# Corporate Carbon Footprint





#### Introduction 00

I'm pleased to share our 2024 Corporate Carbon Footprint Baseline Report — an honest reflection of the progress we have made, the lessons learned, and our direction of travel as we continue to build with sustainability at the core of #buildingforgood.

Now in our third year of reporting, we are more focused on how we understand and reduce our environmental footprint. Sustainability at MDC<sup>2</sup> is not a separate stream of work — it is baked into how we design, build, and operate every day. We are building on past experience to set higher standards across the board aiming for BREEAM Outstanding where possible and making sustainability a consistent and practical part of every project.

A few highlights of our story so far:

In MDC<sup>2</sup> Park Łódź South, our focus on sustainable • design and materials sourcing helped us reach an embedded carbon intensity of just 163 kg CO<sub>2</sub>e/m<sup>2</sup> - about 50% below Polish and global averages. That took close collaboration with our contractor and sets a tough benchmark for us to beat - exactly the kind of challenge we're up for.



- across the board.
- project stages through delivery.
- different charity actions, partnering with organizations like Fundacja Las Na Zawsze, action, not just words.



MDC<sup>2</sup> Park Gliwice, which launched at the end of 2023, earned a BREEAM Outstanding certification, making it one of the top-rated industrial assets in Europe. It's a great example of what smart, sustain able logistics infrastructure can look like.

MDC<sup>2</sup> Park Kraków South (Building II) has now also achieved a BREEAM New Construction "Excellent" rating, underlining our consistent performance

We've continued to invest in transparency – our carbon accounting and Lifecycle Assessments (LCAs) help us stay accountable from the earliest

Sustainability isn't only about buildings. It's about people. This year, our team delivered 14

Fundacja Truckers Life, Fundacja Wyobraź Sobie, and more. These partnerships, along with our re forestation efforts, reflect the kind of culture we're proud to build — one that's rooted in care and

Looking ahead, we'll keep pushing ourselves to build better — for people, for communities, and for the planet. Thank you for your continued trust and support.

Best regards,

Jeremy Cordery, COO















![](_page_4_Picture_0.jpeg)

#### About this report 01

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Revision	00

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01

# Summary

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#### 01 Summary

## **1.** Summary

## **1.1 Key findings**

On the basis of the data collected and the Scope 1, 2 and Scope 3 (limited coverage) emissions calculations carried out for MDC<sup>2</sup>, the following conclusions are drawn:

**1.** According to the GHG Protocol methodology, Scope 1+2+3 emissions for the **MDC<sup>2</sup> in 2024 were**:

Scope	GHG emissions 2024 [tCO2e]
Scope 1	0,00
Scope 2 Location based method	14,66
Scope 2 Market based method	15,10
Scope 3	76,18
Total Scope 1,2,3 Emissions Location ba	sed 103,34
Total Scope 1,2,3 Emissions Market base	ed 103,79

2. The location-based method reveals what the company is physically putting into the air, and the market-based method shows emissions the company is responsible for through its purchasing decisions. Both pieces of information tell an important story about the company's carbon footprint and carbon reduction strategy. In the case of the company analysed, the average location-based and decarbonised energy supplier emission factors were very close to each other, hence the small differences in location-based and market-based emissions.

**3.** Despite analysing only a fraction of the potential Scope 3 emissions for MDC<sup>2</sup>, it can be seen how large a role Scope 3 emissions play in the company's total emissions, in this case over 85% of total emissions.

Table 1. Total emissions Scope 1+2+3 - MDC<sup>2</sup> (2024)

![](_page_8_Picture_10.jpeg)

#### 2023 and 2024 emissions comparison - key findings

Scope	GH	G emission	s [tCC
	2023	2024	%ch
Scope 1			
Scope 2 Location based method	15,74	14,66	-7,
Scope 2 Market based method	15,74	15,10	-4,
Scope 3	76,18	88,68	14,1
Total Scope 1,2,3 Emissions Location based	91,92	103,34	11,
Total Scope 1,2,3 Emissions Market based	91,95	103,79	11,

Table 2. Total emissions Scope 1+2+3 - MDC<sup>2</sup> (2024 in relation to 2023)

![](_page_8_Picture_16.jpeg)

![](_page_8_Figure_17.jpeg)

![](_page_8_Picture_18.jpeg)

#### 01 Summary

### Scope 1

Unchanged, no reported emissions categorised as Scope emissions in years 2023-2024.

