INTREAL

Corporate Carbon Footprint Report 2023

INTREAL
Date: January 2025

AQ GREEN TEC

CONTENTS

MESSAGE FROM THE BOARD

Dear Stakeholders,

We are pleased to present INTREAL's 2023 Carbon Footprint Report, a document that highlights our unwavering commitment to environmental sustainability and climate action, aligned with the objectives of the Paris Agreement. As a financial services provider, INTREAL recognizes its responsibility to reduce greenhouse gas (GHG) emissions within our operations, striving to achieve net-zero GHG emissions by 2030.

This report represents a significant step in our sustainability journey, offering an updated overview of our carbon footprint for the fiscal year 2023 (FY23). Building upon the progress documented in previous years, we have further enhanced the quality of our data and broadened the scope of our analysis to ensure a comprehensive assessment of our environmental impact. FY23 now serves as the base year for our future reporting, allowing us to track our progress with even greater precision.

As we deepen our understanding of the environmental impacts of our activities, we are dedicated to making reflected decisions and implementing initiatives that drive meaningful change.

Our carbon footprint now includes direct (scope 1), indirect (scope 2), and a more extensive representation of material scope 3 activities, such as professional services, software & subscriptions, and other operational expenditures. These additions reflect a growing recognition across industries of the significance of these activities in shaping emissions profiles.

We acknowledge the complexity of this evolving landscape and remain committed to continuous improvement. By adopting a proactive approach and leveraging advances in carbon measurement methodologies, we are better equipped to respond to the challenges and opportunities that lie ahead.

We remain committed to transparency and accountability in addressing climate change, and this report reflects our determination to measure, analyse, and improve our environmental performance continuously.

Thank you for your ongoing trust and support as we work together toward a more sustainable future and the achievement of net-zero GHG emissions.

Sincerely,

Andreas Ertle	Camille Dufieux	Malte Priester

ABOUT

IntReal Group

The IntReal Group comprises four legal entities which are managed by the operating parent company IntReal International Real Estate Kapitalverwaltungsgesellschaft GmbH (INTREAL), a Service KVG (capital investment company) focussed exclusively on the setup and management of regulated real estate funds for third parties.

INTREAL is a 100% shareholder of three of the four entities: IntReal Legal Advisory GmbH, IntReal Luxembourg S.A. and IntReal Solutions GmbH.

The headquarters for INTREAL is in Hamburg, Germany. Additional subsidiary offices are also located in Hamburg with a further office in Frankfurt and IntReal Luxembourg S.A. located in Luxembourg.

Headquarter address:
Ferdinandstraße 61
20095 Hamburg
Germany

AQ Green TeC GmbH

AQ Green TeC (AQGT) provides greenhouse gas (GHG) emissions management services to support companies and their stakeholders to develop and execute integrated climate strategies.

AQGT was retained by INTREAL to provide GHG emissions (emissions) measurement services for scope 1, 2 and 3, for INTREAL's own operations, not including emissions from their portfolio assets. This GHG inventory and carbon footprint report has been compiled by AQGT, using data and information provided by INTREAL.

APPROACH

Organisational Boundary

The organisational boundary for this report was defined using the operational control approach, where the organisation accounts for all GHG emissions from the operations that it owns or controls.

The boundary of this carbon footprint report includes the 100% owned subsidiaries and excludes one entity in which INTREAL has only a 20% equity stake.

The operations included are:

Operations	Location	Address
IntReal International Real Estate KVG mbH **IntReal Legal Advisory GmbH**	Hamburg	Ferdinandstraße 55-61
	Hamburg	Gertrudenstr. 9/Raboisen 50-58 Mietfläche 5-7
		Gertrudenstr. 9/Raboisen 50-58 Mietfläche 1-4
		Kellerfläche Ferdinandstraße 55/57/59/61
IntReal Solutions GmbH	Hamburg	RZ Gerdi 9+Raboisen 50/54+58
IntReal International Real Estate KVG mbH	Frankfurt	Erlenstraße 2
IntReal Luxembourg S.A	Luxembourg	6b, rue du Fort Niedergrünewald L – 2226 Luxembourg

Table 1

Operational Boundary

An operational boundary is established through the identification of operational activities which cause GHG emissions and activities are categorised as either direct or indirect emission sources. INTREAL's investments are specifically excluded from this boundary.

In terms of the requirements in line with the GHG Protocol, all direct (scope 1) GHG emissions are included, as are indirect (scope 2) GHG emissions from purchased electricity. Reporting on other indirect (scope 3) emissions, from upstream and downstream supply chain activities is voluntary.

INTREAL has elected to report on material scope 3 activities where data was available. Where data was incomplete, assumptions and estimations have been used. Further details are included in the methodology section of this report.

The following activities are included in this report:

Scope 1	
Stationary combustion	Natural gas
Mobile combustion	Company owned vehicles
Scope 2	
Electricity consumption	Purchased electricity (green tariff)
Heating	District heating
Scope 3	
Business travel	Air travel
	Land travel
	Hotel stay
Employee commute	Employee commuting
Homeworking	Energy consumption from office equipment & heating
Purchased goods and services	Water supply
	Paper use
	Plastic items
	Electrical items
	Furniture
	Catering
	Professional services
	Software & subscriptions
Downstream transportation and distribution	Air freight
	Land freight
Waste generated in operations	Landfill waste
	Recycled waste
Fuel and energy activities not in scope 1 or 2	Well-to-tank (WTT) emissions
	Transmission and distribution (T&D) losses

Table 2

Reporting Period

This report covers the period: 01 January 2023 through 31 December 2023 (FY23).

Base Year

INTREAL compiled its inaugural GHG inventory and carbon footprint for the FY21 period and decided to measure GHG emissions for two further annual reporting periods before assigning a 'base year' for ongoing reporting purposes. This FY23 inventory reflects improvements in reporting boundary and data quality and will now be considered as the base year. INTREAL will continue to review GHG measurement trends and practices, particularly as they evolve in alignment with global norms and standards for corporate climate action and may in future choose a subsequent measurement period as the base year in that context.

Data Integrity and Verification of Emissions

AQGT follows the GHG Protocol's Corporate Standard approach to GHG emissions calculations, which requires the gathering (or estimating if necessary) of carbon activity data, as applicable, after scope 1, 2 and 3 emission sources have been identified.

Activity data was provided (and internally verified) by the INTREAL team to the greatest degree possible and where data was not available, assumptions and estimates were applied. INTREAL is satisfied that assumptions and estimates used were reasonable and accurate and does not believe that external, third-party verification is necessary at this time, however, the company will consider verification as it progresses on its journey of GHG emissions management.

Reporting Standards and Approach

This GHG inventory has been prepared by AQGT with and on behalf of INTREAL using the norms and standards determined the GHG Protocol.

The GHG Protocol is a partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) and is the most widely applied international accounting tool for quantifying and managing GHG emissions.

This report is aligned with, and utilises, the GHG Protocol's Corporate Standard, Scope 2 Standard and Scope 3 Standard. The GHG Protocol Scope 2 Standard requires that companies make use of both location-based and market-based approaches. In line with the requirement of the Scope 2 Standard, INTREAL has reported using the location-based and market-based approach given that market-based supplier data has been provided.

Reasons for Measuring & Managing GHG Emissions

INTREAL is committed to reducing GHG emissions from operations and tackling action towards climate change, in line with the Paris Agreement. The company aims to increase resource efficiency each year with the goal of achieving net-zero GHG emissions by 2030. The measurement and reporting of GHG emissions is the foundation on which to build this intention. Early identification of changes in the market, implementation of regulatory requirements and future-oriented digital management form part of INTREAL's corporate philosophy.

Data Presentation

Values expressed in this report may be rounded for presentation purposes, which may result in slight variations when compared with source documentation (available upon request.) This is particularly the case for data presented in tables and charts.

CARBON FOOTPRINT

INTREAL's carbon footprint has been analysed and presented as follows:

Emissions overview
A summary of total emissions by location

Emissions by scope and category
A breakdown of emissions by scope and category

Emissions by categories
A detailed breakdown of GHG emission categories and percentage contribution to total emissions, in terms of the market-based and location-based approaches used

Building and mobility related emissions
An analysis of emissions relating to INTREAL's physical building and travel, transport, and commuting activities

Intensity metrics
An analysis of INTREAL's emission per employee and per square metre of office space

Emissions Overview

Total GHG emissions for INTREAL for the reporting period 2023:

Total emissions	**1,849.639 tCO_2e**	Market-based approach
	2,064.577 tCO_2e	Location-based approach

Table 3

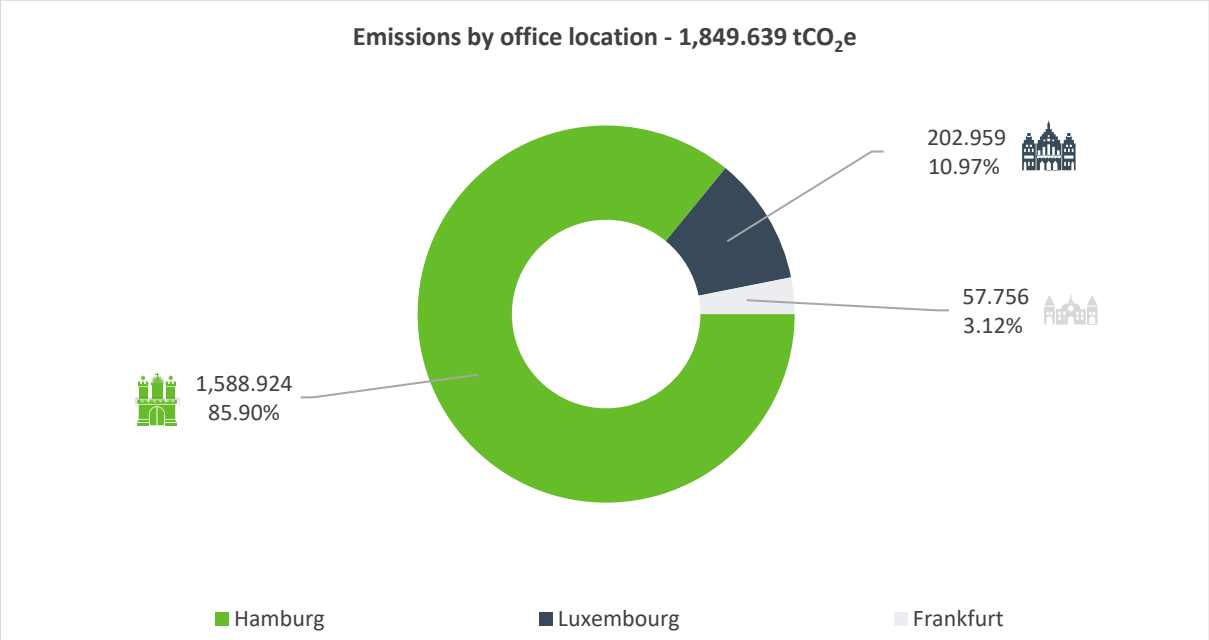


Figure 1: INTREAL's total emissions by office location, market-based approach

The majority of INTREAL's emissions are caused by the operations of the offices located in Hamburg, which is a reflection of the company's operational presence. Hamburg is home to the largest number of employees and serves as INTREAL's headquarters.

