possibility of introducing quantified biodiversity indicators, in collaboration with the other European institutions;
- continue to raise awareness of the massive reduction of biodiversity, for example by organising biodiversity workshops.

Figure 14 – First planting of trees in Schieren on 8-9 March 2022

Source: European Court of Auditors.

The circular economy

124 The ECA participates in many circular economy actions at different levels of its organisation and in a wide range of areas.

125 To showcase these initiatives, an information session on the circular economy was organised for the European Waste Week in November 2021. There was a presentation of the main principles of the circular economy, and the various actions taken by the ECA were presented to staff.

Actions taken

126 The measures already taken to support and foster the circular economy are:

- equipping three areas for book exchanges between colleagues;
- systematic reuse of certain office supplies, such as binders;
- donation of furniture still in good condition to a charity;
- donation of IT equipment still in working order to charities. Associations can make requests on the ECA website. Between 2014 and 2021, 97 associations from 6 different countries received 2 842 items of equipment;
- reuse of printer ink cartridges (excluding toner). The cartridges are collected by a company that fills them again for resale;
- reuse of the ECA's food waste by the Luxembourg city authorities to obtain biomethane;
- organisation of exchanges of office supplies between colleagues during the waste week.

Future measures

127 The following actions may be taken in the future:

- assessment of the possibility of purchasing recycled furniture:
- analysis of the possibility of donating or selling unsold canteen food;
- raising staff awareness of the possibilities for re-use of materials and goods in Luxembourg.

Communication and awareness-raising

128 The ECA uses every possible means of communication to raise staff awareness of environmental issues: training, conferences, knowledge-sharing sessions such as "Savoir+" presentations, online training, videos, social media, intranet news items, events organised by or with other institutions, regular updates to the environment intranet page, etc.

129 Compulsory online training is provided to all new ECA staff. Staff are also regularly offered training on the use of environmental protection equipment (spill kits for the car park), the EMAS internal audit and the EMAS system.

130 ECA staff are very involved, and are themselves responsible for performing certain actions on a voluntary basis. Groups, known as "communities", have been formed. They promote exchanges between colleagues, training, and action, as well as raising awareness among other colleagues. So far, five communities are active on environmental issues:

- the beekeepers' club;
- the 'plant a tree, grow a forest!' community, which carries out tree-planting;
- the ECA gardeners, who are responsible for the community garden;
- cyclists, who discuss cycling mobility and organise presentations on this topic for colleagues;
- electric-vehicle drivers, who coordinate among themselves how electric vehicle chargers will be used.

131 The ECA takes part in a number of annual events:

- The EMAS days, which are organised by the European Commission for all European institutions. This event took place from 2 to 5 February 2022; the ECA presented its "plant a tree grow a forest" initiative during an information session on staff volunteering;
- Earth Hour, the largest public mobilisation event for the planet, organised by the World Wildlife Fund (WWF);
- European Mobility Week, the aim of which is to influence, over time, the resolution of mobility problems and urban transport;
- European Week for Waste Reduction, the aim of which is to promote waste sorting and recycling;
- conferences organised by the interinstitutional Green Procurement Helpdesk.

Figure 15 – Despite restrictions, colleagues met to learn how to get to the office by walking or cycling during the mobility week in September 2021

Source: European Court of Auditors.

Main awareness-raising activities in 2021

132 Awareness-raising activities for 2020 were very different from those in previous years. A number of regular communication and awareness-raising actions have been rendered obsolete due to the closure of buildings and the prolonged use of teleworking, so no on-site events could be organised. However, online events have been very successful, with the regular participation of more than 100 people.

133 During 2021, 25 environmental events were held:

- the organisation of experience-sharing sessions on environment-related audits;
- a "Savoir+" presentation to present the results of the previous year;
- in the framework of the Mobility Week, five walks for all types of active mobility were organised;
- a conference on the environmental state of the planet, "Planetary Stewardship in the Anthropocene – Towards a Climate-Resilient Europe" was given by Professor Johan Rockström, Director of the Potsdam Climate Institute, for both staff and Members of the Court. This conference provided an opportunity to take stock of the current state of the planet in terms of the environment and possible changes in the climate;

Figure 16 – Philipp Sonnleitner explains cognitive biases that prevent us from taking environmental action

Source: European Court of Auditors.

