



ENVIRONMENTAL STATEMENT 2023

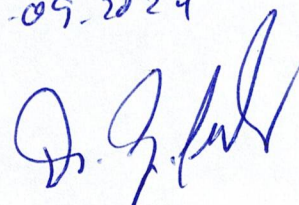
(Regulation (EC) No 1221/2009 (EMAS) + 1505/2017 + 2026/2018)

JANUARY – DECEMBER 2023



Validated Version

20.09.2024



Environmental Policy

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is located in South Dublin with an Office in Brussels and maintains offices, meeting and conference rooms, catering and plant facilities and outdoor grass and woodland. Eurofound is the EU Agency for the improvement of living and working conditions. Eurofound's mission is to provide knowledge to assist in the development of better social, employment and work-related policies. While Eurofound is directed primarily at the EU level in its role and work, it is also linked with the Member States, with Management Board members appointed on nomination from governments and social partner organisations at European and Member States level.

Eurofound is committed to the protection of the environment by managing environmental matters as an integral part of an overall management system. It is Eurofound's policy to ensure the best available environmental processes and systems to achieve control of environmental aspects and to prevent pollution.

The Agency is committed to achieving environmental excellence in every aspect of our operations through continuous improvement and optimising the efficiency of our operations. Eurofound establishes and develops environmental objectives and targets to provide the framework for improvement and for implementing this environmental policy statement.

Energy efficiency and sustainability are key priorities for the Agency in line with the United Nations Sustainable Development Goals. To this end Eurofound aims to achieve carbon neutrality by using renewable energy sources and maintaining carbon fixing through the site's forested area.

Eurofound will minimise resource and materials consumption and waste and emissions generation, and re-use and recycling of the residual wastes. It is committed to minimising the environmental impact of its operations on the external and internal environment, including Eurofound staff, contractors and neighbours.

Eurofound is committed to complying with applicable legislation, regulations and any other relevant requirements and to implementing systems, programmes and procedures to achieve compliance. In addition, the Agency is committed to meeting the requirements of the Eco-Management and Audit Scheme (EMAS) and ISO 14001. This environmental policy statement will be communicated to all staff and contractors to create awareness on environmental matters regarding all aspects of operations. Eurofound will publish an environmental statement in compliance with EMAS. This policy is also made available to all interested parties.

Signed:


Executive Director

Date:

01/07/2021

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Scope of EMAS Registration

This document represents The European Foundation for the Improvement of Living and Working Conditions' (Eurofound) covering the year 2023 in Dublin. The registration applies to all activities undertaken by Eurofound in Dublin.

Scope of ISO14001 Registration

Eurofound intends to apply for ISO14001 registration for 2023. The registration applies to all activities undertaken by Eurofound in Dublin.

Derogation

For the year 2022 The Department of Environment, Climate and Communications, as the competent authority for EMAS in Ireland, granted Eurofound a derogation for small organisations under Article 7 of the EMAS Regulation. According to the derogation the updated Environmental Statement requires external verification every two years instead of annually. A copy of the derogation is available in Annex II.

This Statement covers the year 2023.

Introduction

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency, whose role is to provide knowledge to assist in the development of better social, employment and work-related policies. Eurofound was established in 1975 by Council Regulation (EEC) No. 1365/75 to contribute to the planning and design of better living and working conditions in Europe. A new Founding Regulation was adopted on 20 December 2018 and took effect on 20 February 2019.

Regulation (EU) 2019/127 of the European Parliament and of the Council of 16 January 2019 establishing the European Foundation for the improvement of living and working conditions (Eurofound), and repealing Council Regulation (EEC) No 1365/75

Work programmes

The Programming document 2021–2024 has six strategic areas that will be implemented through the following operational activities. These include:

- Working conditions and sustainable work
- Employment and labour markets
- Living conditions and quality of life
- Anticipating and managing the impact of change
- Promoting social cohesion and convergence

Scope of Business

Eurofound provides information, advice and expertise on working conditions and sustainable work, industrial relations, labour market change and quality and life and public services, to support the EU Institutions and bodies, Member States and Social Partners in shaping and implementing social and employment policies, as well as promoting social dialogue on the basis of comparative information, research and analysis. The Agency focuses on issues where it can draw on its core expertise in the areas of working conditions, industrial relations, employment and living conditions, to support its stakeholders, by providing evidence that can assist their policy action.

Organisation

Eurofound is managed by an executive director who reports to a Management Board. The current Executive Director is Ivailo Kalfin. The Deputy Director, Maria Jepsen reports to the Executive Director. The Board is made up of representatives of the governments and the social partners (employers and trade unions) in the EU Member States, representatives of the European Commission and one independent expert appointed by the European Parliament. It provides the strategic orientation for Eurofound's activities.

Eurofound also maintains a Brussels Liaison Office, with the dual role of strengthening the visibility and impact of Eurofound research at EU level, and monitoring developments in policymaking. The Brussels Liaison Office shall not be included in the EMAS registration process at this time.



Some 100 staff members are drawn from a number of Member States and have a wide range of professional experience and background. Experts are occasionally seconded from national administrations.

Eurofound's offices are centred around the 17th century Loughlinstown House in Dublin, Ireland. Loughlinstown House is listed on the Record of Protected Structures (RPS), Number 1768 under the provisions of the Planning and Development Act 2000 (as amended) and is exempt from requiring Building Energy Rating certificate.

Site and Facilities Management

Lighting, Heating and Ventilation: energy use, F gases, fluorescent tube waste, natural gas boilers, gas oil standby generator

Offices and Meeting rooms

Process and Equipment: energy use, emissions, noise, use of resources, hazardous materials

Catering: food waste, energy use, waste water, grease trap waste

Waste Collection, Storage and Disposal: energy use, transport, emissions

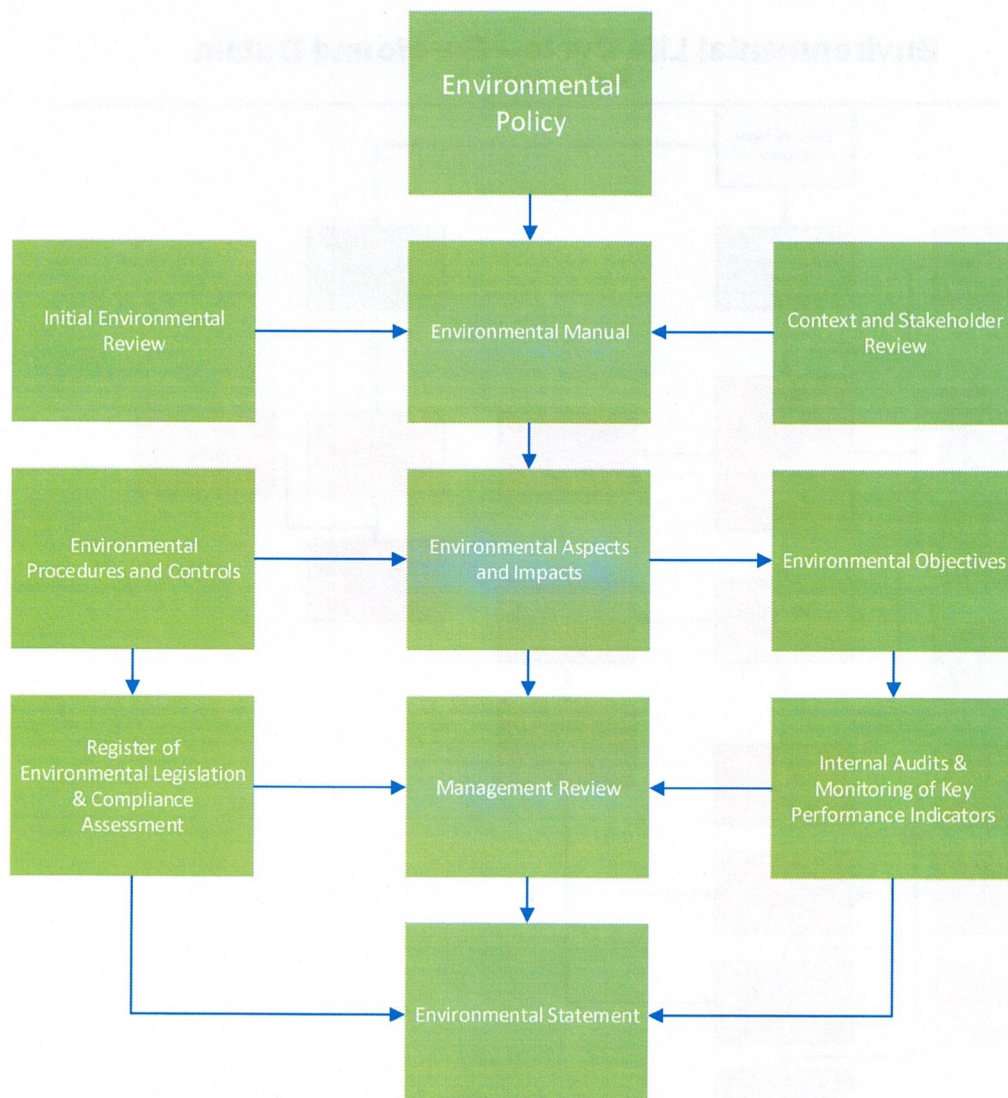
Eurofound Environmental Management Structure