Emissions by Scope and Category

The GHG Protocol requires emissions to be reported and classified as direct and indirect emissions. Direct emissions, reported as scope 1 emissions, are emissions which result from activities owned or controlled by the organisation. Indirect emissions, reported in the scope 2 and scope 3 section of the inventory, are a consequence of the activities of the organisation but occur at sources owned or controlled by other organisations in the value chain.

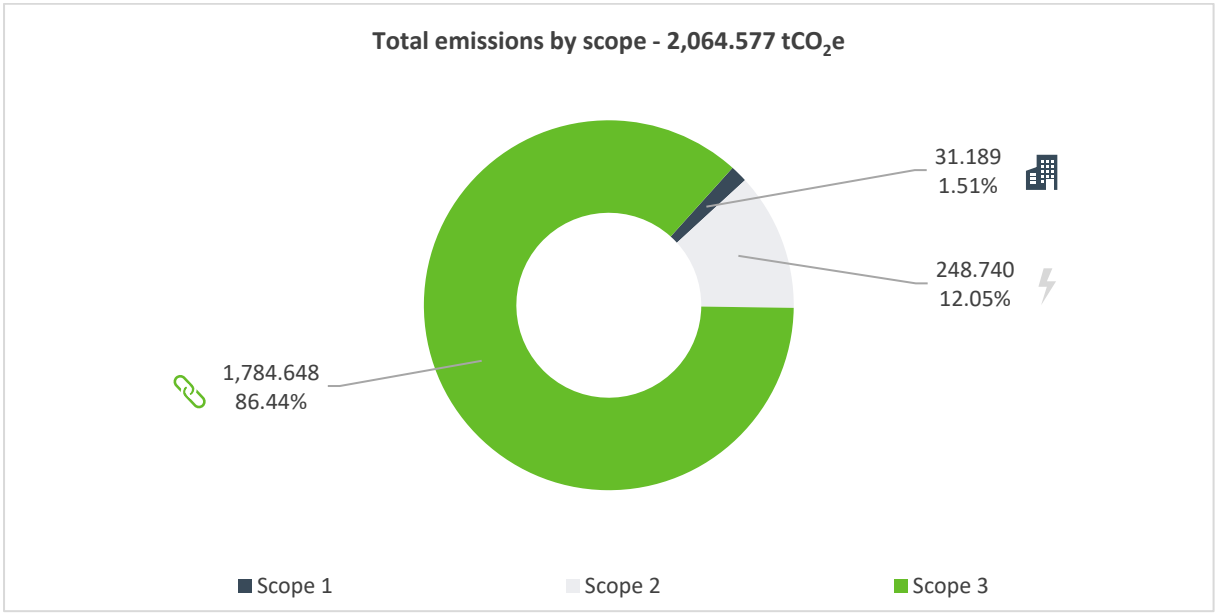


Figure 2: INTREAL's total emissions by scope, location-based approach

Overview of Scopes

The discussion below relates to emission values as per the location-based approach unless otherwise indicated.

- INTREAL's emissions profile by scope is in line with that of a typical office-based service organisation in which scope 1, direct emissions are relatively low and scope 3, value chain emissions are relatively high
- Scope 3 indirect emissions, from sources owned or controlled by organisations in INTREAL's value chain, are the biggest contributor to total emissions. Value chain emissions include activities such as the purchase of goods, products and services procured for the day-to-day running of the business, and travel and transport
- Initiatives to reduce overall emissions should be focused on the value chain via active engagement with upstream and downstream stakeholders

Scope 1

- Scope 1 emissions account for 1.51% of total emissions
- Stationary combustion of natural gas, the heating source at the Frankfurt and Luxembourg offices, is the highest contributing category to scope 1 emissions (50.08%)
- Mobile combustion of fuels from company owned vehicles, accounts for the remaining scope 1 emissions (49.92%)

Scope 2

Scope 2 includes emissions from purchased electricity and district heating.

Except for operations in Luxembourg, INTREAL's operations purchase electricity from suppliers who generate electricity through renewable energy sources. Scope 2 emissions are calculated and reported using the market-based and location-based approach, in line with the recommendations of the Scope 2 Standard of the GHG Protocol.

District heating is only applicable to the offices located in Hamburg.

- Using the location-based approach, scope 2 electricity consumption contributes 228.447 tCO_2e (11.07%) to the total GHG inventory and accounts for 91.84% of total scope 2 emissions
- Using the market-based approach, emissions from electricity consumption utilise emission factors supplied by the energy service providers (suppliers)
- There was a change of address and supplier for the Luxembourg office for this reporting period and the product supplied is not free of emissions as per the FY22 reporting period
- The remainder of scope 2 emissions, 20.293 tCO_2e (8.16%), is from district heating
- The total emissions avoided from the purchase of renewable energy is 214.938 tCO_2e, for the reporting period

Energy consumption

Comparing energy consumption-based activities between locations requires looking at the activity data in a single comparable unit of measure such as kilowatt-hours and not the emissions unit of tCO_2e. This is principally because emissions from energy consumption-based activities are calculated using a variety of emission factors. Emission factors are determined by aspects such as location, supplier data and type of activity/fuel used, which means that comparisons are not on a like-for-like basis.

The following table provides consumption data by geographical location for all energy sources measured: electricity, district heating and natural gas.

Activity	Unit	Frankfurt	Hamburg	Luxembourg	INTREAL
Electricity	kWh	19,782.00	621,652.05	36,024.57	677,458.62
District heating			317,077.71		317,077.71
Natural gas		23,174.00		62,400.17	85,574.17
Total		**42,956.00**	**938,729.77**	**98,424.74**	**1,080,110.51**

Table 4

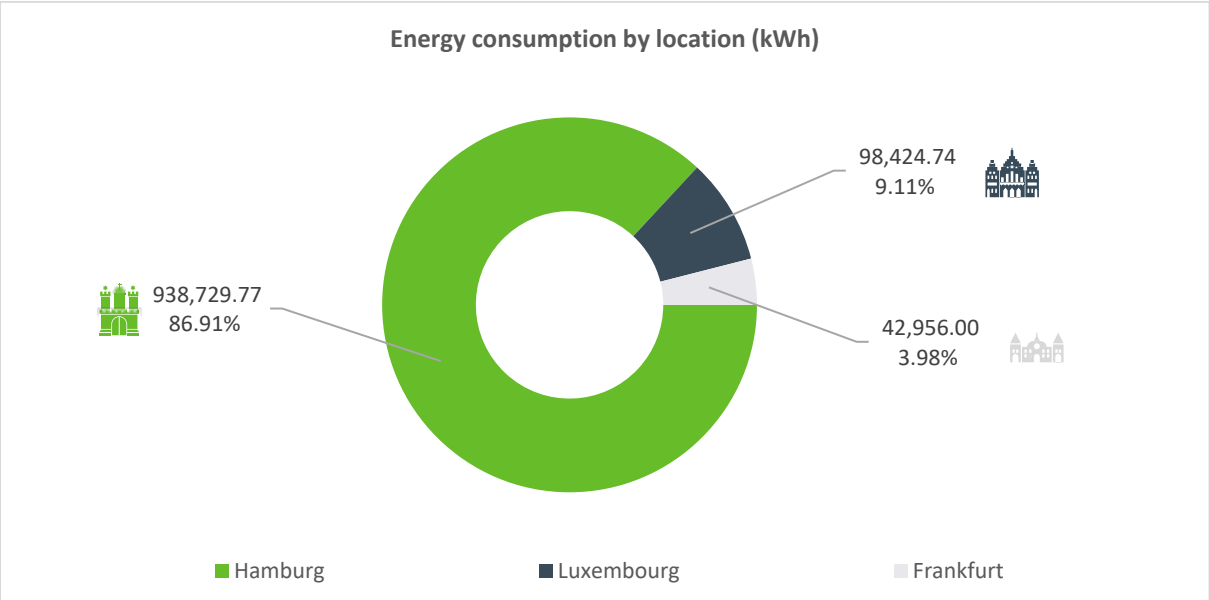


Figure 3: INTREAL's total energy consumption by office location

Scope 3

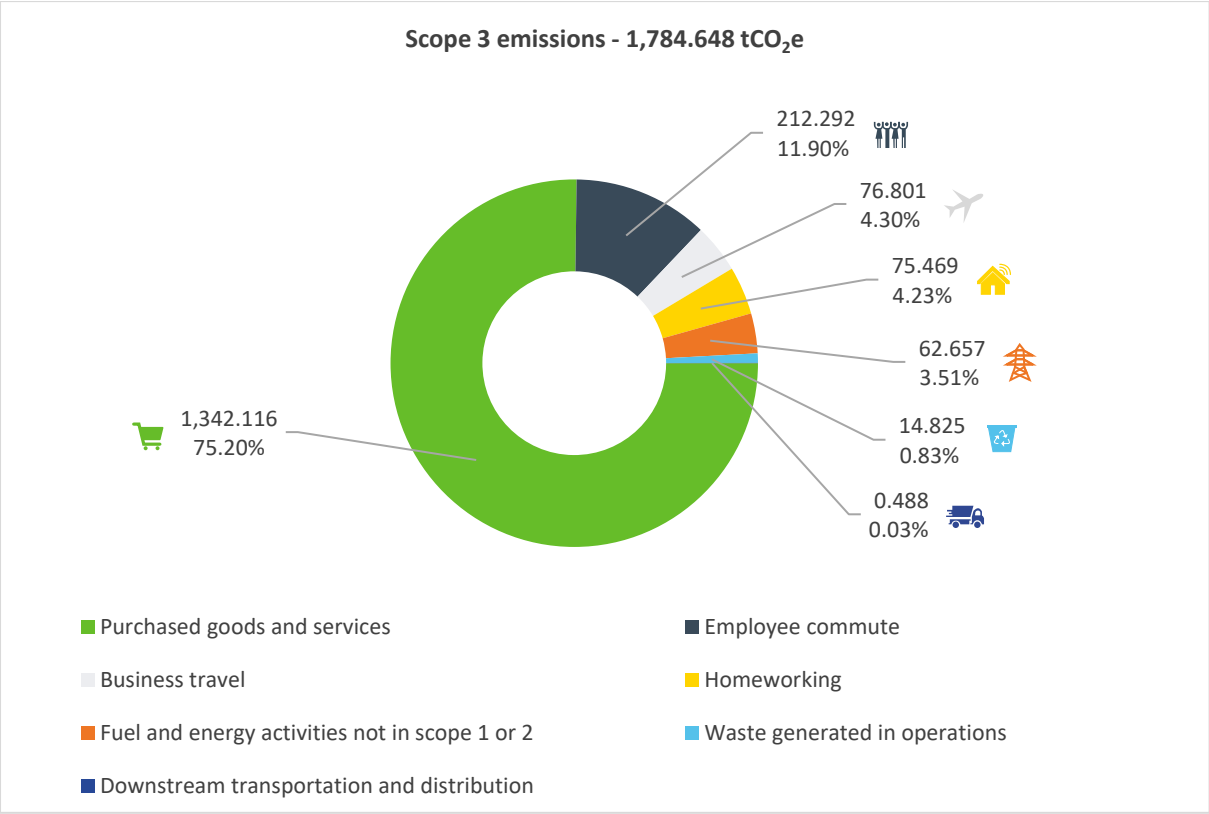


Figure 4: Scope 3 emissions breakdown by category

- Scope 3 (indirect) emissions are the most significant source of total GHG emissions (86.44%)
- For the FY23 reporting period, the scope of purchased goods and services was expanded to include furniture, catering, professional services and software & subscriptions, which reflects evolving scope 3 practices and the increasing acceptance of estimation using spend-

based emission factors. Other activities include electrical items, paper use, plastic items, and water supply