### Scope 2

Electricity consumption in 2024 increased by 18%, taking into account grid decarbonisation, emissions increased by 2% and 12% for the location-based and market-based method.

District heating consumption decreased by 22%, translating into an 11% decrease in emissions. According to district heating supplier data, the GJ energy emissivity factor increased by 10% in 2024 relative to 2023.

### Scope 3

### Purchased goods and services, Waste generated in operations

In 2024, for the first time, emissions resulting from the purchase of tap water and from waste production and management were taken into account.

#### **Business travel**

In 2024, there was no business travel by aircraft in business class. Compared to 2023, the total distance of business travel increased by 13% for air travel and by 32% for train travel. Total business travel emissions increased by almost 4%.

#### **Employee commuting**

Employee fuel consumption fell by 10%, however, emissions increased by 17%. difference is due to an update of the emissions calculation methodology and the choice of a more precise method in 2024 compared to 2023. The total distance travelled by employees and the resulting emissions did not change.

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# Basis of the analysis

![](_page_10_Picture_2.jpeg)

## 2. Basis of the analysis

## The analysis is based on:

- 1. The Greenhouse Gas Protocol, a Corporate Accounting and Reporting Standard
- 2. GHG Emissions Calculation Tool
- 3. GHG Emissions Data sheet "ESG 2024"
- 4. KOBiZE 2024 Reports
- 5. UK Government GHG Conversion Factors
- 6. OneClickLCA 2025

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# Scope of the analysis

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#### 03 **Scope of the analysis**

### **3.1 About GHG Protocol**

Carbon emissions are a key element emphasised by the legal changes being introduced to deal with climate change. Determining carbon emissions for buildings, a portfolio or for a company's entire operations based on the internationally recognised GHG Protocol standard is one way to effectively monitor CO2 emissions. For the CO2 analysis to be complete, activities such as the following should be included:

- an in-depth analysis of the carbon emissions of a building, a group of buildings or an entire company activity based on the guidelines of the GHG Protocol standard;
- identification of the most carbon-intensive areas of activity.

A comprehensive analysis of carbon emissions makes it possible to locate the areas of activity in which a potential change could result in a significant reduction in total CO2 emissions.

## **3.2 Setting organisational boundaries**

GHG emissions calculations were carried out for the MDC<sup>2</sup>, MDC<sup>2</sup> company is managed by an external supervisory board. For the purpose of determining the calculation methodology and performing the calculations themselves, it was decided to analyse only the MDC<sup>2</sup> company without the activities associated with the supervisory board.

## **3.3 Setting control approach**

When using the GHG Protocol, it is necessary to decide on one of the three approaches to control the activities responsible for the generation of individual emissions.

#### Equity share approach

Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.

![](_page_13_Picture_12.jpeg)

#### **Operational control approach**

Most CRE companies will report Scope 1 and 2 emissions using the 'operational control' approach. This is defined as "having the ability to introduce and implement operating and/ or environmental policies and measures". Where this approach is used, it should be extended to Scope 3 reporting as well to maintain consistency. Using this approach, emissions from any asset a company controls are included in its direct emissions (i.e. Scope 1), but emissions from any asset a company wholly or partially owns but does not control (e.g. investments) are excluded from its direct emissions and should be included in its Scope 3 inventory.

For the calculation of emissions included in Scope 1+2 and part of the Scope 3, the use of an **operational control ap**proach was adopted.

