

CARBON FOOTPRINT 2024 REPORT

December 2025 | Xcalibur Smart Mapping

Table of contents

1. Introduction	3
2. Methodology.....	4
3. Description of the organisation.....	9
4. GHG inventory boundaries.....	10
4.1 Temporal boundary	10
4.2 Organisational boundary	10
4.3 Operational boundary	12
5. Overall results	14
5.1 Carbon footprint.....	14
5.2 Excluded emissions	16
5.3 Comparative table between centres	17
6. GHG emissions comparison	20
7. Mitigation measures and carbon reduction plan monitoring	21
7.1 Use of renewable energy	21
7.2 Energy efficiency promotion	22
7.3 Transport emission reduction plans.....	23
7.4 Sustainable planning and management of resources and facilities.....	24
7.5 Carbon reduction plan monitoring.....	25
8. Annex	31
8.1 Details on the source of emission factors for imported electricity	31
8.2 Use of water	36
8.3 Waste disposal	36
8.4 Details on the data source for upstream leased assets	37
8.5 Other contracted services	43
9. References.....	44

1. Introduction

In the current era, where sustainability and environmental responsibility are global imperatives, Europe is at the forefront in the fight against climate change, setting ambitious commitments to reduce greenhouse gas (GHG) emissions.

Businesses play a crucial role in the fight against climate change, as they are responsible for a significant amount of global GHG emissions. Effective management of these emissions is not only essential to comply with environmental regulations and stakeholder expectations, but also to ensure the long-term sustainability and resilience of organisations.

This corporate GHG emissions report aims to present a detailed analysis of the emissions generated by our operations during 2024. It includes a breakdown by gas type, emission sources, and a comparison with previous years to identify trends and assess the progress in reduction of our Carbon Footprint.

In addition to providing a clear and transparent view of the company's environmental performance, this report is part of our commitment to transparency and accountability, aligning with international sustainability reporting standards.

2. Methodology

The methodological basis for calculating greenhouse gas emissions resulting from an organisation's activities is the application of the following formula:

$$\text{Carbon Footprint} = \text{Activity data} \times \text{Emission Factor}$$

In which:

- Carbon Footprint: total greenhouse gas emissions.
- Activity data: parameter defining the degree of activity (e.g. litres of gasoil C).
- Normalised Emission Factor (EF): assumption of the amount of greenhouse gases emitted per unit of the parameter 'activity data' (e.g. 2,868 kgCO₂e/l).

The unit used to display the results is the tCO₂eq (tonne of CO₂ equivalent), a universal unit of measurement that denotes the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of a unit of carbon dioxide. It is used to measure the impact on climate change of the release of different greenhouse gases through the same unit.

Direct GHG emissions (Scope 1) are also quantified separately for CO₂, CH₄, N₂O, NF₃, SF₆ and other appropriate GHG groups (HFCs and PFCs).

The methodology used to perform Scope 1 and 2 calculations is based on the processes described in the [Corporate Accounting and Reporting Standard of the Greenhouse Gas Protocol](#), which is the most widely implemented international methodology at present and follows the guidelines of the [Intergovernmental Panel on Climate Change](#) (IPCC), while the methodology used for Scope 3 calculations is based on the [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#).

The following table shows the categories and subcategories for data collection, with a detailed description of each. For the subcategories in which the calculation can be performed depending on the type of data collected, the different methodologies applicable are also specified.

The activity data collected can be from:

- Delivery note Invoice: Measured by the supplier, documentary evidence available.
- Direct measurement: Measured by the organisation, data register available.
- Estimate: An estimation based on criteria decided by the organisation.

It should be noted that the present report follows the Spanish system of using commas for decimals and dots for thousands. Moreover, activity data is shown up to two decimals, while emission factors up to three, but calculations are made using all.

1. DIRECT EMISSIONS	Sources owned or controlled by the organisation.
1.1 STATIONARY COMBUSTION	Combustion of fossil fuels in furnaces, boilers or other stationary installations. Engine-generators are also included.
1.1.0 BIOMASS COMBUSTION	Use of biomass as fuel in furnaces, boilers or other fixed installations. Biogas is included. Reported separately from stationary fossil fuel combustion as CO ₂ (biogenic) emissions are notified on and CH ₄ and N ₂ O emissions are accounted for.
1.1.1 and 1.1.2 FOSSIL FUEL COMBUSTION	Emissions are distinguished into: 1.1.1 Installations subject to the Law 1/2005, of 9 th March, which regulates the greenhouse gas emission allowance trading scheme. These emissions will be those that are verified and reported. 1.1.2 Installations not subject to the Law 1/2005, of 9 th March. These emissions are calculated based on fuel consumption.
1.2 MOBILE COMBUSTION	Fuel consumption in vehicles and/or agricultural, forestry or industrial mobile machinery owned, rented or leased. Generally, consumption of those vehicles for which the fuel cost the organisation is responsible for.
1.3 PROCESS EMISSIONS	GHG emissions, other than combustion emissions, produced as a result of intentional or unintentional reactions between substances, or their transformation, including chemical or electrolytic reduction of metal ores, thermal decomposition of substances and the formation of substances for use as products or raw materials for processes. Emissions from fertiliser use, manure management and ruminant livestock farming are included.
1.4 FUGITIVE EMISSIONS	Leakage from air-conditioning and/or refrigeration equipment that uses greenhouse gases and occurs during use or maintenance. This also includes leakage from high voltage switchgear, leakage and/or use of fire extinguishers, anaesthetic gases, propellant gases in food aerosols, etc. The quantity leaked is considered equal to the quantity recharged.
2. INDIRECT EMISSIONS FROM IMPORTED ENERGY	Emissions resulting from the organisation's activities, but occurring at external sources, which are owned or controlled by another organisation, associated with the purchase of energy.
2.0 ELECTRICITY FROM OWNED RENEWABLE INSTALLATIONS	Electricity generated in self-owned renewable energy installations (photovoltaic panels, wind turbines, etc.) either for sale or for self-consumption. Avoided emissions from self-consumption of renewable energy do not 'subtract' emissions, but they do generate avoided emissions that are reported.
2.1 IMPORTED ELECTRICITY	Consumption of electricity from external suppliers. Includes GHG emissions related to the production and consumption of electricity imported by the organisation.

2.2 IMPORTED ENERGY	Consumption of heat, steam, cooling or compressed air that is purchased externally for use in equipment or facilities owned or controlled by the organisation. GHG emissions related to the production of energy consumed by the organisation through a physical network (steam, heating, cooling and compressed air) are included. Electricity is excluded.
3. INDIRECT EMISSIONS FROM TRANSPORT	GHG emissions from sources outside the boundaries of the organisation. These sources are mobile and are mainly due to fuel burned during transportation.
3.1 UPSTREAM TRANSPORT AND DISTRIBUTION OF GOODS	Transport and distribution services purchased by the informing company in the reporting year, including inbound and outbound logistics.
3.1.1 TRANS. AND DISTRIBUTION PURCHASES	Emissions caused by the transport and distribution of products upstream from freight services paid for by the reporting organisation. The most recent transport activity from the supplier to the organisation is included.
3.1.2 TRANS. AND DISTRIBUTION SALES	Emissions caused by transport and distribution of products downstream from freight services provided to first buyers (paid for by the reporting organisation).
3.2 BUSINESS TRAVEL	Transportation of employees for business-related activities during the reporting year, in vehicles not owned or operated but paid for by the reporting company (travel by train, plane, taxi, etc.). Travel by outside staff may be included if it is paid for by the reporting organisation.
3.3 EMPLOYEE COMMUTING	Transportation of employees between their homes and their workplaces and vice versa, in vehicles not owned or operated by the organisation.
3.4 TRANS. OF CLIENTS AND VISITORS	Emissions associated with customer and visitor transportation to the reporting company's premises.
3.5 DOWNSTREAM TRANSPORT AND DISTRIBUTION OF GOODS	Transport and distribution of products sold by the informing company in the reporting year between the company's operations and the final consumer (if not paid for by the reporting company), including retail and storage.

4. INDIRECT EMISSIONS FROM PRODUCTS AND SERVICES USED BY THE ORGANISATION	GHG emissions from sources outside the boundaries of the organisation associated with goods used by the organisation. Sources can be stationary or mobile and are associated with all types of products and services purchased by the reporting organisation.
4.1 PURCHASED GOODS AND SERVICES	Emissions from purchased products associated with the organisation's activity.
4.1.1 RAW MATERIALS 4.1.2 USED PRODUCTS	<p>Products purchased by the organisation. They are classified into raw materials (products or materials that are used or transformed to produce the organisation's output) and used products (other materials or products that are necessary for the organisation's activity but are not directly incorporated into the product being sold).</p> <p>Quantification methodologies:</p> <ul style="list-style-type: none"> - Raw material/product specific. Emissions from production (tier 1) are included. Additionally, if the organisation has recorded data, emissions can be included in a cradle-to-gate approach. - Estimated according to material. Cradle-to-gate emissions are represented according to the weight of materials purchased. Primary materials (not reused nor recycled) are considered. The emissions of material extraction, primary processing, manufacturing and transport to the point of sale are included. - Estimated according to expenditure/activity. Emissions from purchase and contracted services, excluding those related to fossil fuel consumption in buildings and vehicles, electricity consumption and water consumption.
4.1.3 PRODUCTION OF ACQUIRED FUELS	<p>Upstream emissions from purchased fuels: All upstream (cradle-to-gate) emissions from purchased fuels (from raw material extraction to the point of combustion, not including the latter).</p> <p>For the calculation of these emissions, the consumptions declared in the subcategories 1.1 and 1.2 expressed in fuel quantity are taken.</p>
4.1.4 PRODUCTION OF ACQUIRED ELECTRICITY	<p>Includes all emissions from the extraction to the transport and distribution of fuel to the electricity plant, construction of the electricity generating plant, and transport and distribution losses to the final consumer.</p> <p>For the calculation of these emissions, the consumption declared in the subcategory 2.1 is used.</p>
4.2 CAPITAL GOODS	<p>Emissions from capital assets purchased and amortised by the organisation. This includes assets used by the organisation to manufacture a product, provide a service, or sell, store and deliver goods. The amortised portion of the total is included (based on accounting rules). Emissions should be reported each year on a pro-rata basis over the amortisation period.</p> <p>Quantification methodologies:</p> <ul style="list-style-type: none"> - Asset specific (machinery, apparatus, vehicle). Emissions from production (tier 1) are included. Additionally, if data is available to the organisation, emissions can be included on a cradle-to-gate approach. - Estimated according to expenditure/activity. Emissions from purchases of amortised goods. The activity input will be the amount amortised by activity in the year calculated.
4.3 USE OF WATER	Water consumption by the organisation. Emissions from the water cycle are analysed, both before use (collection, purification and distribution) and after use (sewage system, wastewater treatment, reuse and return of treated water to the environment).
4.4 WASTE DISPOSAL	The emissions from solid and liquid waste disposal depend on the characteristics of the waste and its treatment.