- Emissions from purchased goods and services (75.20%) is the highest contributing scope 3 category with professional services (65.92%) and software & subscriptions (16.18%) accounting for the majority (82.10%) of these emissions
- Professional services are also the highest contributor to total emissions (42.85%)
- The second highest scope 3 category is from employees commuting to and from work (11.90%)
- Emissions from business travel, which include air travel, land travel and hotel-stay activities, contributes 4.30% to total scope 3 emissions
- Emissions from homeworking (4.23% of scope 3 emissions) include activities associated with the energy consumption of office equipment and heating, which may otherwise have been included in the organisation's building emissions if those employees were working at the office
- The Fuel and energy-related activities not included in scope 1 or scope 2 category enables organisations to report upstream well-to-tank (WTT) emissions associated with purchased energy, as well as transmission and distribution (T&D) losses from the generation of electricity, steam, heating, and cooling consumed within a T&D system. These emissions are reported under scope 3 and contribute 3.51% to scope 3 emissions and 3.03% to total emissions
- Downstream transportation and distribution emissions from the use of courier services for parcel deliveries accounts for 0.03% of scope 3 emissions and is less than 0.05% of total emissions
- INTREAL has reported on recycled waste and landfill waste. Waste generated in operations is a very small contributor to total emissions (0.72%), however it remains important to reduce waste in the context of broader environmental impacts.

Emissions by Categories

The GHG Protocol recommends assigning inventories to GHG emissions categories which provides a framework to organise, track and manage a variety of emission sources across the corporate value chain.

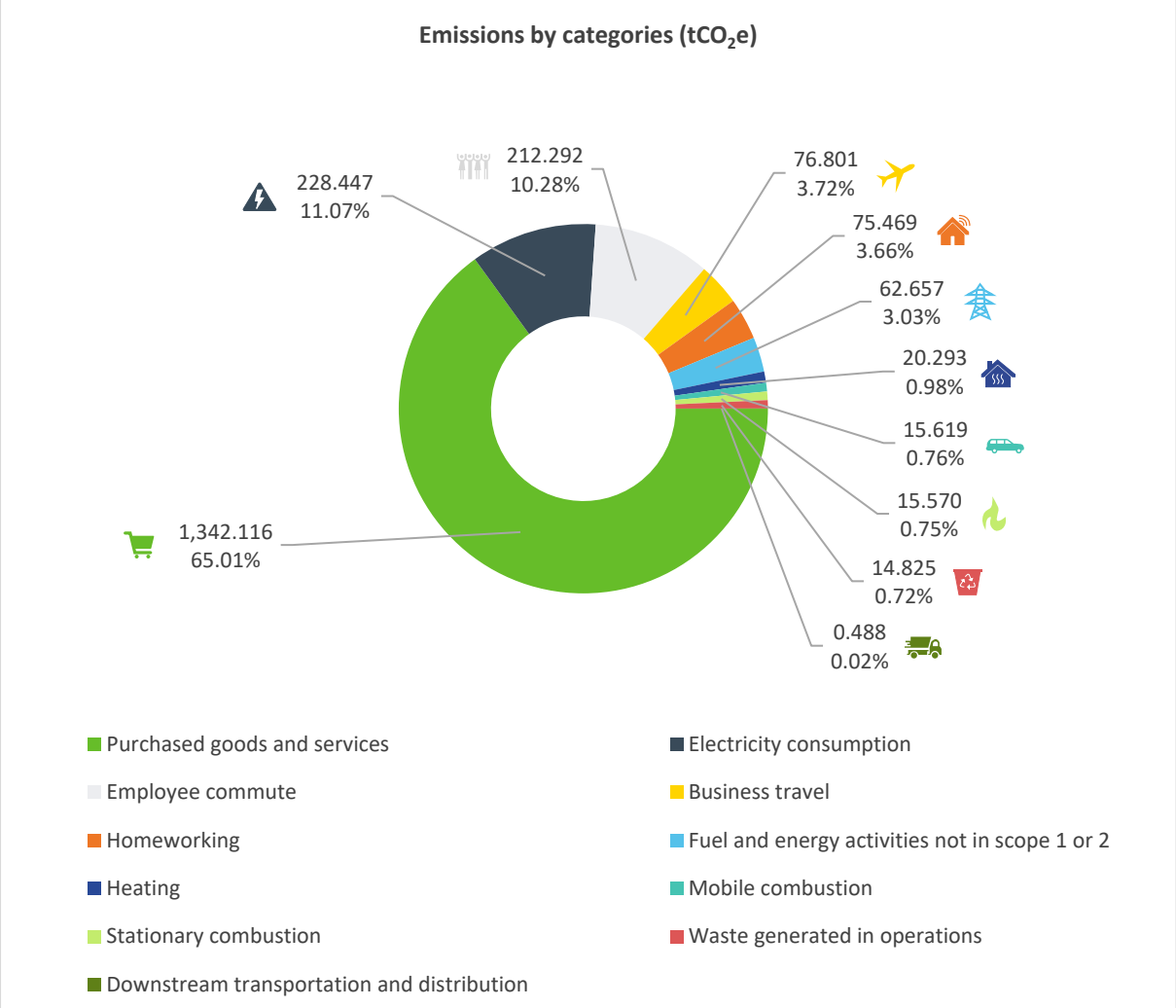


Figure 5: Emissions breakdown by category

Table 5 (below) provides a detailed breakdown of emission categories and their contribution (%) to total emissions.

Scope and category	Activities	Market based approach (tCO_2e)	% of Total emissions	Location based approach (tCO_2e)	% of Total emissions
Scope 1		**31.189**	**1.69%**	**31.189**	**1.51%**
Stationary combustion	Natural gas	15.619	0.84%	15.619	0.76%
Mobile combustion	Company owned vehicles	15.570	0.84%	15.570	0.75%
Scope 2		**33.802**	**1.83%**	**248.740**	**12.05%**
Electricity consumption	Purchased electricity (green tariff)	13.509	0.73%	228.447	11.07%
Heating	District heating	20.293	1.10%	20.293	0.98%
Scope 3		**1,784.648**	**96.49%**	**1,784.648**	**86.44%**
Business travel	Air travel	35.927	1.94%	35.927	1.74%
	Land travel	33.455	1.81%	33.455	1.62%
	Hotel stay	7.419	0.40%	7.419	0.36%
	Total	**76.801**	**4.15%**	**76.801**	**3.72%**
Employee commute	Employee commuting	**212.292**	**11.48%**	**212.292**	**10.28%**
Homeworking	Homeworking	**75.469**	**4.08%**	**75.469**	**3.66%**
Purchased goods and services	Water supply	0.271	0.01%	0.271	0.01%
	Paper use	4.594	0.25%	4.594	0.22%
	Plastic items	0.007	0.00%	0.007	0.00%
	Electrical items	208.042	11.25%	208.042	10.08%
	Furniture	8.170	0.44%	8.170	0.40%
	Catering	19.162	1.04%	19.162	0.93%
	Professional services	884.735	47.83%	884.735	42.85%
	Software & subscriptions	217.135	11.74%	217.135	10.52%
	Total	**688.174**	**72.56%**	**1,342.116**	**65.01%**
Downstream transportation and distribution	Air freight	0.328	0.02%	0.328	0.02%
	Land freight	0.160	0.01%	0.160	0.01%
	Total	**0.488**	**0.03%**	**0.488**	**0.02%**
Waste generated in operations	Landfill waste	14.554	0.79%	14.554	0.70%
	Recycled waste	0.271	0.01%	0.271	0.01%
	Total	**14.825**	**0.80%**	**14.825**	**0.72%**
Fuel and energy-related activities not included in scope 1 or scope 2	Well-to-tank (WTT) emissions	47.523	2.57%	47.523	2.30%
	Transmission & distribution (T&D) losses	15.134	0.82%	15.134	0.73%
	Total	**62.657**	**3.39%**	**62.657**	**3.03%**
		1,849.639	**100%**	**2,064.577**	**100%**

Table 5

Building & Mobility Emissions

The examination of GHG emissions from building and mobility-related activities, provides organisations with a practical lens through which to identify and manage potential projects and initiatives for the purpose of reducing emissions. It also provides a useful frame of reference for setting targets and tracking intensity metrics.