![](_page_13_Picture_19.jpeg)

![](_page_13_Figure_20.jpeg)

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04

# GHG emissions calculations

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## 4. GHG emissions calculations

The client provided an internally completed emissions data sheet. On the basis of the information contained within it and the discussions held, a validation check was carried out and appropriate emission factors were selected. For a summary of the MDC<sup>2</sup>'s reported activities, see **Appendix 1** in the section **6. Appendices.** The current study analyses the Scope 1+2+3 emissions of the above entities for data collected in 2024. The data made available was allocated to the following Scope 1, 2 and 3 categories:

### **4.1 Scope 1**

#### **S1 – Stationary Combustion**

#### $\rightarrow$ Not applicable for MDC<sup>2</sup>

Includes fuel consumption at a facility to produce electricity, steam, heat or power. The combustion of fossil fuels by natural gas boilers, diesel generators and other equipment emits

![](_page_15_Picture_7.jpeg)

#### **S1 – Mobile Combustion**

#### $\rightarrow$ Not applicable for MDC<sup>2</sup>

Includes fuel consumption by vehicles that are owned or leased by the company. Combustion of fossil fuels in vehicles (including cars, trucks, planes, and boats) emits carbon dioxide, methane, and nitrous oxide into the atmosphere. The emission factors were selected based on the type of vehicle and the type of fuel used.

Electricity and other sources of energy purchased from local utilities (that are not combusted on-site). Examples include electricity, steam, and chilled or hot water. To generate this energy, utilities combust coal, natural gas, and other fossil fuels, emitting carbon dioxide, methane, and nitrous oxide in the process. The emission factors were selected on **S1 – Refrigerants** the basis of the locations in which the companies concerned  $\rightarrow$  Not applicable for MDC<sup>2</sup> operate. For comparison purposes, calculations were carried Includes leaks in the company's HVAC system, chillers, reout for the two methods: Market-Based Method and Locafrigerators, etc., through which refrigerant gas escapes. Most tion-Based Method. A brief overview of the two methods is refrigerant gases contribute to global warming when leaked given in the table below. into the atmosphere. The quantity of leaked gas is assumed

![](_page_15_Picture_14.jpeg)

carbon dioxide, methane, and nitrous oxide into the atmosphere. Emission factors have been taken on the basis of the

to equal the amount of gas replaced in these systems by your HVAC or chiller maintenance company. The emission factors were selected based on the type of the refrigerant declared by the Client.

## **4.2 Scope 2**

#### **S2 – Purchased Energy**

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![](_page_15_Figure_24.jpeg)

![](_page_15_Figure_25.jpeg)

![](_page_15_Figure_27.jpeg)

![](_page_15_Figure_28.jpeg)

![](_page_15_Figure_29.jpeg)

![](_page_15_Figure_30.jpeg)

![](_page_15_Figure_31.jpeg)

![](_page_15_Figure_32.jpeg)

	Market – Based Method	Location – Based Method
Definition	A method to quantify the scope 2 GHG emissions of a reporter based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity bundled with contractual instruments, or contractual instruments on their own.	A method to quantify scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries.
How method allocates emissions:	Emission factors derived from the GHG emision rate represented in the contractual instruments that meet Scope 2 Quality Criteria	Emission factors representing average emissions from energy generation occurring within a defined geographic area and a defined time period.
Where method applies:	To any operations in markets providing consumer choice of differentiated electricity products or supplier-specific date, in the form of contractual instruments.	To all electricity grids.
Most useful for showing:	<ul> <li>Individual corporate procurement actions</li> <li>Opportunities to influence electricity suppliers and supply</li> <li>Risks/opportunities conveyed by contractual relationships, including sometimes legally enforceable claims rules</li> </ul>	<ul> <li>GHG intensity of grids where operations occur regardless of market type</li> <li>The aggregate GHG performance of energy-intensive sectors (for exaple, comparing electric train transportation with gasoline or diesel vehicle transit)</li> <li>Risks/opportunities aligned with local grid resources and emissions</li> </ul>
What the method's results omit:	<ul> <li>Average emissions in the location where electricity use occurs.</li> </ul>	• Emissions from differentiated electricity purchases or supplier offerings, or other contracts

 Table 3. Market-Based and Location-Based Method comparison

![](_page_16_Picture_3.jpeg)

![](_page_16_Picture_6.jpeg)

## **4.3 Scope 3**

For the purposes of the following analysis, due to:

- the availability of the Client's emission data,
- the specifics of the business,

it was decided to analyse selected categories of Scope 3 (see Table 2. below), in subsequent years it is not excluded to include a wider range of activities located in the value chain MDC<sup>2</sup>.

