

Business Certification

EBM Electrical Services

YEAR 1

01 January 2022 to 31 December 2022



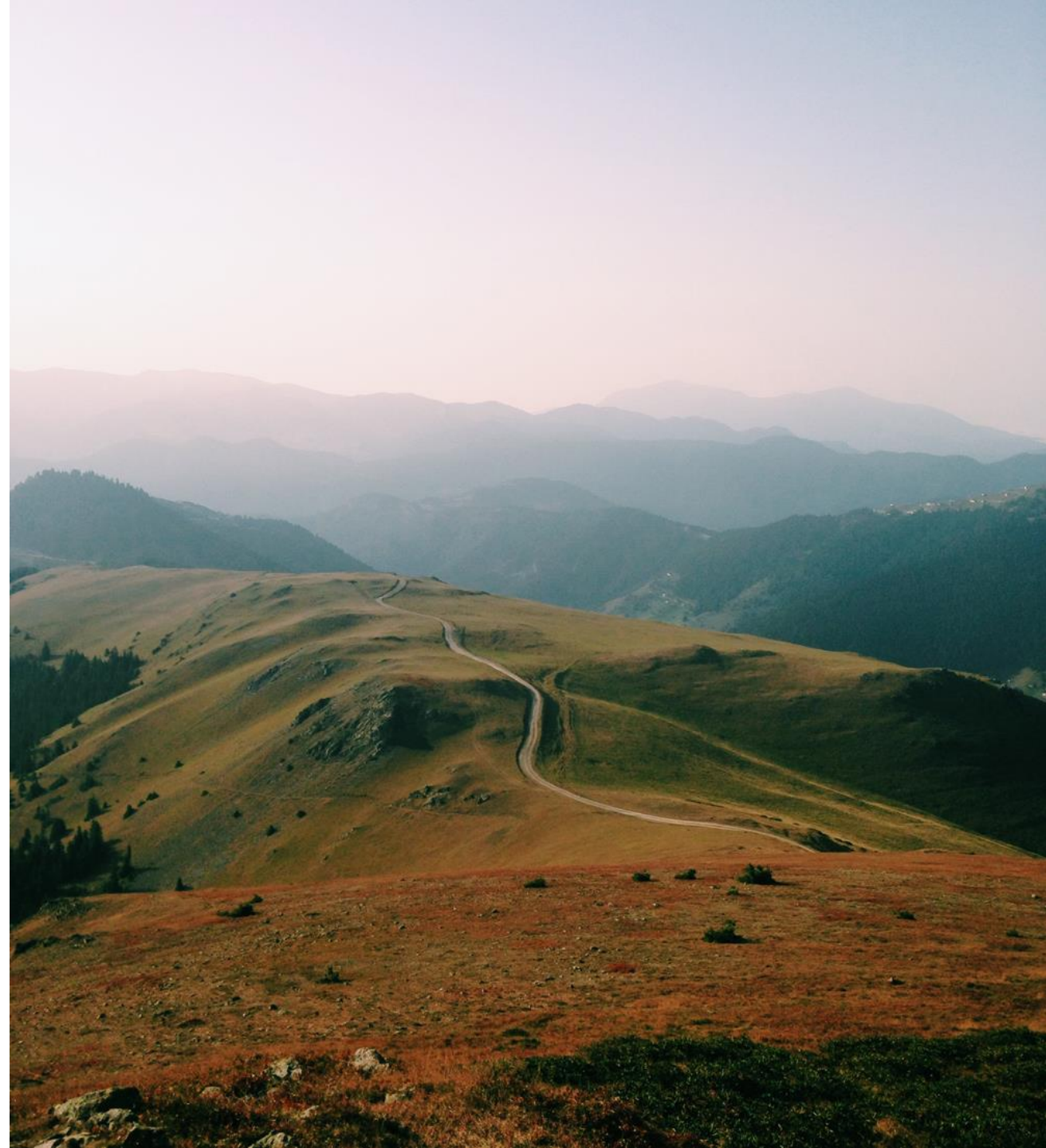
Measure



Engage



Communicate





Measured carbon EMISSIONS

50.0
tCO₂e measured emissions

Measured emissions equivalent to
44 flights from London to New York

1.5
tCO₂e per employee



Buildings
10.6 tCO₂e

Used enough electricity to power **7** UK homes for one year



Travel
39.0 tCO₂e

Travelled **5** times around the world



Waste
0.1 tCO₂e

Produced waste that weighs the same as **0.3** London buses



Water
0.04 tCO₂e

12 litres per employee per day



Procurement
0.3 tCO₂e

104 sheets of paper used per day



Homeworking
1.8 tCO₂e

Used enough energy to power **1** UK home for one year



Step one.

MEASURE





Measured carbon footprint.

Location *BASED*

Note:

Due to uncertainties around measuring Freight emissions based on spend-based data, emissions from that category have been measured but not included in the total footprint. If they had been included, they would have accounted for 96.5% of EBM's carbon footprint.

Reporting year:

01 January 2022 to 31 December 2022

Reporting Boundary:

EBM Head Office

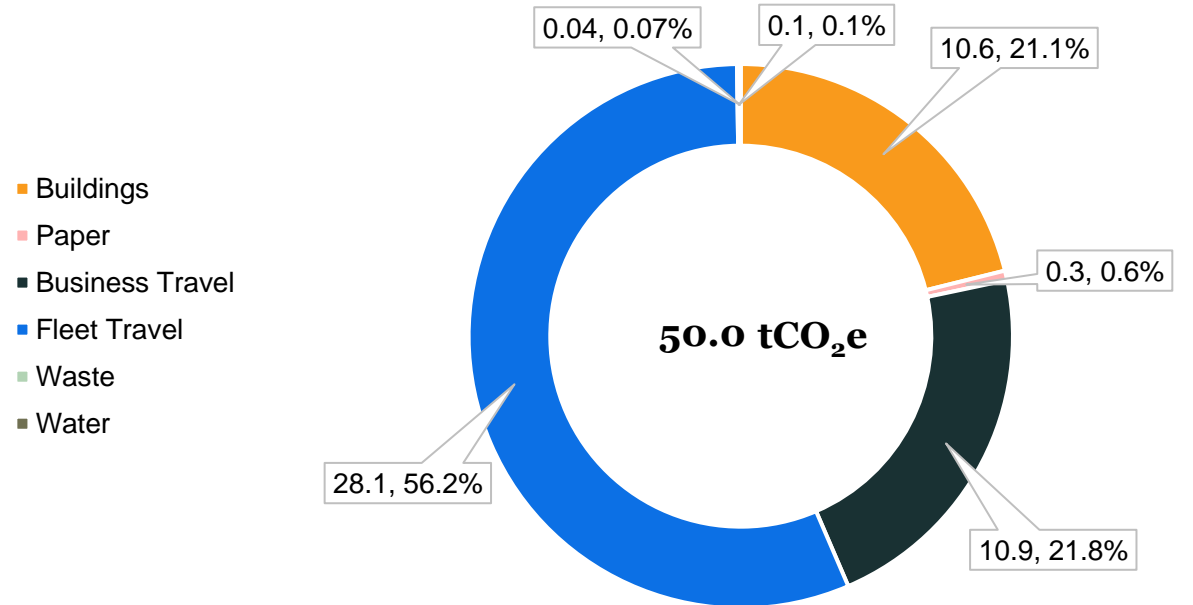
Emissions measured:

Electricity, T&D Losses, Natural Gas, Water, Fleet, Business Travel, Waste, Paper, Homeworking (not included in total footprint), Freight (not included in total carbon footprint).