The Environmental Management System is led by the EMAS Co-ordinator on site and by the Executive Director. The Policy was developed by the Senior Management Team in conjunction with the EMAS Steering Committee and provides direction to the EMS. Environmental Aspects and Impacts have been identified and evaluated to determine the key areas for the management system to address. An Initial Environmental Review (IER) was conducted with the aim of identifying the significant environmental aspects and the associated impacts, and the existing processes for management and control. The Environmental Manual has been developed in line with the requirements of both ISO 14001 and EMAS and acts as a road map for the documented system. Procedures and controls have been implemented. Environmental objectives have been set based on priorities determined in the IER and the aspects and impacts evaluation. Internal audits, management review, compliance assessment and KPI monitoring and reporting are implemented to continually evaluate the environmental performance of Eurofound. The results are reported in the Environmental Statement.

Eurofound is meeting its Legal Requirements as part of the EMAS Standard for Registration.

In December 2022 Eurofound received a positive result following an EMAS Registration audit and is currently EMAS registered.





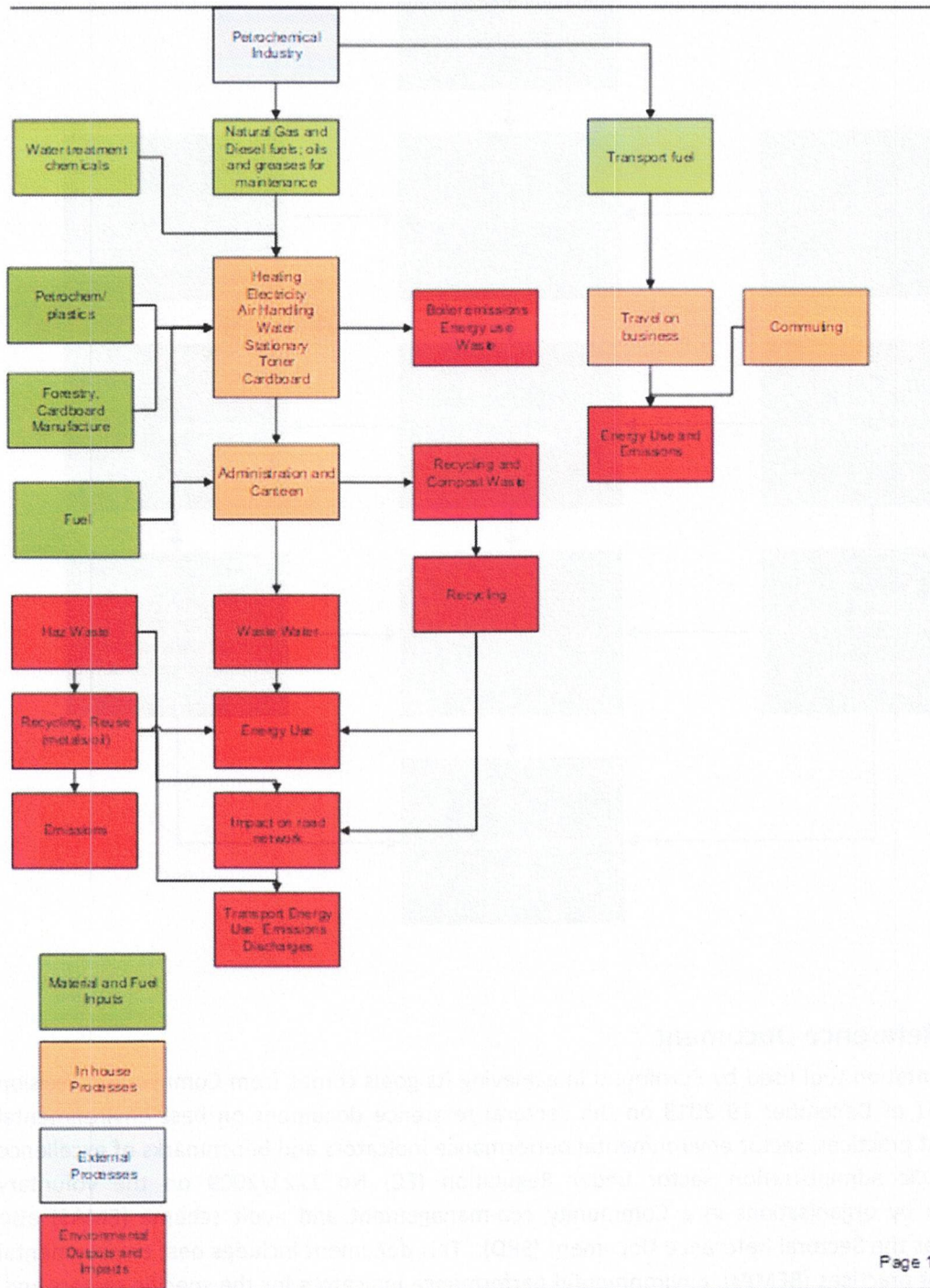
Sectoral Reference Document

An implementation tool used by Eurofound in achieving its goals comes from Commission Decision (EU) 2019/61 of December 19 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) also referred to as the Sectoral Reference Document (SRD). This document includes best environmental management practices (BEMPs), environmental performance indicators for the specific sectors and, where appropriate, benchmarks of excellence and rating systems identifying performance levels.

Life Cycle Description

Environmental Life Cycle – Eurofound Dublin

February 2021



Strengths <ul style="list-style-type: none"> • Strong Board commitment • Collaborative approach • Stakeholder management • Highly developed technical capability • Sustainability, social and workplace expertise • Appropriate new technology implemented as applicable • Experienced, competent and professional employees • Risk based approach • Organisational learning • Environmental legal compliance • Successful implementation of projects • Central location 	Weaknesses/Challenges <ul style="list-style-type: none"> • Difficulty in attracting and retaining expertise for some EHS roles • Lack of experience with EMAS • Most employees were working from home during the pandemic. New remote working policies have reduced on-site presence marginally • Difficulties in securing electricity suppliers providing 100% renewable electricity
Opportunities <ul style="list-style-type: none"> • Monitoring of the baseline • Environmental competence raising • Energy, water and waste reduction • Charging points for e-cars • Bio-diversity programme • New energy efficient boilers • Replacing room lighting with LED's 	Threats <ul style="list-style-type: none"> • Brexit • Covid 19 • Legal changes • Political policy changes • Economic downturn could impact resources • Loss of competence and organisational intellectual property • Increased energy costs • War in Ukraine • War in Gaza

PESTLE	
Issue	Impact/Action/Opportunity
Political	
<ul style="list-style-type: none"> • Strong pro-European Union sentiment across political parties and state bodies • EU taking a greater role in setting and driving policy, e.g. energy • Ongoing concern over Russian gas supply – EU driving for an energy union to address • Britain exit of EU impact on energy 	<ul style="list-style-type: none"> • Continue to reduce energy demand and use on site • Monitor energy market changes and opportunities • Reduce/eliminate hazardous waste • Reduce packaging waste

<p>and waste management supply and prices</p> <ul style="list-style-type: none"> Government targets for environmental and energy improvements China market for plastic waste closed to EU War in Ukraine War in Gaza 	
Economic	
<ul style="list-style-type: none"> Indigenous economic growth forecasts strong but impact of Brexit not fully established Increasing oil and gas prices For. Ex. fluctuations Increase in interest rates 	<ul style="list-style-type: none"> Impact on Asset Management- workplan, risk management and strategies, contingencies Cost of assets Fixed unit price contracts for utilities
Social / Culture	
<ul style="list-style-type: none"> Good relationships with neighbours 	<ul style="list-style-type: none"> Existing and future Corporate Social Responsibility programmes Regular 'Open Days' for local community
Technological	
<ul style="list-style-type: none"> Mobile working Natural Gas Energy audit and opportunities 	<ul style="list-style-type: none"> New digital opportunities Replacement boilers Environmental improvements/controls Move to LED lighting Solar panel installation Procure electrical vehicle
Legislation	
<ul style="list-style-type: none"> General Data Protection Regulations FOI EU EHS legislation and standards 	<ul style="list-style-type: none"> Challenges to stay current on legal and other requirements Implement legal register and compliance tool
Environmental	
<ul style="list-style-type: none"> EU target to reduce GHGs by a minimum of 80% by 2050 More onerous energy and efficiency targets following the publication of the Energy White Paper and the signing of the Paris agreement 	<ul style="list-style-type: none"> Identify eco opportunities Continue drive to reduce impacts – e.g., biodegradable cups, energy reduction/conservation.