- during the Waste Week, a conference on the circular economy and its applications at the ECA was followed by 96 people.
- 120 people had the opportunity to attend a conference moderated by Philippe Sonnleitner, a professor of psychology at the University of Luxembourg, on the transition movement and opportunities for local action in groups.
- each year, the Professional Training department organises one day of training. An exchange took place on “Ocean, climate regulator, source of biodiversity and resources, a global common of humanity” with Catherine Chabaud, Member of the European Parliament.
- the ‘plant a tree, grow a forest!’ project enabled 40 colleagues to visit the forest around Luxembourg and to see the impact of climate change on forests. The first tree-planting action took place in early 2022.

134 The “ECA plastic free” project to reduce single-use plastics at the ECA was launched in 2019. The first communication and awareness-raising activities took place in 2020, despite delayed implementation due to COVID-19.

Legal compliance

135 To ensure compliance with environmental legislation (including conditions for awarding operating permits), and in keeping with its environmental commitments, the ECA has established a comprehensive register of applicable regulations, and performs regular compliance audits.

136 The ECA holds operating permits for its three buildings, issued by the Luxembourg Environment Agency. The permit reference details are given in Annex I.

Actions taken

137 We will continue to implement the following measures:

- in the event of an incident that could affect the environment or endanger human health and safety, the ECA will immediately inform the Luxembourg Environment Agency;
- the ECA keeps a register of applicable regulations for monitoring purposes and updates it regularly, and also adheres to an interinstitutional regulatory monitoring system;
- any new rules or changes to environmental regulations applicable to the ECA are brought to the attention of the relevant department at least every month;
- the environmental regulatory compliance database is accessible to the various departments concerned;
- under the EMAS III requirements[10], the ECA monitors certain other compliance obligations arising from contracts, agreements and requests through regular compliance audits;

138 The ECA declares that it complies fully with the requirements of the applicable environmental legislation and its operating permits.

[10] Commission Regulation (EU) 2017/1505 of 28 August 2017 amending Annexes I, II and III to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

05.

Conclusions and future guidelines

Conclusions and future guidelines

139 The ECA achieved and even exceeded almost all of its targets over the 2020-2022 period. The reduction in the impact of our institution on the environment since 2014 is tangible. The emergence of communities of volunteers among staff to carry out environmental actions shows that our organisation's culture change is well underway.

140 We now need to work on a roadmap for reducing emissions by 2030 and 2050 in line with the Paris Agreements and the European Green Deal, of which our next EMAS Action Plan 2023-2025, currently under preparation, should be the first step.

141 The measures that have the most impact on reducing emissions concern the size of office space and the use of buildings, as well as how their energy consumption is optimised. These actions require a high level of capital expenditure, but they will generate benefits in terms of reduced energy and asset consumption, as well as maintenance and service contracts.

142 The implementation of actions with a significant impact on emission reduction will require a combination of measures that will have a significant impact on the way our organisation operates. This will be reflected mainly in the optimisation of office use, in the new arrangements for organising events and visits and in changes in travel patterns. These measures should therefore be accompanied by a robust internal change-management process, in which staff and their representatives are encouraged to participate.

Annexes

Annex I – Variables used to calculate environmental performance indicators

Number of people

143 All headcount data given in this statement is reported as the average number of full-time equivalent employees (FTEs) for the year. This variable only includes ECA staff, and excludes contractors. It is used to calculate the relative annual consumption of water, electricity, heating and paper, along with the relative annual waste and greenhouse gas emissions generated.

Table 16 — Change in number of FTEs

Year	2014	2019	2020	2021
FTE	922.9	923	937	954.5

Source: European Court of Auditors.