Highlights:

Carbon footprint (tCO₂e): **50.0**
Per employee (tCO₂e): **1.5**
Next reduction target: **5%**
Data quality score: **11 out of 16**

Carbon footprint by emission source for year ending 2022, tCO₂e



Note: Your carbon footprint is reported two ways; one is using the location based method of calculating Scope 2 electricity emissions and the other the market based method. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice).



Measured carbon footprint.

Market *BASED*

Reporting year:

01 January 2022 to 31 December 2022

Reporting Boundary:

EBM Head Office

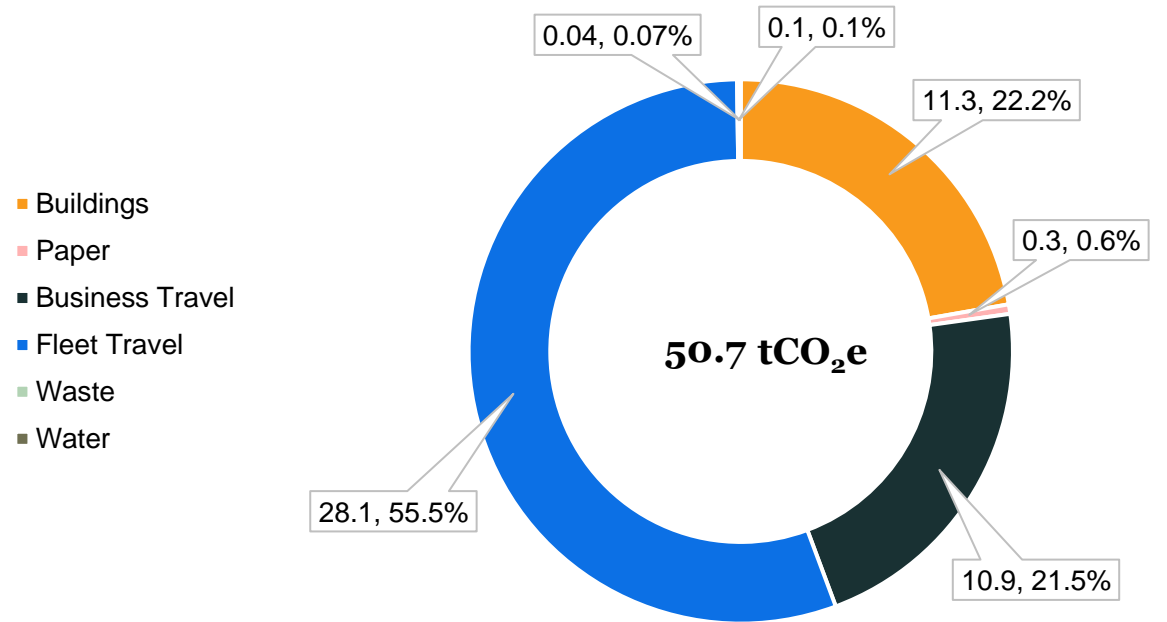
Emissions measured:

Electricity, T&D Losses, Natural Gas, Water, Fleet, Business Travel, Waste, Paper, Homeworking (not included in total footprint), Freight (not included in total carbon footprint).

Highlights:

Carbon footprint (tCO₂e): **50.7**
Per employee (tCO₂e): **1.5**
Next reduction target: **5%**
Data quality score: **11 out of 16**

Carbon footprint by emission source for year ending 2022, tCO₂e



Note: Your carbon footprint is reported two ways; one is using the location based method of calculating Scope 2 electricity emissions and the other the market based method. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice).



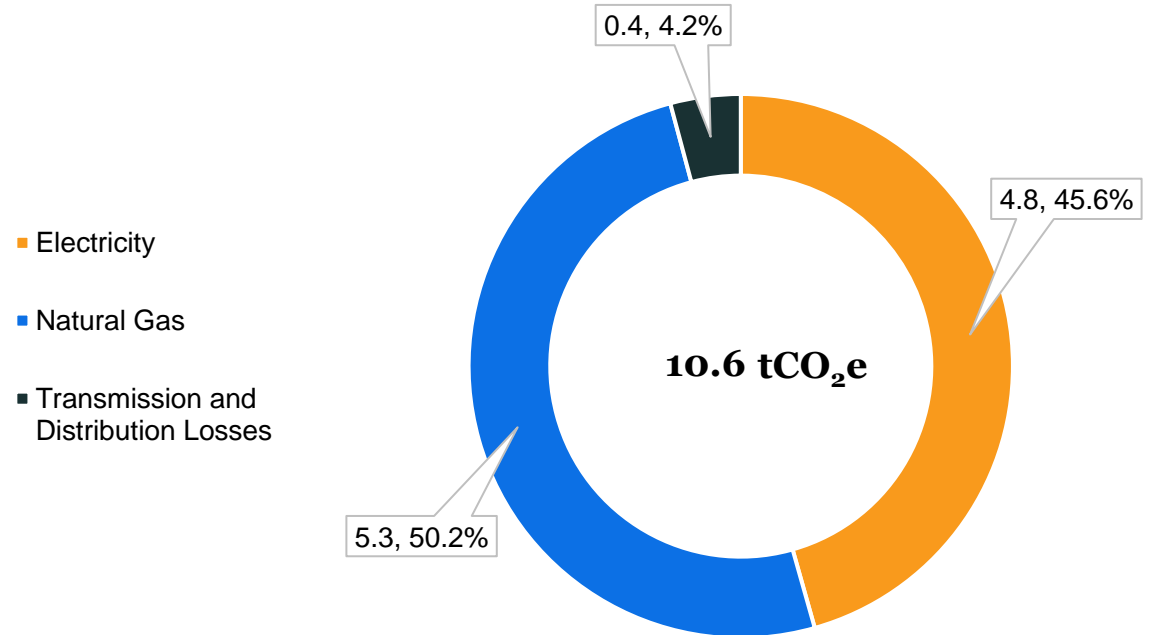
Carbon footprint.