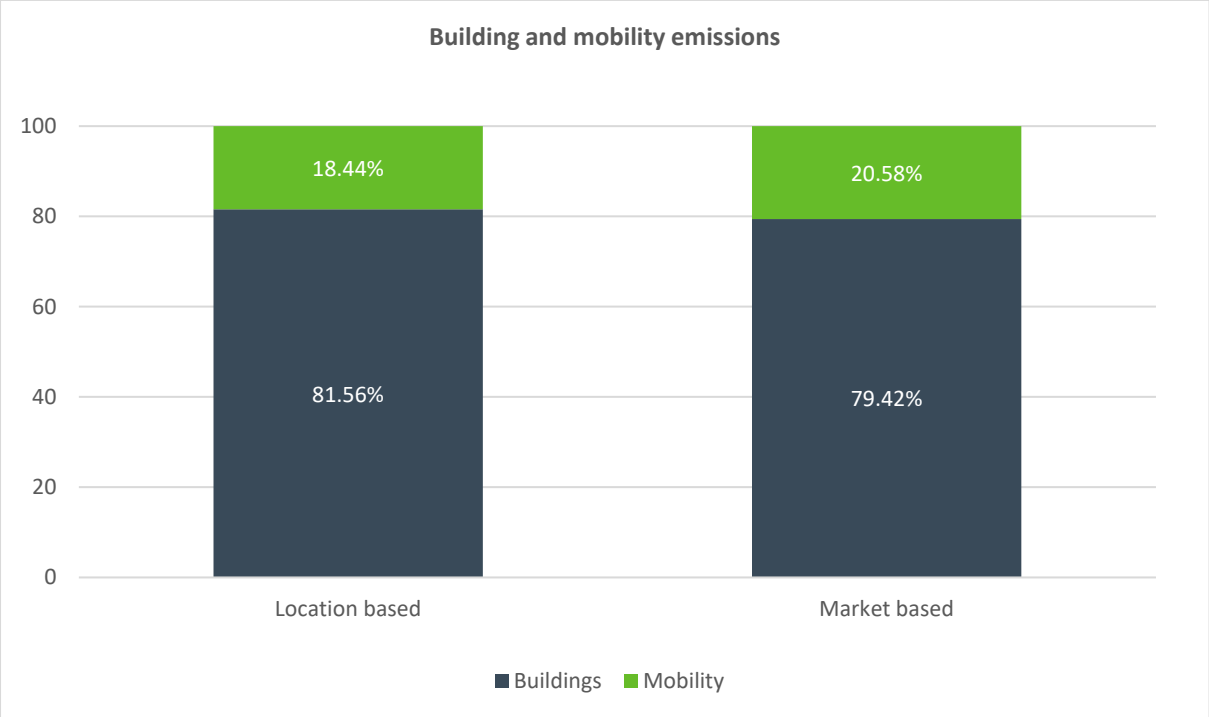


Figure 6: Percentage breakdown of location-based and market-based emissions (tCO_2e)

Building Emissions

The calculation of building emissions considers activities associated with physical buildings, including energy consumption, purchased goods and services and waste generated.

When using the location-based approach:

- More than three quatres of INTREAL's emissions (81.56 %) can be attributed to building-related activities
- Total emissions from purchased goods and services accounts for 79.70% of building-related emissions
- The balance (20.30%) is consequent from energy consumption and waste generated

When using the market-based approach:

INTREAL purchases electricity from renewable energy suppliers that have specified the electricity supply as 'void of emissions' (zero emissions) for their Germany-based office locations. The use of renewable energy has resulted in a decrease in building-related emissions of 2.14%.

- Just over three quarters of INTREAL's emissions (79.42%) can be attributed to building-related activities
- Total emissions from purchased goods and services accounts for 91.36% of building-related emissions
- The balance (8.64%) results from energy consumption and waste generation activities

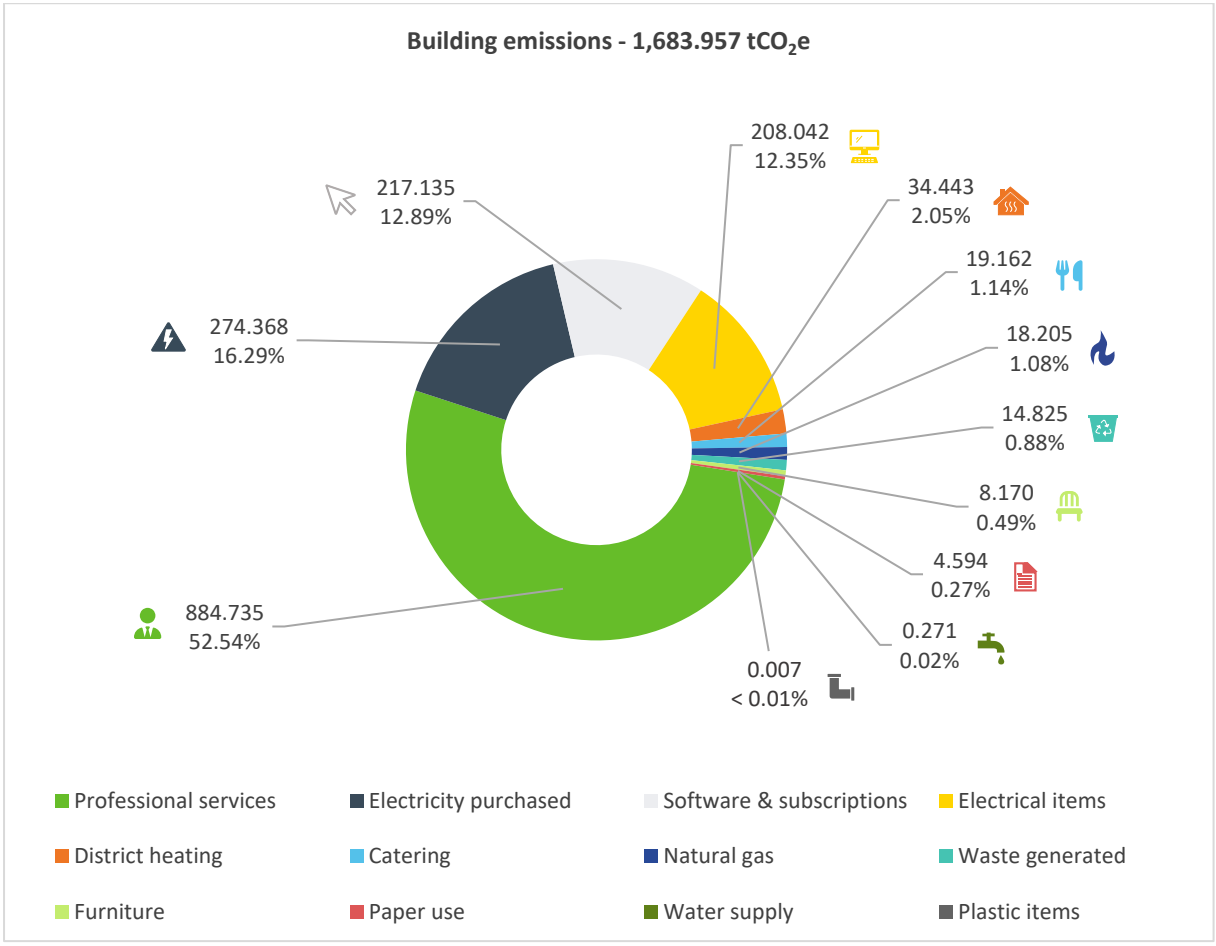


Figure 7: Building-related emissions by source

Mobility Emissions

Mobility emissions include all activities relating to business travel and transport, the movement of people and goods as well as emissions from homeworking.

- Emissions from activities associated with mobility account for 18.54% of location-based emissions and 20.58% of market-based emissions
- Employee commuting, homeworking, and business travel account for 93.83% of mobility emissions. The impact of employee commute has been highlighted in more detail in the previous discussion on scopes
- Emissions from employee commuting account for 55.78% of mobility emissions and 10.34% of total emissions

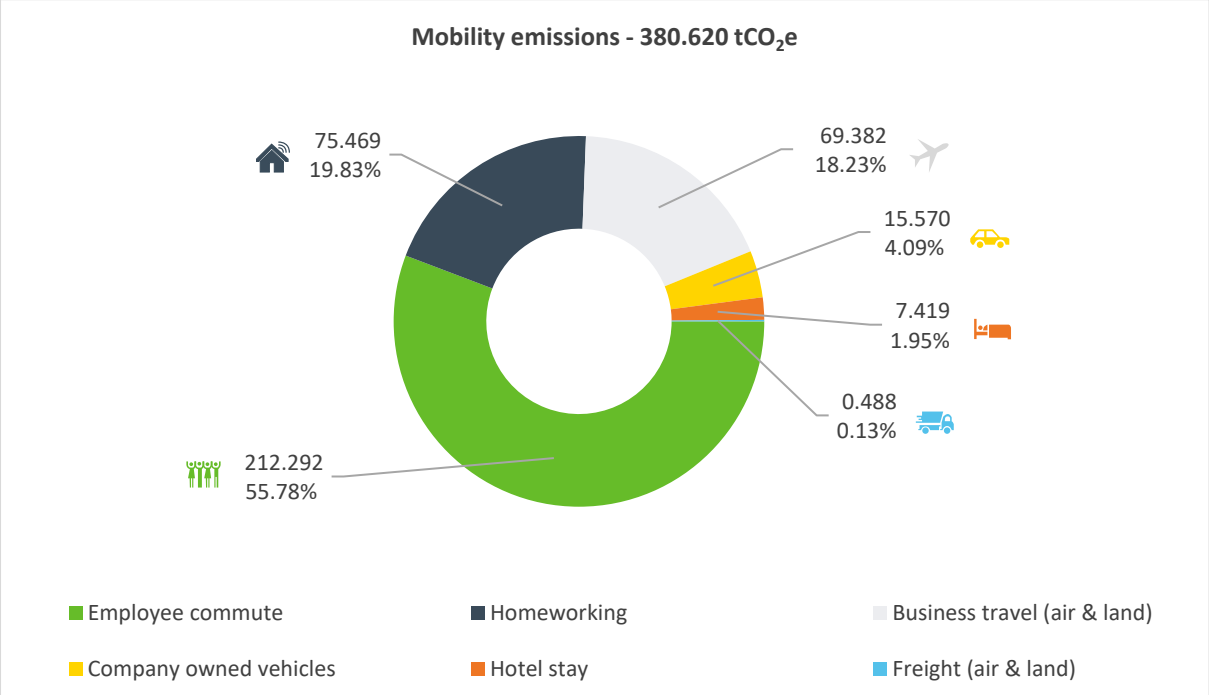


Figure 8: Mobility-related emissions by source

Employee Commute

The employee commute category includes emissions from employee travel to and from places of work. An online survey was shared to INTREAL employees and a response rate of 62.50% was achieved. INTREAL's homeworking policy permits employees to work from home for two days a week with 36 employees who work entirely remotely throughout the reporting period. These employees are excluded from the calculations whereas annual leave and public holidays were considered in the calculations.

Various modes of transport are used by employees. The use of private motor vehicles is the biggest contributor to emissions (57.44%).