Environmental Aspects and Impacts

Eurofound is an office based organisation which is currently operating at around 70% occupancy following the lifting of restrictive travel and work measures resulting from the global Covid pandemic. Contractors attend site only on an as needed basis. Security maintains a continuous presence on site.

A revised evaluation of environmental aspects has been conducted based on the processes operated on site and initial information on resource use, emissions and discharges, waste generation and use of external resources, including suppliers and contractors. The significance rating has been reduced from 341 to 262 based on process improvements and upgrades in Eurofound.

CALCULATION OF SIGNIFICANCE RATINGS														
Eurofound Significance Ratings														
IMPORTANCE:			x< 14	15<x<27	>27									
SIGNIFICANCE:			Minimum	Moderate	High									
No.	Activity	Environmental Impact	(1) F Frequency	(2) (BL) Breach of law.	3 (S) Severity (Hazard, toxicity)							Significance 1X2X3(M+C+L+ SC+I+A)	Owner	Trend
						M	C	L	SC	I	A	Sum of criteria		
6	Catering, hygiene	Water use	3	1	2	2	2	0	0	0	2	36	Facilities	
5	Packaging	Non-hazardous waste	3	1	2	1	1	2	1	0	1	36	Facilities	↓
14	Travel	Travel	2	1	3	2	1	0	1	0	1	30	Eurofound	↑
2	Heating	Energy - Gas	2	1	2	1	2	1	0	0	2	24	Facilities	↓
1	Operation of Plant and Equipment	Energy - Electricity	3	1	2	1	1	0	0	0	2	24	Facilities	↓
10	Fire	Fire water	1	1	3	3	0	3	0	0	2	24		
4	Operation of Plant and Equipment	Use of chemicals and materials	2	1	2	1	0	2	0	0	0	12	Facilities	↓
12	Travel and transport	Transportation	3	1	1	1	1	0	0	0	2	12	Facilities	
12	Operation of Plant and Equipment	Air emissions	3	1	1	1	0	2	0	0	1	12	Facilities	
11	Utilities & Maintenance	Hazardous waste	1	1	2	1	0	2	0	0	2	10	Facilities	↓
15	Refrigeration and A/C	Fugitive emissions	1	1	2	1	0	3	1	0	0	10	Facilities	
7	Storm water	Emissions to surface and storm drains	1	1	2	0	1	3	0	0	1	10	Facilities	
8	Diesel gene	Energy Diesel	1	1	1	1	1	1	1	0	1	5	Facilities	
9	Chemical and fuel storage	Interactions with groundwater and soil	1	1	1	2	1	3	0	0	0	6	Facilities	
16	Buildings & facilities	Land use	1	1	0	0	0	3	0	0	0	0	Facilities	
17	Operation of Plant and Equipment	Noise and vibration	1	1	1	1	0	3	0	0	1	5	Facilities	
3	Personnel	Public Health	1	1	1	1	1	0	0	0	1	3	Management	↓
18	Purchasing	Supply Line	2	1	1	1	0	0	0	0	0	2	Facilities	
19	Utilities & Maintenance	Interaction with ecosystems	1	1	1	0	0	1	0	0	0	1	Facilities	
												262		
Positive Aspects (High score is related to positive impact)														
20	Facilities	Biodiversity	3	1	3	3	2	3	2	0	2	108	Facilities	

Electricity

Electricity is used for office and administrative equipment, canteen equipment, lighting, general site utilities and facilities support.

Eurofound currently does not produce its own electricity and relies solely on electricity supplied by a regulated utilities supplier. Eurofound signed a contract to supply and install PV solar panels on the roof of the Conference Centre and it is expected that these will be operational in Q3 2024.

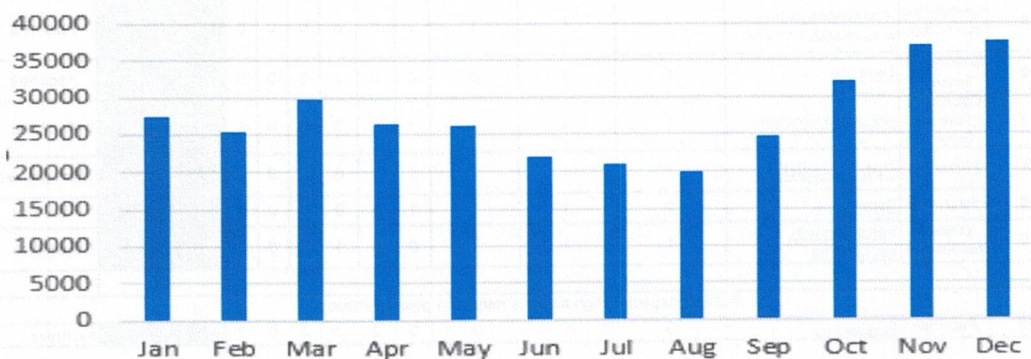
Total electricity use reduced between 2019 and 2023, but there was a more significant reduction in 2020 due to the pandemic. Consumption increased in 2022 due to employees returning to the office however due to infrastructural and cultural improvements consumption is now running at 63% of pre-pandemic levels. In 2023 Eurofound reduced its electricity consumption by 15.73% versus 2022 or 56,763 kWh. Eurofound consumes only 100% renewable electricity and meets the benchmark of excellence in BEMP. The total renewable energy use for Eurofound is 55%.

The CO₂ produced by electricity consumption for 2023 in Eurofound was 100.95 tonnes based on 1kWh producing .332 kg of CO₂.¹

Combined energy usage in terms of the benchmark of excellence as determined by the SRD is referenced below under Natural Gas.

Year	Total kWh	% of 2019	Building area M ²	Employees FTE ²	kWh per M ²	kWh per person
2019	481,718	100	5201	110.75	92.62	4,350
2020	332,876	69	5201	115.75	64.00	2,876
2021	329,001	68	5201	110.75	63.25	2,971
2022	360,830	75	5201	110.75	69.38	3,258
2023	304,067	63	5201	123.25	58.46	2,467

Monthly totals in 2021 in kWh

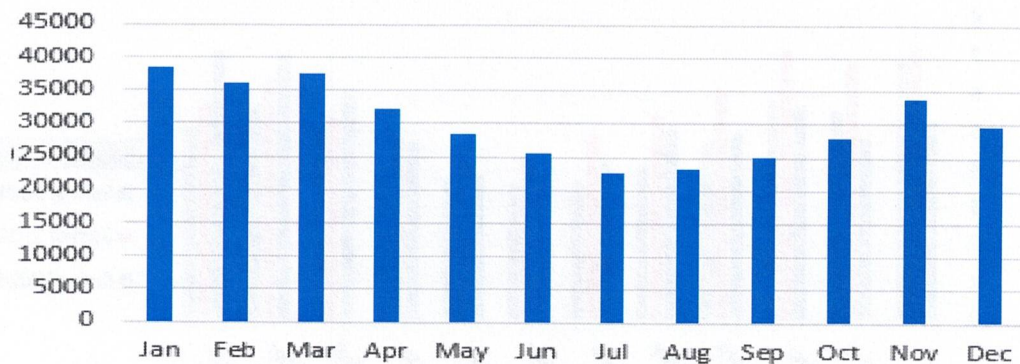


¹ Ref: <https://www.seai.ie/data-and-insights/seai-statistics/conversion-factors/>

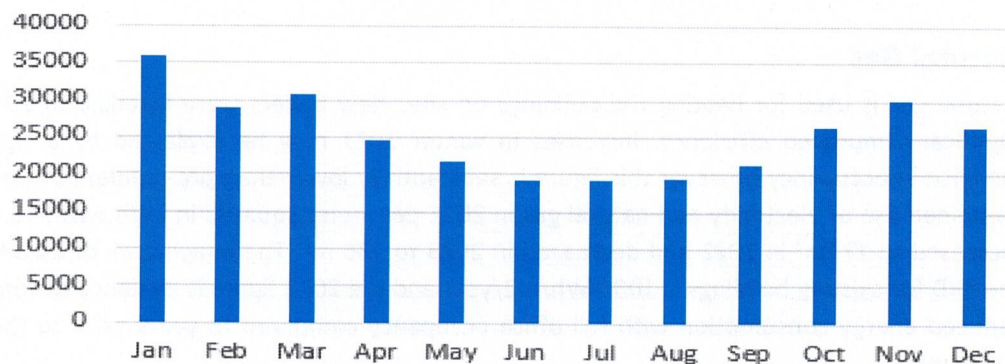
² Each Permanent Staff member equal 1 FTE, Trainees and Agency Staff equal 0.5 FTE. Catering, Reception and Security Staff equal 1 FTE (. All combined cleaning staff equal 1.75 FTE based on 70 hours cleaning per week. Total for 2023 123.25 FTE



