2023 Environmental Statement

European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice

www.eulisa.europa.eu

ENVIRONMENTAL STATEMENT 2023

Published on 25/07/2024

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1. Executive Director Foreword

"As we embark on our journey towards Environmental Management Systems (EMAS) registration, I am pleased to present eu-LISA's Environmental Statement for the year 2023.

At eu-LISA, we recognize the critical importance of environmental sustainability in all aspects of our operations. As the Interim Executive Director, I am committed to ensuring that our organization meets environmental standards and best practices.

Hence, eu-LISA has opted for environmentally friendly practices by adopting a robust Environmental Management system rooted in the Eco-Management and Audit Scheme (EMAS) principles.

The journey has started in 2022, and we are committed to enhancing our eco-friendly strategy to minimize both direct and indirect environmental footprints resulting from our operations.

Our commitment to environmental stewardship is not only a moral imperative but also a strategic priority. By integrating environmental considerations into our decision-making processes and daily operations, we not only mitigate environmental risks but also create opportunities for innovation, efficiency, and long-term sustainability.

As we strive towards EMAS registration by the end of 2024, eu-LISA remains firmly committed to transparency, accountability, and continuous improvement in our environmental performance.

Due to the COVID-19 pandemic dominating the past years, factors such as premises occupancy, energy consumption, travel, and organizational functioning were not representative. Therefore, 2023 serves as the reference year for measuring future improvements in our environmental performance.

This Environmental Statement reflects our dedication to environmental responsibility and serves as a testament to our ongoing efforts to create a greener, more sustainable future for all.

I extend my gratitude to all eu-LISA staff members for their dedication and contributions to our environmental objectives. Together, we will continue to lead by example and inspire positive change within our organization and beyond.

Thank you for your continued support and commitment to environmental excellence.

Luca ZAMPAGLIONE

eu-LISA Interim Executive Director

2. About this document

This environmental statement provides all relevant stakeholders and other interested parties with information concerning the environmental performance and activities of the eu-LISA in 2023 (reporting year from 1 January 2023 to 31 December 2023).

This document has been drafted in accordance with the Eco-Management and Audit Scheme (EMAS) Regulation[1] in its last applicable version [(EU) 2017/1505[2] and (EU) 2018/2026[3]], considering as well sectoral reference document for public administration sector [Commission Decision (EU) 2019/61)[4].

Annex I provides the validation of the EMAS verifier.

As per its environmental management system (EMS), eu-LISA will publish an environmental statement on an annual basis and will make it available on its website.

3. About EU-LISA

3.1. What we do

3.1.1. Product and services

eu-LISA is the European Agency for the Operational Management of Large-Scale IT systems in the Area of Freedom, Security and Justice. The Agency was established in 2011 and became operational in 2012.

The role of the Agency is to support the implementation of the EU's Justice and Home Affairs policies by managing large-scale IT systems that:

- → maintain internal security in the Schengen countries,
- → enable Schengen countries to exchange visa data,
- → determine which EU country is responsible for examining a particular asylum application.

eu-LISA provides technological support for the EU countries' efforts to make Europe safer and helps ensure Europeans can travel freely within the EU, without compromising Europe's security.

[1] Consolidated text: Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC; **EUR-Lex - 02009R1221-20190109 - EN - EUR-Lex (europa.eu)**;
[2] 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); C/2017/5792 **EUR-Lex - 32017R1505 - EN - EUR-Lex (europa.eu)**
[3] 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); C/2018/4429; **EUR-Lex - 32018R2026 - EN - EUR-Lex (europa.eu)**
[4] Commission Decision (EU) 2019/61 of 19 December 2018 on the sectoral reference document on best environmental management practices, sector environmental performance indicators and benchmarks of excellence for the public administration sector under Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS); C/2018/4424; **EUR-Lex - 32019D0061 - EN - EUR-Lex (europa.eu)**

The Agency also tests new technologies to help put in place a more modern, efficient and secure border management system in the EU. It coordinates the testing and follow-up of the Smart Borders pilot project, the analysis of results and reporting on the pilot project, in close cooperation with the participating EU countries and the European institutions.

3.1.2. Mission, vision values

EMAS serves as a pivotal tool in embodying eu-LISA's core values within its mission:

- The certification reinforces accountability and transparency by requiring open communication about the organization's environmental impact and ongoing improvements.
- Pursuing EMAS reflects eu-LISA's commitment to excellence, not just in technological advancements but also in sustainable practices, aligning its operations with the values of continuity.
- The collaborative nature of EMAS, involving teamwork across departments, resonates with eu-LISA's commitment to working collectively.
- Additionally, the scheme addresses customer focus by responding to the demand for environmentally responsible practices, showcasing how eu-LISA's dedication to EMAS aligns seamlessly with its mission to support the European Union and Member States in ensuring Europe's security through advanced technology.

Besides, one of the strategic goals of eu-LISA is to “Further evolve eu-LISA towards an efficient, agile and resilient organisation within the EU regulatory framework”.

The EMS contributes to this strategic goal towards:

- Resource Efficiency and Sustainability:
    - The environmental management system contributes to resource efficiency goals within the Agency, aligning with the broader objective of being an efficient organisation.
    - Strategies to reduce waste, energy consumption, or other environmental impacts are part of resource alignment efforts.
- Compliance:
    - Seeking EMAS registration equals commitment to comply with environmental regulations and relevant stakeholders’ requirements.
- Mission and Values:
    - Promoting the agency's mission and values could encompass a commitment to environmental sustainability.
    - Demonstrating responsible environmental stewardship aligns with values related to corporate social responsibility.
- Key EU Agency Growth:
    - Demonstrating environmental consciousness can contribute to the agency's growth as a key EU agency, considering the increasing importance of sustainability in organisational reputation.

3.2. Teams and location

eu-LISA is located in 3 countries:

- the headquarters - administrative site - is located in Tallinn (Estonia),
- the operational site is located in Strasbourg (France), including the Data Centre
- an administrative site in a rented building is located in Illkirch-Graffenstaden (France) since 2022
- a liaison office is located in rented offices in Brussels (Belgium).

A backup site in Sankt Johann im Pongau (Austria) is also available through site agreement with Austrian authorities.

As of December 31st 2023, eu-LISA employed 399 staff members. External consultants were contracted as well, in average 355 including 157 permanent consultants. These data are used throughout the document in graphs where the number of workers is used.

The Environmental Management System applies equally to all.

2023 was the “back to normal” year post COVID, with a teleworking Policy agreed upon, this year can be set as a reference for future analysis and measures, without the influence of mostly telework.

3.3. Scope of the eu-LISA's Environmental Management System

The Environmental Management System (EMS) applies to the following eu-LISA's premises namely:

a. the Agency's headquarters in Tallinn, Estonia (TLL)

b. the operational site in Strasbourg, France (SXB)

c. the temporary site in Illkirch-Graffenstaden, France (ILK)

d. the Liaison Office in Brussels, Belgium (BXL)

The back-up site of Sankt Johann im Pongau (Austria) is not included in the scope as it is not managed by eu-LISA.

It applies to eu-LISA staff-members under the scope of the Staff Regulations of Officials to the European Union (the 'Staff Regulations') and of the Conditions of Employment of Other Servants of the Union, ('the CEOS')[5], to national experts seconded to eu-LISA (hereinafter referred to as "SNEs")4, to external service providers and their staff (e.g., Intramuros, extramuros, other contractors), and to interns (hereinafter collectively referred to as "eu-LISA personnel").

It applies to all the activities of the Agency.

An **Environmental HandBook** established by the Agency Corporate Services Unit provides internally an overview of the EMS guidelines and vision.

4. Description of the Environmental Management System

4.1. EMAS at eu-LISA

The Eco-Management and Audit Scheme[6] (EMAS), approved by the European Parliament and Council, is the European voluntary system designed for organisations wishing to evaluate, manage and improve their environmental performance. As sustainability is a growing concern for European citizens and industries, EMAS provides a structured framework to integrate environmental concern in the management and day-to-day operations of any organisation.

With the Commission developing its **Green Deal**, it became obvious in 2020 that eu-LISA should take into consideration its responsibilities and ensure its own environmental impacts were managed. This gave birth to the EMAS project, aiming at the EMAS registration in 2024.

The lasting EMAS registration will ensure that eu-LISA will continuously lower its environmental footprint.

This is therefore the first referenced environmental statement produced by eu-LISA.

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[5] 3 Council Regulation (EEC, Euratom, ECSC) No 259/68 of 29 February 1968 laying down the Staff Regulations of Officials of the European Union and the Conditions of Employment of Other Servants of the European Communities and instituting special measures temporarily applicable to officials of the Commission (OJ L 56, 4.3.1968, p. 1), as amended by Regulation (EU, Euratom) No 1023/2013 of the European Parliament and of the Council of 22 October 2013 (OJ L 287, 29.10.2013, p. 15).

[6] EMAS – Environment - European Commission (europa.eu)

4.2. Context and purpose of eu-LISA's environmental management system

eu-LISA works with a wide range of stakeholders: from its staff to local contractors; from member states stakeholders to European institutions. Some of them have a key influence on the Environmental Management System, the direction it should take or the progress it should make.

Stakeholder(s)	Needs and expectations of the stakeholder(s)	How we ensure it is fulfilled
European Union bodies: EC, EP, ECA…	Execution of tasks and activities in accordance with guidelines, regulations, legal acts, agreed terms of reference and specific requirements that the EC / others EU bodies may express for specific activities	Satisfactory audit results
Local authorities	Compliance with environmental legislation	No notification for non-compliance
eu-LISA staff members	Work environment according to health and safety rules. Work environment that expresses concerns for the environment, consistent with the Agency's mission. Work environment that provides forms and means of participation.	Staff feedback , through staff committee or a dedicated "go green" e-mail address.
Members States and their representatives	Optimization of travels, work from distance. Risk of duplication of data, multi-layer of redundancy of equipment, … that lead to extra environmental impacts	Replies to requests for information, questions or requests received No complaints received
eu-LISA top management	Enhance the Agency's social and environmental sustainability (part of 2021-2027 SG4), EMAS registration (2023-2025 SPD)	EMAS registration, approval of CAAR

▲ *Table 1 - Stakeholders' expectations*

The needs and expectations of significant stakeholders are identified by established communication and reporting channels, regular dialogues, participation in professional forums and networks, benchmarking, and follow up on applicable legal requirements.