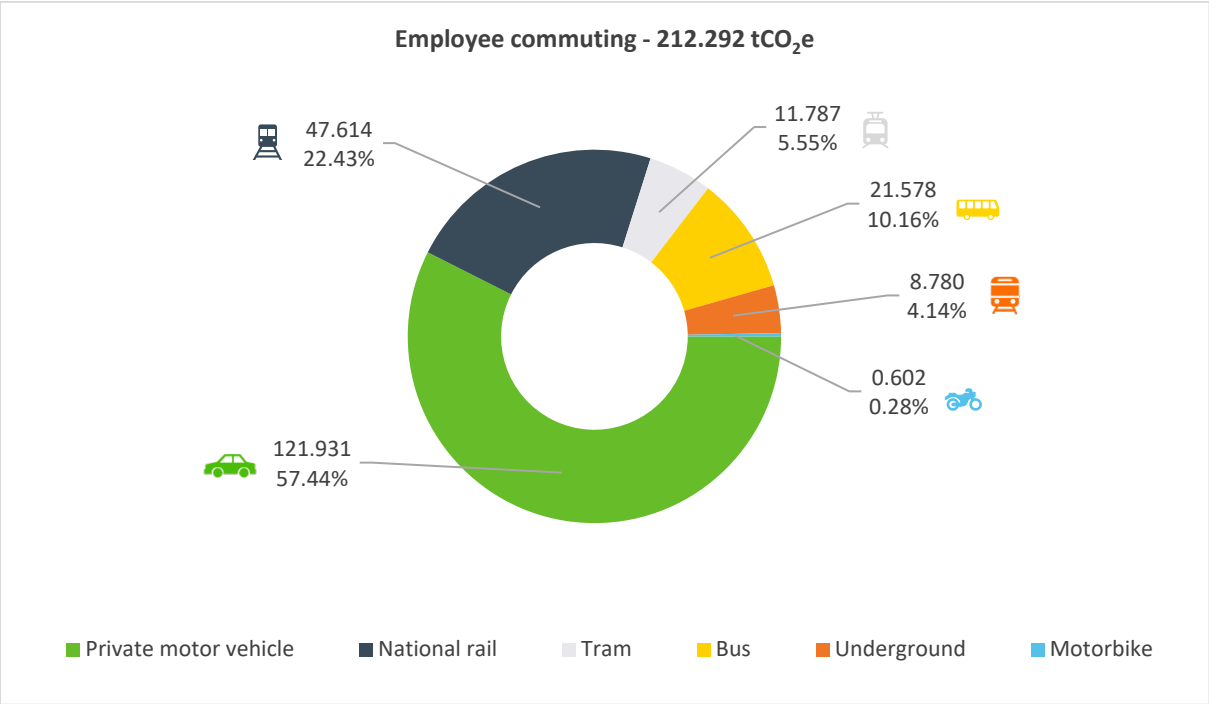


Figure 9: Employee commute: break down by mode of transport

Intensity Metrics

Intensity reporting makes it possible to analyse the relative increase or decrease in emissions against key operational or production denominators, e.g., emissions per square metre (m^2) of office space and per employee (head count). They are therefore a tool for benchmarking over time.

INTREAL has calculated intensity metrics using tonnes of CO_2e per employee and per m^2. For comparative analysis of intensity metrics, please refer to the associated analysis below.

Emissions Intensity 2023

Market-based approach:

2023	Unit	No.		tCO_2e/ employee	tCO_2e/m^2
INTREAL		tCO_2e	1,849.639		
		Employees	520	3.557	
		m^2	9,781.23		0.189

Table 6: INTREAL's intensity metrics based on market-based emissions

Location-based approach:

2023	Unit	No.		tCO_2e/ employee	tCO_2e/m^2
INTREAL		tCO_2e	2,064.577		
		Employees	520	3.970	
		m^2	9,781.23		0.211

Table 7: INTREAL's intensity metrics based on location-based emissions

Emissions Comparisons between FY22 & FY23

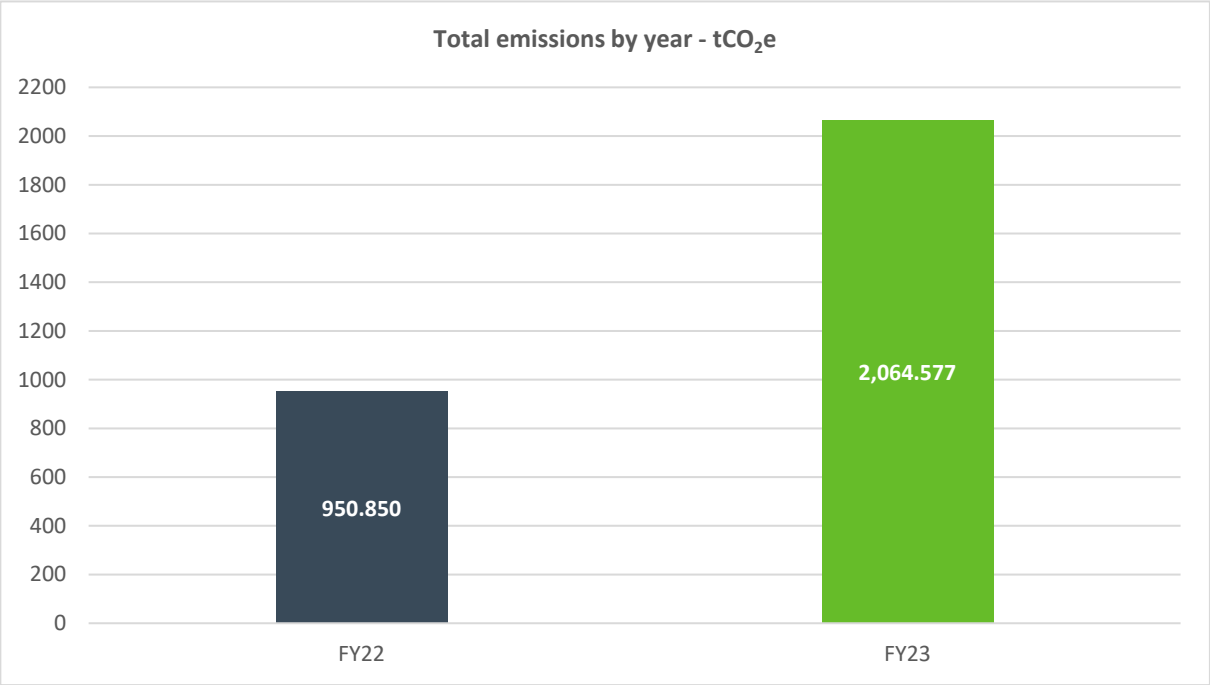
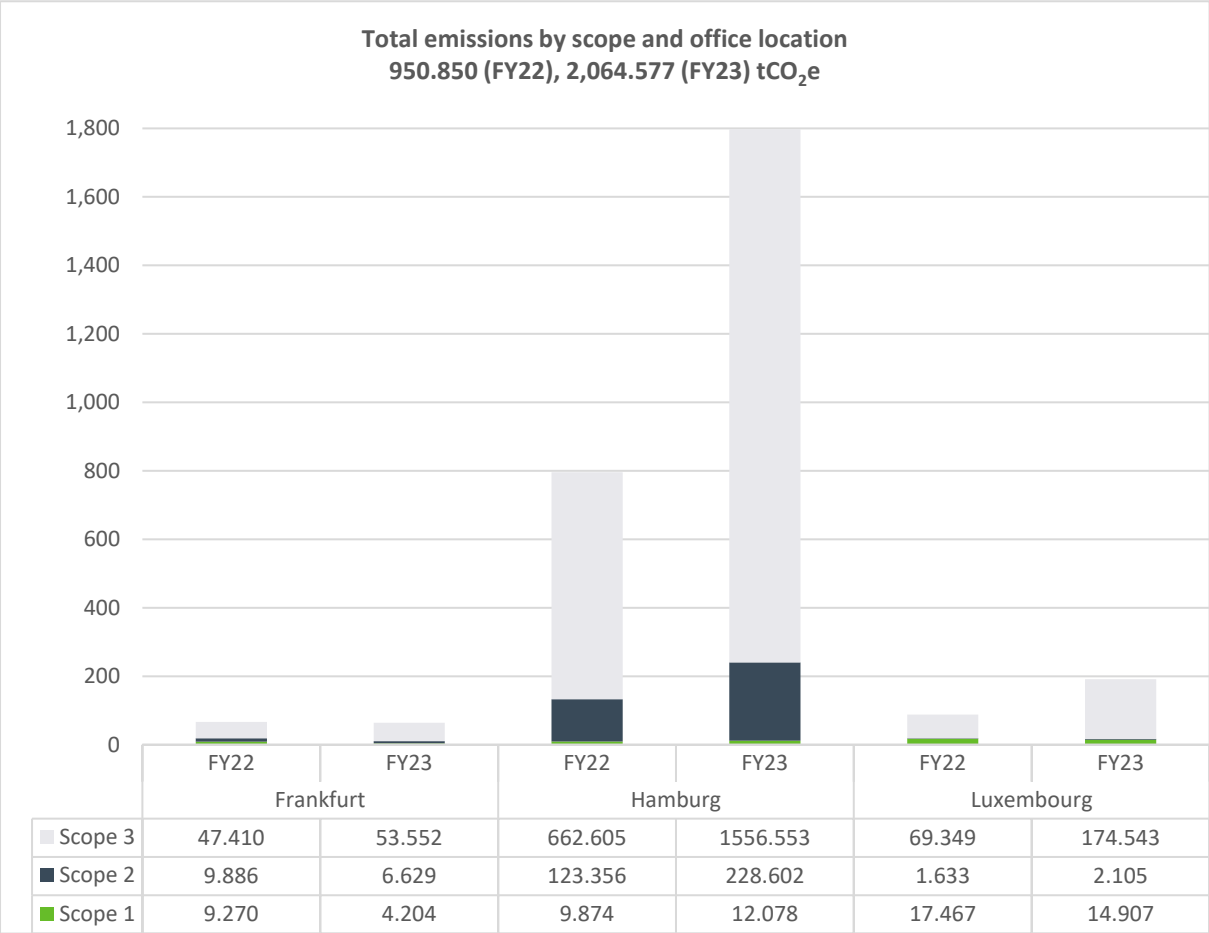


Figure 10: Total emissions by year

INTREAL's total emissions increased by 1,113.727 tCO_2e year on year. The main reasons for this increase are:

- The inclusion of additional scope 3 categories, which reflects evolving scope 3 practices and the increasing acceptance of estimation using spend-based emission factors, is the main driver behind the increase, 90.26% (1,005.284 tCO_2e) of the total increase is as a result from the increase scope 3 boundary
- The increase in scope 2, predominantly due to an increase in energy consumption at the Hamburg offices, as well as the change from a 100% renewable electricity supplier and product at the Luxembourg office, resulted in a 113.865 tCO_2e (10.22%) increase in emissions
- The total increase was slightly negated by the 0.49% (5.422 tCO_2e) decrease in scope 1 activities

Figure 11 below illustrates these increases in emissions by office location:



	FY22	FY23	FY22	FY23	FY22	FY23
	Frankfurt		Hamburg		Luxembourg	
Scope 3	47.410	53.552	662.605	1556.553	69.349	174.543
Scope 2	9.886	6.629	123.356	228.602	1.633	2.105
Scope 1	9.270	4.204	9.874	12.078	17.467	14.907

Figure 11: Total emissions by scope and office location

- Hamburg - the main operational centre, is the location carrying the biggest increase because of the refined scope 3 boundary

Table 8 below provides an overview of the change in GHG emissions year-on-year. An overview of activity data for the two reporting periods is available in Appendix 2.