4.5 UPSTREAM LEASED ASSETS	<p>Emissions not reported in Scope 1 and 2 from leased assets where the reporting organisation is the lessee (tenant). That is, in those cases where supplies are included, without breakdown, in the cost of the lease.</p> <p>Quantification methodologies:</p> <ul style="list-style-type: none"> - Specific. Includes Scope 1 and 2 emissions from the use of the leased asset. The activity data must be provided by the lessor (owner). - Estimated according to expenditure/activity. Emissions shall be estimated based on rental expenditure. The organisation shall stipulate the percentage of expenditure attributable to the consumption generated by its activity.
4.6 OTHER CONTRACTED SERVICES	<p>Emissions from the use of services that are not described in the above subcategories, including consultancy, cleaning, maintenance, mail delivery or banking.</p> <p>Quantification methodologies:</p> <ul style="list-style-type: none"> - Data source Delivery note/invoice: Service specific. This includes the emissions of the performance of the service. This data must be provided by the service provider. - Data source Estimate: Estimated according to expenditure/activity. Emissions from procurement excluding those related to waste disposal.

In order to contextualise and track emissions over time, the overall emissions impact (absolute emissions in tCO₂e) and the emissions ratio are measured against the indicator defined by the organisation. This should adequately reflect the level of activity of the organisation.

The activity index chosen by the organisation is the annual turnover (in thousands of euros).

Activity index	Parameter chosen by the organisation that defines its activity level	MANDATORY
Indicator Level Organisation	Company activity data, in economic terms from turnover, or in physical terms through the company's production. We recommend using annual turnover.	
Indicator Level Centre	Benchmark that allows comparison between sites to assess the efficiency of each site relative to others of the same type, e.g. annual production in manufacturing and industrial organisations or average annual number of employees (FTE) in service organisations.	For organisations with more than one centre

3. Description of the organisation

Corporate Name: XCALIBUR MULTIPHYSICS GROUP S.L.

CIF/VAT: B85462950

Address: Avda. Partenón, 10, 28042, Madrid, Spain

WEB: www.xcaliburmp.com

Description: Xcalibur Smart Mapping is the global leader in airborne and mapping geophysics industry. We provide comprehensive and sustainable solutions for mapping and assessing natural capital, renewable and non-renewable resources with over 100 years of accumulated experience.

With solid experience and a track record of exponential growth, Xcalibur Smart Mapping offers a wide range of advanced services and technologies for the exploration and evaluation of mineral, energy and environmental resources. Owning a fleet of more than forty aircraft equipped with geophysical systems, we map countries and lands to identify the properties of the sub- and above-surface, and discover potential areas of natural resources, such as critical minerals, hydrogen, or geothermal energy.



4. GHG inventory boundaries

The first stage in the process of calculating an organisation's carbon footprint involves determining the temporal, organisational and operational boundaries that will establish the framework of the study and the subsequent calculation steps.

4.1 Temporal boundary

The calculation of the Carbon Footprint for 2024 is carried out following the calendar year. All data collected corresponds to the period from January 1st to December 31st of 2024.

As reliable and complete information for previous years is not available, 2023 is set as the base year.

Any relevant changes in:

- The structure of the reporting organisation (i.e. merger, acquisition or decommissioning),
- Inventory boundaries (i.e. extension of the calculation categories studied),
- Activity data (by detection of an error or several cumulative errors that are collectively substantial),
- Calculation methodologies or emission factors,

will motivate the recalculation of the base year emissions.

4.2 Organisational boundary

4.2.1 Person responsible for the data

The data used for this calculation has been provided by XCALIBUR MULTIPHYSICS GROUP S.L., by Mrs. Vivian Vergara, ESG Specialist, centralising the requested information from the various corresponding departments.

4.2.2 Approach

To establish the boundaries of the greenhouse gas emissions inventory, the operational control approach is followed. Under this approach, the calculation includes all emissions from operations of facilities, centres, and vehicles over which the reporting organisation has control over, and therefore, has complete and accessible information on.

4.2.3 Centres included in the calculation

All subsidiaries within the group are primarily dedicated to airborne geophysics, leveraging advanced technologies to conduct non-invasive surveys for natural resource mapping. Additionally, they engage in investment activities directed by the corporate office, which supports strategic growth and diversification. These activities are complemented by initiatives aimed at driving business development, ensuring the organisation's sustained expansion and alignment with its overarching objectives.

Centre 1 (HEADQUARTERS): CORPORATE (CRP)

In Spain, there are two offices located in Madrid, one of which is the headquarters of the parent company that carries out "other professional, scientific and technical activities not included elsewhere (n.e.c.)"

Address: Avda. Partenón 10, 2nd Floor, 28042 - Madrid, Spain

Centre 2: SPAIN (ESP)

In Spain, there are two offices located in Madrid; one of which is the operational headquarters for the region that develops "professional, scientific and technical activities".

Address: Avda. Partenón 10, 2nd Floor, 28042 - Madrid, Spain

Centre 3: BRAZIL (BRA)

In Brazil, the office and the warehouse are located in Rio de Janeiro.

Office – LASA Address: Av. Presidente Wilson, 231. 31 Salão 1502 (Parte) - Center - CEP: 20030-02. Rio de Janeiro - RJ. Federative Republic of Brazil.

Warehouse – LASA OLARIA Address: Rua assupa, 48 Olaria CEP 21031-510 - Rio de Janeiro - RJ. Federative Republic of Brazil.

In the current reporting period, the hangar is no longer part of the organisation's operational facilities.

Centre 4: CANADA (CAN)

In Canada, there are two strategically located offices in Ottawa and Toronto. There is also a hangar in Ottawa.

Office and Hangar Address: 300 Comet Private, Ottawa, Ontario K1V 9B2, Canada.

Office Address: 2505 Meadowvale Blvd., Mississauga, Toronto, Ontario L5N 5S2, Canada.

Centre 5: COLOMBIA (COL)

In Colombia, the operations are carried out in Bogotá and Chía - Guaymaral. In Bogotá, there is an office, and in Chía - Guaymaral, a hangar.

Office Address: 118th Street, No. 16-61, Office 501, Bogotá D.C, Colombia.

Hangar Address: 235th Street, Guaymaral Road, Kilometre 2.5, ATG Hangar Entrance.

Centre 6: DEMOCRATIC REPUBLIC OF THE CONGO (DRC)

In the Democratic Republic of the Congo, we operate an office in Kinshasa, which also has an aircraft hangar.

Address: 29, Av. COTEAUX, C/Gombe, V/Kinshasa, P/Kinsasha, Kinshasa, Democratic Republic of the Congo.

Centre 7: INDIA (IND)

In India, there is an office in Hyderabad.

Address: New Marine Lines, Mumbai 400-020, Liberty Building, Sir Vithaldas Thackersey Marg, Mumbai, 400020, Hyderabad, India.

Centre 8: SOUTH AFRICA (SAF)

In South Africa, this location is shared by three hangars and an office, all situated in Pretoria.

Address: Hangar OT8. Wonderboom Airport., Lintveld Road, Wonderboom, South Africa.

Centre 9: UNITED STATES (USA)

In the United States, there is an office in Houston.

Address: 10300 Town Park Drive, Houston, Texas 77072, United States.

Centre 10: AUSTRALIA (AUS)

In Australia, the office and hangar are located in Perth.

Address: Hangar 106. 10 Compass Road, Jandakot (Western Australia) 6164, Australia.

Centre 11: SAUDI ARABIA (SAU)

In Saudi Arabia, there is an office in Riyadh.

Address: Office No.18, Wadi Square, building 7774, 2nd Floor, Uthman Ibn Affan Branch Road, Al Wadi Dist. P.O. Box.4158, Riyadh 13313, Kingdom of Saudi Arabia.

Centre 12: KAZAKHSTAN (KAZ)

In Kazakhstan, there is an office in Astana.

Address: 55/17 Mangilik Yel Ave., Block 3.2, office 142, Astana, Kazakhstan.

4.3. Operational boundary

This report analyses:

- Non-biogenic GHG emissions (arising from non-living sources such as fossil fuels or geological processes).

- Anthropogenic biogenic GHG emissions (resulting from human activity involving biogenic material such as biomass combustion).

The emissions associated with their operations are identified. All scope 1 and scope 2 emissions will be included in the calculations, as well as indirect scope 3 emissions for which the organisation has available data.

To conduct the inventory, we divide emission sources into subcategories:

- We consider the following subcategories as INCLUDED: APPLIES, NON-EXISTENT SOURCE (N/A), and NO ACTIVITY (0).
- We consider the following subcategory as EXCLUDED: NO DATA (N/D).

INVENTORY BOUNDARIES		
APPLIES	The organisation provides activity data and emissions are calculated.	
DOES NOT APPLY	The organisation does not have emission sources for this category.	N/A
NO DATA	The organisation does not have activity data for this category.	N/D
NO ACTIVITY	The source exists, but there is no activity reported in the defined period.	0

This information is detailed for each centre in the NOTES column of its respective Emissions Table.

5. Overall results

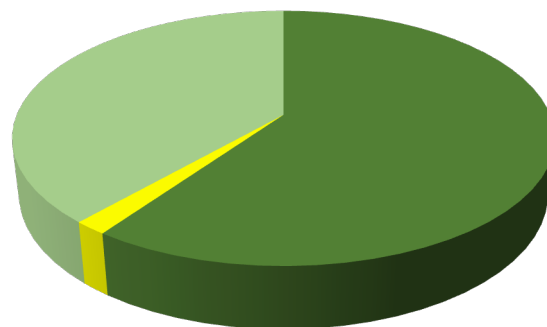
5.1 Carbon footprint

REPORTING COMPANY		XCALIBUR MULTIPHYSICS GROUP S.L.							
REPORTING PERIOD		01/01/2024 - 31/12/2024							
EMISSIONS	NOTES	TOTAL (tCO _{2e})	kg CO ₂	kg CH ₄	kg N ₂ O	kg HFC's	kg PFC's	kg SF ₆	kg NF ₃
	GWP		1	27,9	273	by gas	by gas	24.300	17.400
1. DIRECT EMISSIONS		8.504,97	8.423.409,27	316,92	266,38	0,00	0,00	0,00	0,00
STATIONARY COMBUSTION		49,97	49.871,32	2,72	0,09				
Biomass combustion	N/A								
Fossil fuel combustion		49,97	49.871,32	2,72	0,09				
MOBILE COMBUSTION		8.455,00	8.373.537,95	314,20	266,28				
PROCESS EMISSIONS	N/A								
FUGITIVE EMISSIONS	0								
LAND USE AND FORESTRY CHANGES	N/A								
2. INDIRECT EMISSIONS FROM IMPORTED ENERGY		244,19							
IMPORTED ELECTRICITY	No GdO	244,19							
IMPORTED ENERGY	N/A								
3. INDIRECT EMISSIONS FROM TRANSPORT		2.412,90							
UPSTREAM TRANS. AND DISTRIBUTION OF GOODS	N/D								
BUSINESS TRAVEL		2.412,90							
EMPLOYEE COMMUTING	N/D								
TRANS. OF CLIENTS AND VISITORS	N/D								
DOWNSTREAM TRANS. AND DISTRIBUTION OF GOODS	N/D								
4. INDIRECT EMISSIONS FROM USED PRODUCTS		3.065,99							
RAW MATERIALS AND PRODUCTS	N/D								
PRODUCTION OF ACQUIRED FUELS		1.784,57							
CAPITAL GOODS	N/D								
USE OF WATER		0,63							
WASTE DISPOSAL		13,81							
UPSTREAM LEASED ASSETS		83,85							
CONTRACTED SERVICES		1.183,14							
TOTAL EMISSIONS	tCO_{2e}	14.228,06							
Annual turnover	k€	83.334,99							
RELATIVE EMISSIONS	tCO_{2e}/ k€	0,1707							