Following a PESTEL (Political, Economic, Social, Legal and Environmental actors) analysis in 2023, which involved the Green Team members as well as other staff through interviews, the following high-level risks and opportunities are found to be those that need to be tackled as a matter of priority in order to make the best of our management system:

Area	Finding	Risk / Opportunities
Politics	eu-LISA will chair the presidency of the JHAAN in 2024	O: The Agency should provide example by implementing the EMAS requirements
	The EC has high expectations regarding the exemplarity of EU bodies	Opportunities for eu-LISA's EMS to have political drive and leadership involvement
	90% of the budget of the agency comes from the EU budget -	R: environmental. improvement should reach a high level to be approved given
	Participation to the Greening Network	O: benefit from the agencies return on experience from those that are already EMAS registered
Economics	Budgets are planned for 7 years period	R: lack of reactivity for improvement needs
	Inflation of energy costs	O: Better ROI on energy saving actions
		R: some missions/projects could be delayed due to lack of budget
Social	Stakes connecting with mobility	O: find a new solution of transportation between SXB & ILK sites instead of the shuttle low used but with huge impact
		O: new missions' guidelines from the EC should help to reduce the eu-LISA's impact
	Modification of temperature's threshold in the offices	R: dissatisfaction of workers when restriction on temperature. Environment vs wellbeing.
		O: work on a strategic communication plan to face the resistance to change
Technology	Environmental aspects are today not considered in the technologies developed for DC and associated utilities	O: update of the purchasing strategy & implementation of the EU Code of Conduct on energy efficiency for DC
Legal	Self-inspection regarding the regulation of 3 countries where eu-LISA is located	O: best practices can be shared between legal requirements of the countries
	The Agency must follow the public procurement rules and every project must be planned well in advance	R: many contracts cannot be changed easily
		O: procurement guidelines cover Greening aspects

▲ *Table 2 - PESTEL results*

These risks and opportunities were taken into account in the environmental review, in order to define the priorities of action of the Agency.

4.3. Governance of the EMS

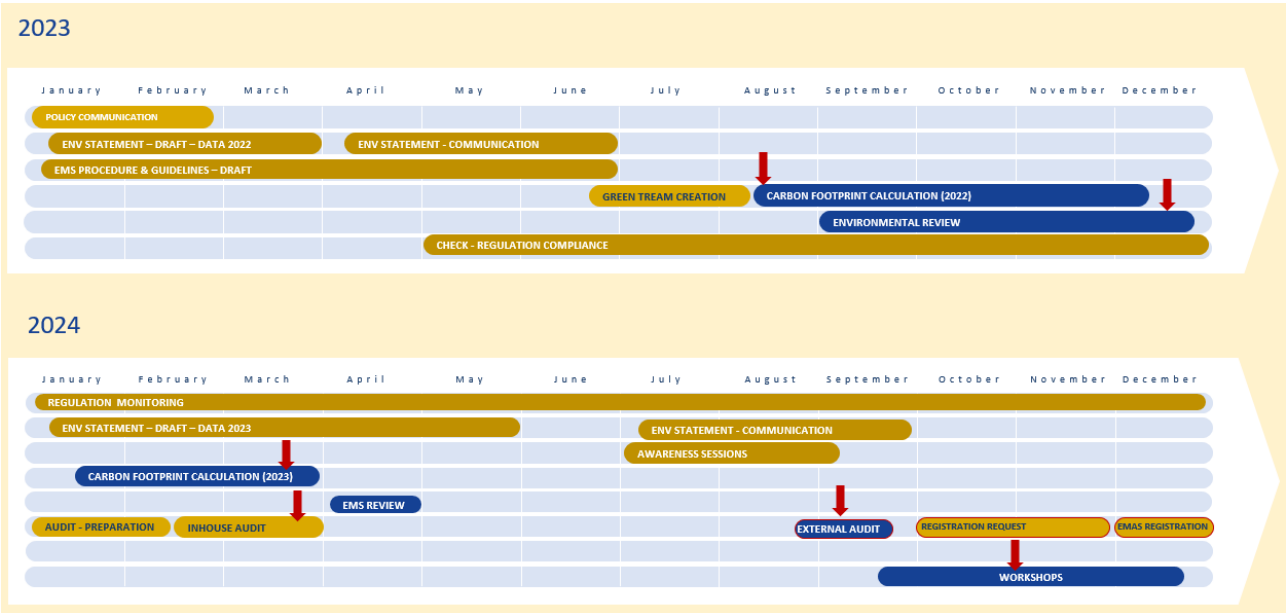
To implement and maintain an efficient environmental management system, eu-LISA adopted the following structure:

Role	Key Responsibilities
Executive Director	Approves the Environmental Policy. Has the ultimate responsibility and authority for the preservation of the environment at eu-LISA and the compliance with the environmental legal framework applicable to the Agency.
Management Committee	Participates at the annual review of the environmental management system, comments and validates the annual objectives, targets and KPIs.
Corporate Service Unit	Under the Executive Director's assignment, the Corporate Services Unit ('CSU') ensures the implementation and the day-to-day running of the EMS. It provides support to all teams in the implementation and maintenance of the EMS.
Heads of Units	Ensure the implementation of the annual action plan. Enforce the rules in their respective area.
Green Team	Volunteers' members from all the Agency. Participate in workshop, suggest actions and communicate results to their sector / unit.
Staff and external workers	Apply the rules in their respective area. Share their concerns and ideas for improvement.

▲ *Table 3 - Environmental organisation at eu-LISA*

In the long-run as sustainability becomes our way-of-life, colleagues in management roles and Green Team members will be key gearing of our management system.

4.4. Key steps in the implementation and maintenance of EMAS



Starting from 2025, eu-LISA will define a standard annual timeline for the Environmental Management Systems with the main steps: Internal audit, annual review, improvement planning and external audit.

5. Environmental aspects and impacts

eu-LISA activities have both direct and indirect impacts on the environment. Direct environmental aspects are defined as activities, products and services that affect the environment and over which the organisation has direct management control. Indirect environmental aspects are those activities and services that can, to some degree, be influenced by eu-LISA but not fully controlled.

5.1. Methodology

Aspects are elements of the activity that have or may have an impact on the environment.

Identification of aspects was carried out through document analysis and interviews with the Green Team members.

To evaluate the significance of an aspect, sets of different criteria were used, depending on whether the aspect is:

- direct or not
- normal or malfunctioning (abnormal, emergency).

For each aspect, each of the following criteria were rated:

- the nature of negative impacts, by answering “Yes” or “No” to the below questions for each aspect (score = 1 when there is no Y; 2 when 1 or 2 Y; 3 when 3Y and 4 for 4 Y)
    - Are there environmental permit-related requirements specific to that aspect?
    - D: High sensitivity of the receiving environment; I: Possibility to influence impacts up-stream with our decisions? "
    - High consumption/emissions or tendency to worsen: size, number, frequency and reversibility of the aspect or impact
    - Failure to meet the expectations of "manage closely" stakeholder, including the organisation's employees.

Significant impacts are those with an impact score of 3 or 4.

- The potential to improve (Yes” or “No” to the below questions for each aspect)
    - Corporate policy or vision supporting or requiring improvement
    - Direct control and best practice available but not yet applied
    - Positive return on improvement actions /ROI (return on investment)

2 if political priority = Y and +1 for each Y

The priority is then given to each aspect and is calculated by the following formula: (nature of negative impacts score) x (potential to improve score).

To ensure a proper allocation of resources in accordance with the need for improvement, the significant impacts are those with an impact score of 3 or 4, and priority above 8. These aspects will be the focus of the EMS. However, this does not mean that no action can be planned for any other aspects if such measures are easy and impactful.

The complete results of the analysis are presented in the document **2024 EMAS environmental aspects register**.

5.2. Significant environmental aspects and impacts

Process / Activity	Impact
Infrastructure design DC and associated utilities	Consumption of electricity Product life cycle with related issues (design, development, packaging, transportation, use and waste recovery/disposal)
Development and run of IT core systems (hardware and software) for clients	Consumption of electricity, product life cycle with related issues (design, development, packaging, transportation, use and waste recovery/disposal)
PMO: Provide projects management methodology for all projects of the Agency	product life cycle related issues
Facilities: Cooling of the DC premises	Consumption of electricity
Facilities: Cooling / heating of the offices	Consumption of electricity
Logistics / procurement: services / products procurement	product life cycle related issues + transportation
Missions : staff Professional travels	use of fossil energies / CO2 emissions

▲ *Table 4 - Results of the environmental analysis: the main significant aspects*

Two additional aspects, though not ranked as a priority, are considered significant, because they raise legal compliance issues and high staff expectations:

Process / Activity	Impact
Communication events: Travel of visitors/colleagues to venue - mostly outside eu-LISA's premises	Pollution of air, use of non-renewable energy
Facilities/Logistics: Sanitary facilities, cleaning	Pollution of water + wasted water

▲ *Table 5 - Results of the environmental analysis: additional aspects*

Though detailed, these aspects merge in the 5 commitments of the environmental policy.

In its comprehensive environmental review in 2023, eu-LISA identified the above significant aspects. These will be reviewed once a year and confirmed during the management review. Specific objectives, key performance indicators and concrete actions are established for based on them on an annual basis.