Number of working days

144 Figures on working days at the EU institutions in Luxembourg are published annually. They include working weekdays only, i.e. excluding weekends and bank holidays. This variable is used to calculate relative annual water consumption.

Table 17 — Change in number of working days

Year	2014	2019	2020	2021
Working days	244	243	244	244

Source: European Court of Auditors.

Energy

The electricity and heating consumption data used in this report come from invoices issued by energy suppliers.

We cross-checked this data against consumption data recorded by the metering system installed in the ECA buildings.

We calculated the percentage of renewable energy based on the energy distribution reported by LuxEnergie, the heating supplier, also taking account of fuel oil.

We only use fuel oil to operate the back-up generators. The quantities used are negligible compared to other energy types.

Degree-days

The concept of unified summer/winter degree-days makes it possible to take into account the temperature of every day of the year in question, and thus put the energy consumed in heating or cooling into perspective in relation to climatic conditions and meteorological variations. This concept is very useful for highlighting the effect of the measures taken, even when the meteorological conditions in a given year are unfavourable in terms of consumption.

If, for example, thermal insulation measures have been put in place, but a particularly severe winter leads to an increase in consumption, the use of degree-days negates the weather effect and allows the effect of changing the insulation to be shown. The same principle applies to cooling during heat waves.

The calculation is based on the following formula:

$$\text{Normalised consumption (MWh)} = \text{fKlima} \times \text{ Real consumption}$$

The climate factor (f_{Klima}) is set by ministerial decree and represents the ratio between normal degree-days and unified degree-days for a given year.

Table 18 — Change in the climate factor

Year	2014	2019	2020	2021
Climate factor	1.16	**1.07**	**1.17**	**0.98**

Source: Grand-Ducal Regulation of 20 April 2022.

Paper

Reported paper consumption data comes from supplier statistics on the number of pages printed or photocopied (including publications). We compare this data against our internal inventory of paper stocks, although we consider the former more reliable.

Greenhouse gas emissions

The ECA's carbon footprint for 2021 was calculated by Argest and EcoAct, using version V.8.1 of the proprietary Bilan Carbone® carbon footprint calculation method.

This method takes into account the following gases:

- the Kyoto Protocol gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulphur hexafluoride (SF_6), hydrofluorocarbons ($C_nH_mF_p$, C_nF_{2n+2}) and nitrogen fluoride (NF_3);
- other non-Kyoto Protocol gases;
- water vapour emitted by planes at very high altitude.

Waste

The following waste types are sorted at the ECA:

- glass;
- plastic, metal, wooden and composite (PMC) packaging;
- printer toners (refilled and recycled by suppliers) and printer cartridges;
- packaging contaminated with dangerous products;
- organic waste;
- paper/cardboard;
- bulky items;
- mixed municipal waste;
- ceramics;
- electrical and electronic waste;
- batteries;
- fluorescent tubes;
- edible fats and oils, and oil/water separator sludge.

Waste generation data is mostly taken from official statistics provided by the Luxembourg city authorities and SuperDrecksKëscht. This data discloses details of waste type, disposal method and the relevant European waste code.

Reported quantities of glass, mixed recyclable packaging and organic waste are based on ECA records and estimates provided by Luxembourg City.

In addition, we weigh all food waste, including: unsold food, leftovers from canteen diners' plates, waste from receptions and waste from all items sold. However, the total amount of organic waste collected by the city is estimated, not weighed.

Green Procurement

The results in this report are based on the ECA Procurement Service evaluation of whether environmental considerations were taken into account in planning and conducting a tendering procedure, in the contract itself and when monitoring contract execution.

Method used for contracts where the award criteria are both quality and price:

- Less environmentally friendly contracts: the weighting for environmental criteria as a proportion of the total (price and quality) is less than 10 %.
- Moderately environmentally friendly contracts: the weighting for environmental criteria as a proportion of the total is 10 % or more.

- Very environmentally friendly contracts: the weighting of environmental criteria as a proportion of the total is 25 % or more.