BUILDINGS

Building-related emissions accounted for 21.1% of EBM's total carbon footprint. Within this, emissions from Electricity (including Electricity usage and T&D losses) and those from Natural Gas represented a very even split (49.8% and 50.2% respectively).

Buildings	tCO ₂ e	%
Electricity	4.8	45.6
Natural Gas	5.3	50.2
Transmission and Distribution Losses	0.4	4.2
Total	10.6	100.0

Buildings emissions for year ending 2022, tCO₂e



All rows and tables are rounded to one decimal place. This may lead to slight discrepancies in totals within the report.



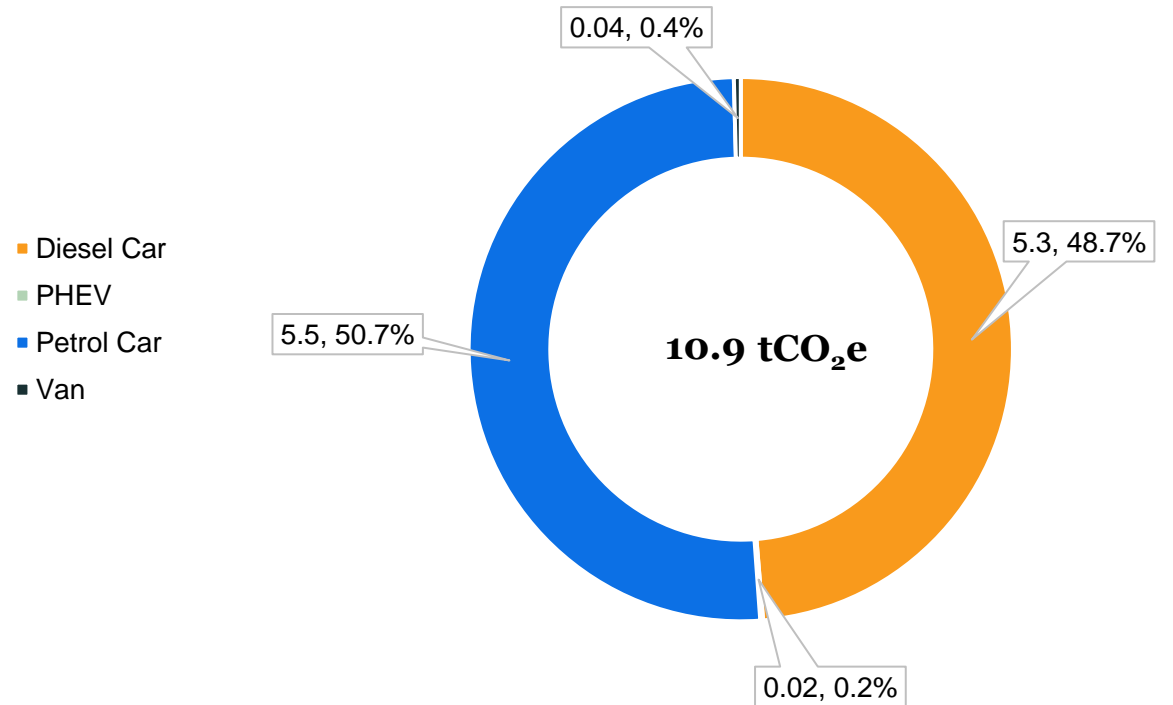
Carbon footprint.

Business TRAVEL

Emissions from Business Travel accounted for 21.8% of EBM's total carbon footprint. Of this, the most significant contributor to emissions was Petrol Cars (50.7%), followed closely by Diesel Cars (48.7%). Using less polluting forms of Business Travel, such as PHEVs, will help lower emissions in this category in future.

Business Travel	tCO ₂ e	%
Diesel Car	5.3	48.7
PHEV	0.02	0.2
Petrol Car	5.5	50.7
Van	0.04	0.4
Total	10.9	100.0

Business travel emissions for year ending 2022, tCO₂e



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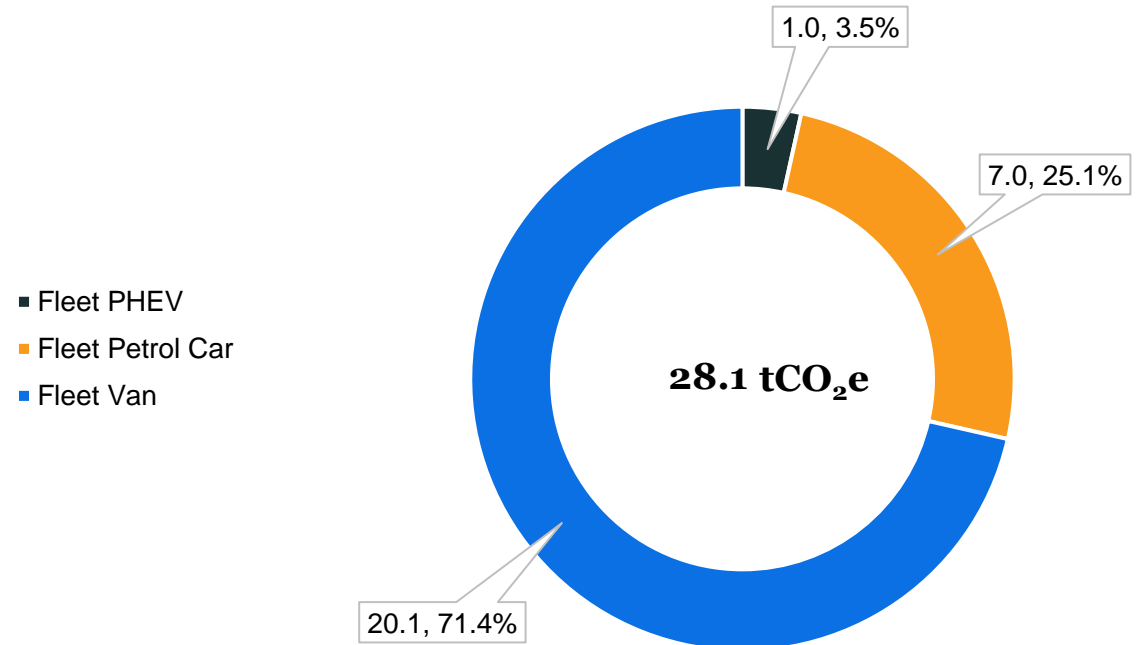
Carbon footprint.

Fleet TRAVEL

Fleet Travel emissions accounted for 56.2% of EBM's total carbon footprint. Within this, the Diesel Fleet Vans accounted for the bulk of emissions (71.4%). As with Business Travel, relying more on Fleet PHEVs will help lower future emissions in this category.

Fleet Travel	tCO ₂ e	%
Fleet PHEV	1.0	3.5
Fleet Petrol Car	7.0	25.1
Fleet Van	20.1	71.4
Total	28.1	100.0

Fleet travel emissions for year ending 2022, tCO₂e



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Carbon footprint.