NOTES	
DOES NOT APPLY (the organisation does not have emission sources for this category)	N/A
NO DATA (the organisation does not have activity data for this category)	N/D
The source exists, but there has been no activity in this reporting period	0
Annual turnover (in thousands of euros)	k€
Guarantee of Origin certificate for renewable energy (GdO)	GdO

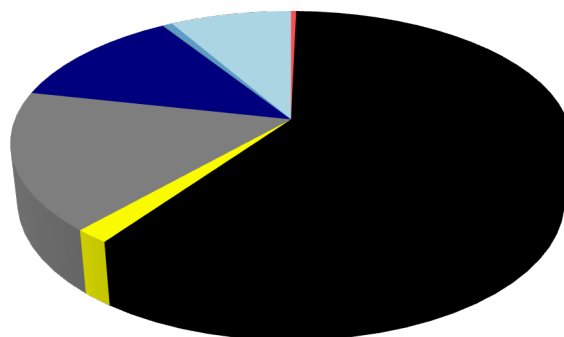
Emissions by scope XCALIBUR MULTIPHYSICS GROUP S.L. – 2024

Key	Emissions	tCO ₂ e	%
	Scope 1: Direct	8.504,97	59,776%
	Scope 2: Indirect from energy	244,19	1,716%
	Scope 3: Other indirect emissions	5.478,90	38,508%

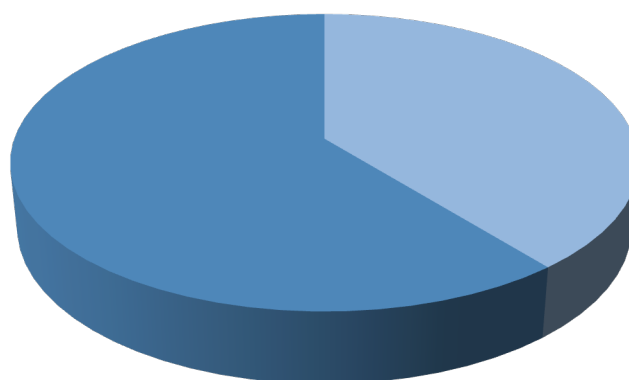


Emission sources by tCO₂e

Key	Emissions	tCO ₂ e	%
	STATIONARY COMBUSTION	49,97	0,351%
	MOBILE COMBUSTION	8.455,00	59,425%
	IMPORTED ELECTRICITY	244,19	1,716%
	BUSINESS TRAVEL	2.412,90	16,959%
	PRODUCTION OF ACQUIRED FUELS	1.784,57	12,543%
	USE OF WATER	0,63	0,004%
	WASTE DISPOSAL	13,81	0,097%
	UPSTREAM LEASED ASSETS	83,85	0,589%
	OTHER SERVICES	1.183,14	8,316%



OTHER SERVICES			
Key	Emissions	tCO ₂ e	%
	Leased aircraft	463,19	39,149%
	Digital emissions (server)	719,95	60,851%
TOTAL emissions		1.183,14	100,000%



5.2 Excluded emissions

Regarding fugitive emissions, some centres of the organisation have fire extinguishers in place, however, data on recharges or use due to maintenance tasks, drills or fire extinguishing is lacking. Therefore, proper calculation on fugitive emissions cannot be done.

Assuming the nearly impossible scenario that all fire extinguishers had been recharged during the reporting year, this would result in 0,094 tCO₂e emissions. Considering that Scope 1 emissions totals 8.504,97 tCO₂e, the fugitive emissions released due to recharge of fire extinguishers would represent 0,00111% of the total Scope 1 emissions.

Thus, as fugitive emissions represent less than 5% of the total Scope 1 emissions, they have been excluded of the calculation in view of their low significance.

Centre	Inventory	Use	Maintenance frequency	Total kgCO ₂ of fire extinguisher	Total emissions Scope 1	Significancy of fire extinguisher emissions
SPAIN	OFFICE 3x5kg	N/D	Annual maintenance	15,00	8.504.972,06	
HEADQUARTERS	OFFICE 2x5kg	N/D	Annual maintenance	10,00		
BRAZIL	OFFICE 4 x 5 kg	N/D	N/D	20,00		
CANADA	N/A	-	-	0,00		
COLOMBIA	OFFICE 1x2,5kg	N/D	Annual maintenance	2,50		
DRC	N/A	-	-	0,00		
INDIA	N/A	-	-	0,00		
SOUTH AFRICA	HANGAR 5 x 5kg; 3 x 2kg	N/D	Annual maintenance	31,00		
USA	OFFICE 2 x 5kg	N/D	N/D	10,00		
AUSTRALIA	HANGAR 3 x 2kg; 10 x 3.5kg; 3 x 5kg OFFICE 1x 2 kg	N/D	Semi-annual maintenance	58,00		
SAUDI ARABIA	N/A	-	-	0,00		
KAZAKHSTAN	OFFICE 2x5kg; HANGAR 4x5 kg; 2x3kg;	N/D	N/D	36,00		
Total kgCO ₂ e				94,00	8.504.972,06	
Total tCO ₂ e				0,094	8.504,97	0,00111%

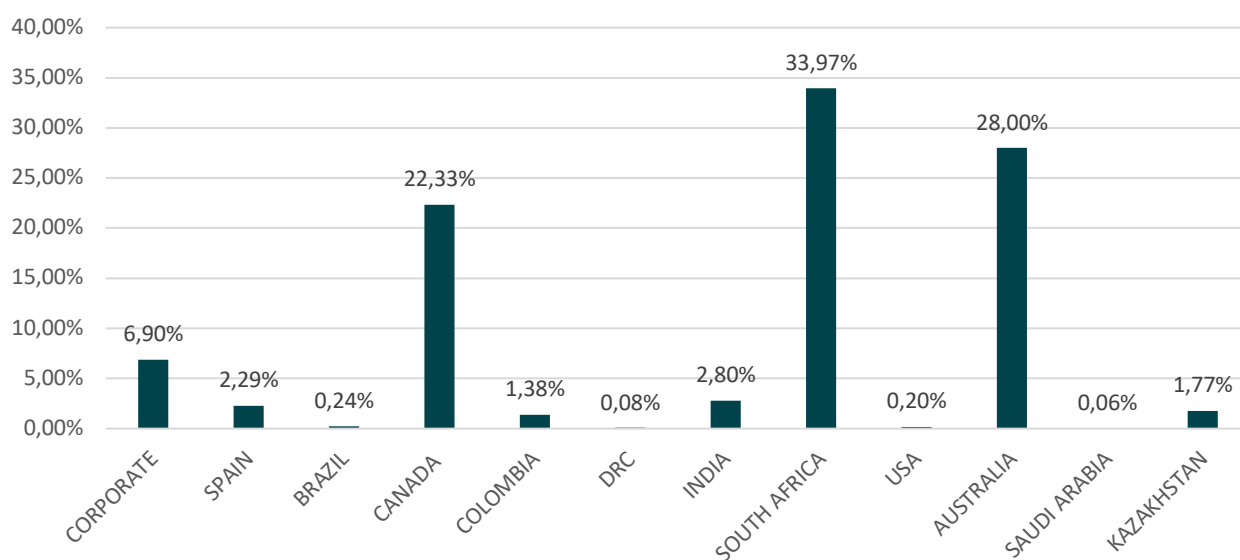
5.3 Comparative table between centres

5.3.1 Scope 1, 2 and 3

REPORTING COMPANY	XCALIBUR MULTIPHYSICS GROUP S.L.												
REPORTING PERIOD	01/01/2024 - 31/12/2024												
EMISSIONS	EMISSIONS tCO ₂ e												
	TOTAL	CRP	ESP	BRA	CAN	COL	DRC	IND	SAF	USA	AUS	SAU	KAZ
1. Direct emissions	8.504,97	0,00	2,13	12,24	2.195,14	152,19	0,00	263,93	3.398,34	0,00	2.285,77	0,00	195,23
Biomass combustion	N/A												
Stationary combustion	49,97	N/A	N/A	0,33	49,48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0,16
Mobile combustion	8.455,00	N/A	2,13	11,91	2.145,66	152,19	N/A	263,93	3.398,34	N/A	2.285,77	N/A	195,07
Mobile comb. – Land	139,66		2,13	3,21	68,52	1,59		0,00	2,10		39,03		23,08
Mobile comb. – Air	8.315,34		0,00	8,70	2.077,14	150,60		263,93	3.396,24		2.246,73		171,99
Process emissions	N/A												
Fugitive emissions	0												
Land use and forestry changes	N/A												
2. Indirect emissions from imported energy	244,19	6,10	12,87	0,00	8,26	0,07	0,00	4,49	72,35	4,47	135,59	0,00	0,00
Imported electricity	244,19	6,10	12,87	N/A	8,26	0,07	N/A	4,49	72,35	4,47	135,59	N/A	N/A
Imported energy	N/A												
3. Indirect emissions from transport	2.412,90	255,11	92,66	18,53	453,59	2,35	9,84	24,51	650,46	2,25	892,31	5,29	5,99
Upstream trans. and distribution of goods	N/D												
Business travel	2.412,90	255,11	92,66	18,53	453,59	2,35	9,84	24,51	650,46	2,25	892,31	5,29	5,99
Employee commuting	N/D												
Trans. of clients and visitors	N/D												
Downstream trans. and distribution of goods	N/D												
4. Indirect emissions from used products	3.065,99	720,02	217,82	3,13	520,22	41,92	0,88	105,23	712,04	21,12	670,75	2,68	50,18
Raw materials and products	N/D												
Production of acquired fuels	1.784,57	0,00	0,57	2,84	466,81	36,01	0,00	54,81	705,81	0,00	476,13	0,00	41,60
Capital goods	N/D												
Use of water	0,63	N/A	N/A	N/A	0,26	N/A	N/A	N/A	0,26	N/A	0,12	N/A	N/A
Waste disposal	13,81	N/D	N/D	N/D	3,15	0,29	N/D	0,33	5,98	N/D	4,06	N/D	N/D
Upstream leased assets	83,85	0,07	0,09	0,28	50,01	0,14	0,88	0,01	N/A	21,12	N/A	2,68	8,57
Other contracted services	1.183,14	719,95	217,17	N/D	N/D	5,49	N/D	50,08	N/D	N/D	190,45	N/D	N/D
TOTAL EMISSIONS	14.228,06	981,23	325,49	33,89	3.177,22	196,53	10,72	398,17	4.833,20	27,84	3.984,42	7,97	251,40
Annual turnover	83.334,99	4.360,50	9.117,10	836,31	25.890,43	1.593,55	N/A	2.116,93	17.859,21	4.164,63	14.243,50	2.183,62	969,20
RELATIVE EMISSIONS	0,1707	0,2250	0,0357	0,0405	0,1227	0,1233	N/A	0,1881	0,2706	0,0067	0,2797	0,0036	0,2594

The following is an expression of the weight of emissions of each subsidiary in relation to the total carbon footprint of the organisation, expressed in both tonnes of CO₂e and percentage.