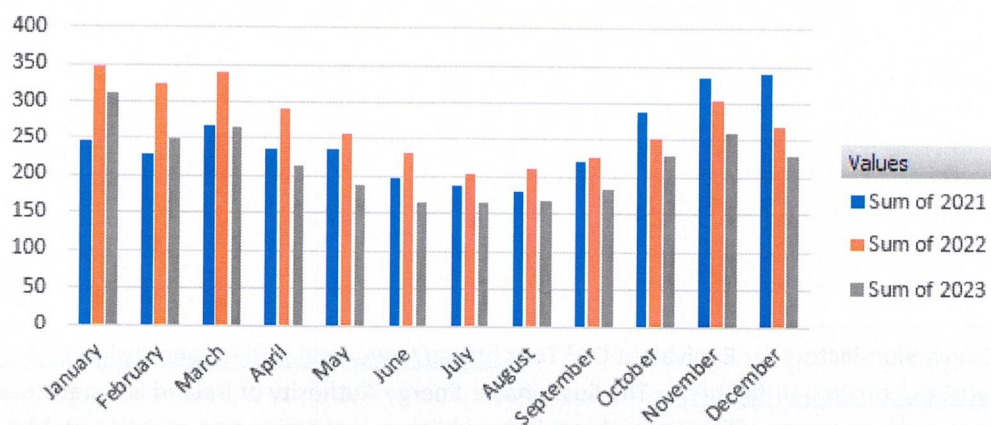
Monthly totals in 2022 in kWh

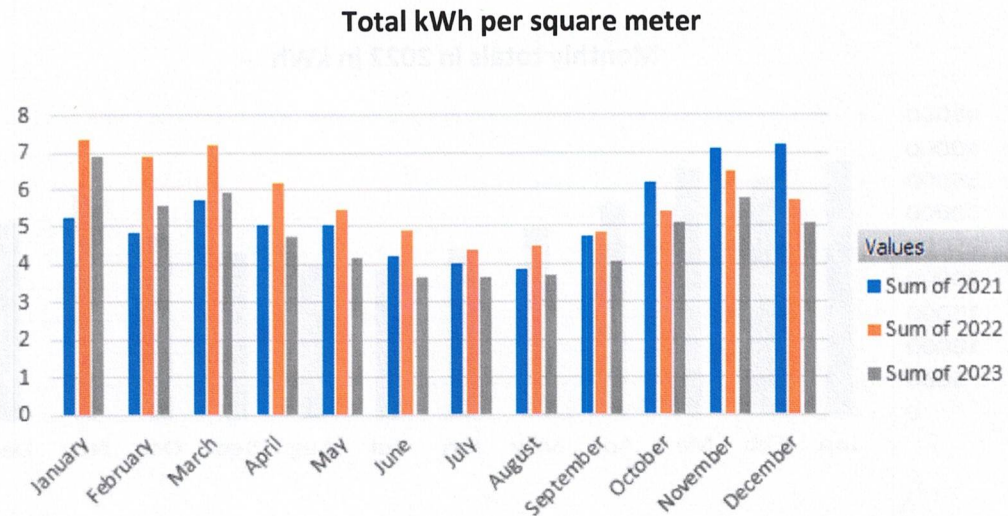


Monthly totals in 2023 in kWh



Total kWh per FTE





Natural Gas

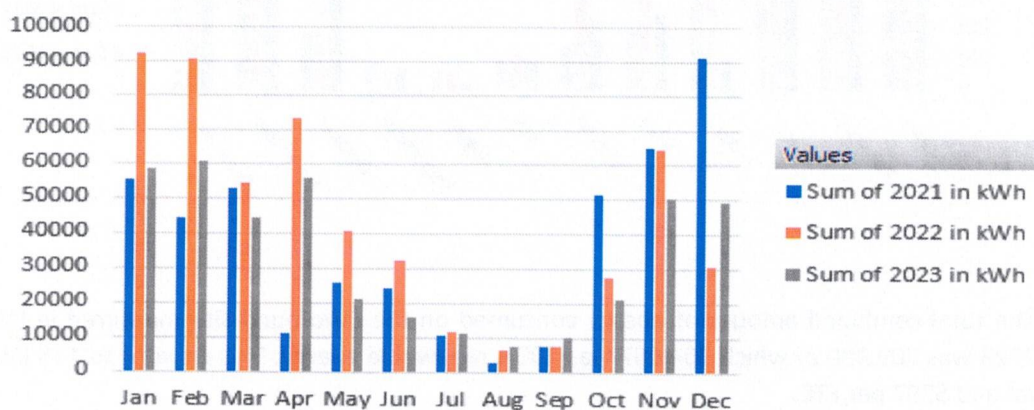
Natural gas is used for heating the buildings on site. New boilers were installed in 2021 with significant improved efficiency. Increases in winter 2021 may be explained by a significant increase in occupancy however this figure is substantially lower than pre-pandemic levels. The combined use of electricity and natural gas in 2021 per meter squared in kWh was 148 m², this increased to 172m² in 2022 and decreased in 2023 to 136 m². The benchmark of excellence in the SRD for existing buildings is 100/kWh/m²/year and the 2023 figure is evidence of consistent, reduced energy consumption with full office occupancy compared to years prior to the Covid pandemic.

The CO₂ produced by natural gas consumption for 2023 in Eurofound was 82.71 tonnes based on 1kWh producing .204 kg of CO₂.³

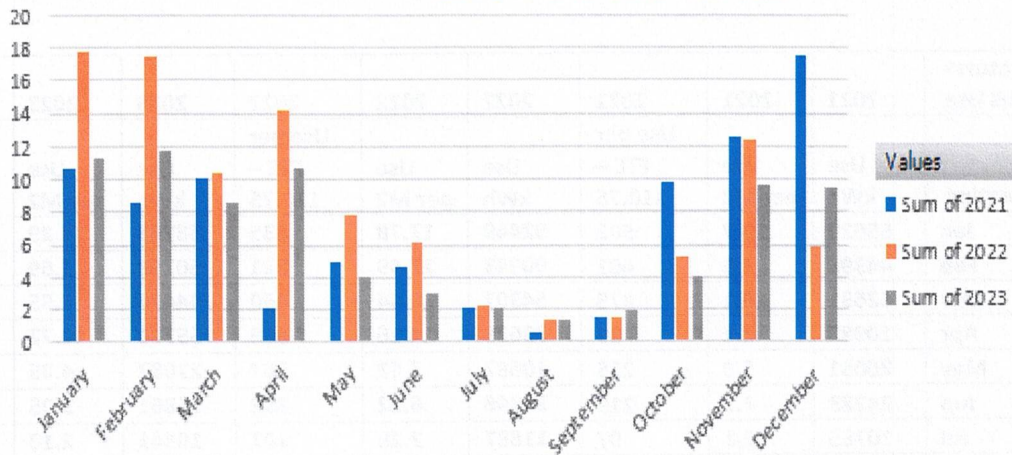
³ Conversion factors for Equivalent CO₂ Tons <https://www.seai.ie/data-and-insights/seai-statistics/conversion-factors/> - The Sustainable Energy Authority of Ireland is a statutory body implementing energy efficiency and regularly publishes conversion and emission factors relating to energy use in Ireland.

Natural Gas Use	2021	2021	2021	2022	2022	2022	2023	2023	2023
Heating	Use kWh	Use per M2	Use per FTE – 110.75	Use kWh	Use per M2	Use per FTE – 110.75	Use kWh	Use per M2	Use per FTE – 123.25
Jan	55620	10.7	502	92449	17.78	835	58745	11.29	477
Feb	44398	8.5	401	90943	17.49	821	60798	11.69	493
Mar	52631	10.1	475	54307	10.44	490	44474	8.55	361
Apr	10982	2.1	99	73629	14.16	665	55770	10.72	453
May	26051	5.0	235	40687	7.82	367	21082	4.05	171
Jun	24283	4.7	219	32348	6.22	292	15861	3.05	129
Jul	10785	2.1	97	11897	2.29	107	10941	2.10	89
Aug	2647	0.5	24	6532	1.26	59	7237	1.39	59
Sep	7627	1.5	69	7321	1.41	66	9913	1.91	80
Oct	51007	9.8	461	27295	5.25	246	21316	4.10	173
Nov	65206	12.5	589	64213	12.35	580	50368	9.68	409
Dec	91168	17.5	823	30601	5.88	276	48918	9.41	397
Total	442,402	85.1	3,995	532,221	102.33	4,805	405,423	77.95	3,289