Category	<b>Reported activities</b>
1. Purchased goods & services	Water consumption in the office
5. Waste generated in operations	Waste management in the office
6.Business Travel	Air Travel Rail Travel
7. Employee commuting	Car transport Rail Transport

Table 4. Scope 3 - Selected categories MDC<sup>2</sup>.

### S3 Category 1 – Purchased goods and services

This category includes emissions from the goods and services purchased by the company during the reporting year not otherwise included in another 'Upstream' category, such as:

- Production of raw materials and components used by the company
- Purchased products and packaging •
- **Emissions from services** (e.g., marketing, IT, consulting)

#### S3 Category 5 – Waste generated in operations

This category includes emissions from third-party disposal and treatment of waste generated in the reporting company's owned or controlled operations in the reporting year. This category includes emissions from disposal of both solid waste and wastewater. Waste treatment activities may include:

- Disposal in a landfill
- **Recovery for recycling**
- Incineration
- Composting

![](_page_17_Picture_19.jpeg)

- Waste-to-energy (WTE) or energy-from-waste (EfW) - that is, combustion of municipal solid waste (MSW) to generate electricity
- Wastewater treatment

#### S3 Category 6 – Business Travel

This category includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars. Emissions from business travel may arise from:

- Air travel
- **Rail travel**
- **Bus travel**
- Automobile travel (e.g., business travel in rental cars or employee-owned vehicles other than employee commuting to and from work)
- Other modes of travel

/	1	8
		<u> </u>

![](_page_17_Figure_36.jpeg)

![](_page_17_Picture_37.jpeg)

#### **Scope 3 Category 7 - Employee commuting**

This category includes emissions from the transportation of employees between their homes and their worksites. Emissions from employee commuting may arise from:

- Automobile travel
- **Bus travel**
- **Rail travel**
- Air travel
- Other modes of transportation

## 4.4 Input data and calculation quality

#### Input data quality

The data provided by the Client was verified for the correctness of orders of magnitude, units, compliance with facts and compliance with general good practices used in the calculation of greenhouse gas emissions.

#### **Calculation quality**

The previously verified input data was used in the next step to properly perform the GHG emission calculations. The individual data had to be averaged or appropriate conversion factors had to be selected in order to achieve compliance with the data format of the emission factors.

![](_page_18_Picture_13.jpeg)

#### **Emission factors**

To calculate emissions for this study, the most up-to-date emission factors available, published by internationally recognized institutions, were used, as well as the accurate emission factors declared by the providers of each service.

The specific assumptions used in each area are summarised in the  $\rightarrow$  Appendix 3 - Data quality - MDC<sup>2</sup>.

/ 19	

![](_page_18_Figure_20.jpeg)

![](_page_18_Figure_21.jpeg)

## **4.5 Calculation results**

The data provided by the client was processed and checked. The result of the analysis is the calculated total of greenhouse gas emissions for Scope 1, 2 and part of the Scope 3. An overall summary of the total MDC<sup>2</sup> emissions is provided Scope 1 in the following table.

Scope 2

Scope

Scope 3

 Table 4. GHG Emissions Summary for MDC<sup>2</sup>

![](_page_19_Picture_6.jpeg)

Activity type	GHG emissions 2024 [to
Stationary combustion	
Mobile combustion	
Fugitive emission from air-conditioning	
Other fugitive or process emissions	
Scope 1 Total:	
Scope 2 Location based + heat and steam	
Scope 2 Market based + heat and steam	
Purchased goods and services	
Waste generated in operations	
Business Travel	
Employee commuting	
Scope 3 Total	

![](_page_19_Picture_11.jpeg)

![](_page_19_Figure_12.jpeg)

![](_page_19_Picture_13.jpeg)

# 05

# Conclusions

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## **5.** Conclusions

### 5.1 Result diagrams

![](_page_21_Figure_4.jpeg)

![](_page_21_Picture_5.jpeg)

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#### Total emissions Scope 1+2+3 – MDC<sup>2</sup> 2024

![](_page_21_Picture_9.jpeg)

![](_page_22_Figure_2.jpeg)

![](_page_22_Picture_3.jpeg)

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### Total emissions Scope 1+2+3 – MDC<sup>2</sup> 2024 by category