EMISSIONS FOR tCO ₂ e SCOPE 1, 2 AND 3						
	Centre	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL tCO ₂ e	% TOTAL ORG
CRP	CORPORATE	0,00	6,10	975,13	981,23	6,90%
ESP	SPAIN	2,13	12,87	310,48	325,49	2,29%
BRA	BRAZIL	12,24	0,00	21,66	33,89	0,24%
CAN	CANADA	2.195,14	8,26	973,82	3.177,22	22,33%
COL	COLOMBIA	152,19	0,07	44,27	196,53	1,38%
DRC	DRC	0,00	0,00	10,72	10,72	0,08%
IND	INDIA	263,93	4,49	129,74	398,17	2,80%
SAF	SOUTH AFRICA	3.398,34	72,35	1.362,51	4.833,20	33,97%
USA	USA	0,00	4,47	23,37	27,84	0,20%
AUS	AUSTRALIA	2.285,77	135,59	1.563,06	3.984,42	28,00%
SAU	SAUDI ARABIA	0,00	0,00	7,97	7,97	0,06%
KAZ	KAZAKHSTAN	195,23	0,00	56,16	251,40	1,77%
	Total Org	8.504,97	244,19	5.478,90	14.228,06	100,00%



Percentage of CO₂e emissions relative to the total of the organisation.

5.3.2 Scope 1 and 2

SCOPE 1 AND 2 EMISSIONS IN tCO ₂ e							
Centre	Stationary combustion	Mobile combustion	SCOPE 1	Imported electricity	SCOPE 2	TOTAL tCO ₂ e	% SCOPE 1 AND 2
CRP	0,00	0,00	0,00	6,10	6,10	6,10	0,07%
ESP	0,00	2,13	2,13	12,87	12,87	15,01	0,17%
BRA	0,33	11,91	12,24	0,00	0,00	12,24	0,14%
CAN	49,48	2.145,66	2.195,14	8,26	8,26	2.203,40	25,18%
COL	0,00	152,19	152,19	0,07	0,07	152,26	1,74%
DRC	0,00	0,00	0,00	0,00	0,00	0,00	0,00%
IND	0,00	263,93	263,93	4,49	4,49	268,42	3,07%
SAF	0,00	3.398,34	3.398,34	72,35	72,35	3.470,69	39,67%
USA	0,00	0,00	0,00	4,47	4,47	4,47	0,05%
AUS	0,00	2.285,77	2.285,77	135,59	135,59	2.421,35	27,68%
SAU	0,00	0,00	0,00	0,00	0,00	0,00	0,00%
KAZ	0,16	195,07	195,23	0,00	0,00	195,23	2,23%
Total Org	49,97	8.455,00	8.504,97	244,19	244,19	8.749,17	100,00%

5.3.3 Scope 3

SCOPE 3 EMISSIONS IN tCO ₂ e								
Centre	Business travel	Production of acquired fuels	Use of water	Waste disposal	Upstream leased assets	Other services	SCOPE 3	% TOTAL SCOPE 3
CRP	255,11	0,00	0,00	0,00	0,07	719,95	975,13	17,80%
ESP	92,66	0,57	0,00	0,00	0,09	217,17	310,48	5,67%
BRA	18,53	2,84	0,00	0,00	0,28	0,00	21,66	0,40%
CAN	453,59	466,81	0,26	3,15	50,01	0,00	973,82	17,77%
COL	2,35	36,01	0,00	0,29	0,14	5,49	44,27	0,81%
DRC	9,84	0,00	0,00	0,00	0,88	0,00	10,72	0,20%
IND	24,51	54,81	0,00	0,33	0,01	50,08	129,74	2,37%
SAF	650,46	705,81	0,26	5,98	0,00	0,00	1.362,51	24,87%
USA	2,25	0,00	0,00	0,00	21,12	0,00	23,37	0,43%
AUS	892,31	476,13	0,12	4,06	0,00	190,45	1.563,06	28,53%
SAU	5,29	0,00	0,00	0,00	2,68	0,00	7,97	0,15%
KAZ	5,99	41,60	0,00	0,00	8,57	0,00	56,16	1,03%
Total Org	2.412,90	1.784,57	0,63	13,81	83,85	1.183,14	5.478,90	100,00%

6. GHG emissions comparison

REPORTING COMPANY EMISSIONS	NOTES	2023	2024	2023 - 2024
	GWP	tCO ₂ e	tCO ₂ e	%
1. DIRECT EMISSIONS		9.364,58	8.504,97	-9,18%
BIOMASS COMBUSTION	N/A			--
STATIONARY COMBUSTION		73,25	49,97	-31,78%
MOBILE COMBUSTION		9.291,33	8.455,00	-9,00%
MOBILE COMBUSTION - Land		132,76	139,66	5,20%
MOBILE COMBUSTION - Air		9.158,57	8.315,34	-9,21%
PROCESS EMISSIONS	N/A			--
FUGITIVE EMISSIONS	N/A			--
LAND USE AND FORESTRY CHANGES	N/A			
2. INDIRECT EMISSIONS FROM IMPORTED ENERGY		186,27	244,19	31,10%
IMPORTED ELECTRICITY		186,27	244,19	31,10%
IMPORTED ENERGY	N/A			--
3. INDIRECT EMISSIONS FROM TRANSPORT		1.576,17	2.412,90	53,09%
UPSTREAM TRANS. AND DISTRIBUTION OF GOODS	N/D			--
BUSINESS TRAVEL		1.576,17	2.412,90	53,09%
EMPLOYEE COMMUTING	N/D			--
TRANS. OF CLIENTS AND VISITORS	N/D			--
DOWNSTREAM TRANS. AND DISTRIBUTION OF GOODS	N/D			--
4. INDIRECT EMISSIONS FROM USED PRODUCTS		3.881,68	3.066,00	-21,01%
RAW MATERIALS AND PRODUCTS	N/D			--
PRODUCTION OF ACQUIRED FUELS		1.950,50	1.784,57	-8,51%
CAPITAL GOODS	N/D			--
USE OF WATER		0,85	0,63	-26,40%
WASTE DISPOSAL		13,73	13,81	0,53%
UPSTREAM LEASED ASSETS			83,85	--
OTHER CONTRACTED SERVICES		1.916,60	1.183,14	-38,27%
TOTAL EMISSIONS SCOPE 1 AND 2	tCO₂e	9.550,85	8.749,17	-8,39%
Annual turnover	k€	93.523,83	83.334,99	-10,89%
RELATIVE EMISSIONS	tCO₂e/k€	0,1021	0,1050	2,81%
TOTAL EMISSIONS SCOPE 1, 2 AND 3	tCO₂e	15.008,70	14.228,06	-5,20%
Annual turnover	k€	93.523,83	83.334,99	-10,89%
RELATIVE EMISSIONS	tCO₂e/k€	0,1605	0,1707	6,39%

7. Mitigation measures and carbon reduction plan monitoring

Beyond quantifying the GHG emissions for which an organisation is responsible, the carbon footprint provides a foundation for action by enabling the setting of improvement and reduction targets. Mitigation measures refer to actions designed to reduce, prevent, or limit greenhouse gas emissions.

In the following tables, the measures defined in last year's report are summed up, followed by an updated monitoring on their implementation status and other additions.

7.1 Use of renewable energy

MEASURE	IMPLEMENTATION	COMMENTS
Replacement of boilers that use fossil fuels with biomass boilers.	<input checked="" type="checkbox"/> Implemented <input checked="" type="checkbox"/> Under study	Implanted: BRA. Under study: COL, SAF and AUS.
Purchase of 100% renewable electricity.	<input checked="" type="checkbox"/> Under study	
Replacement of the vehicle fleet with hybrid and/or electric models.	<input checked="" type="checkbox"/> Implemented <input checked="" type="checkbox"/> Under study	Implemented: CRP and ESP. Replacing the fleet of company vehicles with hybrid and/or electric models. Additionally, an MOU has been signed with Monte to transition the aircraft fleet once the technology is available.
Installation of photovoltaic panels to reduce electricity consumption from the grid.	AUSTRALIA: Prohibition due to glare hazard at the airport. BRAZIL: Implementation of solar panels to supply energy at operational bases. Power for the equipment used at the bases, which operates during all flights, used to come from vehicle-type batteries, recharged daily. With the energy provided by solar panels, both time and energy expenditure in the process are reduced.	

In the current reporting year, the organisation hasn't expanded the implementation of measures of this category. However, in the South Africa centre, they are studying the viability of the installation of photovoltaic panels along with the purchase of renewable electricity and replacement of the vehicle fleet with hybrid or electric models.

7.2 Energy efficiency promotion

MEASURE	IMPLEMENTATION	COMMENTS
Installation of combustion analysers to improve the energy efficiency of boilers.	☑ Under study	
Installation of heat recovery units.	☑ Under study	
Renewal of conventional luminaires with low-energy bulbs, LEDs, etc.	☑ Implemented ☑ Under study	Implemented: CRP, ESP, SAF and CAN. Under study: AUS and COL.
Renewal of equipment (computer screens, printers, etc.) that are more efficient than those being replaced, with A+, A++, A+++ label.	☑ Under study	
Replacement of analogue thermostats with digital thermostats to improve comfort temperature management.	☑ Under study	
Installation of ambient temperature and relative humidity sensors to improve the management of the air-conditioning system.	☑ Under study	
Sharing computer towers to reduce electricity consumption.	☑ Under study	
Use of satellite internet (Starlink).	BRAZIL - The internet used is via satellite, which minimises the need (in different cities, sometimes very small and with little infrastructure) to install, maintain and uninstall their internet provider equipment.	

In 2024, the organisation has implemented several measures, such as the renewal of conventional luminaries, the renewal of electrical equipment that is more efficient and the replacement of analogue thermostats. Most of these measures have been carried out in the SAF, CAN, AUS, BRA and ESP centres. Additionally, the Brazil centre has also implemented sharing computer towers, while CRP and ESP have also worked on installing sensors to improve the management of the air-conditioning system. Furthermore, while initially not considered, the organisation has replaced their conventional boilers with more efficient ones to improve the energy efficiency in their Spanish centres.