Water

- Reported water consumption datas come from invoices issued by the water supplier.
- We cross-checked this data against consumption data recorded by the metering system installed in the ECA buildings.
- Relative annual water consumption is based on working days.

Legal compliance

Table 19 – List of operating permits

Building	Registration number	Date of issue
K1	Order No 1/16/0160	8 June 2017
K2	Order No 1/20/0043	24 February 2021
K3	Order No 3/19/0224	28 November 2019

Source: European Court of Auditors.

Annex II – Detailed results of calculations of environmental performance indicators

Energy

Table 20 — Multi-year comparison

Energy consumption		2017	2018	2019	2020	2021
Gross energy consumption by activity	Total electricity consumption (MWh)	4 353.4	4 357.3	4 252.9	3 687.46	3507.4
	Total heating consumption (MWh)	3 446.5	3 408.2	3 270.2	2 965.02	3189.5
	Fuel oil (MWh)	6.4	16.0	41.5	0.0	0.0
Total gross energy consumption	Total energy consumption (MWh)	7 806.3	7 781.5	7 564.6	6 652.5	6696.9
	Renewable energy consumption (MWh)	7 799.9	7 765.5	6 074.4	5 407.2	5079.9
	% of renewable energy	99.9 %	99.8 %	80.3 %	81.3 %	76 %
Relative energy consumption (per FTE)	**Electricity (MWh per FTE)**	**4.71**	**4.70**	**4.61**	**3.94**	**3.67**
	Heating (MWh/FTE)	3.73	3.68	3.54	3.17	3.34
	Heating, corrected value (MWh/FTE)	**3.73**	**3.68**	**3.54**	**3.70**	**3.27**
	Fuel oil (m^3/FTE)	0.65	1.62	4.22	0.0	0.0

Source: European Court of Auditors.

Table 21 – Estimated electricity consumption in 2021, by building

Building	Reading (KWh)	Estimate based on total invoice (KWh)	Occupier	Consumption (KWh per FTE)	m^2	consumption (kWh per m^2)
K1	823 647	847 395	339	2 430	26 051	33
K2	870 379	895 474	103	8 450	21 562	42
K3	1 715 113	1 764 563	648	2 647	33 877	52
ECA	3 409 139	3 507 432	1 090	3 128	81 490	42

Source: European Court of Auditors.

The data in blue is prorated based on the site readings and the total consumption invoiced by the supplier.

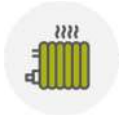


Table 22 – Heating consumption in 2021, by building

Building	Invoiced consumption (kWh)	Occupants	Consumption (kWh per FTE)	Surface area (m²)	Consumption (kWh per m²)
K1	1 134 370	339	3 346	26 051	31.6
K2	685 410	103	6 654	21 562	40.4
K3	1 369 730	648	2 114	33 877	50.6
ECA	3 189 510	1090	2 926	81 490	39.1

Source: European Court of Auditors.

Paper

Table 23 — Multi-year comparison

Paper consumption		2017	2018	2019	2020	2021
Gross annual consumption	Pages printed/photocopied (office work)	7 689 929	7 675 136	6 183 794	2 011 891	1 786 391
	Publications	460 696	402 076	711 922	132 020	122 698
	Total pages (office work + publications)	8 150 625	8 077 212	6 895 716	2 143 911	1 909 089
Relative annual consumption	Pages printed/photocopied (office work per FTE)	8 325	8 280	6 698.22	2 147.7	1871.5
	Total pages (office work + publications per FTE)	**8 823**	**8 714**	**7 469.36**	**2 288.7**	**2000.1**
	Total pages (office work + publications per FTE per day)	36.5	36	30.74	9.38	8.20

Source: European Court of Auditors.