![](_page_22_Figure_6.jpeg)

![](_page_22_Picture_8.jpeg)

![](_page_22_Picture_9.jpeg)

![](_page_23_Figure_1.jpeg)

![](_page_23_Picture_2.jpeg)

### Scope 3 - MDC<sup>2</sup> 2024 by activity

![](_page_23_Picture_6.jpeg)

![](_page_23_Figure_7.jpeg)

## **5.2 Key findings**

Summarising this study and the calculations made for Scope 1, 2 and limited Scope 3 emissions, the following conclusions are drawn and a course of action is proposed. These conclusions and recommendations should

- contribute to the general awareness of the company's emission situation
- help to take effective reduction measures.

According to the GHG Protocol methodology, Scope 1+2+3 emissions for the **MDC2 in 2024** were:

#### Scope

Scope 1

Scope 2 Location based method

Scope 2 Market based method

Scope 3

**Total Scope 1,2,3 Emissions** Location based

**Total Scope 1,2,3 Emissions Market based** 

![](_page_24_Picture_13.jpeg)

![](_page_24_Picture_15.jpeg)

As can be seen in the table and in the graphs in section 5.1, a significant proportion of the total MDC<sup>2</sup> emissions in 2023 (almost 83%) were emissions categorised as Scope 3. Of these, the following areas should be singled out which, following a prior materiality assessment, could be the field in which to implement effective emissions reduction measures:

- Team travel by cars  $\bullet$
- **Business travel air travel**

Among Scope 2 emissions, the main source of emissions turns out to be the purchase of district heating.

![](_page_24_Figure_21.jpeg)

![](_page_24_Figure_22.jpeg)

![](_page_24_Picture_23.jpeg)

## **5.3 Potential course of action**

In order to reduce total emissions, the company should first analyse the relevance of the given areas of activity and accompanying emissions. If the analysis shows that a reduction of activity in the areas in question, or a change in the operating model in particular sectors, can favourably reduce emissions while maintaining business potential or even increasing it, then it is suggested that reduction measures should be taken. The following are suggested example actions based on the general analysis done for this study. The reduction plan should be preceded by a more detailed analysis.

#### **Reduction activities**

#### Scope 3

#### Employee commuting by cars - examination of the issue

- Is it possible to reduce trips made by car?
- Whether some of the trips could be made using trains or shared transportation?
- Whether it would be possible to replace individual cars with more fuel-efficient/hybrid or electric cars (after a prior analysis of the reduction potential)?

![](_page_25_Picture_9.jpeg)

#### Scope 2

#### **Purchase of heat and electricity**

- implement standard energy reduction measures switch off lighting, air-conditioning, and computer and domestic appliances when leaving the office, set optimum seasonal and outdoor temperatures summer 24, winter 20, track energy consumption per area,
- ask the landlord for information about the building's energy efficiency and improvement plans, register for the green lease initiative,
- checking the possibility of purchasing energy from renewable sources (through PPA's - Power Purchase Agreements) for the operation of the office.

![](_page_25_Picture_18.jpeg)

![](_page_25_Picture_26.jpeg)

06

![](_page_26_Picture_1.jpeg)

![](_page_26_Picture_2.jpeg)

**Appendix 1** – MDC<sup>2</sup> - Reported Data 2024 Appendix 2 – Scope 1, 2 and 3 emissions **Appendix 3** – Data quality - MDC<sup>2</sup>

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**Corporate Carbon Footprint Report 2024** 

![](_page_27_Picture_5.jpeg)

![](_page_27_Figure_6.jpeg)

## Appendix 1 – MDC<sup>2</sup> - Reported Data 2024

Facility		Sc	ope 1	Sco	ppe 2	
	StationaryMobileRefrigerantscombustioncombustion		ts Purchased energy			
Office Królewska 18, Warsaw	Fuel combusted	Travelled distance	Fuel consumed	Refrigerant Loss	Purchased electricity	Purchased Heat steam
-	[kWh]	[1]	[1]	[kg]	[kWh]	[GJ]
	_	_	_	_	7531,7	110,3

![](_page_28_Picture_3.jpeg)

![](_page_28_Picture_6.jpeg)