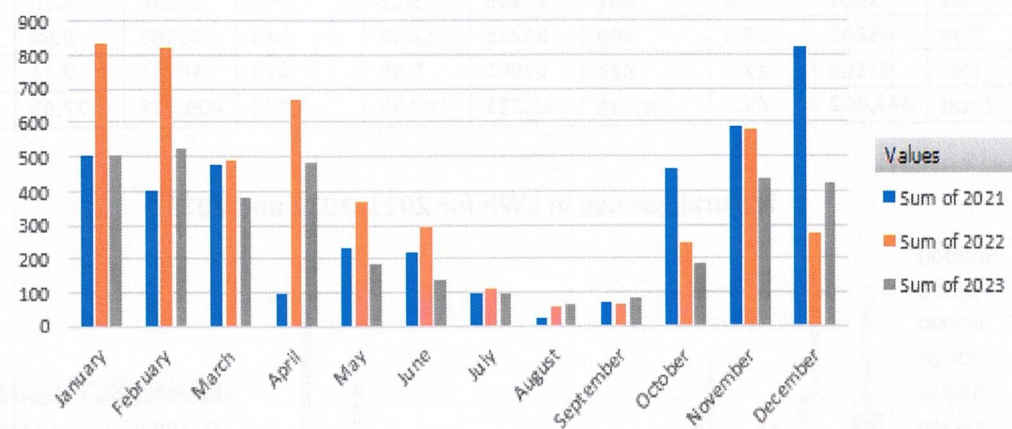
Natural gas use in kWh for 2021, 2022 and 2023



kWh per square meter



kWh per FTE



The total combined amount of energy consumed on the Eurofound site measured in kWh for 2023 was 709,490 of which 304,067 was 100% renewable energy. This equates to 136 kWh per m² and 5757 per FTE.

The total combined amount of energy consumed on the Eurofound site measured in kWh for 2022 was 893,050 of which 360,829 was 100% renewable energy. This equates to 172 kWh per m² and 8063 per FTE.

In 2021 the amount consumed was 771,403 kWh of which 329,001 was 100% renewable energy. This equates to 148 kWh per m² and 6965 per FTE.

The rise in consumption in 2022 is explained with almost full office occupancy compared to previous years but still represents a reduction compared to 2020 when offices were vacated in March for most of the year. In 2023 office occupancy stabilised and considerable reductions in consumption were achieved.



Gas Oil/Diesel

Gas oil is used periodically to test the back-up electricity generator and to fuel an on-site tractor. The double banded diesel tank is topped up approximately every 4 to 5 years. No gas oil was purchased in 2023.

F Gases

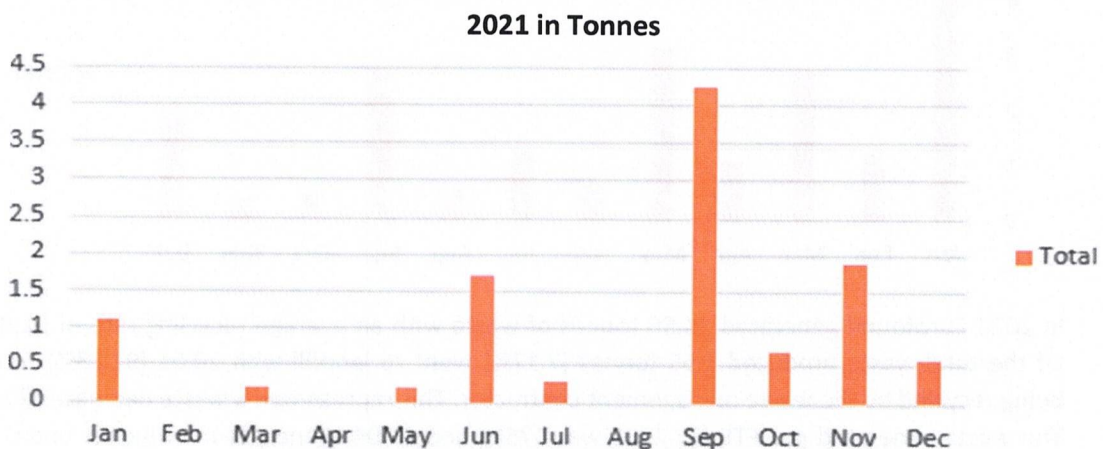
A small quantity of F Gas is contained in the air conditioning units on site. An F Gas register is maintained by a registered and qualified F Gas contractor. This gas will be removed and replaced with an environmentally friendly substitution early 2025.

Hazardous Waste

Hazardous waste is generated in small quantities including fluorescent tubes, batteries, WEEE (Waste Electrical and Electronic Equipment recycling) and toner. Hazardous waste generated by contractor's working on site is the responsibility of the contractor, who are responsible for the removal and treatment of their waste from the site by competent and authorised waste management contractors. WEEE is collected by registered competent contractors on an ad-hoc basis and is sent for recycling.

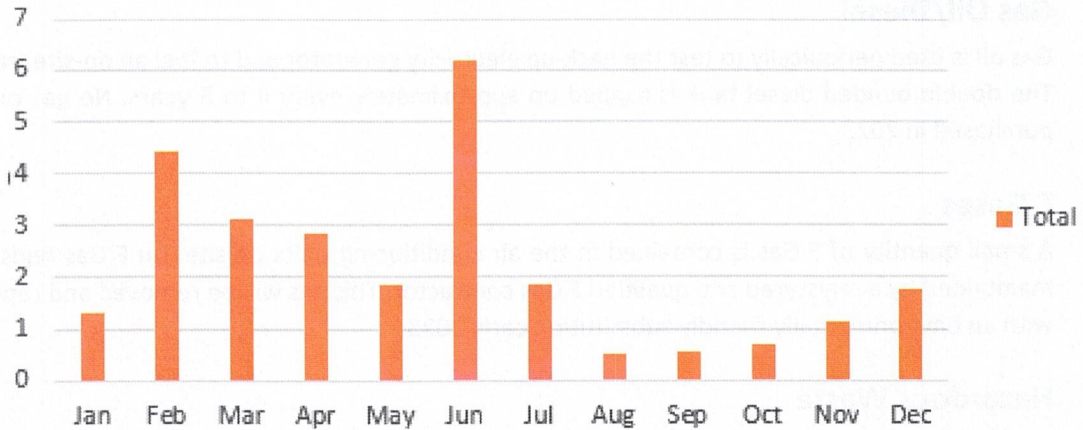
Non-Hazardous Waste

Non-hazardous waste is generated from the dining hall, offices and meeting rooms, site landscaping and maintenance activities. The waste management contractor (Thornton's) provides a breakdown of the waste as follows:



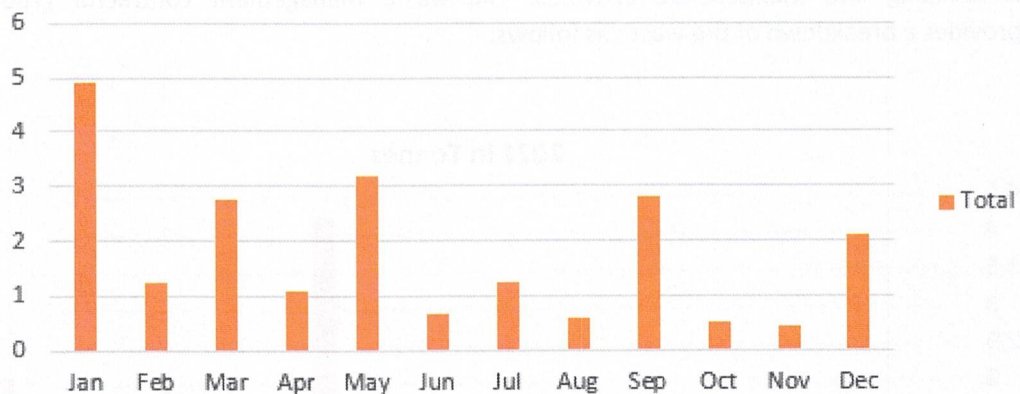
In 2021 Eurofound generated 10.97 tonnes of waste with an average recycling rate of 91.81%. Of the total waste produced 0.89 tonnes (8.19%) went to landfill with 12.12 (91.81%) tonnes being recycled by the waste management contractor. This represented a waste reduction of 17.84%. The waste generated per FTE for 2021 was 121kg and 0.002 tonne per m² which is under the recommended benchmark of 200kg per person however limited office occupancy should be taken into account.