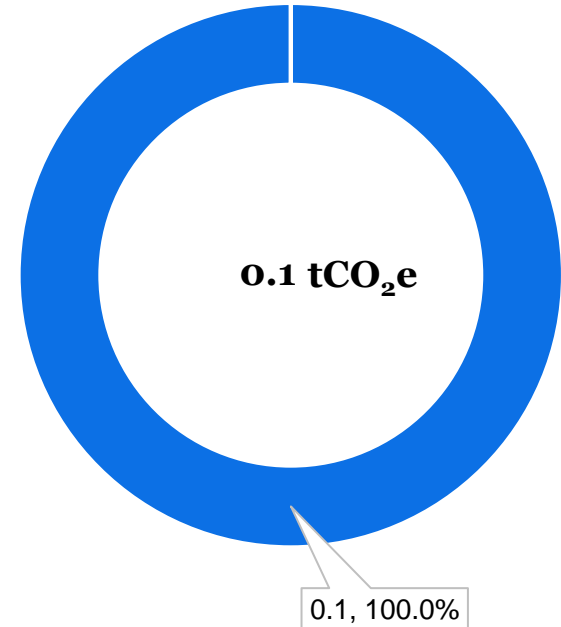
WASTE

Waste emissions only accounted for a fraction of EBM's total carbon footprint. This is in part due to the fact that all reported waste was disposed of at an Energy for Waste facility and was diverted from Landfill.

Waste	tCO ₂ e	%
Energy from Waste	0.1	100.0
Total	0.1	100.0

Waste emissions for year ending 2022, tCO₂e

■ Energy from Waste



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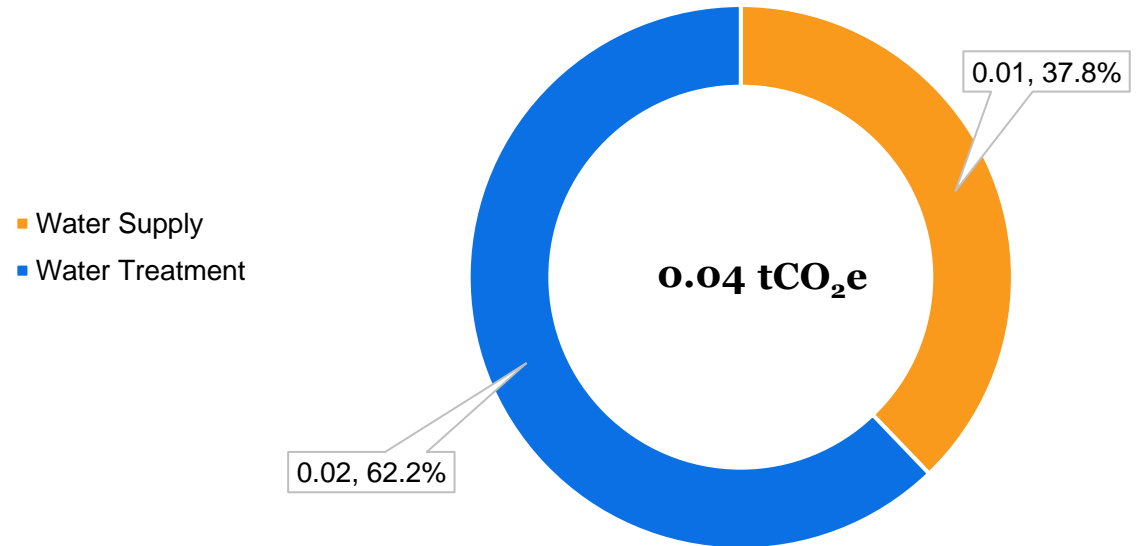
Carbon footprint.

WATER

As with Waste, Water-related emissions only made up a very small part of EBM's carbon footprint for YE2022. Emissions in this category are split between the water used by the company (Water Supply) and wastewater (Water Treatment).

Water	tCO ₂ e	%
Water Supply	0.01	37.8
Water Treatment	0.02	62.2
Total	0.04	100.0

Water emissions for year ending 2022, tCO₂e



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Carbon footprint.

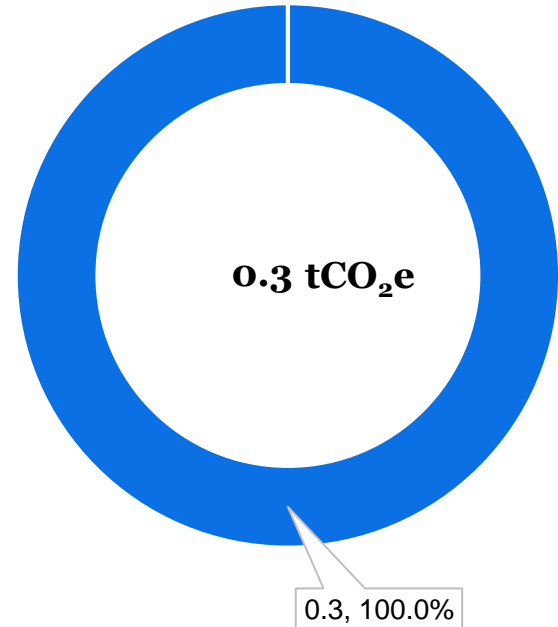
PROCUREMENT

Although only accounting for 0.3 tCO₂e, future emissions in the Procured Paper category could be reduced by switching to Paper sourced from recycled materials.

Paper	tCO ₂ e	%
Paper Primary Content	0.3	100.0
Total	0.3	100.0

Procurement emissions for year ending 2022, tCO₂e

■ Paper Primary Content



All rows and tables are rounded to one decimal place. This may lead to slight discrepancies in totals within the report.



Carbon footprint.

Courier *FREIGHT*

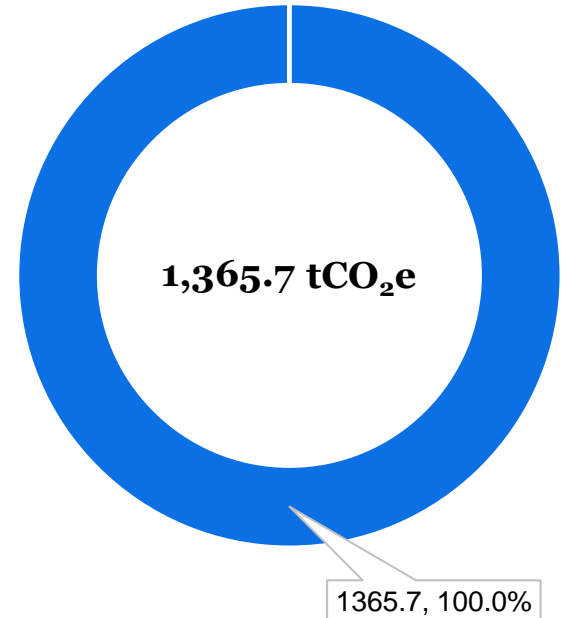
Due to uncertainties surrounding the calculation of Freight from spend-based data, Freight emissions have been calculated but not included in total carbon footprint. If they had been included in the total carbon footprint, emissions from this category would have accounted for 96.5% of EBM's carbon footprint.