Additionally, the use of Starlink in Brazil allows reduced infrastructure and energy overhead. Likewise, the solar photovoltaic panels help power their base equipment, allowing for a reduced electricity consumption.

7.3 Transport emission reduction plans

MEASURE	IMPLEMENTATION	COMMENTS
Use of bicycles.	☑Under study	
Agreements with green/ecological taxis.	☑Implemented	Implemented: ESP. Establishment of agreements with Uber and Bolt, with preference in choosing the “green” option.
Prioritisation of rail travel over air and/or car, where feasible.	☑Implemented	
Prioritisation of travel by public transport.	☑Implemented	
Monitoring of vehicle tyre pressure to avoid additional fuel consumption as a result.	☑Under study	
Installation of consumption control software to implement reduction actions.	☑Under study	Under study: Group.
Recording of journeys made in order to implement optimisation measures.	☑Under study	Implemented: Group-level travel policy that establishes more rigorous control of consumption during business trips.
Installation of electric chargers to facilitate in itinerary transport of employees, customers and visitors with electric vehicles.	☑Implemented	Implemented: CRP and ESP. Arrangement of chargers for company profiles with corporate car.

Conscious that most of their emissions are from combustion of fossil fuels in Scope 1 and business travel and production of acquired fuels in Scope 3, the organisation has placed emphasis on expanding the implementation of measures of this category.

Starting with a group-level implementation of recording all journeys made for later analysis, it has also executed the plan to monitor tyre pressure to reduce fuel consumption in SAF, CAN, AUS and BRA. In addition, public transportation and rail travel is prioritised in CRP-ESP and in CAN, other than rail travel, the work of installing electric chargers has also been carried out.

7.4 Sustainable planning and management of resources and facilities

MEASURE	IMPLEMENTATION	COMMENTS
Implementation of a remote management system with an energy manager.	<input checked="" type="checkbox"/> Not considered	Under study: AUS. Review bills and implement energy use efficiency measures whenever possible.
Establish protocols for switching equipment on and off according to schedules.	<input checked="" type="checkbox"/> Implemented	
Establish energy saving protocols.	<input checked="" type="checkbox"/> Implemented	Implemented: SAF. Compressor activation only on demand, with immediate shutdown after use. Reusing coffee cups and washing them only at the end of the day.
Remote control of equipment.	<input checked="" type="checkbox"/> Implemented	Implemented: CRP and ESP.
Configuration of devices in energy-saving mode.	<input checked="" type="checkbox"/> Implemented	
Sectorisation of lighting and air-conditioning consumption.	<input checked="" type="checkbox"/> Under study	Under study: SAF. Restricting workshop lighting to specific work areas.
Installation of timers.	<input checked="" type="checkbox"/> Under study	
Installation of presence detectors at transit points.	<input checked="" type="checkbox"/> Implemented <input checked="" type="checkbox"/> Under study	Implemented: SAF and USA. USA - Installation of lights with motion sensors.
Implementation of climate control or setting of setpoint temperatures.	<input checked="" type="checkbox"/> Implemented <input checked="" type="checkbox"/> Under study	Implemented: CRP and ESP. Temperature management: the air conditioning is adapted depending on the climate and the type of work activity. Generally, no higher than 19°C in winter and no lower than 27°C in summer.
Installation of dimmers and light regulators.	<input checked="" type="checkbox"/> Under study	

In the present year, SAF has established protocols for equipment uptime according to schedules, while CAN has assigned responsibilities to have this issue under control. In addition, the Canadian centre has implemented several energy efficiency measures, including the installation of thermostats, configuring appliances to operate in energy-saving mode by default, introducing climate control measures, and implementing zoning across its lighting and air-conditioning systems. AUS and CRP-ESP have also adopted similar initiatives, such as installing thermostats, zoning lighting and air-conditioning systems, and applying climate control solutions. Furthermore, the Spanish headquarters has installed motion sensors in transit areas to further reduce office energy consumption.

7.5 Carbon reduction plan monitoring

Below, an analysis of the impact the mitigation measures discussed in the Reduction Plan have on the emissions trend of XCALIBUR MULTIPHYSICS GROUP S.L. (hereafter, XCALIBUR) is presented.

In the following table (table 1), a comparison of the actual results with those estimated in the original Plan in reference to the baseline (year 2023) is shown:

Table 1. Evolution of emissions by source and comparison between actual and estimated values (2023–2024).

XCALIBUR	ACTUAL kgCO ₂ e			ESTIMATED kgCO ₂ e	
SOURCE OF EMISSIONS	2023	2024	2023 - 2024	2024	2023 - 2024
Stationary combustion	73.247,29	49.972,32	-31,78%	73.247,29	0%
Mobile combustion – Land	132.755,19	139.661,35	5,20%	128.772,53	-3%
Mobile combustion – Air	9.158.574,46	8.315.338,38	-9,21%	9.158.574,46	0%
Fugitive emissions	0,00	0,00	-	0,00	0%
Imported electricity	186.270,36	244.193,51	31,10%	176.956,84	-5%
TTL KgCO₂e	9.550.847,30	8.749.165,56	-8,39%	9.537.551,13	-0,14%
TTL tCO ₂ e	9.550,85	8.749,17	-8,39%		
Annual turnover (k€)	93.523,83	83.334,99	-10,89%		
Relative emissions tCO₂e/k€	0,1021	0,1050	2,81%		

If we look at the total emissions in absolute numbers, we observe a clear downward trend, caused mainly by an important reduction in stationary combustion and at a lesser rate, in air mobile combustion. While unplanned, these decreases contribute to largely exceeding the original reduction projection of 0,14%. However, if we relativise the total emissions considering annual turnover, the result is contrary to the previous trend.

Relative emissions allow us to compare the emissions of both periods considering the actual level of activity. In this case, while annual emissions have seen a reduction, annual turnover has experienced a bigger drop, causing an upwards trend in GHG relative emissions. Therefore, the decrease in combustion emissions could be ascribed to a lesser activity level for the current reporting period.

Next, the trend of emissions by category is analysed in relation to the actions implemented.

Mobile combustion – Land. Expected reduction of 3%

During the current study period, emissions associated with fuel combustion of land vehicles increased by 5,20% compared to the previous year. However, this increase should be interpreted considering that in 2024, the Kazakhstan branch was incorporated. But at the same time, DRC did not record any consumption during the same period, leading to a mismatch in data comparison.

To carry out a coherent and technically comparable assessment, the data corresponding to both the DRC branch in 2023 and the Kazakhstan branch in 2024 have been excluded from the analysis. Under these conditions, emissions from mobile combustion show a reduction of 9,26% compared to the previous year, together with a decrease in total fuel consumption of 12,07% (Table 3). This reduction is attributed to the implementation of the mitigation actions previously described.

The difference observed between the reduction in consumption and in emissions is explained by a drop in the use of fuels with lower emission factors, which has altered the consumption profile and its impact in terms of emissions.

Table 2 presents the fuel consumption and the associated emissions by country for 2023 and 2024.

Table 2. Fuel consumption and emissions for Land mobile combustion by country and year (2023–2024).

2023	Passenger car Petrol (L)	Passenger car Diesel B7 (L)	Van Diesel B7 (L)	Passenger car Bioethanol (L)	Total litres	KgCO ₂ e
SPAIN	-	-	647,90	-	647,90	1.628,21
BRAZIL	3.450,62	2.814,11	-	467,60	6.732,33	14.314,32
CANADA	31.742,42	418,59	-	-	32.161,01	67.635,52
COLOMBIA	176,13	330,64	-	-	506,77	1.200,37
DRC	-	1.700,00	-	-	1.700,00	4.272,20
SAF	-	-	840,00	-	840,00	2.110,97
AUSTRALIA	-	16.552,68	-	-	16.552,68	41.597,81
KAZAKHSTAN	-	-	-	-	-	-
Total	35.369,17	21.816,02	1.487,90	467,60	59.140,69	132.759,40

2024	Passenger car Petrol (L)	Passenger car Diesel B7 (L)	Van Diesel B7 (L)	Passenger car Bioethanol (L)	Total litres	KgCO ₂ e
SPAIN	622,51	195,78	137,15	-	955,44	2.134,57
BRAZIL	1.156,18	318,68	-	152,84	1.627,70	3.212,58
CANADA	21.087,70	9.768,90	-	-	30.856,60	68.515,22
COLOMBIA	431,7	274,08	-	-	705,78	1.588,88
DRC	-	-	-	-	-	-
SAF	-	-	835,09	-	835,09	2.099,23
AUSTRALIA	-	15.528,00	-	-	15.528,00	39.034,01
KAZAKHSTAN	3.113,59	6.598,20	-	-	9.711,79	23.076,87
Total	26.411,68	32.683,64	972,24	152,84	60.220,40	139.661,35

In Table 3, a summary of the organisation's total fuel consumption and emission results are shown, along with the recalculated results excluding the Kazakhstan and DRC branches to facilitate a consistent comparison between both reporting years.

Table 3. Comparison of fuel consumption and emissions: total results and results excluding KAZ and DRC (2023–2024).

Mobile combustion – Land	2023	2024	2023 – 2024 (%)
TOTAL EMISSIONS (kgCO ₂ e)	132.759,40	139.661,35	5,20%
TOTAL LITRES	59.140,69	60.220,40	1,83%
EMISSIONS excl. KAZ/DRC (kgCO ₂ e)	128.487,21	116.584,49	-9,26%
LITRES excl. KAZ/DRC	57.440,69	50.508,61	-12,07%

In conclusion, considering the evolution of emissions under homogeneous conditions for the 2023 and 2024 reporting years, by excluding the DRC and Kazakhstan branches, an effective decrease of 9,26% has been achieved, significantly exceeding the initially projected target of 3% reduction in emissions from land mobile combustion.

Imported electricity. Expected reduction of 5%

For the current study period, emissions associated with imported electricity increased by 31,10%. However, in truth, the organisation's total electricity consumption decreased by 20,48%. This situation can be mainly explained by the increase in value for the applied electricity emission factors, which offset the reduction in consumption in terms of emissions.

Below, an analysis of electricity consumption by country is presented in table 4. Similarly, a comparison of electricity EF and emissions by country is shown in table 5.

Table 4. Comparison of electricity consumption by office and year (2023–2024).

OFFICE	2023 (kWh)	2024 (kWh)	2023 – 2024 (%)
SPAIN	43.214,67	46.808,66	8,32%
CORPORATE	16.551,12	22.168,56	33,94%
CANADA	168.559,39	102.029,77	-39,47%
COLOMBIA	852,00	418,00	-50,94%
INDIA	5.599,00	6.169,00	10,18%
SAF	62.199,71	66.428,00	6,80%
USA	75.493,00	13.289,00	-82,40%
AUSTRALIA	161.630,00	167.390,00	3,56%
Total	534.098,89	424.700,99	-20,48%

As described above, a few countries have shown a notable drop in electricity consumption: the United States, Colombia and Canada, in order of amount reduced.

Table 5. Comparison of imported electricity EF and emissions by office and year (2023–2024).