6. Environmental Policy and objectives

6.1. Environmental Policy

eu-LISA adopted its first environmental policy in February 2023. It takes into account the findings from the initial environmental review (carried out in November 2022). It is designed to provide a framework for setting objectives in reduction of environmental impact. The Environmental Policy contains the main commitments below.

eu-LISA ENVIRONMENTAL COMMITMENTS

By implementing its own Environmental Policy, eu-LISA, commits to allocate human, organisational and financial resources in order to ensure that the EMS runs efficiently, by following the below objectives:

> IMPROVING ENERGY EFFICIENCY

eu-LISA has the willingness to improve its energy efficiency by implementing rules and initiatives such as:

- Defining an **energy sobriety action plan**;
- Defining environmental criteria for each project;
- Using and complying with energy best practices when applicable;
- Monitoring relevant KPIs and defining efficient actions when discrepancies are observed;

> COMPLYING WITH RELEVANT REGULATIONS

eu-LISA considers the observance of applicable European and pertinent local and internal Regulations in the environmental area. The EMS ensures the compliance of the Agency's activities by:

- Identifying and fulfilling legal obligations and non-legal requirements;
- Ensuring a continuous regulatory monitoring;
- Including current and future legal requirements through ongoing projects.

> DEVELOPPING ENVIRONMENTAL AWARENESS - TRAINING - COMMUNICATION

- Integrating environmental management and culture into the organization;
- Raising awareness of all employees and service providers by providing them with relevant and adequate information, instructions, training and supervision;
- Involving Senior Management and promoting the employee consultation and participation;
- Integrating environmental considerations in all activities and project.

> ASSESSING THE ENVIRONMENTAL PERFORMANCE

eu-LISA's environmental objectives and targets are defined each year and the performance is assessed through an annual management review, beginning of Q2. The environmental performance assessment shall include:

- Monitoring the environmental impacts, risks and opportunities of eu-LISA's activities by updating the environmental review and conducting inhouse environmental audits in a yearly way;
- Considering stakeholders expectations in a relevant action plan;
- Considering the priorities, the past years achievements and the available resources to build the new action plan for the coming year, according to the environmental commitments and new objectives validated by the Management Committee.

> PRESERVING NATURAL RESSOURCES AND PREVENTING POLLUTION

- Promoting a digital work environment;
- Integrating environmental criteria within services providers' contracts;
- - Operating in an environmentally responsible way.

6.2. Objectives for 2023

According to the implementation of the EMS which started in mid-2022, some actions have been initiated and can be considered as objectives for this first period of 2023.

Based on the environmental commitments, several objectives have been defined for 2023. The table below presents objectives and targets focused on for 2023.

	Objectives	Targets	Indicators	Date of achievement
2023-1	Achieve the Environmental statement	Use EMAS template with relevant information	Internal and public communication	March 23
2023-2	Carbon footprint complete calculation	Calculation for scopes 1-2-3 for 2022	Report done	Dec 23
2023-3	Environmental audit	100% EMAS chapters audited	Audits reports	March 24
2023-4	EHS regulatory monitoring tool	Tool implementation and 100% Agency's activities compliance checked	Compliance report	Dec. 23
2023-5	Environmental Analysis done	Environmental aspects and impacts identified with a Working Group	Finalized document	Nov. 23
2023-6	Env. Hand Book	Environmental Hand Book available	Finalized document approved	March 23
2023-7	Waste sorting	Improve waste sorting and ensure the recycling	T of recycled waste	Still ongoing
2023-8	Awareness and communication	Inform all workers about the Environmental Policy and the ongoing steps	Info session done	Sept. 2023

▲ *Table 6 - Environmental objectives for 2023*

6.3. Objectives for 2024

Based on the Environmental Policy, significant environmental aspects, the Green House Gases emissions calculation and risks and opportunities, the following objectives were set in 2024 for the coming years.

Objectives for 2027 and 2030 were suggested to be confirmed or updated during the 2025 annual review.

Aspect		Strategic objective*	2024	2027	2030
Energy	E.1	Improve energy efficiency by reducing the electricity consumption	Use green electricity for all premises		
	E.2		Identify the best practices for green datacentres that could be implemented first, and define actions in order to implement them		
	E.3		Improve the calculation of the PUE for DC		
	E.4				Reduce the PUE of the main DC to 1.5. And PUE 1.2 for MDC 1&2
	E.5				Reduction of the Agency electricity consumption in offices from 5% based on 2023 consumption – kWh/person
	E.6				Installation of renewable energy production on site
Carbon Footprint	C.1	Comply with relevant regulations by measuring the carbon footprint of the Agency every year and defining actions to reduce it	Improvement of the collect of data to have a more precise Carbon Footprint calculation	Reduction of the Carbon Footprint from 5% considering 2023 Carbon Footprint calculation. Ton of eq CO^2/person excluding DC.	Become carbon neutral by 2030
	C.2			Integrate the calculation of the emissions linked to travels from eu-LISA's clients for trainings, and eu-LISA's visitors	
Procurement	P.1	Integrate environmental criteria within service providers' contracts	Train the entire procurement staff (including operational stakeholders OIA and OVA), to practical knowledge on GPP (basics).		
	P.2		For coming tenders, if GPP guidelines already exist for their category, start to train concerned staff members to GPP for implementing them in the tenders		
	P.3				Environmental impact is considered for 100% of the contracts procured by the Agency,
Awareness	A.1	Integrate environmental management and culture into the organisation	Start to train all managers to EMAS requirements	Train 90% of staff and 100% of newcomers to EMAS requirements	
	A.2		Provide an awareness session on EMAS and eu-LISA's environmental Policy to 100% of newcomers		
	A.3			Train all staff from "operational department" to green IT	
Projects	J.1	Define environmental criteria for each project	Update project templates to include an evaluation of the environmental impact for each project		
	J.2			Environmental impact is considered for 100% of the projects of the Agency	
Waste	W.1	Complying with relevant regulations	Set up selective sorting waste in ILK		
	W.2		Collect accurate data for the selective sorting waste in TLL (kg/year/type of waste)		
	W.3		100% of furniture and IT equipment if still usable is decommissioned in a sustainable manner		
	W.4			0% of waste to landfill	
Travels	T.1	Improve energy efficiency by minimizing the impact of travels on GHG emissions	Include specification for an electric alternative to the next tender procedure for the shuttle service between SXB & ILK		
	T.2		Implement in eu-LISA a transport Policy		
	T.3		Apply the EC missions guidelines.		

▲ *Table 7 - 2024 Environmental Objectives*

7. Actions and performance

The following information reports on the eu-LISAs performance, showing the little history we have and comparing it to objectives.

Note: Since the project started during the end of the pandemic, 2022 is the first reporting year. But the base line has been defined as 2023. During 2022, the Teleworking Policy implemented for the pandemic period, was still in place until Q3. And going back to 2019 would have not been relevant due to the increase of workers.

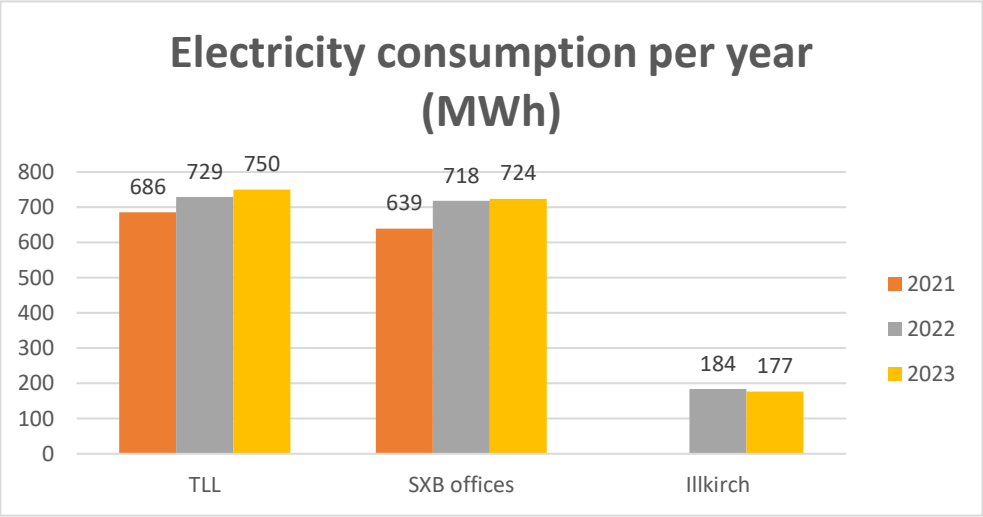
7.1. Energy efficiency in buildings

In 2023, the Agency introduced a Sobriety Action Plan[7] aimed at achieving energy savings associated with office heating and cooling, as well as IT equipment usage. While the intention behind this initiative was to promote environmental sustainability, it became evident that the implementation of these measures was met with some challenges. Despite the best efforts to communicate the benefits of the action plan, the Agency acknowledges that there were a number of concerns raised by its workforce.

Various feedback channels highlighted that some employees expressed dissatisfaction and resistance to the changes brought about by the Sobriety Action Plan (directly to facilities team, via the staff committee members, or during the survey conducted in March 2023). These concerns were mainly about discomfort with temperature adjustments in office spaces. eu-LISA understands and values the importance of fostering a supportive and inclusive work environment, and takes these concerns seriously.