Scope and category	Activities	tCO_2e		
		FY22 Location-based	FY23 Location-based	Change
Scope 1		**36.611**	**31.189**	**-5.422**
Stationary combustion	Natural gas	15.430	15.619	0.189
Mobile combustion	Company owned vehicles	21.180	15.570	-5.610
Scope 2		**134.875**	**248.740**	**113.865**
Electricity consumption	Purchased electricity (green tariff)	120.400	228.447	108.047
Heating	District heating	14.474	20.293	5.819
Scope 3		**779.364**	**1,784.648**	**1,005.284**
Business travel	Air travel	40.531	35.927	-4.604
	Land travel	24.867	33.455	8.588
	Sea travel	0.034	0.00	-0.034
	Hotel stay	9.474	7.419	-2.055
	Total	**74.906**	**76.801**	**1.895**
Employee commute	Employee commuting	**323.073**	**212.292**	**-110.781**
Homeworking	Homeworking	**68.513**	**75.469**	**6.956**
Purchased goods and services	Water supply	0.166	0.271	0.105
	Paper use	1.328	4.594	3.266
	Plastic items	0.031	0.007	-0.024
	Electrical items	276.815	208.042	-68.773
	Furniture		8.170	8.170
	Catering		19.162	19.162
	Professional services		884.735	884.735
	Software & subscriptions		217.135	217.135
	Total	**278.340**	**1,342.116**	**1,063.776**
Downstream transportation and distribution	Air freight	7.670	0.328	-7.342
	Land freight	0.933	0.160	-0.773
	Total	**8.603**	**0.488**	**-8.115**
Waste generated in operations	Landfill waste	8.154	14.554	6.400
	Recycled waste	0.176	0.271	0.095
	Total	**8.330**	**14.825**	**6.495**
Fuel and energy activities not in scope 1 or 2	Well-to-tank (WTT) emissions	9.757	47.523	37.766
	Transmission & distribution (T&D) losses	7.841	15.134	7.293
	Total	**17.598**	**62.657**	**45.059**
		950.850	**2,053.173**	**1,102.323**

Table 8: INTREAL's total emission by year, scope, and category

To summarise the findings in the table above:

- The decrease in scope 1 emissions is attributed to most of the mileage from company cars driven in hybrid vehicles which is typically associated with lower emissions from fuel consumption
- The increase in scope 2 emissions is due to a large increase in consumption at the Hamburg offices as well as the changing of energy suppliers at Luxembourg, from green (zero-emissions) energy to conventional energy
- The increase in scope 3 emissions is due to the refined reporting boundary for this period. Reductions have however been observed. Business travel activities have decreased, and data collection on employee commuting has improved, now including details on employees working exclusively from home. Additionally, fewer IT starter kits were issued due to a lower number of new hires. While not a reduction, this decrease is also reflected positively in the emissions balance. A decrease in downstream transportation activities was also observed.

Intensity Metrics

The comparison of FY23 with FY22 shows an increase in tCO2e/employee (107.24%) and tCO2e/m² (178.39%), based on the average of market-based and location-based values. This change is primarily attributed to the expanded reporting boundary, alongside an overall increase in total emissions and a decrease in floor area. Notably, in 2023, 100% of the data centre consumption was attributed to INTREAL. As the expanded boundary is a significant factor, these figures should not be interpreted as indicative of a trend without considering the broader context.

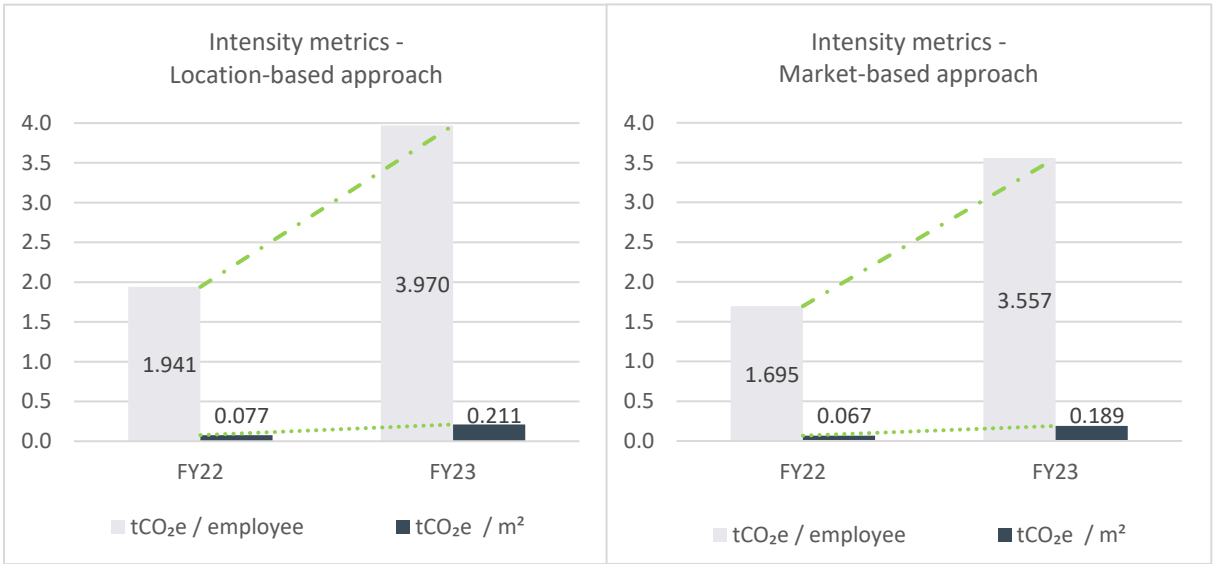


Figure 12: Intensity metrics by approach and reporting periods

SUMMARY

INTREAL is committed to emission reduction initiatives in line with the Paris Agreement and has a corporate goal to achieve net-zero GHG emissions by 2030. INTREAL's GHG inventory and carbon footprint reporting process is an important step in this journey. The measurement and reporting of GHG emissions is a foundation on which to set targets and to take action.

The INTREAL emissions profile is in line with that of a typical office-based service organisation in which scope 1 (direct emissions) are relatively low, and scope 3 (value chain) emissions are relatively high. Notwithstanding the meaningful increase in total emissions, various positive results can be reported:

- INTREAL's carbon footprint processes improved in the FY23 reporting period, in terms of boundary refinement, access to data and data quality, which resulted in a carbon footprint result which better reflects the activities of the organisation
- Certain specific initiatives appear to have resulted in reductions in emissions from activities that are easier to control (e.g. business travel)
- Actual consumption data was provided for important activities (such as natural gas) where estimations were used in the previous report
- There were decreases in activity data for activities such as purchases of electrical items, freight, air travel and hotel stay

During the FY23 reporting period, the scope 3 boundary for INTREAL was expanded to include additional activities such as professional services, software & subscriptions, furniture, and catering. These additions reflect the evolving materiality of such activities due to shifts in operational practices and global reporting standards.

The use of spend-based emissions estimations for these activities was necessitated by the absence of direct data. While spend-based approaches are less precise due to inherent variability in service costs, market dynamics, and regional procurement practices, they provide a practical solution for addressing complex and increasingly relevant scope 3 activities.

This measured expansion aligns with INTREAL's goal of establishing a comprehensive and credible baseline for 2023 and reflects the company's commitment to continuously improving its carbon measurement practices.

INTREAL's other sustainability initiatives include:

Energy efficiency

- All halogen lamps have been replaced with LED's
- Successive roll out of smart meters for electricity and district heating at the Ferdinandstraße 55-61 and Gertrudenstraße 9 offices in Hamburg
- Emission factors of products and services to be integrated into decision-making processes
- Installations of drinking water dispensers

Technology

- Mobile apps have been deployed to make it easier to connect/work remotely
- Teleconferencing tools have been improved to reduce travel
- Unused IT equipment has been decommissioned and removed

Reducing consumption and waste

- Primary "paperless" contract processing via DocuSign
- Electronic equipment is recycled wherever possible or destroyed and disposed of responsibly under the waste electrical and electronic equipment (WEEE) regulations
- Paper cups have been removed and replaced with ceramic cups
- Avoidance of single-use plastic
- The use of environmentally friendly cleaning chemicals has been implemented
- Food/catering that is ordered for events and not consumed is donated to organizations
- Smaller recycling systems have been initiated (crown cap donations to finance social and environmentally sustainable projects)
- Suppliers from the region are preferred in order to keep delivery distances short
- Where possible, we choose the best possible environmental standards for the purchase of copy paper and marketing supply, if available, INTREAL chooses to buy "climate neutral" copy paper
- Use of bicycle couriers for inner-city transportation
- Abolition of "disposable gifts" (bouquets of flowers) for employees birthday: instead of cut flowers, every employee receives a jar of regional HIH honey from the Group's own beehives for their birthday

Staff mobility

- An employee commuting survey is conducted to improve awareness
- Company bikes were purchased so employees can drive to meetings in the city center by bike
- Bicycle parking facilities have been provided
- Subsidising of professional tickets for public transport in Germany
- Subsidising of the JobRad
- Flexible work location: remote/presence

RECOMMENDATIONS

There are various recommendations for INTREAL's consideration, which remain important to action over time. If implemented, they are likely to improve the accuracy of the measurement, reduce emissions and reduce risk.