Imported electricity	EF (kgCO ₂ e/kWh)			Emissions (kgCO ₂ e)		
	2023	2024	2023 - 2024 (%)	2023	2024	2023 - 2024 (%)
ESP*	0,2600	0,2830	8,85%	11.235,81	13.246,85	17,90%
CRP*	0,2600	0,2830	8,85%	4.303,29	6.273,70	45,79%
CAN	0,0300	0,0810	170,00%	5.056,78	8.264,41	63,43%
COL	0,1336	0,1770	32,49%	113,83	73,99	-35,00%
IND	0,6001	0,7270	21,15%	3.359,96	4.484,86	33,48%
SAF	0,8052	1,0891	35,26%	50.083,21	72.346,73	44,45%
USA	0,3512	0,3361	-4,30%	26.513,14	4.466,43	-83,15%
AUS	0,5300	0,8100	52,83%	85.663,90	135.585,90	58,28%

Note: As there are different EF values for ESP and CRP, the national mix has been used for reference. Thus, the emissions shown for both offices are not the actual results and only an estimation using the national mix and electricity consumption.

Although the Canadian office has experienced a reduction of 39,47% in electricity consumption, this is not represented by its resulting carbon footprint emissions due to the rise in the Canadian electricity mix for 2024.

In any case, the decrease in electricity consumption in Canada can be mainly attributed to the implementation of the reduction actions previously described. However, it should also be noted that there has been an important change in the billing system for this office: in 2023, electricity consumption was billed to the property owner, who subsequently charged XCALIBUR for 36% of the estimated total consumption. As of 2024, the electricity supplier directly bills XCALIBUR for the actual, site-specific consumption, which may have resulted in the inclusion of electricity consumption not directly attributable to the organisation in 2023. For this reason, the results should be interpreted with caution, as year-on-year comparability is affected by the change in the billing methodology. Nonetheless, we consider it a positive change as it allows for closer and more correct monitoring of future measures.

On the other hand, attention to the United States office should be given, as it has managed a pronounced drop in both electricity consumption and carbon emissions, even though no significant mitigation measures have been implemented. The explanation as to how this reduction has been achieved can be understood if we look at the origin of their data. For the current reporting year, only consumption corresponding to the period from January to April has been included, as from May onwards electricity consumption is included in the rental agreement and, thus, considered Scope 3.

Similarly for the Colombian office, while no significant mitigation actions have been implemented, they have shown a notable decrease in electricity consumption and emissions for imported electricity, despite the 32,49% rise in its electricity mix.

Below, the evolution of emissions for the categories for which no reduction had been planned for is analysed.

Stationary combustion

In this category, consumption associated with generator sets in Spain, Brazil and Kazakhstan is included, as well as consumption related to heating in Canada.

During the current period, emissions decreased by 31,78% compared to the previous year. This reduction is mainly due to the decrease in natural gas consumption in Canada, which fell by 32,62%, contributing significantly to the overall reduction of emissions in this category.

Mobile combustion – Air

During the period analysed, emissions associated with fuels used in aircraft decreased by 9,21%. This reduction is primarily explained by an overall decrease in fuel consumption, as seen in table 6, and is mainly due to lower operational activity.

Table 6. Total fuel consumption for Air mobile combustion by office and year (2023–2024).

Mobile combustion – Air	2023 (L)	2024 (L)	2023 – 2024 (%)
BRAZIL	0,00	3.419,00	-
CANADA	404.982,19	822.519,68	103,10%
COLOMBIA	72.021,60	61.973,90	-13,95%
INDIA	319.640,00	103.775,00	-67,53%
SAF	1.652.313,00	1.335.356,00	-19,18%
AUSTRALIA	1.152.954,70	883.428,00	-23,38%
KAZAKHSTAN	0,00	67.625,00	-
Total	3.601.911,49	3.278.096,58	-8,99%

If we look at table 7, despite the rise in consumption of aviation spirit (AVGAS), the reduction of aviation turbine fuel (Aviation Turbine Fuel – Jet Fuel, Jet A1) is enough to offset its impact. This is due to aviation turbine fuel having a higher emission factor than aviation spirit. As a result, overall emissions show a downward trend.

Table 7. Total fuel consumption for Air mobile combustion by type and year (2023–2024).

Total fuel consumption by type	2023 (L)	2024 (L)	2023 – 2024 (%)
Aviation Spirit (AVGAS)	10.633,65	103.562,40	873,91%
Aviation turbine fuel (JET FUEL, JET A1)	3.591.277,84	3.174.534,18	-11,60%
Total	3.601.911,49	3.278.096,58	-8,99%

Table 8. Detail on fuel type consumption for Air mobile combustion by office and year (2023–2024).

2023	Aviation Spirit (AVGAS) (L)	Aviation turbine fuel (JET FUEL, JET A1) (L)	Total litres
BRAZIL	-	-	-
CANADA	-	404.982,19	404.982,19
COLOMBIA	9.690,65	62.330,95	72.021,60
INDIA	-	319.640,00	319.640,00
SAF	-	1.652.313,00	1.652.313,00
AUSTRALIA	943,00	1.152.011,70	1.152.954,70
KAZAKHSTAN	-	-	-
Total	10.633,65	3.591.277,84	3.601.911,49

2024	Aviation Spirit (AVGAS) (L)	Aviation turbine fuel (JET FUEL, JET A1) (L)	Total litres
BRAZIL	-	3.419,00	3.419,00
CANADA	69.881,00	752.638,68	822.519,68
COLOMBIA	33.156,40	28.817,50	61.973,90
INDIA	-	103.775,00	103.775,00
SAF	-	1.335.356,00	1.335.356,00
AUSTRALIA	525,00	882.903,00	883.428,00
KAZAKHSTAN	-	67.625,00	67.625,00
Total	103.562,40	3.174.534,18	3.278.096,58

The organisation will maintain the reduction objectives projected for 2028 (5,50% less than 2023). In future reporting years, the organisation will keep striving to implement mitigation measures according to the plan and analysing its real emissions compared to the projected trend.

In the following table (table 9), the reduction percentages of each year are shown, updated with real data followed by the estimated values for future periods:

Table 9. Carbon footprint baseline, actual results and future projections (2025–2028).

SCOPE	SOURCE OF EMISSIONS	Baseline 2023 (kgCO ₂ e)	CF 2024 (kgCO ₂ e)	ESTIMATED CARBON FOOTPRINT (kgCO ₂ e)			
				2025	2026	2027	2028
Scope 1	Stationary combustion	73.247,29	49.972,32	73.247,29	73.247,29	73.247,29	69.584,93
	Mobile comb. – Land	132.755,19	139.661,35	124.789,88	119.479,67	114.169,46	106.204,15
	Mobile comb. – Air	9.158.574,46	8.315.338,38	9.158.574,46	9.066.988,72	8.883.817,23	8.700.645,74
Scope 2	Imported electricity	186.270,36	244.193,51	173.231,43	169.506,03	158.329,81	149.016,29
Scope 1 + 2		9.550.847,30	8.749.165,56	9.529.843,06	9.429.221,70	9.229.563,79	9.025.451,10
% Annual reduction			-8,39%	8,92%	-1,06%	-2,12%	-2,21%

Note: The percentage of annual reduction is obtained in comparison to each previous year.

8. Annex

8.1 Details on the source of emission factors for imported electricity

8.1.1 CORPORATE (HEADQUARTERS) AND SPAIN

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Spain, a market-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The emission factor applied corresponds to the electricity mix supplied by Endesa Energía, S.A.U., based on data published by the Spanish Office for Climate Change (OECC 2025) within the national system of electricity labelling and Guarantees of Origin (GdO).

According to the official information available, the emission factor associated with the electricity mix supplied by Endesa Energía, S.A.U. for the current reporting year is 0,275 kgCO₂e/kWh. This value reflects the carbon intensity of the contracted electricity supply, calculated from the declared generation mix of the supplier and verified by the National Authority for Markets and Competition (CNMC) through the national electricity certification system (GdO).

Therefore, this factor is considered representative of the market-based approach, as it incorporates supplier-specific data on the generation mix of the electricity supplied.

8.1.2 BRAZIL

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Brazil, a location-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The official grid emission factor for the national electricity system was published by the Ministry of Science, Technology and Innovation (MCTI) within the framework of the National Emissions Registration System (SIRENE), the governmental body responsible for compiling and reporting the emission factors associated with electricity generation in the National Interconnected System (SIN).

According to the publication “Fatores de emissão de CO₂ pela geração de energia elétrica no Sistema Interligado Nacional (SIN) – Ano Base 2024”, published by the MCTI in 2025, the average emission factor of the Brazilian grid is 0,0523 kgCO₂e/kWh.

This value reflects the high predominance of renewable sources, mainly hydropower, complemented by biomass, wind and solar generation, and represents an official, traceable and up-to-date reference for corporate greenhouse-gas reporting under the location-based approach.

8.1.3 CANADA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Canada (province of Ontario), a location-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The emission factor for Ontario was published by The Atmospheric Fund (TAF) in its report “Ontario Electricity Emissions Factors and Guidelines. June 2024 Edition”. The report provides average grid emission factors derived from actual 2024 generation data reported by the Independent Electricity System Operator (IESO).

The EF of 0,0810 kgCO₂e/kWh represents the average carbon intensity of Ontario’s electricity grid for 2024, calculated based on real generation outputs. As the figure represents a provincial grid-average and does not refer to supplier-specific data, it is considered applicable to the location-based approach.

This value reflects the predominance of low-carbon and zero-emission sources (hydropower, nuclear, and renewables) in Ontario’s power mix, complemented by a residual share of natural gas.

Note: The Atmospheric Fund is a public regional organisation recognised by the Government of Ontario, which develops its estimates based on official IESO data. While not a governmental (ministerial) source, it is transparent, its methodology robust, and widely used for corporate GHG inventories and reporting.

8.1.4 COLOMBIA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Colombia, a location-based approach was applied in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The official grid emission factor of the National Interconnected System (SIN) was published by the Mining and Energy Planning Unit (UPME), an agency under the Ministry of Mines and Energy responsible for calculating national electricity generation emission factors.

According to the report “Factores de Emisión del Sistema Interconectado Nacional – SIN para el año 2023” published by UPME in December 2024, the average grid emission factor for Colombia’s electricity system is 0,177 kgCO₂e/kWh.

This figure represents the average carbon intensity associated with the generation of electricity in Colombia’s interconnected system, which is largely composed of hydropower sources, complemented by thermal generation from natural gas and coal. Therefore, this value is considered representative of the location-based approach, as it reflects the average emissions of the national electricity mix.

8.1.5 DEMOCRATIC REPUBLIC OF THE CONGO

For the calculation of Scope 2 indirect emissions associated with electricity consumption in the Democratic Republic of the Congo (DRC), a location-based approach was adopted in line with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

In the absence of an official grid emission factor published by the national electricity company (SNEL) or the Electricity Regulation Authority (ARE), verified international sources were used to determine the carbon intensity of the national power mix.