2022 in Tonnes



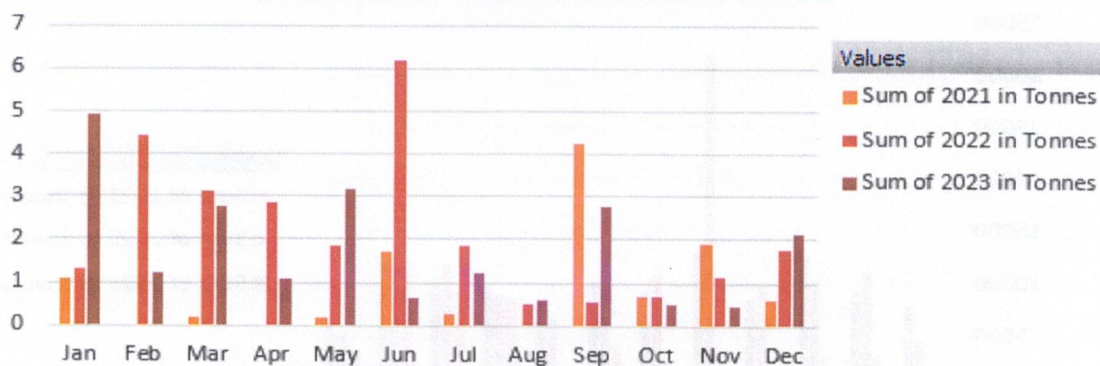
In 2022 Eurofound generated 26.31 tonnes of waste with an average recycling rate of 92.37%. Of the total waste produced 2 tonnes (7.63%) went to landfill with 24.31 (92.37%) tonnes being recycled by the waste management contractor. This represented a waste increase of 139.94%. The waste generated per FTE for 2022 was 238kg and 0.005 tonne per m² which is over the recommended benchmark of 200kg per person.

2023 in Tonnes



In 2023 Eurofound generated 21.56 tonnes of waste with an average recycling rate of 92.83%. Of the total waste produced 1.55 tonnes (7.17%) went to landfill with 20.01 (92.83%) tonnes being recycled by the waste management contractor. This represented a waste decrease of 18%. The waste generated per FTE for 2023 was 175kg and 0.004 tonne per m² which is under the recommended excellence benchmark of 200kg per person.

Waste disposal for 2021, 2022 and 2023



The quantity and mix of waste generated, removed and treated in 2022 considerably increased in 2022 due to the return to office based working however there was extensive cleaning and disposal tasks undertaken in order to facilitate the aforementioned return. As expected in 2023, the waste generated stabilised and returned below the SRD benchmark of 200kg per person.

Paper Use

Paper is used by personnel for printing and copying documents. All figures are based on data from the printing and photocopying machines as part of a managed print services contract. There was a considerable reduction in printing due to the Covid pandemic as staff were working from home. There were slight increases in Q4 2021 given increased presence of staff at Eurofound however with increased virtual meetings and conferences taking place there is a significant opportunity to permanently reduce paper consumption compared to previous levels.

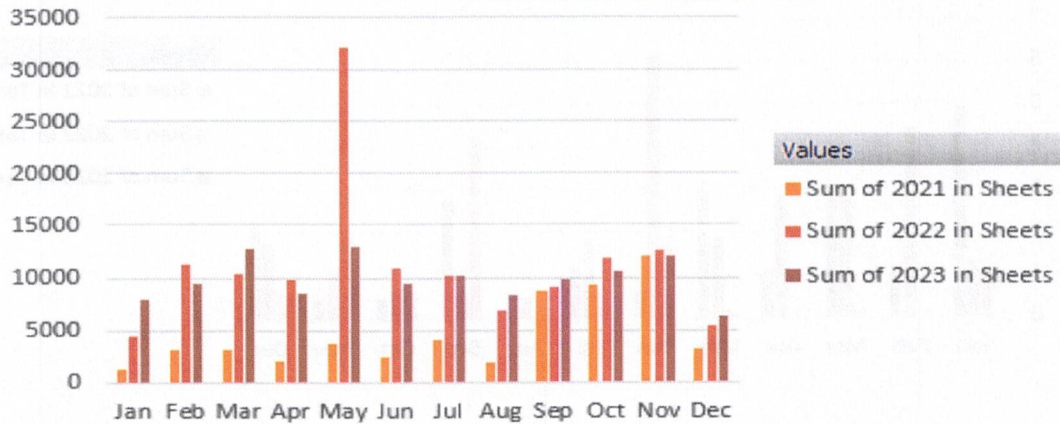
Paper use in 2021 saw a 44% reduction compared to 2020. Total printed paper used in 2021 was 55,062 sheets or $55,062 \times 5/1000000$ grms = 0.28 tonnes. Tonnes per month = 0.02. This equates to 497 sheets per FTE per annum producing 0.7 tonnes of CO₂. This represents 10.58 sheets per m² per annum.

2022 saw an increase of 145% in printing and photocopying in Eurofound compared with 2021. Total printed paper used in 2022 was 135,096 sheets or $135,096 \times 5/1000000$ grms = 0.68 tonnes. Tonnes per month = 0.06. This equates to 1,351 sheets per FTE per annum producing 1.7 tonnes of CO₂. This represents 25.98 sheets per m² per annum.

In 2023 printing and photocopying in Eurofound decreased by 12% in compared with 2022. Total printed paper used in 2023 was 118,354 sheets or $118,354 \times 5/1000000$ grms = 0.59 tonnes. Tonnes per month = 0.05. This equates to 960 sheets per FTE per annum producing 1.5 tonnes of CO₂. This represents 22.76 sheets per m² per annum.

The average use of paper sheet per FTE per day in 2021 was 2.5, in 2022 it was 6.1 and in 2023 it was 4.8. All figures are lower than the SRD benchmark of 15 per day. The 2021 figures are unusually low due to low office occupancy and both 2022 and 2023 are now reflective of Eurofound operating at normal capacity.

Paper use in sheets for 2021, 2022 and 2023



Water Use

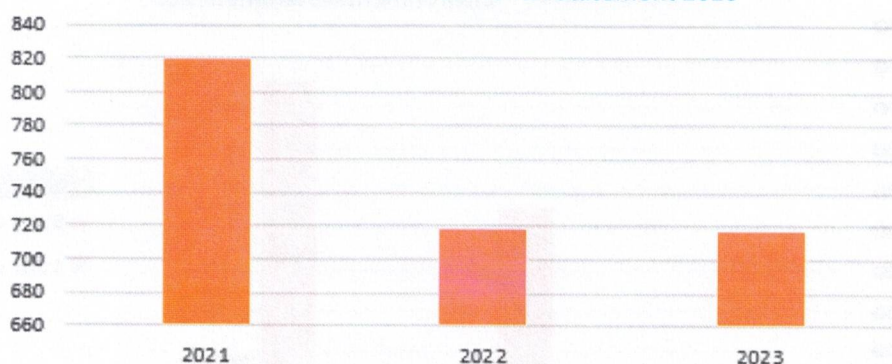
Water use data from the local authority, Irish Water, is issued in the form of charges linked to a standing charge and a water use and waste water treatment charge. Irish Water assume that water treated is equivalent to the water used, which is a good approximation as there are no processes used where water could be evaporated or incorporated into a product or service. Cubic meter use per FTE in 2021 was 7.40 (higher than SRD benchmark of 6.4) and in 2022 was 6.48. Usage in m³ per square meter of floor space in 2021 was 0.16.

Water consumption reduced by 12% in 2022 to 6.48m³ per FTE, almost in line with the SRD benchmark of 6.4m³. This reflects 0.13m³ per m² of floor space.

In 2023 consumption per FTE was 5.82. As almost identical quantities of water were consumed in Eurofound compared to 2022 the FTE figures are reduced due to increased personnel while the m² of floor space remains stable at 0.13m³.

Third & Year	Water used cubic metres	Water treated cubic metres	Annual Consumption in cubic meters
T1 2021	195	195	820
T2 2021	386	386	
T3 2021	239	239	
T1 2022	238	238	718
T2 2022	237	237	
T3 2022	243	243	
T1 2023	233	233	717
T2 2023	243	243	
T3 2023	241	241	

Water used and waste water by cubic meter per third



Water used and waste water by cubic meter per annum

Water Effluent

The site discharges to the local authority sewer system from its sanitary processes. It does not generate process waste water.

Surface Water and Ground Water

There have been no emissions to surface or ground from the site or its activities. The diesel tank is internally banded. A programme of secondary containment has been implemented for small containers of liquid chemicals and oils on site. A number of staff have been trained in spill management and containment. Spill containment equipment has also been procured. In 2022 an addition Standard Operating Procedure was added to the Eurofound EMAS documentation to prescribe procedures in the event of chemical and oil escape.