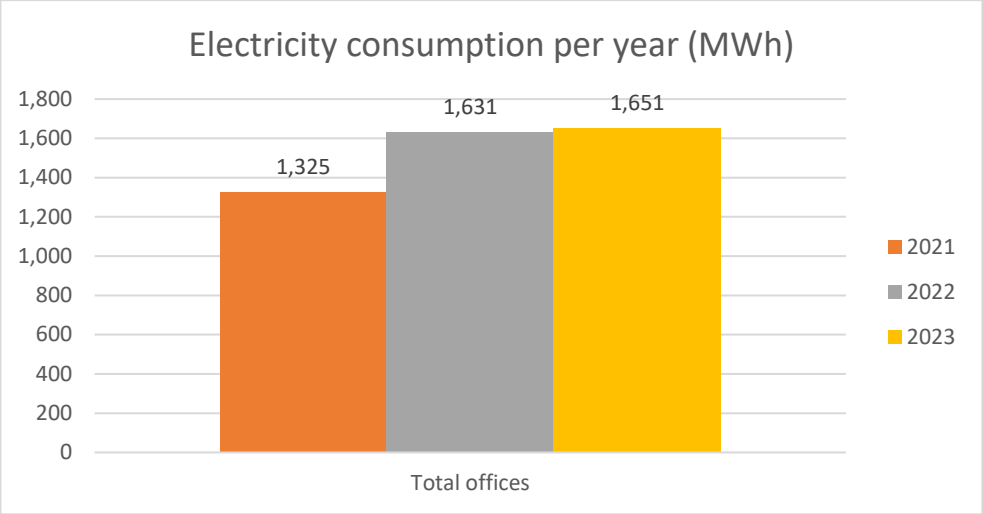
Moving forward, eu-LISA is committed to addressing the feedback received and finding solutions that balance its sustainability goals with the comfort and productivity of its employees. The Agency recognizes the need for open dialogue and collaborative decision-making processes to ensure that any future initiatives are implemented in a manner that considers the diverse needs and perspectives of its workforce. The aim remains to foster a culture of sustainability while upholding the well-being and satisfaction of all employees.

The results of the energy consumptions are presented below:



▲ *Figure 1- Electricity consumption per location*

[7] **eu-LISA sobriety action plan 2023**



▲ *Figure 2 - Global energy consumptions in offices*

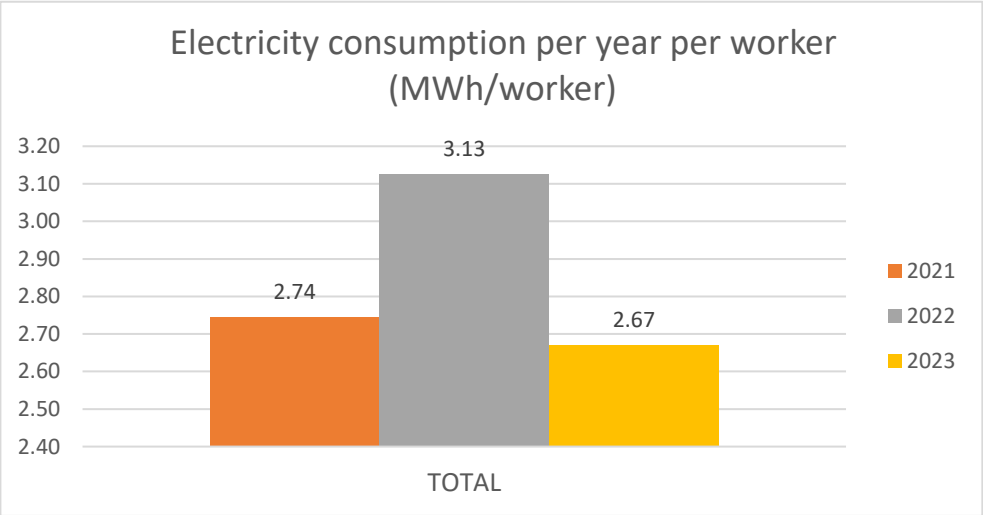
Strasbourg Site: Beginning 2023, the data show savings in energy consumption. But at the same time humidifiers system were implemented in one building (March 2023), this has resulted with an increase of energy consumption for this building. Which explains despite the efforts the very limited increase of consumption between 2022 and 2023 (0.84%) taking into account also the re- entry of people on site.

Illkirch site: Between 2022 and 2023, the data show an average of 4 % of savings in energy consumption.

Tallinn site: No significant savings, the building already has a high level of energy efficiency.

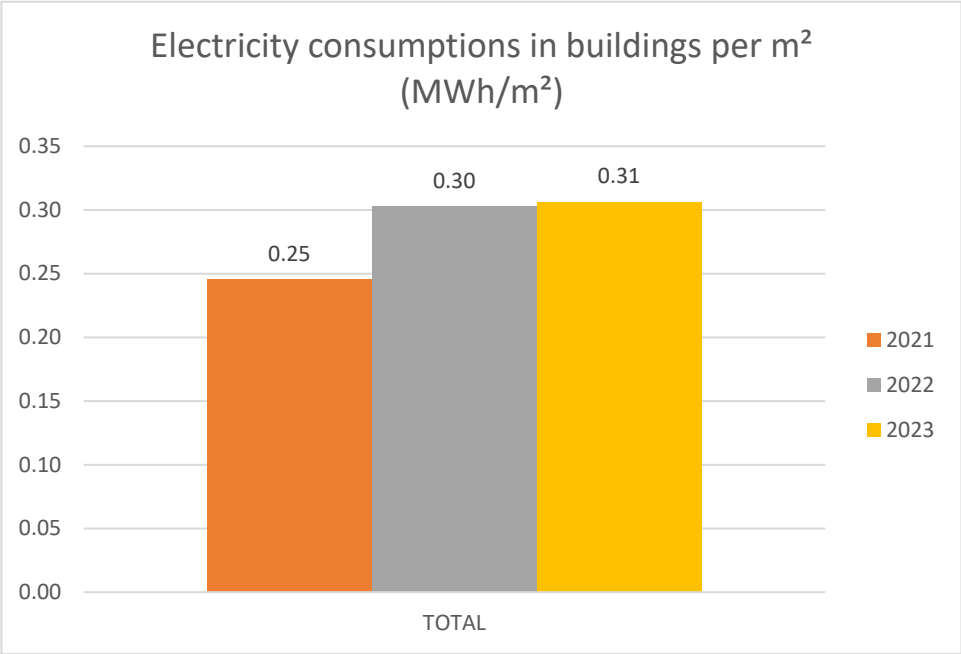
Green electricity is used in Estonia and France.

“SXB offices” data does not include one old building for which no meters exist to provide accurate data. The consumption of this building is for now aggregated with the DC consumption. The objective is to implement solutions to measure the consumption of this building independently in the future



▲ *Figure 3 - Electricity consumption per worker per year*

The energy consumption of 2022 was higher per worker as the entry plan was not enforced before Q3 2022.



▲ *Figure 4 - Electricity consumption per m² per year*

The objective for the coming months is to continue to apply the sobriety action plan, and implement a way to better monitor the different types of equipment. This will allow the Agency to identify which equipment is the most energy consumer, and act where it is needed.

For Tallinn, in addition to electricity consumption, there is the use of district heating.

	2021	2022	2023
District heating (MWh)	222	191	189

For Tallinn, an Artificial Intelligence is planned to be implemented in 2024, in addition to the BMS in order to optimise the cooling and heating systems, and reduce energy consumption as well as CO2 emissions.

7.2. Energy efficiency in Data Centre

In 2023, new systems were implemented (servers, racks) according to the mandate given to the Agency. This has led to an increase of the main data centre energy consumption of 12% for the operational site.

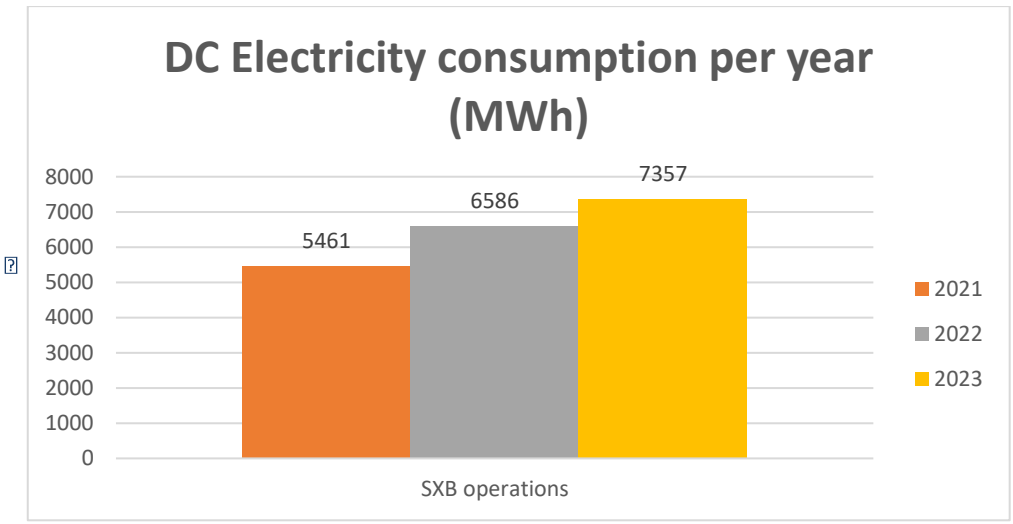


Figure 5- Energy consumption for SXB data centre including cooling system

In the coming years, the activity of the Data Centre will continue to increase. The electricity consumption of the Data Centre is then not a good indicator to be followed. For that reason, the PUE will be used to monitor the energy efficiency of the Data Centre. PUE = Power Usage Efficiency