INTREAL should continue to:

- Promote and incentivise the use of public transport for employee commuting
- Continue to enhance the employee commute survey approach and frequency
- Roll out smart meters for utility data (energy, water, waste) where possible, and/or engage with suppliers to access quality data more frequently
- Keep abreast of announcements regarding possible alternative (renewable) supply options for natural gas for heating
- Remain in touch with evolving measurement practices that enable an improvement in scope 3 measurement and reporting
- Continue to request confirmation documentation from suppliers, particularly for GO certificates, supplier-mix factors, and residual-mix factors if applicable
- Evaluate and improve systems to record fuel consumption data for company owned vehicles
- Keep abreast of, and implement initiatives solutions for waste measurement
- Consider the use of carbon reporting software or other digital systems to capture carbon activity data more regularly and accurately

INTREAL should consider:

- Undertaking a dedicated materiality assessment to reconfirm its GHG emissions profile, particularly considering evolving practices around scope 3 emissions. This process could be effectively aligned with any ongoing CSRD activities, leveraging the required double materiality approach by incorporating a specific analysis of GHG activities
- Engaging with key service providers to collaborate on measuring emissions associated with their services, focusing on sharing data and methodologies to improve the accuracy of INTREAL scope 3 emission calculations, including the development of supplier emission factors. Given the increasing reliability of spend-based emissions factors, identify the most significant business cost line items as part of the materiality assessment to prioritise emissions categories that are likely to have the greatest impact on INTREAL's overall footprint

APPENDIX 1: DATA CONFIDENCE TABLE

Legend:

	Primary data, no estimations
	Data provided, estimations mostly unavoidable
	Data provided with estimations required
	Entirely estimated

Scope	Emission Source	Activity Data	Comment
Scope 1	Natural gas		
	Company owned vehicles		Data for 1 out of the 4 vehicles was estimated
Scope 2	Purchased electricity		
	District heating		
Scope 3	Air travel		
	Land travel		Distances for employee reimbursement and taxi travel are estimated based on spend value
	Hotel stay		
	Employee commuting		By nature this data point makes us of assumptions. Not all employees complete the survey and commuting behaviour varies between seasons
	Homeworking		By nature this data point makes us of assumptions. Calculations are based on the work from home policy which may not be an accurate reflection of employee choices or number of hours worked
	Water supply		
	Paper use		Data was provided but additional information had to be assumed to obtain calculations
	Plastic items		Data was provided but additional information had to be assumed to obtain calculations
	Electrical items		
	Furniture		
	Catering		
	Professional services		
	Software & subscriptions		
	Air and land freight		By nature this data point makes us of assumptions. Service providers do not keep record of all details (e.g. vehicles types used) required for CO_2e calculations
	Landfill and recycled waste		The majority of data points are available, estimations were applied to the rest
	All fuel and energy related activities for WTT and T&D		Data is based on consumption data of gas and heating

Table 9: Data quality of activity data by source

Note: The detailed discussion on assumptions and estimations is found in Appendix 3.

APPENDIX 2: ACTIVITY DATA TABLE

			FY22	FY23	Change
Scope & Category	**Activity**	**Unit**	**Quantities**	**Quantities**	**Quantities**
Scope 1					
Stationary combustion	Natural gas	kWh	72,373.33	85,574.17	13,200.84
Mobile combustion	Large car - Petrol	km	37,100.00	19,000.00	-18,100.00
	Large car - Plug-in hybrid electric vehicle	km	40,000.00	20,000.00	-20,000.00
	Large car - Diesel	km	38,000.00	7,000.00	-31,000.00
	Large car - Hybrid Petrol	km	0.00	45,300.00	45,300.00
Scope 2					
Electricity consumption	Purchased electricity	kWh	328,333.80	677,458.62	349,124.82
Heating	District heating	kWh	226,163.87	317,077.71	90,913.85
Scope 3					
Business travel - Air	Flights <900km	passenger.km	140,594.92	117,377.57	-23,217.35
	Flights 900 - 3,700km	passenger.km	13,008.56	0.00	-13,008.56
Business travel - Land	Train - National rail	passenger.km	277,084.71	316,735.51	39,650.80
	Tram - Tram and underground	passenger.km	682.56	0.00	-682.56
	Bus - Coach	passenger.km	638.85	0.00	-638.85
	Car hire - Large engine size diesel car	km	2,000.00	3,500.00	1,500.00
	Car hire - Large car - Petrol	km	0.00	785.00	785.00
	Car hire - Large car - Unknown fuel	km	0.00	200.00	200.00
	Car hire - Medium engine size diesel car	km	520.00	0.00	-520.00
	Car hire - Medium car - Petrol	km	0.00	3,586.58	3,586.58
	Car hire - Small car - Petrol	km	0.00	1,082.00	1,082.00
	Car hire - Small engine size battery electric car	km	8.00	47.00	39.00
	Car hire - Small car - Unknown fuel	km	0.00	100.00	100.00
	Car hire - Average car - Battery electric	km	0.00	8.00	8.00
	Taxi - Medium engine size petrol car	km	2,626.42	3,586.58	960.16
	Employee private use - Average engine size unknown fuel car	km	19,631.20	60,423.73	40,792.53
Business travel - Sea	Ferry - Foot passenger	passenger.km	1,500.00	0.00	-1,500.00
Business travel - Hotel stay	Austria	Room night	2.00	2.00	0.00
	France	Room night	12.00	9.00	-3.00
	Germany	Room night	683.00	524.00	-159.00
	Luxembourg	Room night	44.00	71.00	27.00
	Netherlands	Room night	3.00	1.00	-2.00
	Spain	Room night	7.00	0.00	-7.00
	England	Room night	0.00	1.00	1.00
Employee commute	Taxi - Medium engine size petrol car	km	2,028.27	0.00	-2,028.27
	Car - Average size unknown fuel type	km	1,060,580.00	551,117.37	-509,462.63
	Motorbike	km	11,276.88	4,201.97	-7,074.91
	Bus	passenger.km	93,772.11	169,798.37	76,026.26
	Train - Underground	km	254,367.23	250,279.92	-4,087.31
	Train - Light rail and tram	passenger.km	348,883.53	326,588.37	-22,295.16
	Train - National rail	passenger.km	1,334,241.82	1,071,673.99	-262,567.83
Homeworking	Heating	FTE working hour	183,960.00	206,640.00	22,680.00
	Office equipment	FTE working hour	367,920.00	413,280.00	45,360.00

Purchased goods and services	Water supply	m3	1,113.15	1,531.79	418.64
	Paper and board - Virgin	tonne	1.445	4.996	3.55
	Paper and board - Recycled	tonne	0.000	0.001	0.001
	Plastics	tonne	0.008	0.002	-0.01
	Computer - Notebook	nr	161.00	121.00	-40.00
	Computer - Monitor	nr	161.00	121.00	-40.00
	Computer - Conferencing Monitor	nr	161.00	121.00	-40.00
	Computer - Wireless Headset	nr	161.00	121.00	-40.00
	Mobile Phone - Apple iPhone SE 3rd Gen	nr	161.00	121.00	-40.00
	Computer - Average Docking Station	nr	161.00	121.00	-40.00
	Computer - Keyboard & Mouse Set	nr	161.00	121.00	-40.00
	Furniture	Euro	0.00	20,549.55	20,549.55
	Catering	Euro	0.00	118,094.80	118,094.80
	Professional services	Euro	0.00	5,247,539.80	5,247,539.80
	Software & subscriptions	Euro	0.00	1,628,919.41	1,628,919.41
Downstream transportation and distribution	Air freight - flights <900km	tonne.km	1,520.68	49.09	-1,471.59
	Air freight - flights 900 – 3,700km	tonne.km	34.67	37.60	2.94
	Courier - Average car, unknown fuel type	tonne.km	0.00	764.32	764.32
	Road freight - Van - Average (up to 3.5t) unknown fuel type	tonne.km	1,271.82	0.00	-1,271.82
	Rail freight - Freight train	tonne.km	4.01	0.00	-4.01
Waste generated in operations	Recycled waste - Paper and board	tonne	6.44	9.81	3.37
	Recycled waste - Mixed recyclables	tonne	1.84	2.95	1.11
	Landfill - Commercial waste	tonne	17.46	27.97	10.51
Fuel and energy activities not in Scope 1 or 2	Well-to-tank (WTT) emissions	kWh	524,701.06	2,074,646.84	1,549,945.78
	Transmission & distribution (T&D) losses	kWh	554,497.67	994,536.34	440,038.67

Table 10: Activity data table by year (these figures include estimations and/or assumptions, please see Appendix 3 for detailed descriptions)

APPENDIX 3: METHODOLOGY, ASSUMPTIONS & LIMITATIONS

The methodology used to develop this GHG Inventory is as recommended by the GHG Protocol Corporate Standard (WRI & WBCSD, 2015).

All scope 1 and 2 emissions are reported as per the minimum requirements set by the Corporate Standard. In addition, material scope 3 emissions have been reported.

The unit of measure is carbon dioxide equivalent (CO_2e) which includes the gases:
Carbon dioxide (CO_2)
Methane (CH_4)
Nitrous oxide (N_2O)

All emissions factors applied are derived from the factor database of the United Kingdom Government's Department for Environment Food & Rural Affairs (DEFRA), version 2.0 of 2023 unless otherwise indicated. The DEFRA emissions factor database is considered to be one of the most comprehensive and reliable and is updated on an annual basis.

All data submitted by INTREAL is assumed to be accurate, precise, and complete unless otherwise stated. Where data was not available figures were estimated and extrapolated according to the methodologies described below. AQGT was not asked to verify data against source documentation.

Further information regarding data collection limitations, assumptions and extrapolations are available on request.

Scope 1

Stationary combustion

Natural gas is used as a heating fuel at Frankfurt and Luxembourg. The GHG emissions for Frankfurt were calculated based on the supplier emission factor provided by INTREAL.

According to the GHG Protocol, under the operational control approach, emissions associated with fuel combustion in leased assets are reported under scope 1.

The well-to-tank (WTT) emissions relating to upstream extraction, refining and transportation of natural gas, prior to consumption were included under scope 3.

Mobile combustion

Fuel consumption data for company owned vehicles was not available and emission factors were chosen based on estimated distances provided by INTREAL, engine size and fuel type.

All vehicles on lease periods for longer than two months, were considered long term leased vehicles, and therefore under the control of INTREAL and thus included under scope 1. All vehicle models provided were classified as large vehicles with engine sizes above 2.0 litres.

Where vehicles are leased for less than two months and rented for employees to commute for business travel, these emissions were reported under land-based business travel in scope 3.

The WTT emissions relating to upstream extraction, refining and transportation of fuel, prior to consumption, were included under scope 3.

Scope 2

Electricity consumption

For INTREAL's German operations the company purchases renewable (green) electricity from a market-based supplier. The supplier claims zero GHG emissions from generation.

In line with the recommendations of the GHG Protocol, emissions from purchased electricity were calculated using the market-based and location-based approach.

As per the reporting requirements, for the market-based approach, emissions were calculated based on the zero product specific emission factor provided by the supplier. For the location-based approach, emissions were calculated using a production mix factor of 335.09 gCO_2/kWh for Germany obtained from the Association of Issuing Bodies (2023).

For Luxembourg the electricity product purchased (Eurostrom from Enovos), contains fossil fuels and the supplier emission factor of 375 gCO_2/kWh was used in the calculations for both approaches. Upstream transmission and distribution (T&D) losses and WTT emissions were accounted for under scope 3, fuel and energy activities not reported in scope 1 or 2.