Greenhouse gas emissions

Table 24 – Multiannual comparison of greenhouse gas emissions (tCO2e)

Category	2014	2019	2020	2021
Buildings	**4 066**	**3 820**	**3 018**	**3 701**
Fixed assets	1 790	1 745	1 644	1 616
Cleaning service	173	1	2 44	51
Energy in buildings	1 840	1 561	1 004	1 246
Non-energy in house	82	47	143	38
Water purchased	2	2	2	0
Repairs, maintenance and installation services	110	368	1	657
Subscriptions	36	73	42	59
Waste	34	25	30	34
Digital	1 245	426	1 837	2 105
Digital	1 245	426	1 837	2 105
Goods and services	1 283	1 091	613	1 124
Catering	212	282	47	91
Various services	0	222	207	220
Other	619	255	167	338
Paper	39	17	5	5
Goods purchased	337	199	124	355
Translation services,	59	111	60	115
Transport of goods	16	5	3	0
Mobility	4 105	3 750	491	577
Business trips	1 475	1 046	97	85
ECA vehicle fleet	85	83	92	94
Commuting	1 640	1 188	179	305
Nights spent in hotels during business trips	0	0	9	6
Meals during business trips	0	0	1	2
Support transport service; travel agency	0	116	0	57
Visitors' journeys	905	1 316	113	27
Telework	**0**	**0**	**93**	**72**
Telework	0	0	93	72
Total	**10 699**	**9 087**	**6 052**	**7 578**

Source: Argest and EcoAct consultancy firms.

Data for previous years has been recalculated on the basis of the assumptions used for the calculation of the carbon footprint for 2021.

Table 25 — Multiannual comparison of kilometres travelled by activity

BUSINESS TRAVEL		2016	2019	2020	2021
Gross annual total	Total distance covered for business travel (in km):	5 798 154	4 317 152	586 807	427 852
	air travel (km)	4 229 964	3 528 447	380 841	352 044
	travel by private car (km)	482 000	152 723	49 570	39 479
Relative annual total	Total distance covered for business travel (in km per FTE)	6 277.09	4 676.3	626.4	450.1

Table 26 — Details of emissions for 2021 (Bilan Carbone® carbon footprint calculation method)

CATEGORY	Sum of CO_2 emissions (tCO_2e)
Capitalised goods	1 711
Buildings energy	1 246
Buildings non-energy[11]	38
Goods and services purchased	1 955
Transport of persons	417
Transport of goods	0
Waste	34
Teleworking	72
Digital	2 105
Grand total	7 578

[11] "Buildings non-energy" takes into account the impact of installations containing refrigerants (cooling systems, cold storage for catering, etc.).

Green procurement

Table 27 — Multi-year comparison

NUMBER OF PUBLIC PROCUREMENT PROCEDURES		2017	2018	2019	2020	2021
Number	*Very environmentally friendly*	0	2	2	0	0
	Moderately environmentally friendly	2	3	1	1	0
	Less environmentally friendly	2	1	1	1	2
	Not environmentally friendly	0	0	0	1	3
	percentage of *not* and *less environmentally friendly* contracts	50 %	50 %	25 %	67 %	100 %
	percentage of *moderately* and *very environmentally friendly* contracts	50 %	50 %	75 %	33 %	0 %
Value	*Very environmentally friendly*	€ 0.00	€ 7 724 924.35	€ 9 585 450.19	0	0
	Moderately environmentally friendly	€ 4 756 295.85	€ 183 885.85	€ 150 000.00	€ 473 990.00	0
	Less environmentally friendly	€ 1 733 533.40	€ 148 000.00	€ 513 567.00	€ 560 000.00	€ 283,231
	Not environmentally friendly	€ 0.00	€ 0.00	€ 0.00	€ 143 230.20	€ 763 615
	percentage of *not* and *less environmentally friendly* contracts	26.71 %	1.84 %	1.46 %	59.74 %	100 %
	percentage of *moderately* and *very environmentally friendly* contracts	73.29 %	98.16 %	98.54 %	40.26 %	0 %