PUE

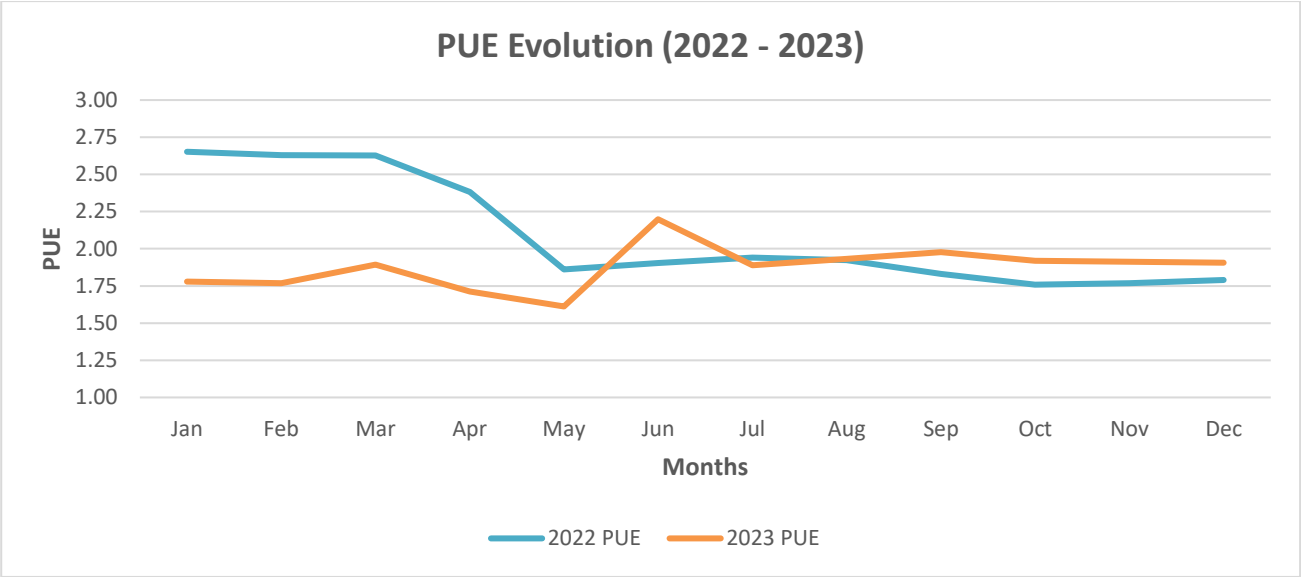
PUE serves as a benchmark for efficiency, comparing a data centre's infrastructure to its existing IT load. The initial assessment of PUE provides an efficiency score and establishes a testing framework for the facility to replicate.

By comparing the initial and subsequent scores, Data Centre managers can assess the effectiveness of ongoing efficiency initiatives. At any given time, they are evaluating the power consumed by the IT equipment required by a company against the power used by the infrastructure responsible for cooling, powering, backing up, and safeguarding that IT equipment.

PUE = Total Facility Power / IT Equipment Power

PUE	Level of Efficiency
3.0	Very Inefficient
2.5	Very Inefficient
2.0	Average
1.5	Efficient
1.2	Very Efficient

At the present eu-LISA operational site in Strasbourg, we observed a favourable progression from 2022 to 2023, although there is still a need for a significantly higher level of activity in the near future.



▲ *Figure 6 - PUE evolution of SXB main DC*

The main increase in 2023 is due to the installation of new equipment in the DC, and the time needed to regulate the consumptions of energy.

eu-LISA has already initiated certain measures (outlined below) to enhance the performance of the main Data Centre, but additional actions will need to be implemented in the near future.

- Transitioning the water tank to a three-point mode to prevent the mixing of cold and hot water.
- Relocating temperature sensors for the chillers to optimize the utilization of free cooling.

Action	Status	Expected Date
Phase 1 - Short term quick wins – Improve energy performance (e.g. realize the Hot/Cold Aisle Containment) in the DC building	In Progress. There are dependencies and constraints due to impact on operational activities.	Q4 2024
Phase - 2 Implementation of Geothermal Energy to improve the DC energy performance and cooling availability (1 Well)	In Progress.	Q4 2025

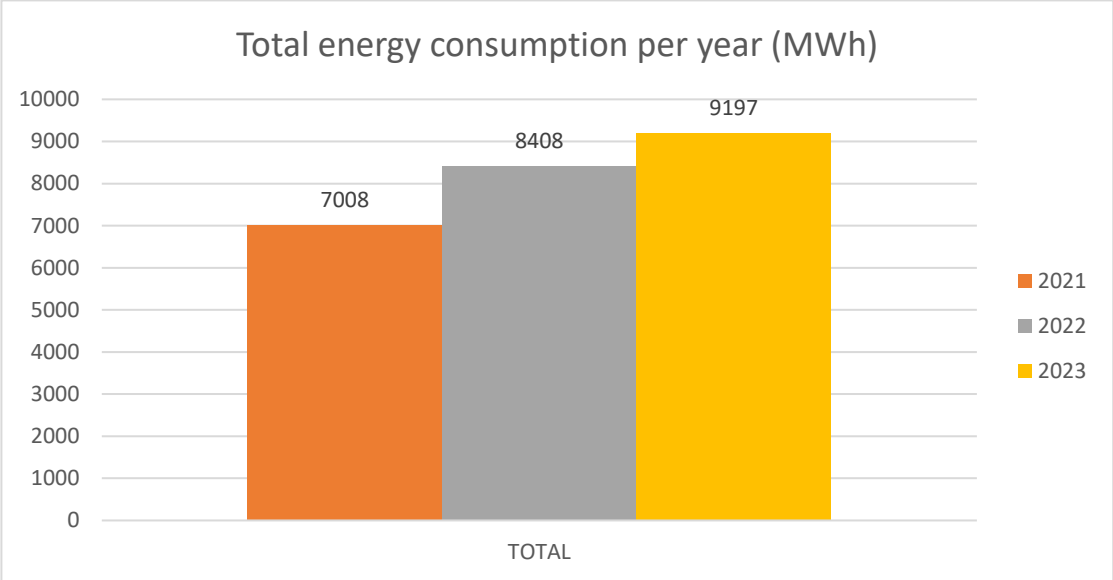
The main expected benefits are:

- Energy gain: 5-7% reduction in PUE
- Environmental gain (lowering of carbon impact)
- Increased system availability (minimum 80 minutes of additional availability in the event that the chillers stop operating)
- Gain in available cooling power (additional available cooling power of up to 577 kW)

In 2024, the goal is to perform an analysis of best practices for enhancing energy efficiency in Data Centres. The findings of this analysis will assist the Agency in determining the initial focus area to maximize impact. If necessary, the Agency may seek assistance from a consultancy provider to evaluate the benefits and costs associated with each solution, thereby prioritizing actions effectively.

7.3. Global energy consumption

The global energy consumption of the Agency is the following:



▲ *Figure 7 - Total energy consumption per year (MWh)*

7.4. Waste

Not all waste production data is currently available due to different factors on each site.

In the office spaces, paper, plastic, glass, and metal waste are sorted and removed by the city's service providers.

For Tallinn, service providers in Estonia could not provide information regarding the weight of waste collected.

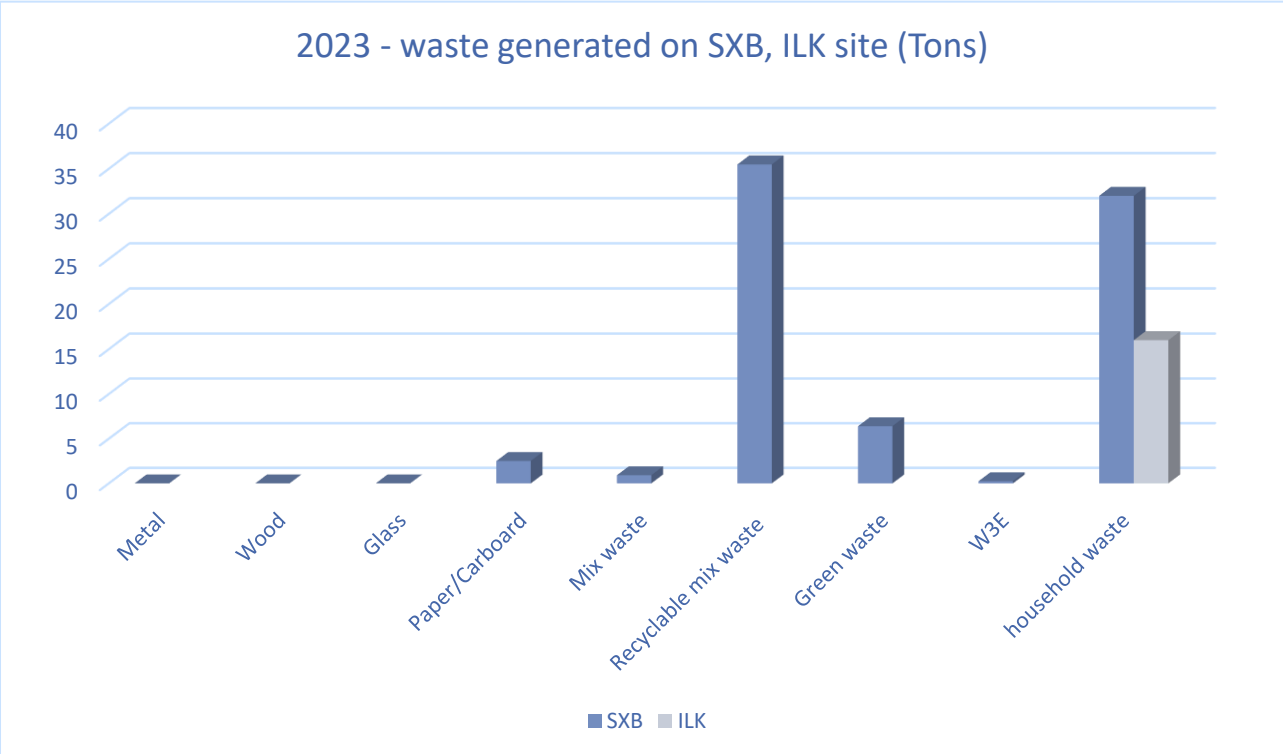
In Brussels, office spaces are shared with another agency, and waste is collected at the same time by the city with no ability to track the quantity generated. In 2024, the Liaison Office shall move in another building where it will be possible to collect accurate data.

In Illkirch, waste is collected by the city's service provider, which does not furnish data regarding the quantity of waste collected as the waste of multiple buildings in the Parc d'innovation are mixed. As a result, estimations have to be made.