As the data is spend-based, it was not possible to discern the modes of transport used. Calculations based on activity data will help provide a more accurate picture of emissions from Freight in future.

Freight	tCO₂e	%
Freight	1,365.7	100.0
Total	1,365.7	100.0

Freight emissions for year ending 2022, tCO₂e

■ Freight



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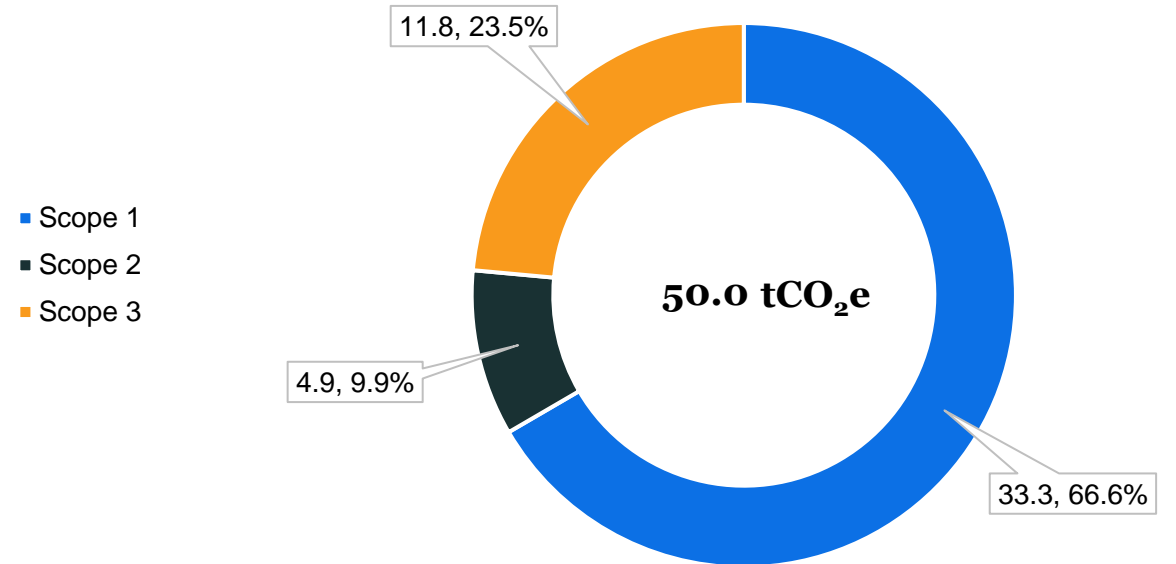


Measured carbon footprint.

BY SCOPE

Scope	tCO ₂ e	%
Scope 1	33.3	66.6
Scope 2	4.9	9.9
Scope 3	11.8	23.5
Total	50.0	100.0

Measured carbon emissions by scope for year ending 2022, tCO₂e



All rows and tables are rounded to one decimal place. This may lead to slight discrepancies in totals within the report.



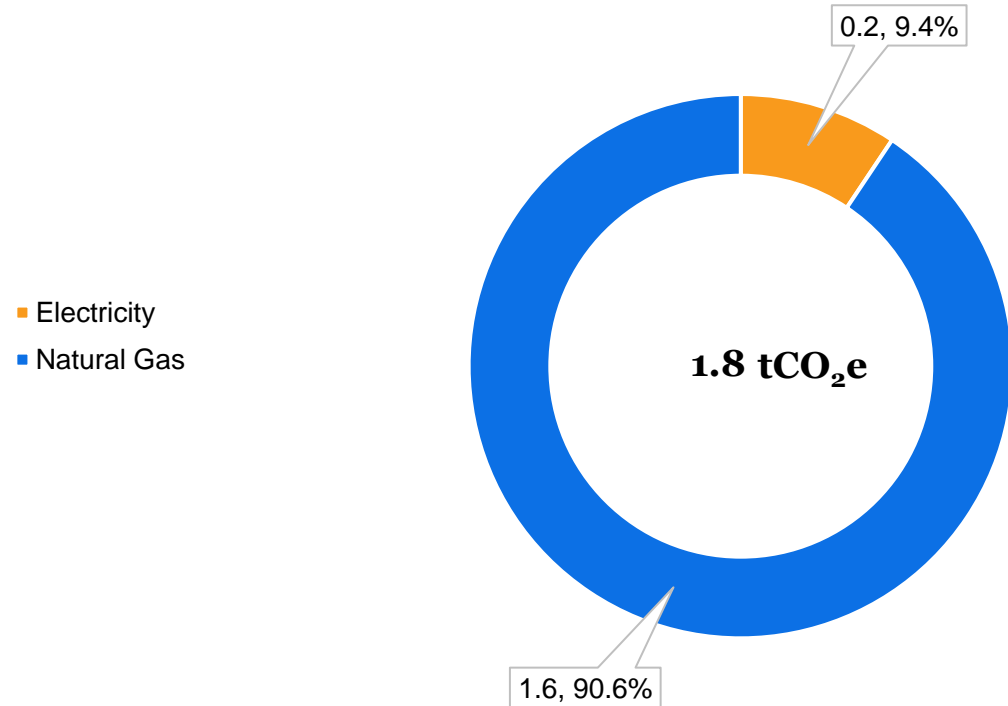
Carbon footprint.

HOME OFFICE

Due to the uncertainties surrounding Home Office emissions, and the fact that commuting emissions have not been calculated as part of your footprint, these figures are provided for information only in order to give an indication of the scale of the impact associated with home office energy consumption. They have not been included in your carbon footprint total.

Homeworking	tCO ₂ e	%
Electricity	0.2	9.4
Natural Gas	1.6	90.6
Total	1.8	100.0

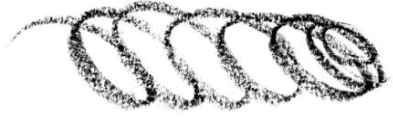
Homeworking emissions for year ending 2022, tCO₂e



All rows and tables are rounded to one decimal place. This may lead to slight discrepancies in totals within the report.



Looking ahead Targets for next year.