Waste

Table 28 — Multiannual comparison

Waste generated		2018	2019	2020	2021
Gross annual amount	Total waste generation (t), of which:	176.4	179.3	91.5	74.4
	food waste (t)	23.6	23.6	5.86	1.85
	paper and cardboard waste (t)	46.8	43.92	24.78	14.23
	mixed municipal waste (t)	34.52	37.58	16.40	13.33
	total hazardous waste (t)	61.2	63.0	25.8	18.46
Relative annual amount	Total waste generated (kg)/FTE	**190.34**	**194.2**	**97.75**	**77.99**
	Total food waste generated (kg) per FTE	**25.45**	**25.6**	**6.25**	**1.94**
	Total hazardous waste generated (kg) per FTE	66.08	69.1	27.61	19.34

Table 29 — Quantity of waste generated in 2021 (by fraction)

NO	WASTE CODE	OFFICIAL DESCRIPTION	QUANTITY (KG) 2021	TREATMENT 2021	QUANTITY (KG/FTE)
1	080111	Waste paint and varnish containing organic solvents or other dangerous substances	10	Destruction	0.01
2	080318	Waste printing toner other than those mentioned in 08 03 17	2	Destruction	0.00
3	130208	Other motor, gearbox and lubricating oils	7	Destruction	0.01
4	130507	Oily water from oil/water separators	7 700	Destruction	8.22
5	150101	Paper/cardboard packaging	12 981	recycling	13.86
6	150102	Plastic packaging	282	Recycling	0.30
7	150103	Wooden packaging	2 100	Destruction	2.24
8	150106	Mixed packaging	1 106	Recycling	1.18
9	150107	Glass packaging	830	Destruction	0.89
10	150110	Packaging containing residues of or contaminated by hazardous substances	39	Recycling	0.04
11	150202	Absorbents, filter materials (including oil filters not specified elsewhere), cloths for wiping and protective clothing contaminated by dangerous substances	15	Destruction	0.02
12	150203	Absorbents, filter materials, cloths for wiping and protective clothing other than those mentioned under 15 02 02	305	recycling	0.33
13	160115	Cables other than those mentioned under 16 01 14	180	Destruction	0.19
14	160215	Hazardous components removed from scrapped equipment	77	Destruction	0.08
15	170107	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned under 17 01 06	17	Destruction	0.02
16	170201	Wood	276	Recycling	0.29
17	170203	Plastics	79	Recycling	0.08
18	170407	Mixed metals	38	Recycling	0.04
19	170411	Cables other than those mentioned under 17 04 10	90	Recycling	0.10
20	170904	Mixed construction and demolition waste other than those mentioned under 17 09 01, 17 09 02 and 17 09 03	2 738	Recycling	2.92
21	190906	Solutions and sludges from regeneration of ion exchangers	66	Destruction	0.07
22	200101	Paper and cardboard	13 548	Recycling	14.46

NO	WASTE CODE	OFFICIAL DESCRIPTION	QUANTITY (KG) 2021	TREATMENT 2021	QUANTITY (KG/FTE)
23	200108	Biodegradable kitchen and canteen waste	1 771	Recycling	1.89
24	200111	Textiles	1 250	Destruction	1.33
25	200114	Acids	50	Destruction	0.05
26	200121	Fluorescent tubes and other mercury-containing waste	243	Recycling	0.26
27	200125	Edible oils and fats	4 362	Recycling	4.66
28	200125	Edible oils and fats	4 806	Destruction	5.13
29	200132	Cables other than those mentioned under 20 01 31	6	Destruction	0.01
30	200133	Batteries and accumulators mentioned under 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	44	Recycling	0.05
31	200135	Scrapped electrical and electronic equipment containing hazardous components other than those mentioned under 20 01 21 and 20 01 23	459	Recycling	0.49
32	200138	Cables other than those mentioned under 20 01 37	3	Recycling	0.00
33	200139	Plastics	89	Destruction	0.10
34	200140	Metals	441	Recycling	0.47
35	200201	Biodegradable waste	5 100	Recycling	5.44
36	200301	Mixed municipal waste	13 330	Destruction	14.23
	Annual total		74 441		79.47
	Recycling rates				59 %
	Sorting rates				82 %