For the Strasbourg site, a portion is collected by an external service provider, while the remainder, classified as domestic waste and recyclable mixed waste, is collected by the city's service provider. The table below displays waste generated by the SXB site in 2023.

	SXB	ILK
TYPE	**Quantity (T)**	**Quantity (T)**
Metal	0,047	
Wood	0,736	
Glass	0,099	
Paper/Carboard	2.506	
Mix waste	0.912	
Recyclable mix waste	35.48	
Green waste	6.4	
W3E	0.245	
Household waste	32	16

▲ *Table 8 - Waste production in 2023 in SXB and ILK sites*



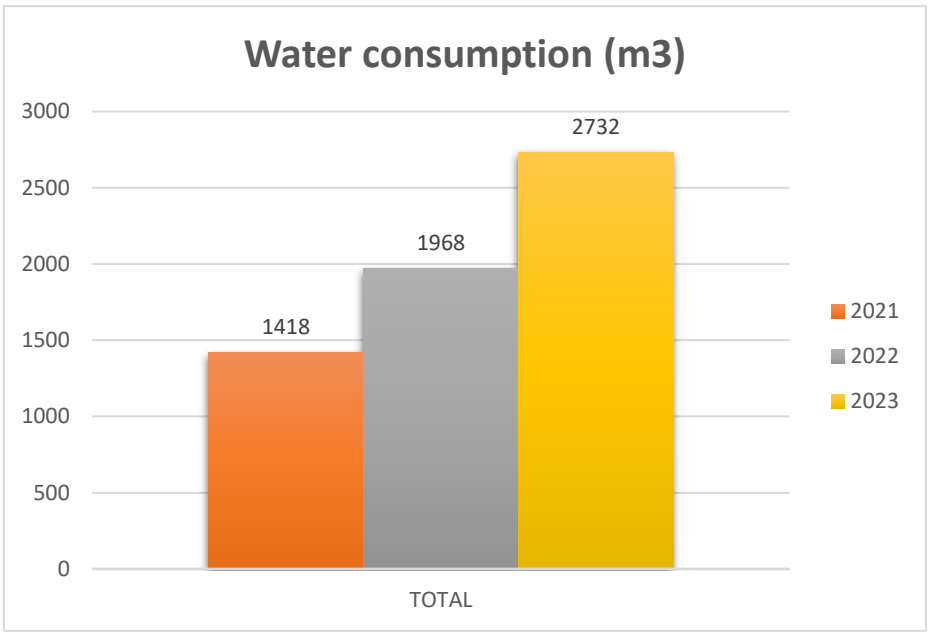
▲ *Figure 8 - Waste generated in SXB and ILK sites*

Regarding these results, for Strasbourg site, the waste generated by employee per year is 187 kg/worker/year, and for Illkirch 115 kg/worker/year. These results are below the sectoral reference data.

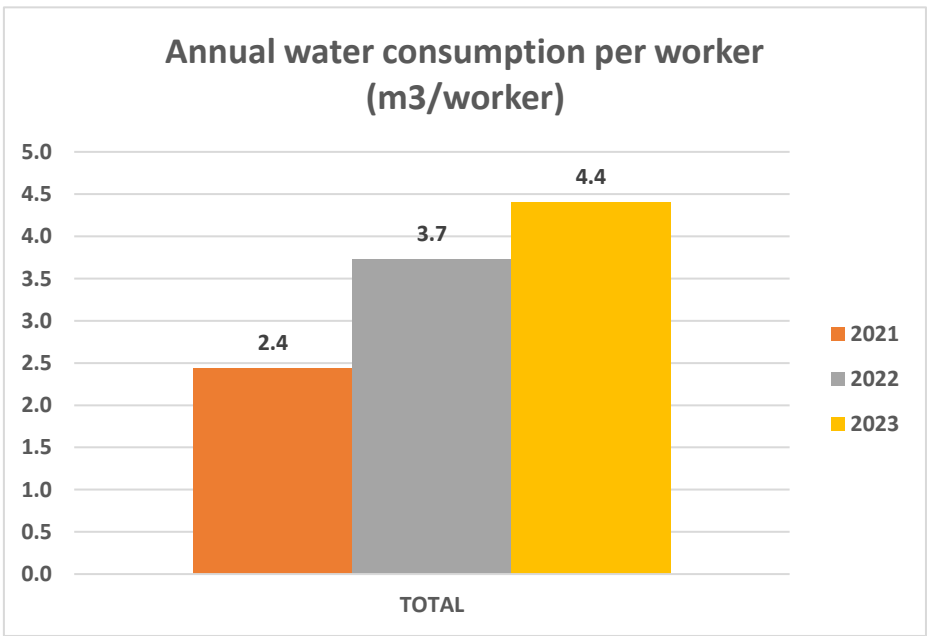
The goal for 2024 is to initiate a waste management project, encompassing various actions such as developing better methods to estimate the volume of waste generated by individual buildings, enhancing waste sorting practices, installing shelters in Strasbourg to protect containers for W3E waste, and strengthening communication with workers.

7.5. Water

The water is provided by the municipalities for the premises usages (sanitary facilities and kitchens) and is as well used in the Strasbourg site for the Data Centre Cooling System.



▲ *Figure 9 - Annual water consumption for the Agency*



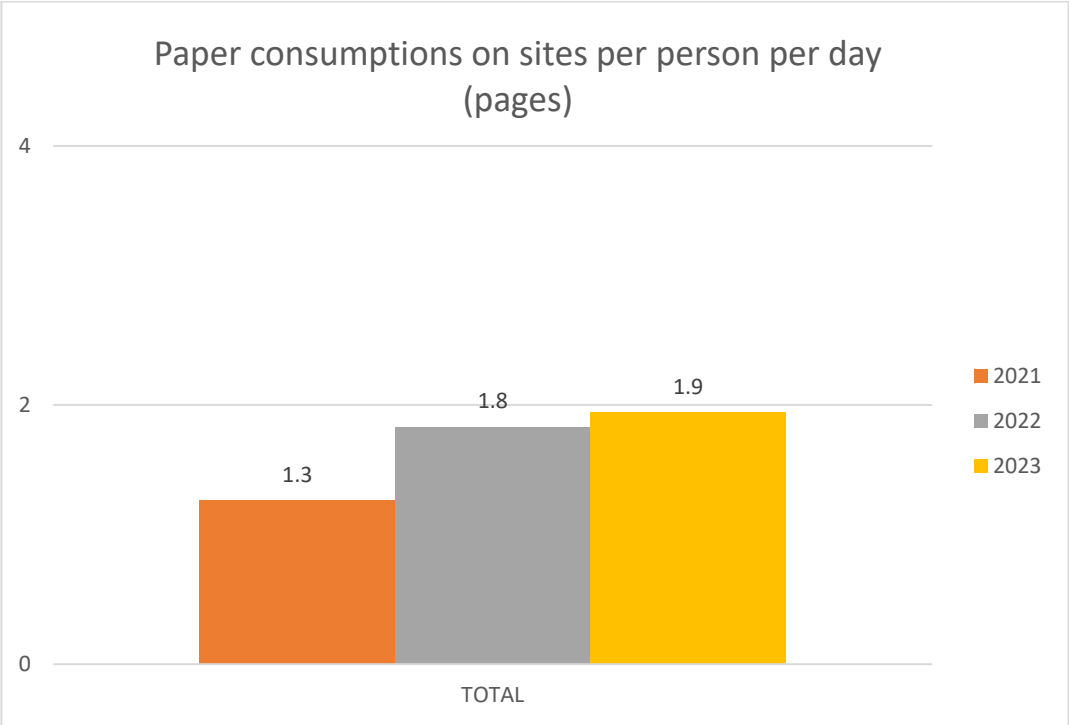
▲ *Figure 10 - Annual water consumption per worker*

The increase between 2021 and 2023 is due to both the progressive re-entry policy after COVID times and increase of service providers and contractors on sites.

The water consumption at eu-LISA per worker per year is 4.4 m3 which is below the sectoral reference data, taken into account that in the calculation we have included the water for the cooling of the Data Centre.

7.6. Paper

The quantity of paper packs consumption is calculated each year for all sites. Information is available in the following graph.



▲ *Figure 11 - paper consumption per person per day*

By default, printers are configured in order to print on both sides, in white and black.

Based on the results from 2024, a target will be established for the upcoming years. The objective is to inform all employees about the rise in consumption, aiming to decrease the amount of paper utilised within the Agency

In accordance with the Sectoral Reference Document for Public Administration, eu-LISA's paper consumption falls below the benchmark of 15 paper sheets per FTE per day.

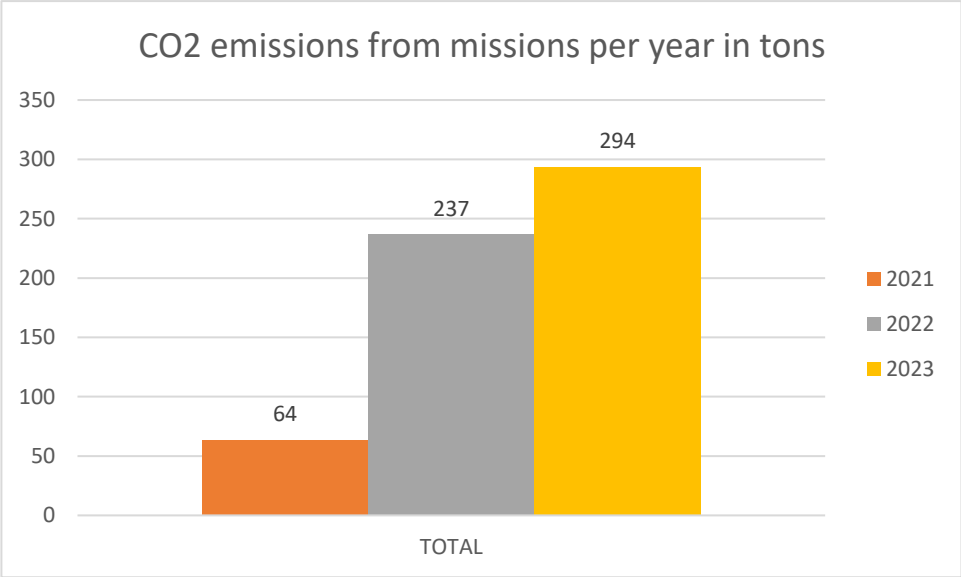
7.7. Missions

The Agency uses the MIPS+ tool to organise and book business travels for staff. The tool gives the possibility to estimate the carbon footprint of all Staff travels.