Measured carbon
footprint
50.0 tCO₂e



Carbon
reduction target (5%)
2.5 tCO₂e



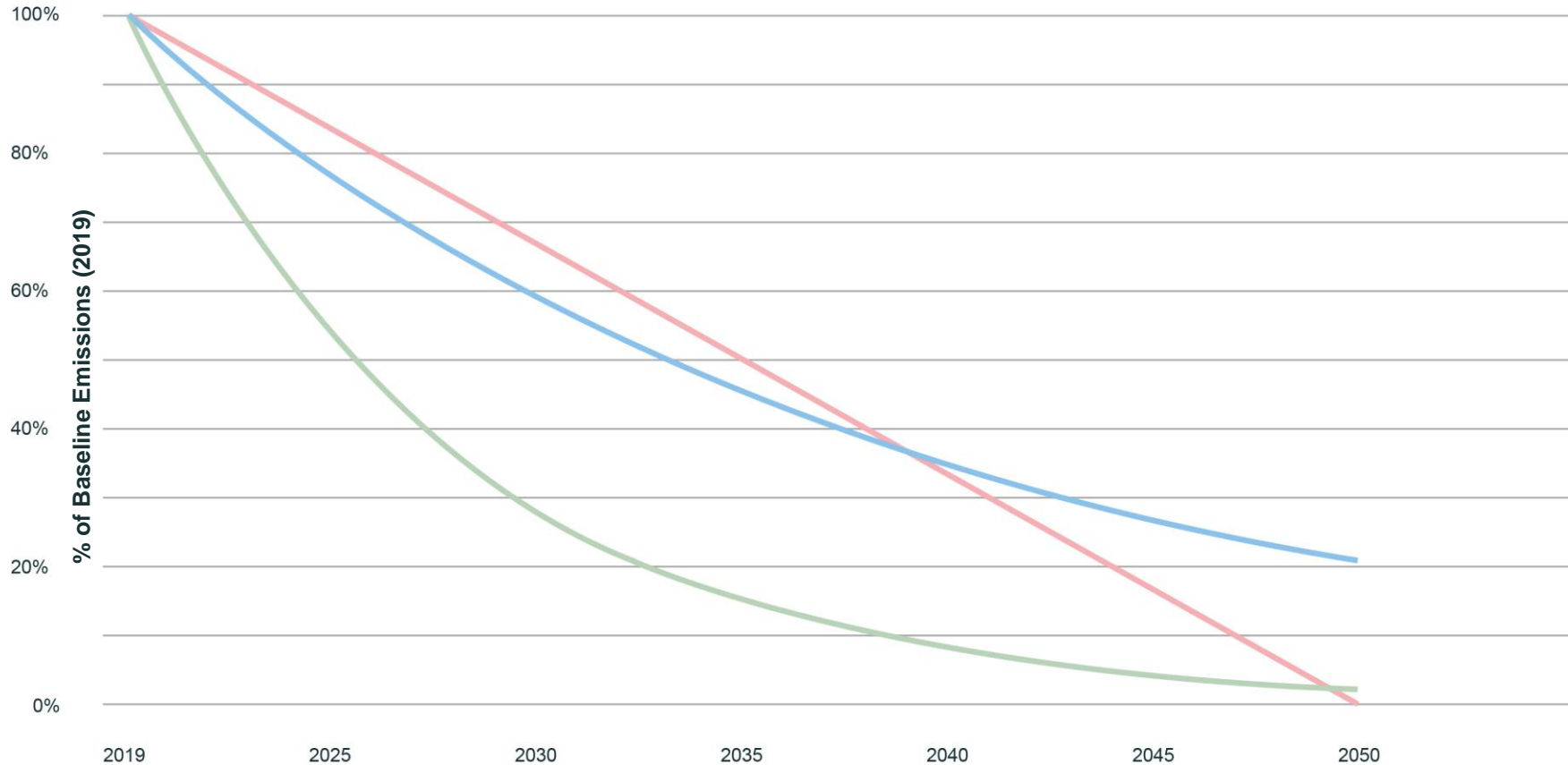
Carbon reduction
per employee (5%)
0.1 tCO₂e





Target setting.

A Decade of Action: Pathways to Net Zero through varying emissions reduction trajectories



Planet Mark 5% annual reduction

- 5% year on year reduction is the minimum annual reduction recommended by the Planet Mark.

Planet Mark 12% annual reduction

- 12% year on year reduction is based on the mean average reduction achieved by the Planet Mark holders in Ye2019.
- A 12% year on year reduction from a 2019 baseline will set you on track to meet the UK target Net Zero by 2050.

Net Zero 2050



Step two.

ENGAGE





Workshops.

At Planet Mark we believe each day is an opportunity to create change. Our engagement experts will help unlock your employees' passion and help embed sustainability within your organisation.

Our workshops seek to inform, inspire and empower participants to become part of your business' net zero journey.

One virtual 1h sustainability workshop is included with your Certification.

Book a call with us [here](#) to explore how we can help upskill, build confidence and participation among your team and wider stakeholders.



Workshop	Description
Sustainability Plan Workshop	A three-hour session which lifts the lid on operational carbon emissions, supporting a brainstorming session to understand impacts and consider actions that can make a material difference. Participants leave with a one-year Sustainability Plan with SMART targets, roles and responsibilities.
Net Zero Carbon Essentials	A three-hour CPD accredited workshop which introduces the fundamentals of net zero carbon and what it means for a business to embark on a Net Zero journey.
Net Zero Masterclass	Designed for senior leaders and board members, this short workshop covers the Net Zero terminology, legislation and frameworks and presents an opportunity for leaders to discuss the company's net zero journey.
Business Sustainability Essentials	A three-hour CPD accredited workshop covering the basics of business sustainability and the role your employees can adopt in driving change from within.
Supplier Engagement workshop	Invite your suppliers to learn about and get involved with your sustainability journey and net zero ambitions. We facilitate and build content particularly around Scope 3 emissions.



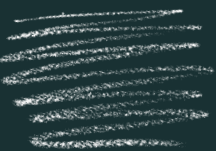
The Eden Project

PARTNERSHIP

At Planet Mark, we recognise that that we need nature to address the greatest challenges of our time.

The Eden Project, an educational charity, connects us with each other and the living world, exploring how we can work towards a better future.

As part of your certification with the Planet Mark, a number of tickets have been assigned to your organisation so you can visit the Eden Project for free – please get in touch to arrange your Eden Project visit and inspire and encourage positive action.





Cool Earth

PARTNERSHIP

Protecting our rainforests is one of our best lines of defence against climate change.

- Cool Earth is helping rainforest communities to protect nearly 100,000 hectares of biodiversity rich rainforest across three continents.
- Behind this huge milestone are thousands of families whose futures have been transformed.

COOL EARTH





Step three.