Code red: Hazardous waste

Water

Table 30 — Multiannual comparison

Water consumption		JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
Gross annual consumption	Total consumption (m^3)	12 548	11 707	12 548	5 674
Relative annual consumption	Total consumption (m^3/FTE)	**13.59**	**12.50**	**13.59**	**5.94**
	Total consumption (m^3/FTE/day)	0.06	0.05	0.06	0.02

Biodiversity

Table 31 — Multi-year comparison

Biodiversity	2018	2019	2020	2021
Total occupied area (m^2)	18 687	18 687	18 473	18 473
Total impermeable surface area (m^2)	16 442	16 442	16 442	16 442
Green spaces (m^2)	2 245	2 245	2 031	2 031
Green spaces/Total surface area occupied (%)	12 %	12 %	11 %	11 %

Verification data

Déclaration de Validation

Système Communautaire de Management Environnemental et d'Audit (EMAS)

VINÇOTTE sa

Jan Olieslagerslaan 35, 1800 Vilvoorde, Belgique

Sur base de l'audit de l'organisation, des visites de son site, des interviews de ses collaborateurs, et de l'investigation de la documentation, des données et des informations, documenté dans le rapport de vérification n° **61092026**, VINÇOTTE SA déclare, en tant que vérificateur environnemental EMAS, portant le numéro d'agrément BE-V-0016 accrédité pour les activités suivantes: 1, 10, 11, 13, 16, 18, 19, 20 (excl. 20.51), 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.2, 30.9, 31, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43, 45, 46, 47, 49, 50, 52, 53, 55, 56, 58, 59, 60, 62, 63, 70, 71, 72, 73, 74, 79, 80, 81, 82, 84, 85, 86, 87, 88, 90, 93, 94, 95, 96, 99 (code NACE) avoir vérifié si l'organisation dans son ensemble figurant dans la déclaration environnementale mise à jour 2022 de l'organisation

Cour des Comptes Européenne
portant le numéro d'agrément ***LU-000004***

sis à

12, rue Alcide de Gasperi
1615 Luxembourg
Luxembourg

et utilisé pour:

L'ensemble des activités exécutées sur son site (bâtiments K1, K2 and K3) sis 12 rue Alcide de Gasperi à 1615 Luxembourg.

Respecte(nt) l'intégralité des dispositions du règlement (CE) no 1221/2009 du Parlement européen et du Conseil du 25 novembre 2009 concernant la participation volontaire des organisations à un système communautaire de management environnemental et d'audit (EMAS) tel que modifié par les règlements (UE) 2017/1505 et (UE) 2018/2026.

En signant la présente déclaration, je certifie :
- que les opérations de vérification et de validation ont été exécutées dans le strict respect des dispositions du règlement (CE) no 1221/2009 modifié par les règlements (UE) 2017/1505 et (UE) 2018/2026;
- les résultats de la vérification et de la validation confirment qu'aucun élément ne fait apparaître que les exigences légales applicables en manière d'environnement ne sont pas respectées ;
- que les données et informations fournies dans la déclaration environnementale mise à jour 2022 de l'organisation donnent une image fiable, crédible et authentique de l'ensemble des activités de l'organisation exercées dans le cadre prévu dans la déclaration environnementale.

Le présent document ne tient pas lieu d'enregistrement EMAS. Conformément au règlement (CE) no 1221/2009 modifié par les règlements (UE) 2017/1505 et (UE) 2018/2026, seul un organisme compétent peut accorder un enregistrement EMAS. Le présent document n'est pas utilisé comme un élément d'information indépendant destiné au public.