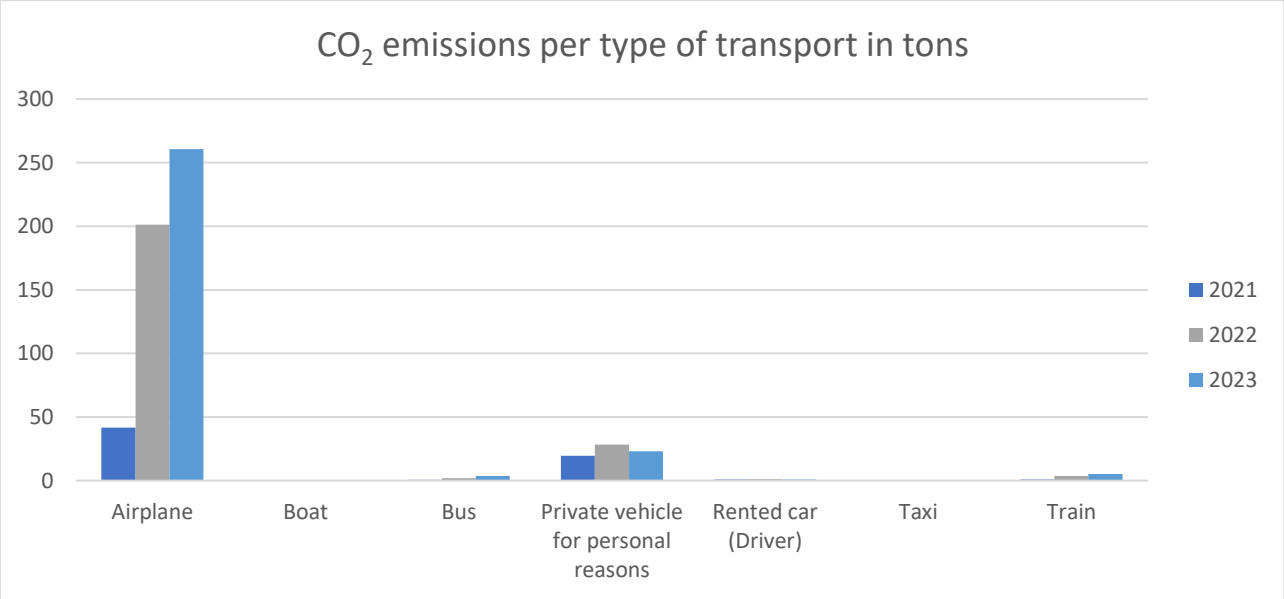
The following table gives the number of missions and related CO_2 emissions for the previous years and for all sites. The total CO_2 emissions for the entire year 2023 is 294 tons that is a little bit higher compared to 2022 (236 tons) and significantly higher with 2020 and 2021 with the pandemic years and restricted missions due to COVID-19 pandemic.

	2021	2022	2023
Estonia	35	125	173
France	26	97	114
Belgium	3	15	7
TOTAL	64	236	294

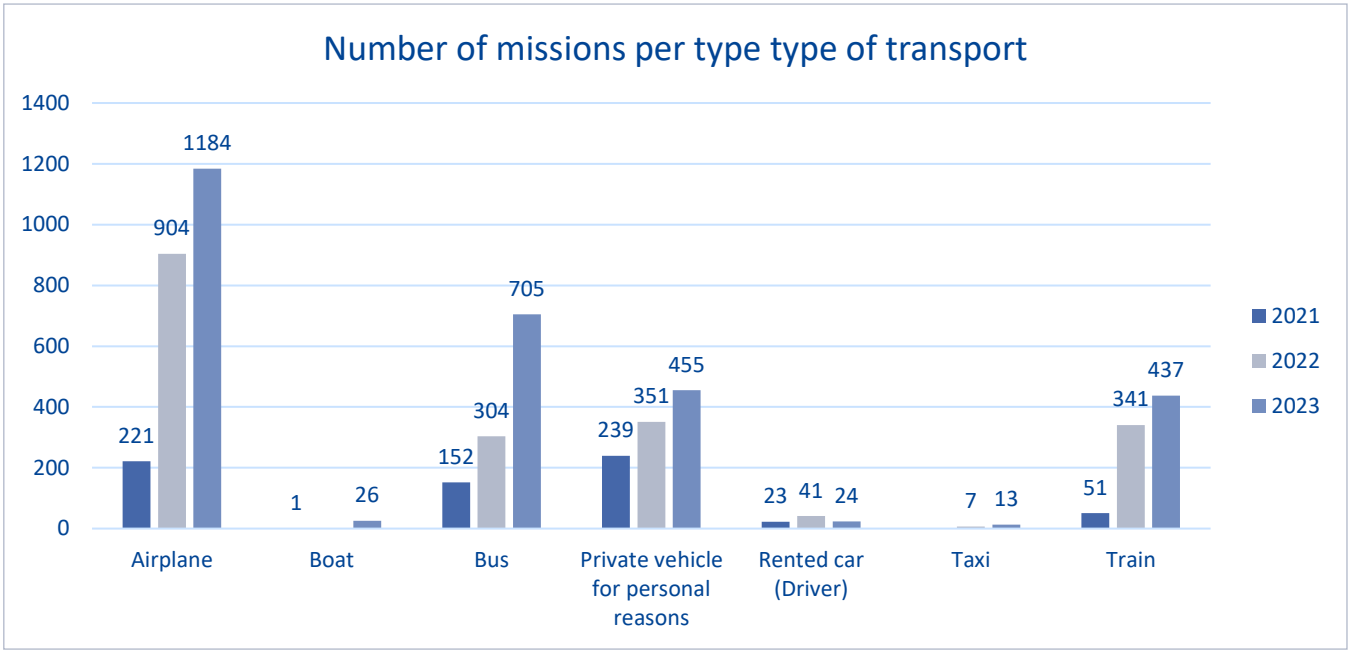
▲ *Table 9 - CO2 emissions in tons due to missions*



▲ *Figure 12 - CO2 emissions due to missions per year in tons*

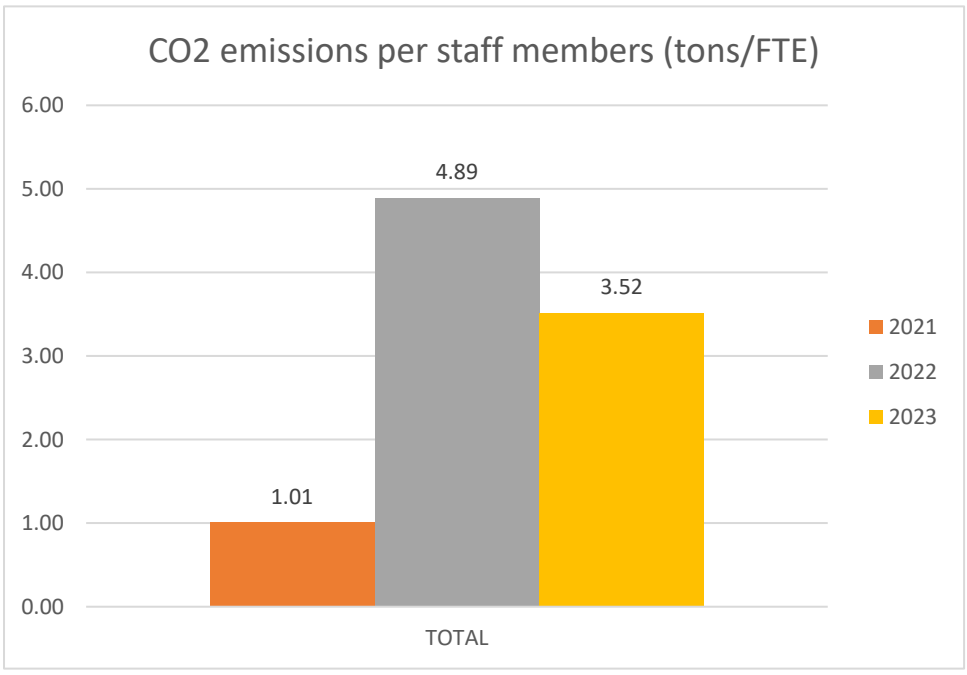


▲ *Figure 13 - CO2 emissions per type of transport*



▲ *Figure 14 - Number of missions per type of transport*

Last year, while air travel remained frequent, there was a notable increase in the use of train and bus transportation. The high utilization of air travel can be attributed to the distant location of the headquarters and operational site from the European institutions in Brussels and Strasbourg.



▲ *Figure 15 - CO2 emissions from missions per staff member*

Video conferencing facilities are available for all staff and their use is encouraged.

7.8. Biodiversity

eu-LISA's activities don't have a huge impact on biodiversity.

The percentage of natural ground inside the eu-LISA estate is 44%, for a CBS = 60% Coefficient de biotope par surface.

In addition, for gardening, only organic products are used.

7.9. Impact on climate: GHG emissions

Eu-LISA started to calculate the CO2 emissions in 2020, but only based on electricity consumptions and missions, without taking into account the green electricity.

Starting from 2023, the Agency decided to use a platform dedicated to GHG emissions calculation with the support of consultants. The annex III presents how the use of a dedicated tool for GHG emission calculation has increases the accuracy of the result.