COMMUNICATE





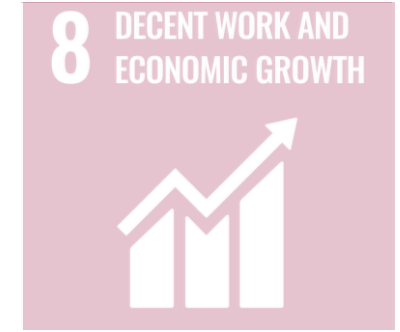
Communicating your international influence.

The Sustainable Development Goals (SDGs), also known as the Global Goals, are a collection of 17 interrelated goals set by the United Nations. They cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender, equality, water, sanitation, energy.

By measuring and reducing your carbon footprint with the Planet Mark, you can directly and measurably contribute to up to 9 SDGs addressing 14 SDG targets.

Contributing towards

5 SDGs





SDG alignment.



6 CLEAN WATER AND SANITATION

6.3 - 90% of water treated

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

9.4 - 30% of fleet that is electric or hybrid

13 CLIMATE ACTION

13.3 - Donation to the Eden Project

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

11.6 - Measured carbon emissions
11.4 - Donation to the Eden Project

14 LIFE BELOW WATER

8 DECENT WORK AND ECONOMIC GROWTH

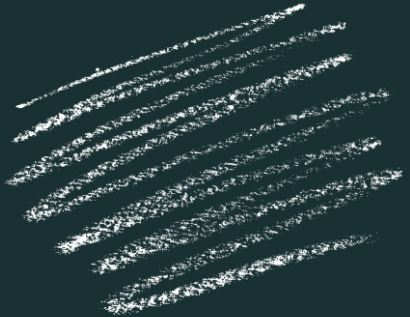
12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12.6 - Measured carbon emissions

15 LIFE ON LAND



5 ways to accelerate your sustainability journey.



1. Review our recommendations

Guidance for general best practice: See the Appendix of this report for recommendations to do with Data Collection & Quality, Building, Waste, Travel, Paper, Staff Engagement and Supplier Engagement.

2. Join our online community

Planet Mark online community platform: If you haven't already, invite your team to join our exclusive member-only community platform, where you can check out inspirational initiatives to implement in your own organisation and collaborate with other Planet Mark Members. Join [here](#).

3. Use our toolkits & resources

Toolkits & Guides: Go to our Members Area on our [website](#) and make use of resources available to Planet Mark members.

4. Connect with us

Social media channels: We're active across social media and would love to help share your sustainability stories across our platform, just connect and tag us please!

5. Need more support?

We can help. We are here to support on your sustainability journey, no matter where you're at. If you're on a path to net zero, we have a suite of Net Zero [Solutions](#) to offer. If you want further stakeholder engagement support, browse our list of workshops [here](#) or just get in touch to discuss.



Data Report.

APPENDIX



Current					
01 January 2022 to 31 December 2022					
Source	Scope	Unit	Amount	tCO ₂ e	% total carbon footprint
Buildings					
Electricity (location based)	2	kWh	24,898.8	4.8	0.3%
Electricity (market based)	2	kWh	24,898.8	5.5	-
Natural Gas	1	kWh	29,031.9	5.3	0.4%
Transmission and Distribution Losses	3	kWh	24,898.8	0.4	0.03%
Procurement					
Freight	3	GBP	6,369,955.4	1,365.7	96%
Paper Primary Content	3	tonnes	0.3	0.3	0.02%
Travel					
Fleet PHEV	1	km	13,183.1	0.9	0.1%
Fleet Petrol Car	1	km	27,720.0	7.0	0.5%
Fleet Van	1	km	114,621.9	20.1	1%
Fleet PHEV	2	km	5,770.6	0.1	0.008%
Diesel Car	3	km	31,095.7	5.3	0.4%
Fleet PHEV	3	km	5,770.6	0.01	0.01%
PHEV	3	km	193.4	0.02	0.001%
Petrol Car	3	km	32,464.0	5.5	0.4%
Van	3	km	193.1	0.04	0.003%
Waste					
Energy from Waste	3	tonnes	3.5	0.1	0.005%
Water					
Water Supply	3	cubic metres	94.0	0.01	0.001%
Water Treatment	3	cubic metres	84.6	0.02	0.002%
Location Based					
Total		tCO₂e		1,415.7	
No. employees		Number		33.6	
Total per employee		tCO₂e		42.2	
Turnover £m		£m		16.0	
Total per £m		tCO₂e		88.5	
Total floor space		m ²		225.0	
Building emissions per m²		tCO₂e		0.05	
Market Based					
Total		tCO₂e		1,416.4	
No. employees		Number		33.6	
Total per employee		tCO₂e		42.2	
Turnover £m		£m		16.0	
Total per £m		tCO₂e		88.5	
Total floor space		m ²		225.0	
Building emissions per m²		tCO₂e		0.1	

All rows and tables are rounded to one decimal place. This may lead to slight discrepancies in totals within the report.



About this report – General.

Company Name	EBM Electrical Services
Sector	Engineering
Reporting Period	01 January 2022 to 31 December 2022
Year Of Certification	1st
Reporting Boundary	EBM Head Office
Emission sources included	Electricity, T&D Losses, Natural Gas, Water, Fleet, Business Travel, Waste, Paper, Homeworking (not included in total footprint), Freight (not included in total footprint)
Total FTE Employees (annual average no.)	34
Total Internal Floorspace (m²)	225
Data Collection Lead	Bria Jones, bsj@ebmelec.com - Sustainability Officer
Significant reporting changes	None
Current Conversion Factor	BEIS 2022
Methodology	We follow the GHG Protocol for Corporate Emission Reporting and The National TOMs Framework for Social Value Reporting. Refer to Planet Mark Business Certification Scheme Rules for detailed information on the methodology and standards used in the preparation of this report.
Community Project	Contributions to the Eden Project have been made as part of Planet Mark Certification.
Prepared by	Hugh Williams, Sustainability Consultant, Planet Mark
Checked by	Jamie Beevor, Head of Technical, Planet Mark Rima Trofimovaite, Head of Measurement, Planet Mark
Date	09 August 2023



About this report – Caveats (i).