According to Low Carbon Power (which referenced EMBER data), the average carbon intensity of electricity in the DRC is 59 gCO₂e/kWh for 2023, equivalent to 0,059 kgCO₂e/kWh. This value reflects the predominantly hydroelectric nature of the Congolese power system and provides an updated and traceable estimate for the location-based approach.

8.1.6 INDIA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in India, a location-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The official grid emission factor for the national electricity system was published by the Central Electricity Authority (CEA), a statutory body under the Ministry of Power of the Government of India, responsible for maintaining the CO₂ Baseline Database used for the official monitoring of emissions from the power sector.

According to the most recent version of the CO₂ Baseline Database (Version 20.0), published in December 2024, the average emission factor (for net effective injection into grid) is 0,727 kgCO₂/kWh, corresponding to the 2023–2024 base year.

This value, equivalent to the weighted average of the operating and build margins, represents the average carbon intensity of the national electricity system, calculated in accordance with the Clean Development Mechanism (CDM) methodology.

The factor reflects the composition of India's electricity mix, dominated by fossil fuel-based sources (mainly coal and natural gas), along with an increasing share of renewable energy (solar, wind and hydropower).

8.1.7 SOUTH AFRICA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in South Africa, a market-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The grid emission factor for South Africa was obtained from the technical report published by Promethium Carbon, “South Africa’s Grid Emission Factor (1 April 2023 – 31 March 2024)” in January 2025, which provides updated emission factors for corporate greenhouse-gas reporting.

According to this publication, the residual mix grid emission factor follows the market-based accounting approach under the GHG Protocol and is 1,0891 kgCO₂e/kWh for the 2023–2024 period. This value represents the carbon intensity of electricity not covered by renewable-energy contracts or certificates, calculated from Eskom’s generation and consumption data.

This factor reflects the high dependence on coal in South Africa’s electricity mix and provides a traceable, up-to-date reference for calculating indirect (Scope 2) emissions from electricity under the market-based approach.

8.1.8 USA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in the United States, a location-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The national average grid emission factor was obtained from the U.S. Environmental Protection Agency (EPA), official federal environmental agency of the U.S. Government, through its publication “GHG Emission Factors Hub 2025”. This document consolidates the most recent official emission factors, including electricity, which is derived from the eGRID 2023 (Emissions and Generation Resource Integrated Database), also maintained by the EPA.

According to the GHG Emission Factors Hub 2025, the emission factor for the ERCOT subregion electricity grid is 0,3361 kgCO₂e/kWh. This value represents the average carbon intensity of the regional electricity mix, calculated from total CO₂, CH₄ and N₂O emissions associated with electricity generation, and follows the location-based approach under the GHG Protocol.

8.1.9 AUSTRALIA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Australia, a market-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The applied emission factor was obtained from the official report “Australian National Greenhouse Accounts (NGA) Factors 2024” published by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) — department responsible for the National Greenhouse Gas Inventory and for publishing Australia’s official greenhouse-gas emission factors.

According to the report, the residual mix grid emission factor follows the market-based accounting approach under the GHG Protocol and has a value of 0,810 kgCO₂e/kWh for 2024. This figure represents the carbon intensity of the residual electricity mix — that is, electricity not covered by renewable-energy certificates or specific contracts.

8.1.10 SAUDI ARABIA

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Saudi Arabia, a location-based approach was adopted in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

The official national grid emission factor was published by the Designated National Authority (DNA) of the Kingdom of Saudi Arabia, the entity responsible for greenhouse gas crediting and offsetting mechanisms. This value was developed following the Clean Development Mechanism (CDM) methodology and represents the average carbon intensity of electricity generated and distributed within the country.

According to a report issued by the DNA, the official grid emission factor established for 2021, the latest year with available information, is 0,568 kgCO₂e/kWh.

This value reflects the significant predominance of fossil fuels (natural gas and petroleum derivatives) in the Saudi electricity mix and serves as an official, traceable, and conservative reference for corporate reporting under the location-based approach.

8.1.11 KAZAKHSTAN

For the calculation of Scope 2 indirect emissions associated with electricity consumption in Kazakhstan, a location-based approach was applied in accordance with the GHG Protocol – Scope 2 Guidance (WRI/WBCSD, 2015).

In the absence of an official national grid emission factor published by the Government of Kazakhstan or the national electricity operator, verified international data sources were used to estimate the carbon intensity of the national electricity mix.

According to Low Carbon Power, based on EMBER's Global Electricity Data, the average carbon intensity of electricity generation in Kazakhstan for 2024 was 603,556 gCO₂e/kWh, equivalent to 0,6036 kgCO₂e/kWh.

This value reflects the predominance of fossil fuels (coal and natural gas) in Kazakhstan's electricity mix and is considered an updated, traceable, and conservative value for corporate reporting under the location-based approach.

8.2 Use of water

The emission factor used for the calculation of the emissions from use of water has been taken from the activities “water supply” and “water treatment”, from DEFRA 24v1.1.

The calculation for this factor has been carried out under the following considerations. Water supply refers to the emissions released during all the processes before use (collection, purification and distribution) when the water originates from the water main network; and water treatment refers to the emissions released during all processes after use (sewage system, wastewater treatment and return to the environment) when the water is drained to the sewage system.

Activity	Type	kgCO ₂ e/m ³
Water supply	Water supply	0,153
Water treatment	Water treatment	0,186
Total		0,339

8.3 Waste disposal

After an internal study on waste generation, it has been concluded that only the waste generated during maintenance of aircraft is significant enough to include in the calculation. However, none of the centres with owned aircraft had data on waste disposal, only total flight hours were available.

As AIRWORKS is the only supplier to have data available on waste generated from maintenance tasks on aircraft, the emissions for waste disposal have been calculated and associated with the number of flight hours registered by the same supplier. That is, the total emissions for waste disposal relative to the total amount of flight hours, giving us an emission factor of 0,832 kgCO₂e/flight hour.

The data on waste generation corresponds to the period from October 2023 to September 2024 (12 months), while flight data corresponds to the calendar year of 2023.

Code	Waste	Description	Treatment	Equivalence	Quantity (kg)	EF (kgCO ₂ e/tn)	kgCO ₂ e
130205	Mineral-based non-chlorinated engine, transmission and lubricant oils.	C003 - Non-chlorinated, used engine oil	R1301	Fraction 4 equivalent to fraction 6	350	200,169	70,06
150110	Containers with hazardous substance residues or contaminated by them.	C040 - Contaminated metallic containers	R1304	T62	110	225,423	24,80
130703	Other fuels (mixtures included)	C036 - Hydrocarbon mixture	R1301	T62	916	225,423	206,49

150203	Absorbents, filtration materials, cleaning rags and protective clothing different of those specified.	E042 - Non-hazardous absorbents and filtration materials	R13	Other Treatments fraction 5	23	173,083	3,98
150110	Containers with hazardous substance residues or contaminated by them.	C040 - Contaminated metallic containers	R13	T62	66	225,423	14,88
150203	Absorbents, filtration materials, cleaning rags and protective clothing different of those specified.	E042 - Non-hazardous absorbents and filtration materials	R13	Other Treatments fraction 5	120	173,083	20,77
130205	Mineral-based non-chlorinated engine, transmission and lubricant oils.	C003 - Non-chlorinated, used engine oil	R1301	Fraction 4 equivalent to fraction 6	140	200,169	28,02
130703	Other fuels (mixtures included).	C036 - Hydrocarbon mixture	R13	T62	170	225,423	38,32

TOTAL kgCO ₂ e	407,32
Flight hours	489,29
kgCO ₂ e/flight hour	0,832

Waste Disposal EF Source: Catalan Climate Change Office (OCCC, for its initials in Catalan) 2025.

8.4 Details on the data source for upstream leased assets

8.4.1 CORPORATE (HEADQUARTERS)

Use of water Data Source: Estimate

1. Average number of employees in 2024: 34 (34,43).
2. Teleworking frequency: one day a week (20%).
3. Average water consumption in Spanish offices: 7,5 m³/year and person.
4. Total use of water: 34,43 employees x 80% x 7,5 m³/year = 206,58 m³

Data validated by the auditor.

8.4.2 SPAIN

Use of water Data Source: Estimate

1. Average number of employees in 2024: 43.
2. Teleworking frequency: one day a week (20%).
3. Average water consumption in Spanish offices: 7,5 m³/year and person.
4. Total use of water: 43 employees x 80% x 7,5 m³/year = 258,00 m³

Data validated by the auditor.

8.4.3 BRAZIL

Office - LASA

Use of water Data Source: Estimate

The information on water consumption available is not segregated and includes the entire floor of the building LASA is located. Therefore, based on the invoices provided, the cost of water consumption for the 14th floor is divided by the number of employees of all the companies sharing the floor, and then multiplied by the number of employees working for LASA. This price is then converted to litres according to two different rates, as per the yearly adjustment of inflation from December 2024 (Águas do Rio, 2024).

Area A - Categoria Comercial - Faixa de consumo >30

- From November 2023 39,481445 R\$
- From December 2024 43,362668 R\$

Data validated by the auditor.

Imported electricity Data Source: Estimate

To estimate LASA's electricity consumption, the electricity usage of the entire floor as indicated in the supplier's invoices, is taken as a reference. The percentage corresponding to the area occupied by LASA relative to the total floor area is then applied.

LASA = 35,90 m²

14 Floor= 390,565 m²

Data validated by the auditor.

Warehouse - LASA OLARIA

Imported electricity Data Source: Delivery note Invoice

XCALIBUR reports that no warehouse leasing activity took place between January and March, thereby confirming the absence of electricity consumption during the referenced period.

8.4.4 CANADA

Toronto

Use of water Data Source: Estimate

Water consumption is included as part of the rent for the new office from April onwards.

Monthly average calculated from total water consumption of January until March, based on invoices, and then multiplying the average by 9 months.

Therefore,

Total Jan - March: 757 m³. Monthly average: 757 m³ / 3 months = 252,33 m³/month. April - Dec estimate: 252,33 m³/month x 9 months = 2.271 m³

Data validated by the auditor.

Ottawa

Use of water Data Source: Estimate

Data provided by the tenants.

The building's total water consumption is available through invoices. The part belonging to XCALIBUR is estimated based on the proportion of people working in the office relative to that of the building.

Imported electricity Data Source: Estimate

Data provided by the tenants.

The building's total electricity usage is available through invoices. The part belonging to XCALIBUR is estimated based on the proportion of people working in the office relative to that of the building.

Natural gas (heating) Data Source: Estimate

Data provided by the tenants.

The building's total natural gas usage on heating is available through invoices. The part belonging to XCALIBUR is estimated based on the proportion of people working in the office relative to that of the building.