Numéro de la déclaration: **16 EA 99b**
Date de délivrance: **7 novembre 2022**

VINÇOTTE

Pour le vérificateur environnemental:

Daniëlla Segers
Président de la Commission de Certification

BELAC
EMAS
BE-V-0016

Glossary

Acronym	Definition
Bilan Carbone®	Bilan Carbone® is the most widely used approach to recording and reducing greenhouse gas emissions in France. It is based on the method used by ADEME (French Environment and Energy Management Agency).
BREEAM	The "BRE Environmental Assessment Method", developed by the Building Research Establishment, makes it possible to assess the environmental performance of buildings during their construction.
Call for tender/public procurement	Purchase of goods or services by a public authority in exchange for remuneration. A public procurement procedure leads to the conclusion of a public contract.
Carbon credit	Project promoters of greenhouse gas emissions reduction or sequestration projects may be issued with carbon credits when they meet certain specific criteria. A carbon credit is a unit equivalent to one tonne of avoided or sequestered CO_2.
EMAS	*Eco-Management and Audit Scheme*
EU	European Union
European Green Deal	The European Green Deal is a European Commission action plan. It aims to transform the EU into a modern, resource-efficient and competitive economy, ensuring: o the end of net greenhouse gas emissions by 2050, o decoupled economic growth from resource use; o that no one is left behind.
FSC®	The FSC® label is an environmental label that certifies that timber comes from forests or plantations managed responsibly and sustainably (management that meets the social, economic, ecological and cultural needs of present and future generations).
FTE	Full-time equivalent
Green procurement helpdesk **(GPP Helpdesk)**	Advice service on green public procurement, outsourced by the EU institutions.
Green public procurement criteria	Not green: not environmentally friendly. The invitation to tender does not include any reference to environmental aspects. Light green: less environmentally friendly. The invitation to tender includes a reference to the environmental aspects of the contract, but it does not affect the procurement process and will not have an environmental impact during the performance of the contract.

	Medium green: moderately environmentally friendly. The invitation to tender includes significant environmental clauses designed to reduce the environmental impact of the contract. Top green: very environmentally friendly. This final category corresponds to environmental best practices.
Greenhouse Gas Protocol	The Greenhouse Gas Protocol is an international protocol providing a framework for measuring and managing greenhouse gas emissions from private and public sector activities, developed by the *World Business Council for Sustainable Development* (WBCSD) and the *World Resources Institute* (WRI).
Hazardous waste	All waste identified as potentially hazardous to the environment, health or safety, all or part of which can be recycled, such as electronic equipment, toner cartridges, packaging soiled with hazardous products, etc.
Household and similar waste	Non-hazardous unsorted waste from households or from industrial enterprises, skilled trades, shops, schools, public services, hospitals and tertiary services, when collected under the same conditions as household waste. This includes towels and packaging soiled with food leftovers. In Luxembourg, this type of waste is incinerated with added fuel due to its high moisture content.
ISO 14001	This standard sets out a series of requirements specific to the establishment of an environmental management system within an organisation, regardless of its size and area of activity.
IT (*information technology*)	IT equipment: networks, equipment, programmes, etc.
Paris Agreement	The Paris Agreement, often called the Paris Climate Agreement, is an international treaty on global warming adopted in 2015. It covers climate change mitigation, adaptation and financing of climate change actions. The long-term objective of the Paris Agreement relating to temperature is to keep the global average temperature increase well below 2 °C above pre-industrial levels, and preferably to limit the increase to 1.5 °C, recognising that this would significantly reduce the impacts of climate change.
Primary energy	A primary energy source is a form of energy present in nature that can be used directly without transformation.
Rare earths	Rare earths are metals that share certain common or close properties and have an atomic number between 57 and 71; these electromagnetic metals have a metallic appearance and are malleable. Contrary to what their name might suggest, not all of these earths are rare. Many of these metals are necessary for the manufacture of electronic equipment.
Savoir+	In-house knowledge-sharing sessions organised by the professional training service. Sessions last 30-45 minutes and are held over breakfast at 9.15 on Friday mornings.

European Court of Auditors

12, rue Alcide de Gasperi

1615 Luxembourg

Luxembourg

Information: ECA-info@eca.europa.eu

Website: eca.europa.eu

Next environmental statement: **November 2023**

Next main statement: November 2025