Air Travel

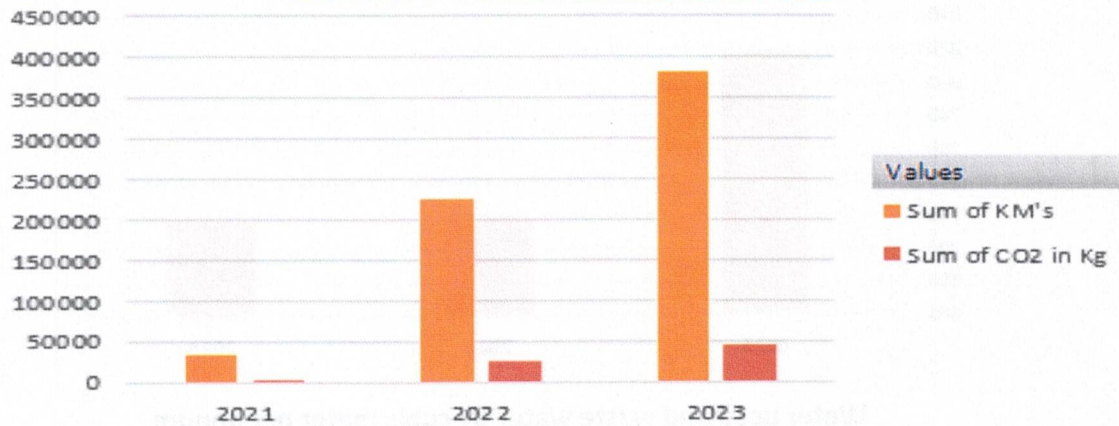
Air travel in 2019 amounted to 827,726 kms equating to 95,188 kg of CO₂. 2020 amounted to 96,122 km and emitting 11,054 kg of CO₂. Travel was minimal by previous standards in 2021 finishing at 35,328 km and emitting 4,052 kg of CO₂.

In 2022 Eurofound amassed 227,837 air kilometres in business travel emitting 26,201 kg of CO₂. While it is a substantial increase on 2021 it is a 72% decrease in CO₂ emissions prior to the global pandemic.

Travel increased again in 2023 reflecting a full return to business as usual with air kilometers increasing to 384,010 emitting 44,161 kg of CO₂. It is accepted that the increase from 2022 to 2023 is considerable (69%) but compared to 2019 it reflects an overall decrease of 54% in business travel highlighting Eurobond's commitment to both travel and emission reduction.

https://www.carbonindependent.org/sources_aviation.html estimates that CO₂ emissions from a Boeing 737-400 are 115 g per passenger km. It should be noted that reported climate gas emissions relate only to air travel from airport to airport. No other emissions (travel to and from airports) have been calculated yet.





Noise

Noise is not a significant environmental aspect at Eurofound.

Land Use and Biodiversity

Eurofound occupies a campus totalling approximately 53,000 square meters of which 5,200 square meters are used as office space and approximately 2,500 square meters of space is occupied by roadway, parking and a tennis court. Of the remaining occupied land over 50% (23,000 square meters) is arboreal and much of the remaining land is under grass. This is a valuable resource in an area which is combined commercial and residential. Eurofound is planning to develop a biodiversity programme over the coming years, including establishing the species and habitats present on site. It also operates a 'Managed for Wildlife' and 'Pollinator Friendly' maintenance programme. In 2023 Eurofound, with a local beekeeper, installed a beehive to actively promote pollination. The carbon captured by the woods and grassland on site will also be estimated.

Emissions

The combined CO₂ emissions for 2023 occurred from natural gas boilers used for space heating, water heating and cooking and from paper use and business travel for the organisation.

The German TA Luft Regulations are used to specify limits for emissions to air for the protection of the environment and health. Eurofound's boilers are fully compliant with the TA Luft limits for NO_x and SO₂.

Boiler emissions are tested annually.

In 2022 Eurofound produced 135.91 (26.2 tonnes from air travel and 107.99 tonnes from natural gas consumption, 124.78 tonnes from 100% renewable electricity not included) representing a 43% increase on 2021 owing largely to significant business travel increase and office occupation but a 7% decrease of CO₂ emissions on 2020 levels which may be a more comparative year.

Eurofound is actively reducing business travel against pre-pandemic levels through reductions in the travel budget.

Eurofound has reported CO₂ emissions in 2023 of 127.92 (44.16 tonnes from travel, 82.26 tonnes from natural gas and 1.5 tonnes from paper consumption with 100.95 tonnes from 100% renewable electricity not included). This represents an overall 5.88% reduction in CO₂ emissions compared to 2022.

In reporting emissions Eurofound uses the *Conversion and emission factors for publication* published by the Sustainable Energy Authority of Ireland. The calculations are made by multiplying the gCO₂ by kWh.

For air travel <https://www.carbonindependent.org/sources/aviation.html> estimates that CO₂ emissions from a Boeing 737-400 are 115 g per passenger km. Eurofound uses this calculation as the most common aircraft.

In 2023 there were no leaks of F gas emissions to air from cooling equipment.

Compliance with Legal Requirements Related to the Environment

Eurofound is compliant with existing environmental legislation and the requirements of EMAS and the ISO14001 standard.

The EMAS Coordinator regularly evaluates Eurofound's compliance with pertinent regulations and environmental legislation. In ensuring compliance the organisation considers legislation and legislative changes along with industry practice and monitors all relevant legislation and guidelines using the Legal Register. Compliance is reviewed at regular meetings and the organisation conducts internal audits for verification.

ISO14001

To complement the ongoing implementation of EMAS, Eurofound will officially introduce the ISO14001 standard to its Environmental Management Programme.

The EMAS Coordinator will regularly evaluate Eurofound's compliance with pertinent regulations and environmental legislation. In ensuring compliance the organisation considers legislation and legislative changes along with industry practice and monitors all relevant legislation and guidelines using the Legal Register. Compliance is reviewed at regular meetings and the organisation conducts internal audits for verification.



Environmental Management Programme

Objectives and Targets

This is Version 1 of the Environmental Management Programme at Eurofound, Loughlinstown, Dublin. The objectives and targets comprising the Management Plan are set out on the following pages.

Objectives are defined together with a reason for the objective and a programme for achieving it. The environmental relevance of the objective is indicated in the table below.

The programme describes how each objective is to be achieved; the title of the person responsible for carrying it out; and the timeframe for each stage of the programme.

Each objective is referenced to its corresponding significant environmental impact in the Register of Environmental Aspects.

Associated with each objective are a number of targets. For each target responsibilities are defined as well as a target date.

The most significant environmental aspects include:

1. Electricity
2. Natural Gas
3. Resource Use

OBJECTIVE	Monitoring	Management	Improvement
Implementation of EMAS and ISO 14001	X	X	X
Reduce use of electricity	X		X
Reduce use of natural gas	X		X
Reduce use of paper	X		X

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OBJECTIVE #1

Implementation of ISO14001 and EMAS

REASON

To implement and demonstrate good environmental safety management to stakeholders through an independently assessed management system in compliance with the EMAS Regulation and ISO 14001:2004

Environmental Aspects Register: Not applicable

PROJECT METHOD

Step	Method	Person Responsible	Target Date	Status
1	Draw up Baseline Study and develop Register of Aspects and Impacts	Antaris	Q1 2021	Complete
2	Draft Environmental Policy Review and agree Policy	Eurofound Management	Q1 2021	Complete
3	Draft Environmental Management Plan	Antaris/Eurofound	Q1 2021	Complete
4	Draft and implement Environmental Procedures Manual	Antaris/Eurofound	Q1 2021	Complete
5	Prepare Environmental Manual	Antaris/ Eurofound	Q1 2021	Complete
6	Prepare environmental Register of Legislation and conduct compliance assessment	Antaris/Eurofound	Q2 2021	Complete
7	Conduct internal audits	Eurofound	Q3 2023	Complete
8	Carry out Management Review	Eurofound	Q4 2023	Complete
9	Document Environmental Statement and have validated by approved body	Eurofound	Q2 2024	Ongoing
10	Undergo Re-Certification Audit	Certification Body/Eurofound	Q2 2024	Ongoing
11	Respond to Findings and implement Corrective actions	Eurofound	Q2 2024	Ongoing

Overall responsibility for objective # 1

Environmental Coordinator

Overall target date for achievement of objective # 1

June 2024



OBJECTIVE # 2

Reduce the use of electricity on site

REASON

Electricity use is a significant environmental aspect and the site has the potential for reducing further, as identified through the initial environmental review and the development of the environmental aspects and impacts register.

Environmental Aspect Reference: Electricity use

PROJECT METHOD

Step	Method	Person Responsible	Target Date	Status
1	Identify initial opportunities – LED lighting to replace existing bulb lighting	Site FM Team	Q1 2021	Complete
2	Cost and plan implementation of LED change out	Site FM Team	Q2 2021	Complete
3	Implement phased changeover – phase 1 – 75% of lights	Site FM Team	Q3 2021	Complete
4	Implement remaining phases	Site FM Team	Q1 2023	Complete
5	Target reduction of 40% lighting cost (power requirement reduced by circa 38.5 – 40% compared to previous years consumptions)	Site FM Team	Q1 2023	Ongoing
6	Replace current vehicle with hybrid/electric vehicle	Site FM Team	Q1 2024	Ongoing
7	Installation of Solar Panels on CC roof	Site FM Team	Q2 2024	Ongoing

Overall responsibility for objective # 2

Site Facilities Team

Overall target date for achievement of objective # 2

June 2024



OBJECTIVE # 3

Minimise use of natural resources and emissions to air from fuel use.