Then, the GHG emissions are calculated with Aktio tool which uses the GHG protocol. Scope 1 and 2 emissions are fully reported-on. The scope 3 is based of GIME recommendations[8], when data is available, they include:

- Product and service purchases
- Capital asset
- Waste
- Business travel
- Commuting to work
- Other indirect emissions

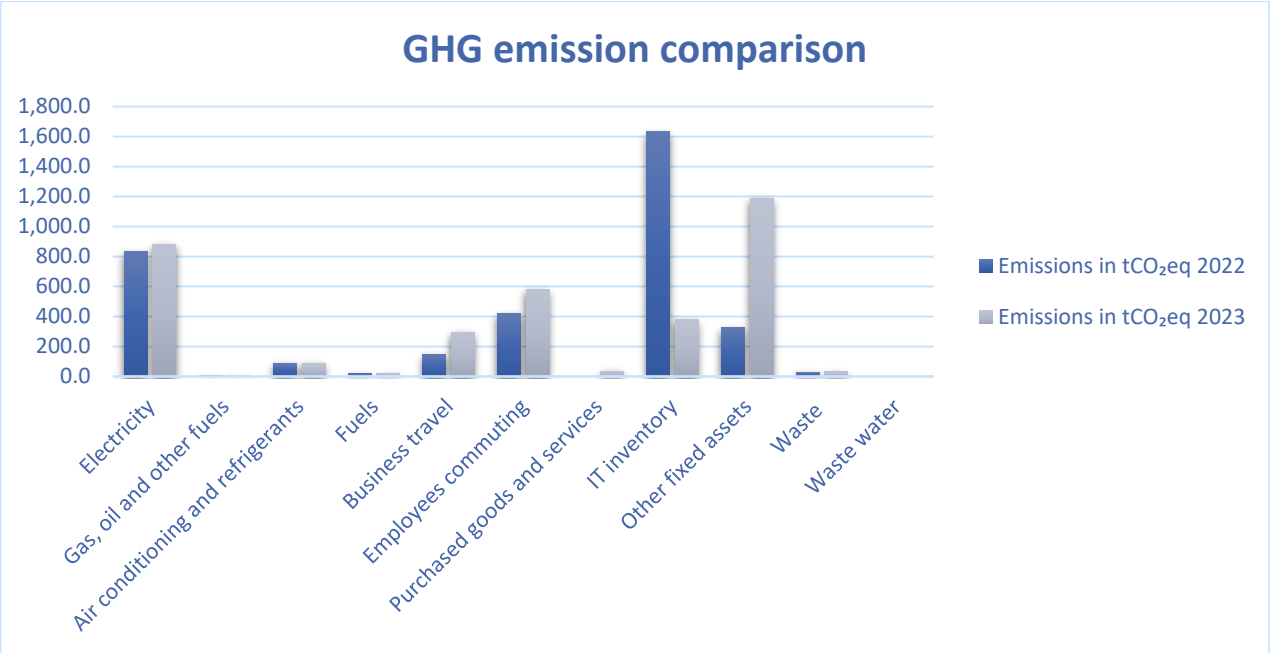
The objectives for the coming years are:

- To be able to take into account, in the calculation, the impact of the transport of visitors and customers.
- To increase the data accuracy

2023 GHG emissions: 3 507 tCO2 eq vs 3 491 tCO2 eq for 2022.

▲ *Figure 16- Repartition of 2023 emissions by section*

[8] GIME recommendations – Ref ARES (2017) 6028470 – 08/12/2017



▲ *Figure 17 - GHG emission comparison by year*

The global increase is 0.45% between 2022 and 2023.

Here are some explanations:

- Increase of business travels, due to the use of the integrated tool in MIPS which has allowed a better calculation of the GHG emissions
- Employees commuting, the uncertainty has raised due to low level of response to the questionnaire.
- The decrease of IT assets
- Much less IT equipment purchase in 2023, but increase of assets for security and maintenance.

By taking into account the emission by worker we can see a decrease of the emissions. Emissions in tCO_2eq by worker are 6.62 for 2022 and 5.61 for 2023.

The 2 main sections that produce the more emissions are assets, IT equipment and electricity consumption. That will be the focus for the coming years, as indicated in the objectives of the Agency to integrate environmental criteria in its tenders, and applying GPP.

8. Legal and other environmental requirements

As a tenant, and given the equipment it uses, eu-LISA does not need any specific environmental permit pursuant to the EU or local regulations.

The Agency is bound by the relevant regulations and the European legal framework. As a European Agency, it regularly reports on its environmental management in its governance documents, as well as on its environmental performance via this statement.

Environmental requirements come from French, Estonian, Belgian regulations (the vast majority of which stem from European directives or regulations).

The biggest focus for the years to come will be:

- on the energy efficiency front as the French regulations have set as a target of –40% energy consumption for 2030 (baseline no later than 2010) for all tertiary buildings
- on datacenter for energy consumption efficiency

All relevant environmental requirements are therefore integrated into the online legal compliance register (echoline) platform, which provides for:

- annual self-analysis of compliance with environmental legislation (in Estonia, France and Belgium)

- regular update on any new regulations.

Should action be needed to correct or prevent non-compliance, it will be integrated into the Environmental Action Plan and followed through until completion.

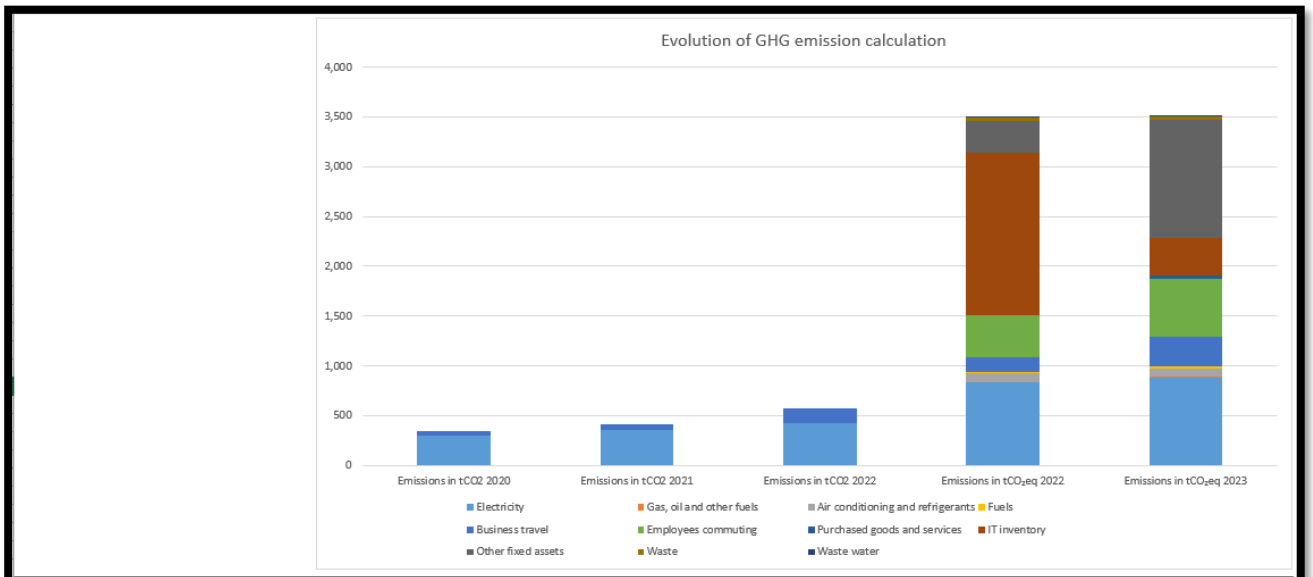
9. Annexes

9.1. ANNEX II: METHODOLOGICAL ASSUMPTIONS

The following sources of data and hypothesis taken for the GHG consumption calculation are the following:

- Electricity:
  - invoices for Estonia,
  - meters for France.
  - For Belgium, as per lack of data, the statistical data 253 kWh/m2/year (CEREN) were used
- Cooling system gas:
  - no data, hypothesis from ADEME average leakage rate of 9% applied on total equipment load
- Visitor travel:
  - no data => hypothesis = negligible
- Commuting:
  - questionnaire responses extrapolated to total workforce based on participant responses (26% Strasbourg, 61% Illkirch, 11% Tallinn) – high uncertainties as per the low level of responses
- Business travel:
  - extraction from the internal tracking software
- Purchases and fixed assets: extraction from the accounting files (in €)
- Waste:
  - estimation for France based on number of bins per week.
  - For Estonia and Belgium absence of data => use of statistical data (ADEME): 80 kg/ FTE/year

9.2. ANNEX III: evolution of methodology of GHG calculation



Type of emissions	Emissions in tCO_2 2020	Emissions in tCO_2 2021	Emissions in tCO_2 2022	Emissions in tCO_2eq 2022	Emissions in tCO_2eq 2023
Electricity	296	355	425	831.2	883.2
Gas, oil and other fuels				7.1	7.1
Air conditioning and refrigerants				86.8	86.8
Fuels				17.3	17.3
Business travel	45	56	143	143.7	294.0
Employees commuting				417.6	582.0
Purchased goods and services				2.7	35.9
IT inventory				1,632.0	378.2
Other fixed assets				323.8	1,190.1
Waste				28.2	31.5
Waste water				0.6	0.7
Total	341	411	568	3,491	3,507

▲ *Figure 18 - Evolution of GHG emissions calculation*

The table above shows for the year 2022, how the calculation has evolved. Besides, eu-LISA started to calculate the CO2 emissions in 2020, but only based on electricity consumptions and missions, without taking into account the green electricity consumed in Estonia.

Besides, using Aktio tool has allowed to take into account not only CO2 emissions but all GHG emissions.

In 2023, calculations for 2022 data were conducted using the same method as before. And at the end of 2023, the new tool had been implemented, facilitating updated calculations, and allowing to evaluate the differences between the 2 ways of calculation.