District heating

GHG emissions were calculated using a specific emission factor provided by the supplier, applicable only to Hamburg. Upstream associated emissions were accounted for under scope 3, fuel and energy activities not reported in scope 1 or 2.

Scope 3

Business travel

Air travel

Flights are classified according to the one-way route distance and by class as per the DEFRA database categories:
Domestic flights: up to 900 km
Short haul flights: 901 – 3,700 km
International flights: >3,700 km flights

All flight routes provided were specified as economy class.
All emission factors selected are with radiative forcing (RF) to include the indirect effects of non-CO_2 emissions such as water vapour, contrails and NO_x on climate change.

Land travel

Car rentals
The GHG emissions for vehicles rented or leased for a period of two months or less were accounted for based on the distance travelled, engine size and fuel type.

Employee private vehicle use
The total distance travelled in privately owned vehicles was calculated by taking the total spend and dividing by the flat rate per kilometre (km), as the km data is not recorded. GHG emissions were calculated based on an average car - unknown fuel type.

Taxi rides
The distances travelled in taxi rides are not recorded. The distances were estimated using the total spend. The total base cost for the 243 rides recorded was deducted from the total spend to determine the spend on distance travelled. The total km travelled was determined by dividing the total spend on distance travelled by an estimated price per km of €3.00 as indicated by INTREAL. The emission factor for a medium sized petrol car was applied to the estimated total km.

Train rides
The DEFRA emission factor for national rail was applied to all train trips.

Hotel stays

Hotel stays were totalled by country and the average hotel stay factor per country was used to calculate GHG emissions. The emission factor for Austria and Luxembourg was obtained from the Greenview Hotel Footprinting Tool which uses data from the Cornell Hotel Sustainability Benchmarking (CHSB) index, 2023.

Employee commute

The data for employee commute was obtained from an electronic survey shared with all employees. The survey was conducted during November 2023.

Respondents

The survey response rate increased from 52.24% (FY22) to 62.50% (FY23).

Location	Nr. of respondents	Nr. of employees
Hamburg	280	455
Frankfurt	27	43
Luxembourg	18	22

Table 11

The total daily distances travelled for the various modes of transport were calculated based on the information provided by the respondents. Once the total daily distances were calculated this data was extrapolated to the number of employees for each location.

For Hamburg the extrapolation was based on 419 employees. The 36 employees who work from home on a permanent basis were excluded.

The daily distances were extrapolated to a yearly figure based on the assumption that there are 135 travel days within the year. INTREAL has a 3:2 work from home policy. It was assumed that there are 45 working weeks in the year allowing for 30 days (six weeks of annual leave) and five days (one week of public holidays), each week has three days for travel to work, resulting in an annual total of 135 travel days.

Modes of transport

The following emission factors from the DEFRA database were applied to the respective modes of transport:

Mode of transport selected in survey	DEFRA Emission factor
Car	Average car, unknown fuel type
Motorcycle	Average motorcycle (no specified fuel type)
Bus	Average local bus
Train/Railway	National rail
Tram	Light rail and tram
Underground	Underground

Table 12

Homeworking

INTREAL has a work from home policy which allows employees to work from home for two days per week. The GHG emissions resulting from homeworking are regarded to be from the energy consumption of office equipment and heating. Should the employees have worked at the office, these emissions would normally be accounted for under the company's scope 1 and 2 emissions.

To account for the GHG emissions associated with employees working from home, a total number of work-from-home hours was calculated. It was assumed that employees work from home 16hrs per week (two days). For the 36 employees who work from home on a permanent basis, a 40hr week was used. It was assumed that there are 45 working weeks in the year. GHG emissions from heating were calculated for only half of the work-from-home hours whereas emissions from the use of office equipment, were calculated for the total number of work-from-home hours.

Purchased goods & services

Electrical items

INTREAL provides all new employees with an IT starter package. There were 121 new employees during 2023. The emission factors for these items were provided by INTREAL and obtained from the manufacturer's datasheets:

Item description	Emission factor
Notebook - ThinkPad E15 Gen 3	551.00 $kgCO_2e$
Conference monitor - Dell C2422HE	602.00 $kgCO_2e$
Monitor - Dell P2422H	481.00 $kgCO_2e$
Docking station - Non-specific/average	22.00 $kgCO_2e$
Keyboard & mouse – Logitec MK120 Bundle	5.03 $kgCO_2e$
Headset - Jabra Evolve2 65	12.32 $kgCO_2e$
Mobile phone – Apple iPhone SE (3rd gen), 64GB	46.00 $kgCO_2e$

Table 13

Paper use

For office paper and brochures, where information was not available, the following assumptions were made:

Description	Assumption
Hamburg purchases	
Cardboard shipping bags	Board weight - 300gsm
Info Sticky Notes various sizes	Number of notes per pad - 100
Memo folder DIN A4	Weight per item - 400gm
Luxembourg purchases	
Notepads DIN A4, 80 sheets	Paper weight - 70gsm
Binder A4	Weight per item - 400gm

Table 14

Marketing materials – paper use and plastic items

For marketing materials, where information was not available, the following assumptions were made:

Description	Assumption
Folded flyers, DIN A5	4x DIN A5 pages per flyer
Brochure, DIN A4	12x DIN A4 pages per brochure

Table 15

Furniture, catering, professional services and software & subscriptions

These activities were calculated using the spend-based approach with emission factors sourced from the following data bases. Where the conversion of currencies was required the average exchange rate for the relevant currency for the period January – December 2023 was applied.

Activity	Source of emission factor
Furniture	BEIS/DEFRA 2024
Catering	EPA (Supply Chain Factors Dataset v1.2) 2023
Professional services	EXIOBASE 2021
Software & subscriptions	EXIOBASE V3.8.2 2021

Table 16

Water supply

The DEFRA emission factor for water supply (UK) in cubic metre was applied.

Downstream transportation & distribution

All activity data for deliveries were supplied by the freighting company.

Air freight

Air freight was divided into two categories. Domestic freight flights for distances of less than 900 kilometres and short haul freight flights for distances between 900 and 3,700 kilometres.

Weight and distance were provided, and emissions were calculated on a tonne.km basis for each route listed.

Land freight

For land freight, the mode of transport for all deliveries were assumed to be an average passenger car of unknown fuel type. Weight and distance were provided, and emissions were calculated on a tonne.km basis for each route listed.

Well-to-tank emissions

Where applicable these emissions have been included. WTT GHG emissions relate to upstream extraction, refining and transportation of fuel, prior to consumption WTT emissions are regarded to be indirect scope 3 emissions according to the GHG Protocol.

Waste generated

Data for waste generated, for all offices, were provided as per the table below. Where data was not available, assumptions were made and indicated with an asterisk.

Office location	Type of waste	No. of bins	Size (litres)	Frequency of emptying	Destination
Hamburg Ferdinandstraße INTREAL	Residual	1	120	1x / week	Landfill
	Residual	2	1,100	2x / week	Landfill
	Paper	1	1,100	2x / week	Recycling
	Packaging/Packaging with plastic content	1	1,100	1x / week	Recycling
	Shredded paper	6	240	1x / quarter	Recycling
	Shredded paper	2	70	2x / year	Recycling
	Shredded paper	2	350	2x / month	Recycling
Hamburg Ferdinandstraße INTREAL (IRS)	Shredded paper	1	240	5x / year	Recycling
	Shredded paper	1	240	1x / year	Recycling
Hamburg Getrudenstraße INTREAL	Residual	1	60	2x / month	Landfill
	Residual	2	1,100	2x / week	Landfill
	Paper	1	1,100	2x / week	Recycling
	Packaging/Packaging with plastic content	1	660	1x / week	Recycling
Frankfurt Erlenstraße 2 INTREAL	Shredded paper	1	240	1x / year	Recycling
	Residual*	1	120	1x / week	Landfill
Luxembourg 6b Rue du Fort Niedergrünewald INTREAL S.A	Shredded paper	1	240	1x / year	Recycling
	Residual	1	40	3x / week	Landfill
	Packaging/Packaging with plastic content	1	20	3x / week	Recycling
	Paper	1	240	3x / year	Recycling

Table 17
*Note: Based on data estimations

It was estimated that a 1,100 litre bin has the following capacities: 65 kg of general residual waste, 35 kg of cardboard/paper waste and 35 kg of light fraction/dry mixed recycling. The capacities for the 660 and 120 litres bins were derived from the above estimation. For shredded paper it was assumed that 12 litres of shredded paper weighs approximately 1kg. The total weight of waste was determined based on the total number and volume of bins, and the frequency of the bins being emptied.

The following emission factors were assigned to the various waste streams:

Waste type	DEFRA emission factor category
Residual waste	Commercial and industrial waste, landfill
Paper waste	Paper and board, closed loop (recycled)
Packaging with plastic content (dry mixed recycling)	Average plastics*, open loop (recycled)

Table 18
**The average plastic open loop factor is the same value as various other open loop materials and therefore not meant as a description of the waste stream, but for the emission factor it represents and shares with other materials indicated in this waste stream.*

Fuel and energy activities not reported in scope 1 or 2

Well-to-tank (WTT) emissions

WTT GHG emissions were included to account for the upstream scope 3 value chain emissions associated with energy, prior to combustion/consumption.

Transmission & distribution (T&D) losses

GHG emissions from upstream energy T&D losses were accounted for using the associated DEFRA emission factors, based on consumption (kWh).

APPENDIX 4: GLOSSARY

CHSB	Cornell Hotel Sustainability Benchmarking
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CSRD	Corporate Sustainability Reporting Directive
DEFRA	Department for Environment Food & Rural Affairs
FTE	Full time equivalent
GHG	Greenhouse Gas
LCA	Life Cycle Assessment
RF	Radiative forcing
T&D	Transmission and distribution
UK	United Kingdom
WTT	Well-to-tank
WRI	World Resources Institute
WBCSD	World Business Council for Sustainable Development

DISCLAIMER

The accuracy of any carbon footprint calculation is linked to the accuracy of the primary input data provided by the reporting entity and its representatives/affiliates, the veracity of data sourced/provided for assumptions and various other factors that may be out of AQGT's control. AQGT was not required to verify data or data source information as part of this assignment. INTREAL acknowledges and accepts (i) that the calculation results are a best approximation, (ii) that AQGT cannot and do not guarantee that the calculated carbon footprint corresponds to INTREAL's actual carbon footprint and (iii) that AQGT does not support any carbon-related claims unless these have been expressly endorsed by AQGT in writing, and (iv) to the extent the calculation yields INTREAL's carbon footprint over a time period partly in the future, that the calculated carbon footprint is not necessarily a prediction about the future and as such necessarily an estimate or forecast.