![](_page_28_Picture_7.jpeg)

![](_page_28_Picture_12.jpeg)

## Appendix 1 – MDC<sup>2</sup> - Reported Data 2024

Facility				Scope 3				
	Purchased goods and services	Waste generated in operations	ste generated 1 operations Business Travel			Er	mployee commutin	g
Office Królewska 18, Warsaw	Water supply	Waste generated	Air Travel	Rail travel		Car transport		Rail transport
	Water consumed	Total volume of generated waste and waste water	Travelled distance Economy class	Travelled distance	Fuel consumed Diesel cars	Fuel consumed Petrol cars	Energy consumption EV	Travelled distance
	[m³]	[1]	[km]	[km]	[1]	[1]	[kWh]	[km]
	6,56	10,14	101865	3119	16800	9180	921,6	89440

![](_page_29_Picture_3.jpeg)

![](_page_29_Picture_6.jpeg)

## Appendix 2 – Scope 1, 2 and 3 emissions

	Scope 1		Scope 2				Scop	<b>be 3</b>	
				Purchased energy					
Stationary combustion	Mobile combustion	Refrigerants	Electricity Location-based method	Electricity Market-based method	Heat/Steam	Purchased goods and services	Waste generated in operations	Business Travel	Employee commuting
[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]	[tCO2e]
_	_	_	4,50	4,94	10,16	0,001	2,52	19,04	67,12

![](_page_30_Picture_3.jpeg)

![](_page_30_Picture_8.jpeg)

![](_page_30_Picture_16.jpeg)

## **Appendix 3** – Data quality - MDC<sup>2</sup>

Scope		Calculation method	Calculation assumptions
Scope 1	Stationary combustion	N/A	N/A
	Mobile combustion	N/A	N/A
	Refrigerants	Based on actual leakage values	Refrigerant loss weight x emission factor depending on refrigerant type Based on the technical assessment of the installations, no leaks were found
Scope 2	Electricity Location-based	Based on actual electricity consumption	Amount of electricity purchased [kWh] x conversion factor x average emission factorin [kg/MWh] for electricity end-users in Poland
	ElectricityMarket-based	Based on actual electricity consumption	Amount of electricity purchased [kWh] x conversion factor x the emission factor of the electricity sold by the energy supplier [Mg/MWh]
	Heat	Based on actual heat consumption	Amount of heat purchased [GJ] x conversion factorx the emission factor of theheat sold by the heat supplier [kg/MWh]

![](_page_31_Picture_3.jpeg)

![](_page_31_Picture_6.jpeg)

## Appendix 3 – Data quality - MDC<sup>2</sup>

Scope		<b>Calculation method</b>	Calculation assumptions
Scope 3	Purchased goods and services	Based on the water consumption evidence	Amount of water consumed [m3] x the emission factor of the water consumption [kgCO2e/MWh]
	Waste generated in operations	Based on the waste evidence, waste volumes, waste fractions	Amount of waste generated [I or m3] x conversion factor x the emission factor of the appropriate waste fraction and waste water [kgCO2e/m3]
	Business Travel	Based on the business travel records, (length, frequency and means of transport of the routes taken)	Travel distances of particular modes of transport [km] x frequency of travel [number per year] x emission factor appropriate to the means of transport [kgCO2/km]
	Employee commuting	Based on the employee commuting records (length and fuel consumption, frequency and means of transport of the routes taken, and fuel consumption)	Rail travel Travel distances of particular modes of transport [km] x frequency of travel [number per year] x emission factor appropriate to the means of transport [kgCO2e/km] <b>Car travel</b> Fuel consumption of particular car [I] x frequency of travel [number per year] x emission factor appropriate fuel [kgCO2e/l]
			In the case of consumption values given as a range of values, an average value was selected, (range from X to Y, average value = (X+Y) /2

![](_page_32_Picture_3.jpeg)

![](_page_32_Picture_6.jpeg)

![](_page_33_Picture_0.jpeg)

![](_page_34_Picture_0.jpeg)

![](_page_35_Picture_0.jpeg)

#### 07 Contact

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![](_page_36_Picture_11.jpeg)

![](_page_37_Picture_0.jpeg)