REASON

To eliminate or reduce air emissions and reduce use of natural gas.

Risk Assessment: Use of natural resources, Air emissions, Greenhouse gases.

PROJECT METHOD

Step	Method	Person Responsible	Target Date	Status
1	Review natural gas use	Site FM Team	Q1 2021	Complete
2	Review options for significant users (boilers, kitchen)	Site FM Team	Q1 2021	Complete
3	Initiate boiler changeout project (age and efficiency of boilers) – ITT	Site FM Team	Q1 2021	Complete
4	Identify optimal supplier and installer	Site FM Team	Q1 2021	Complete
5	Replace gas boilers with new higher efficiency models	Site FM Team	Q3 2021	Complete
6	Continue to monitor natural gas use and estimate savings	Site FM Team	Ongoing	Ongoing

Overall responsibility for objective # 3

Site Facilities Team

Overall target date for achievement of objective # 3

Ongoing



OBJECTIVE # 4

Reduce/maintain reduction in paper use on site.

REASON

Subjective observation of major reduction in paper use since Covid restrictions, indicates potential for long term reduction.

Environmental Aspects: Resource use

PROJECT METHOD

Step	Method	Person Responsible	Target Date	Status
1	Quantify annual paper use from print management system	EMAS Coordinator	Q1 2022	Complete
2	Monitor use on a monthly basis	EMAS Coordinator	Q4 2024	Ongoing
3	Survey users to understand main requirements for paper	EMAS Coordinator	Q4 2022	Complete
4	Identify potential for: Reduction – e.g., print both sides Recycling – ensure all paper is recycled after use, use recycled paper where possible	EMAS Coordinator	Q4 2024	Ongoing
5	Trial potential elimination, reduction, reuse and recycling opportunities	EMAS Coordinator	Q4 2024	Ongoing
6	Reduction of printers in EF to 6 from 11	EMAS Coordinator with ICT	Q4 2024	Ongoing
7	Implement successful opportunities	EMAS Coordinator Procurement/All users	Q2-Q4 2022	Ongoing

Overall responsibility for objective # 4

Colm O'Brien

Overall target date for achievement of objective # 4

December 2022

Annex I Main Legal Requirements

At the beginning of each year, the EMAS Coordinator contracts an external consultancy or legal practice to maintain Eurofound's Register of Environmental Legislation and to provide ongoing updates.

The Register of Environmental Legislation is reviewed/updated continually by an external consultancy at <https://www.hse-compliance.net/?p=101&sp=1>. As a new or updated piece of information is added to the register an automated email is issued to Eurofound users notifying them of the change.

For each piece of legislation, the following information is given in the Legal Register:

- a. Full title of legislation
- b. Reference number
- c. Purpose of the Act/Regulation/Directive
- d. Implications for Eurofound
- e. Summary of the Act/Regulation/Directive

The Register of Environmental Legislation is divided into the following sections:

- | | |
|--------------|--|
| Section 1 - | General Environmental Legislation |
| Section 2 - | Water |
| Section 3 - | Waste |
| Section 4 - | Air Pollution |
| Section 5 - | Physical Planning |
| Section 6 - | Noise |
| Section 7 - | Energy |
| Section 8 - | Dangerous Substances |
| Section 9 - | Emergency Preparedness |
| Section 10 - | Habitats and Eco systems |
| Section 11 - | Existing Licenses, Planning Permissions and EMS Policy |

Any new legal or other requirements which Eurofound becomes aware of or are notified of, should be communicated to the consultancy/legal practice by the EMAS Coordinator. as soon as practicable.

The EMAS Coordinator should review any update to the Register of Environmental Legislation within one week of receipt. Updates with major implications will also be reviewed at Management Review meetings.

The EMAS Coordinator will decide what relevant changes need to be made to the Environmental Management System.

The appropriate personnel will be informed of any changes by the EMAS Coordinator.

Any changes to other documentation within the system will also be made by the EMAS Coordinator.

The Register of Environmental Legislation is reviewed in detail on a regular basis by the EMAS Coordinator to ensure ongoing compliance. This review will be used to determine if Eurofound is complying with the relevant legislation as well as planning permissions or other requirements. Any corrective actions required in order to ensure compliance will be documented at this review and communicated to relevant managers and staff.

Compliance shall be assessed using the Red-on-Line Legal Register compliance assessment tool built into the on-line register. This may be done by 1) using the questionnaires associated with significant environmental legislation and/or 2) completing the legal compliance section of the main page of the piece of legislation and providing a justification for the level of compliance assessed.

In addition, a summary of the changes in legislation is reviewed every six months by the EMAS Coordinator and the implications and any required actions are documented and retained within the EMAS document file.

Eurofound also conducts internal audits and inspections of its operations, including audits of service level agreements and contractual obligations where legal requirements are implemented through external bodies including contractors and suppliers. Internal audits of the EMS will also be used to verify compliance.

An annual review of Eurofound's compliance with relevant Environmental legislation and regulations is carried out at the annual EMS Management Review in addition to the review of legislation/regulations carried out by the EMAS Coordinator.

Annex II Derogation

An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications



FAO: Colm O'Brien
Eurofound,
Wyattville Road,
Loughlinstown,
Dublin,
D18KP65

17/08/2023

Email: colm.o'brien@eurofound.europa.eu

RE: Confirmation of EMAS Derogation

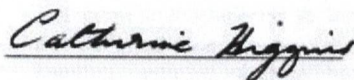
Dear Colm,

I acknowledge the submission of your documentation for derogation under Article 7 of the EMAS Regulation.

The Department of the Environment, Climate and Communications (DECC), as the competent body for EMAS in Ireland, are pleased to advise you that the derogation has been granted for 2023.

Should you have any questions please do not hesitate to contact the undersigned.

Kind Regards



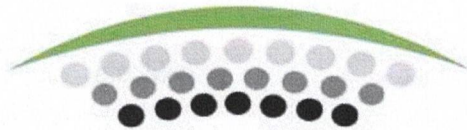
Catherine Higgins,
Assistant Principal
Circular Economy Division

Roinn Comhshaoil, Aeráide agus Cumarsáide
Department of the Environment, Climate and Communications
Bóthar an Bhaile Nua, Loch Garman, Y35 AP90
Newtown Road, Wexford, Y35 AP90

Bóthar an Bhaile Nua, Loch Garman, Y35 AP90
Newtown Road, Wexford, Y35 AP90
T +353 1 678 2000 | 1890 44 99 00
www.gov.ie/decc



Annex III Renewable Electricity Certificate



Captured Carbon



www.capturedcarbon.com

CERTIFICATE OF RENEWABLE SOURCE ELECTRICITY SUPPLY

1ST JANUARY 2023 – 31ST DECEMBER 2023



This certificate confirms that the electricity consumed by the Consuming Company; **Eurofound**, as a client of Supply Company; **GO Power**, has been verified as being sourced from 100% renewable electricity generation by **Captured Carbon** for the period outlined above. The location of consumption is set out below:

MPRN	Location
10005273500	Loughlinstown House, Loughlinstown D18 KP65.

FOR MORE INFORMATION CONTACT: WWW.CAPTUREDCARBON.IE

CERT NO. CCL/ROI/LCC/23/14



EUROFOUND

Environmental Verifier's Declaration on Verification & Validation Activities

BSI Group Italia S.r.l., with EMAS environmental verifier registration number IT-V-0021, accredited for the scope 84.11 "Administration of the State and the economic and social policy of the community" and Dr. Georg Sulzer, with environmental verifier registration number DE-V-0041 licensed for the scope 71.20 "Control activities and technical analysis" and 99.00 "Activities of extraterritorial organisations and bodies" declare to have verified the site(s) or the whole organisation as indicated in the environmental statement of the organisation **EUROFOUND The European Foundation for the Improvement of Living and Working Conditions** with registration number IE-009 meet all requirements of Regulation (EC) N° 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) and subsequent amendments (Regulation (EC) N°1505/2017 and Regulation (EC) N°2026/2018).

By signing this declaration, We declare that:

- The verification and validation have been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009,
- The outcome of the verification and validation confirms that there is no evidence of noncompliance with applicable legal requirements relating to the environment,
- The data and information of the environmental statement of the EUROFOUND The European Foundation for the Improvement of Living and Working Conditions Dublin reflect a reliable, credible and correct image of all the EUROFOUND The European Foundation for the Improvement of Living and Working Conditions activities, within the scope mentioned in the environmental statement.

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

Date :

Done at Altfraunhofen,
26th September, 2024



BSI Group Italia srl Representative

Dr. Georg Sulzer