Operational Boundary	Scope	Unit	Data Source	Data Accuracy	Comments, omissions, estimates or extrapolations	Organisational Boundary
Electricity	2 and 3	kWh	Primary source - invoices	Actual meter reads with interpolation	Please refer to the adjusted data slide(s) for details of interpolation.	EBM Head Office
					Your electricity consumption is shown in the carbon footprint as Purchased Electricity emissions (Scope 2 emissions) and Electricity Transmission and Distribution losses (Scope 3 emissions). Your scope 2 electricity emissions are reported in two ways: location-based and market-based methods. Location-based electricity emissions have been calculated using carbon emission factors for average national or sub-national grid electricity. Market-based electricity emissions have been calculated using carbon emission factors for your specific electricity supply fuel mix as published on your supplier's website for electricity supplied in the period April 2021 to March 2022.	
Natural Gas	1	kWh	Primary source - invoices	Actual meter reads with interpolation	Please refer to the adjusted data slide(s) for details of interpolation.	EBM Head Office
Water Supply & Treatment	3	m ³	Primary source - invoices	Actual and estimated meter reads	None	EBM Head Office
Homeworking Energy	3	kWh	Secondary sources - Planet Mark homeworking energy calculation tool and data submission	Estimated	UK homeworking energy includes additional electricity and gas consumption as a result of each full-time equivalent employee working from home. We base our estimate of energy consumption due to homeworking on the new BEIS 2022 homeworking emission factors. The annualised BEIS emission factors have been converted into monthly estimates of energy consumption in order to better account for seasonal variations. Our estimates are based on a 40h working week and a 6-month heating season (October to March) and take into account annual leave.	EBM Head Office
					Where the business has a physical office, homeworking utility emissions are calculated but not included in the Total Carbon Footprint figure.	

Note: unless otherwise stated in the report all electricity emissions are location based (i.e. calculated using carbon emission factors for average UK national grid electricity). Do let us know if your electricity is from 100% renewable energy and we will provide dual reporting to show both market based and location based electricity emissions.



About this report – Caveats (ii).

Operational Boundary	Scope	Unit	Data Source	Data Accuracy	Comments, omissions, estimates or extrapolations	Organisational Boundary
Fleet Vehicles	1	km	Primary source - mileage report	Actual	EBM Electrical Services had two PHEVs in the Fleet during the reporting period, one charged on-site for 40-45% of time, the other charged on-site for 65-70% of the time. For the charging that took place at the employees' homes, emissions from electricity used in charging, and T&D losses associated with this electricity, have also been included as emissions sources.	EBM Head Office
Private Vehicles Used for Business	3	km	Primary source - mileage report	Actual	None	EBM Head Office
Waste	3	tonnes	Primary and secondary sources - estimated and landlord report	Estimated	We have updated our approach to calculating emissions from waste. This change in methodology has led to a reduction in our estimate of the weight of waste arisings based on the number of bin collections and this may result in an apparent reduction in the waste emissions estimate.	EBM Head Office
Procurement - Courier/Freight	3	£	Secondary source - estimated	Estimated	Given the uncertainty around spend-based calculations for Freight, emissions from this category have been calculated, but not included in the Total Carbon Footprint figure.	EBM Head Office
Headcount		no.	Primary source - note from payroll	Actual	We have used the annual average full-time equivalent employees. Part-time employees are assumed to work 20 hours a week. We assume headcount only includes active employees (i.e. excludes employees on furlough).	EBM Head Office

Note: unless otherwise stated in the report all electricity emissions are location based (i.e. calculated using carbon emission factors for average UK national grid electricity). Do let us know if your electricity is from 100% renewable energy and we will provide dual reporting to show both market based and location based electricity emissions.



About this report – Caveats (iii).

Operational Boundary	Scope	Unit	Data Source	Data Accuracy	Comments, omissions, estimates or extrapolations	Organisational Boundary
Turnover		£m	Primary source - note from finance director	Assumed Actual	None	EBM Head Office
Floor Area		m ²	Secondary source - data submission form	Assumed Actual	None	EBM Head Office

Note: unless otherwise stated in the report all electricity emissions are location based (i.e. calculated using carbon emission factors for average UK national grid electricity). Do let us know if your electricity is from 100% renewable energy and we will provide dual reporting to show both market based and location based electricity emissions.



About this report.

Data Quality.

Data quality score

The data quality score is based on the 'Data Quality Matrix' in the Planet Mark Business Certification Scheme Rules and provides an indication of data assurance when using information in this report in your business.

	01 January 2022 to 31 December 2022	Definition
Relevance of boundary	3	Boundary accurately reflects the majority of the business carbon footprint for the studied period.(eg at least 75% of organisational activity included)
Data completeness	3	12 months of data provided for most sources.
Transparency	3	Majority disclosure of assumptions and/or some original evidence provided.
Data accuracy	2	Mainly use of secondary data sources and/or estimated data.
Total score	11 out of 16	

As a way to improve your data quality score for future reports, it is recommended:

- Provide waste data for the whole year;
- Collect activity-based data for Freight, to avoid reliance on estimations;
- Expand business travel to include trains, taxis, planes etc.



Recommendations.

APPENDIX





Guidance for general best practice.

Data collection and quality

Evidence pack: Collate all relevant invoices in an electronic evidence pack.

Utilities: Take readings of all meters on the last day of the month. Investigate the installation of smart meters.

Headcount: Ask HR for a table showing monthly full time equivalent headcount for the whole reporting period.

Fuel: Introduce fuel cards.

Travel: Ask your travel suppliers to provide you with a report detailing mileage and mode of transport so you can accurately add data to your carbon footprint. For non centrally booked travel record mode of travel, destination/origin and distances travelled in expense claim forms.

Building

Energy efficiency: Regular 'energy audits' will help identify where most energy is being used and potential wastage from equipment, lights and heat loss. Investigate the installation of LED, T5 and sensor lighting and the upgrade of heating controls.

Waste

Carry out a waste management audit: To understand what waste you are producing, where it is coming from and what the best route for it would be. Provide plenty of bins for segregating waste correctly and encouraging recycling.

Engage your waste management supplier to help you reduce landfill waste and instead increase the proportion that goes to recycling and to energy from waste.



Guidance for general best practice.

Water

Check your meters at night, or when water is not in use, to monitor leakage.

Introduce a water use awareness campaign in communal kitchen areas.

Travel

Record all business travel and promote public transport options for business meetings.

Arrange safe and fuel efficient driving training for all drivers. Plan driver routes to finish at their homes.

Choose fuel efficient vehicles. Electric or hybrid cars are exempt from various taxes. Subsidies are also available for smallest vehicles. Provide incentives for employees to opt for low carbon cars, and limit choices to those which meet sustainability criteria.

Choose travel management companies, airlines, taxi companies, couriers and other providers that are Planet Mark certified, and look for clear progress on improving fuel efficiency and pursuing credible, sustainable solutions for travel.

Paper

Buy paper from sustainable forests or recycled content. Ask for FSC or PEFC branded paper as a minimum - ideally with the EU Eco label.

Choosing recycled content paper, your carbon emissions from paper use are reduced by 30% but choosing sustainably sourced paper the benefits are more holistic as you support the demand for sustainably managed forests which may otherwise be cut down for a different land use such as agriculture.



Guidance for general best practice.

Staff engagement

Organise annual sustainability workshops.
Carry out an energy awareness and 'switch off' campaign.

Supplier engagement

Explore your possibilities and choose consciously. Check the [Planet Mark website](#) for companies that are currently engaged on reducing their carbon footprint.

A BRIGHTER future.



THANK YOU

Get in touch

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