8.4.5 COLOMBIA

Office

Use of water Data Source: Estimate

Water consumption data is available for the entire building, which is shared between different organisations. To estimate the part belonging to XCALIBUR, the following methodology has been used:

1. Average number of employees in 2024: 6 (6,6) - floating population considered to be 10% of the average.
2. Average water consumption in offices: 3,5 litres/m² a day.
3. NTC 1700 states that the maximum occupancy load permitted in office buildings is 9 m² per person.
4. Percentage of work in office: 70%
5. Yearly water consumption: 3,5 L/m² x 9 m² x 365 days / 1000 = 11,49 m³

Total use of water 2024: $6,6 \text{ employees} \times 70\% \times 11,49 \text{ m}^3 = 53,08 \text{ m}^3$

Data validated by the auditor.

Hangar

Use of water Data Source: Estimate

Water consumption data is available for the entire building, which is shared between different organisations. Due to lack of information on the operation and maintenance of the number of aircraft for each centre, a consumption estimate for maintenance and repair activities has been calculated using the ratio provided by the Brazil centre in 2023: 200 L of water usage for maintenance and repair activities.

Following evidence given by the organisation, there is a record of maintenance on the months of January, February, April, May, June, July, August, September, October, November and December.

Therefore,

$(200 \text{ L} \times 11 \text{ months}) / 1000 = 2,20 \text{ m}^3$.

Data validated by the auditor.

Imported electricity Data Source: Estimate

The Chía hangar electricity usage also includes the office building.

The electricity consumption has been determined from the average electricity usage of every electrical or electronic device present in the centre, obtained from multiplying the total number of devices by its power (in VA) and the number of hours being used in a month.

Total imported electricity: $54,922 \text{ kWh/month} \times 12 \text{ months} = 659,064 \text{ kWh}$

Data validated by the auditor.

8.4.6 DEMOCRATIC REPUBLIC OF THE CONGO

Use of water Data Source: Estimate

There are no flight operations recorded for 2024. Therefore, all water consumption belongs to the office building. As the number of employees has remained unchanged from last year, the use of water is estimated to be the same as 2023.

Imported electricity Data Source: Estimate

Although utility invoices are available, no consumption data is shown. As the invoice only indicates the cost, the rate of 0,059 USD/kWh has been applied to estimate the total electricity usage (Global Petrol Prices, 2024).

Data validated by the auditor.

Generator Data Source: Estimate

Although utility invoices are available, no consumption data is shown. As the invoice only indicates the cost, the following rates have been used to estimate the fuel consumption for electricity generation (Global Petrol Prices, 2025). The highest number, representing the most unfavourable scenario, has been applied.

Diesel = 1,116 USD/L; Total: 227 USD / 1,116 USD/L = 248,21 litres

Petrol = 1,120 USD/L; Total: 227 USD / 1,120 USD/L = 247,32 litres

As the average price for 2024 was not accessible, the last updated price was used.

8.4.7 INDIA

Use of water Data Source: Estimate

1. Total number of full-time employees in 2024: 4.
2. Average water consumption per person: 25 litres/day.
3. Working days a month: 21 days.
4. Total use of water: (4 employees x 25 litres/day x 21 days/month x 12 months) / 1000 = 25,20 m³

Data validated by the auditor.

8.4.8 USA

Use of water Data Source: Estimate

As no utility invoice for 2024 was available, and since the number of employees has remained unchanged from last year, the use of water is estimated to be the same as 2023.

Data validated by the auditor.

Imported electricity Data Source: Estimate.

Electricity consumption is included in the rental agreement of the new office, whereas previously it was the organisation's responsibility. As there are no electricity utility invoices from May onwards, and since the number of employees has remained unchanged, the imported electricity for the remaining months with no consumption data is estimated to be the same as the sum for May to December of 2023.

Data validated by the auditor.

8.4.9 SAUDI ARABIA

Use of water Data Source: Estimate

1. Total number of full-time employees in 2024: 2,4.
2. Average water consumption per person: 32 litres/day.
3. Working days a year: 260 days.
4. Total use of water: $(2,4 \text{ employees} \times 32 \text{ litres/day} \times 260 \text{ days/year}) / 1000 = 19,968 \text{ m}^3$

Data validated by the auditor.

Imported electricity Data Source: Estimate.

The electricity consumption has been determined from the average electricity usage of every electric and electronic device in the office, taking into consideration the occupancy affected by teleworking.

Therefore,

1. Average electricity usage: 18,08 kWh/day.
2. Working days a year: 260 days.
3. Total imported electricity: $18,08 \text{ kWh/day} \times 260 \text{ days/year} = 4.700,80 \text{ kWh}$

Data validated by the auditor.

8.4.10 KAZAKHSTAN

Use of water Data Source: Estimate

1. Average number of employees in 2024: 7.
2. Average water consumption in homes, as informed by the water supply industry: 35,1 m³/year and person.
3. Total use of water: $7 \text{ employees} \times 35,1 \text{ m}^3/\text{year} = 245,7 \text{ m}^3$

Data validated by the auditor.

Imported electricity Data Source: Estimate.

As no utility invoice for 2024 was available, the average electricity consumption per person is estimated from 2023's values. This figure is then multiplied by the number of employees in 2024.

Data validated by the auditor.

8.5 Other contracted services

Breakdown of the calculation for digital emissions:

	Value	Unit	kWh/TB/year	Total kWh/year
Processed data	2.500,00	TB	1.000,00	2.500.000,00
Stored data	44,00	TB	1.000,00	44.000,00

Total kWh	2.544.000,00
kgCO ₂ e/kWh	0,283
Total kgCO ₂ e	719.952,00
Total tCO ₂ e	719,95

Note: As we lack data on the location of the servers, the Spanish electricity mix has been applied (location of the headquarters). EF Source: Spanish Office of Climate Change (OECC, for its initials in Spanish) 2025.

The conversion factors used have been taken out of the Lean ICT report (The Shift Project, 2019):

- **Data centres:**

“The impacts presented are given for an average data centre, characterised by its surface area and the total power capacity of its installations (in MW):

- Surface area of the average data centre: 1,000 m²
- Power of an average data centre: 1 MW
- PUE (Power Usage Effectiveness): 2”.

- **The annual impact of storing a byte of data was calculated:**

“The electricity consumption associated with the storage of a byte of data was evaluated on the basis of works and exchanges with a partner of this study, the *Groupe Caisse des Dépôts*: on the basis of the total volume of data stored and the associated annual electricity consumption, we obtained a magnitude of 1.10-9 kWh/byte/year.”

Thus, since 1 terabyte (TB) equals 1.000.000.000.000,00 bytes (B), therefore,

kWh/B/year	kWh/TB/year
0,000000001	1.000,00

9. References

Águas do Rio. *Legislação e tarifas*. Região 1 - Tarifas válidas a partir de dezembro de 2024.

<https://aguasdoriorio.com.br/legislacao-e-tarifas/>

CDMDNA (Clean Development Mechanism Designated National Authority). 2021. *Development of the Kingdom's Updated Grid Emission Factor 2021*.

<https://cdmdna.gov.sa/Resources/70/e179cf72596d15213c8772bf7a9dab642.pdf>

CEA (Central Electricity Authority). *CDM - CO2 Baseline Database*. V20.0. Government of India, Ministry of Power. December 2024. <https://cea.nic.in/cdm-co2-baseline-database/?lang=en>

DCCEEW (Department of Climate Change, Energy, the Environment and Water). 2024. Australian National Greenhouse Accounts Factors. Canberra, August 2024. CC BY 4.0. <https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-factors-2024>

DEFRA (Department for Environment, Food & Rural Affairs). 2024. *Conversion factors 2024: full set (for advanced users)* – updated 30 October 2024. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024>

EPA (United States Environmental Protection Agency). *GHG Emission Factors Hub 2025*. January 2025. <https://www.epa.gov/climateleadership/ghg-emission-factors-hub>

Global Petrol Prices. *Democratic Republic of the Congo electricity prices*. 2024.

https://www.globalpetrolprices.com/Democratic-Republic-of-the-Congo/electricity_prices/

Global Petrol Prices. *Democratic Republic of the Congo Gasoline prices, liter, 06-Oct-2025*.

https://www.globalpetrolprices.com/Democratic-Republic-of-the-Congo/gasoline_prices/

ICAO (International Civil Aviation Organisation). *ICAO Carbon Emissions Calculator (ICEC)*.

<https://icec.icao.int/>

ICONTEC (Instituto Colombiano de Normas Técnicas y Certificación). Norma Técnica Colombiana - NTC 1700. 1982. *Hygiene and safety. Means of safety in Buildings. Evacuation means*. Pag 47. March 1982.

<https://planesdeemergencia.weebly.com/uploads/4/0/5/4/40542785/ntc1700.pdf>

Low Carbon Power. *Electricity in Congo – Kinshasa* – Electricity generation in gCO₂eq/kWh, 2023. Data sourced from EMBER. https://lowcarbonpower.org/region/Congo_-_Kinshasa

Low Carbon Power. *Electricity in Kazakhstan* – Electricity generation in gCO₂eq/kWh, 2024. Data sourced from EMBER. <https://lowcarbonpower.org/region/Kazakhstan>

MCTI (Ministério da Ciência, Tecnologia e Inovação). 2025. *Fatores de emissão de CO2 pela geração de energia elétrica no Sistema Interligado Nacional do Brasil - Ano Base 2024 – com correções nos meses de janeiro e março a setembro*. <https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/sirene/dados-e-ferramentas/fatores-de-emissao>

OCCC (Oficina Catalana de Canvi Climàtic). 2025. *Calculadora de GEH pel càlcul 2024_versió 2025*. May 2025. https://canviclimatic.gencat.cat/ca/actua/calculadora_demissions/

OECC (Oficina Española de Cambio Climático). 2025. *Factores de emisión 2007 – 2024*. V5. May 2025. https://www.miteco.gob.es/content/dam/mitesco/es/cambio-climatico/temas/mitigacion-politicas-y-medidas/factoresemission_tcm30-542746.xlsx

Promethium Carbon. *Guidance note: South Africa's Grid Emission Factor* (1 April 2023 to 21 March 2024). January 2025. <https://promethium.co.za/guidance-note-south-africa-s-grid-emission-factor>

TAF (The Atmospheric Fund). 2024. *Ontario Electricity Emissions Factors and Guidelines*. June 2024 Edition. <https://taf.ca/publications/>

The Shift Project. 2019. *Lean ICT: Towards Digital Sobriety*. Pag 71-78. March 2019. https://theshiftproject.org/app/uploads/2025/02/Lean-ICT-Report_The-Shift-Project_2019.pdf

UPME (Unidad de Planeación Minero Energética). *Factores de emisión del sistema interconectado nacional - SIN para el año 2023*. Rev. January 2025. https://www1.upme.gov.co/siame/Documents/Calculo-FE-del-SIN/Factores_de_emision_SIN_2023.pdf

WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development). 2004. *A Corporate Accounting and Reporting Standard. Greenhouse Gas Protocol*. March 2004. <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

WRI (World Resources Institute) and WBCSD. 2011. *Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Greenhouse Gas Protocol*. September 2011. https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development). 2015. *GHG Protocol Scope 2 Guidance. Greenhouse Gas Protocol*. <https://ghgprotocol.org/sites/default/files/2023-03/Scope%20%20Guidance.pdf>