



Carbon Footprint Appraisal for Guarding UK

Assessment Period:
1st April 2023 – 31st March 2024

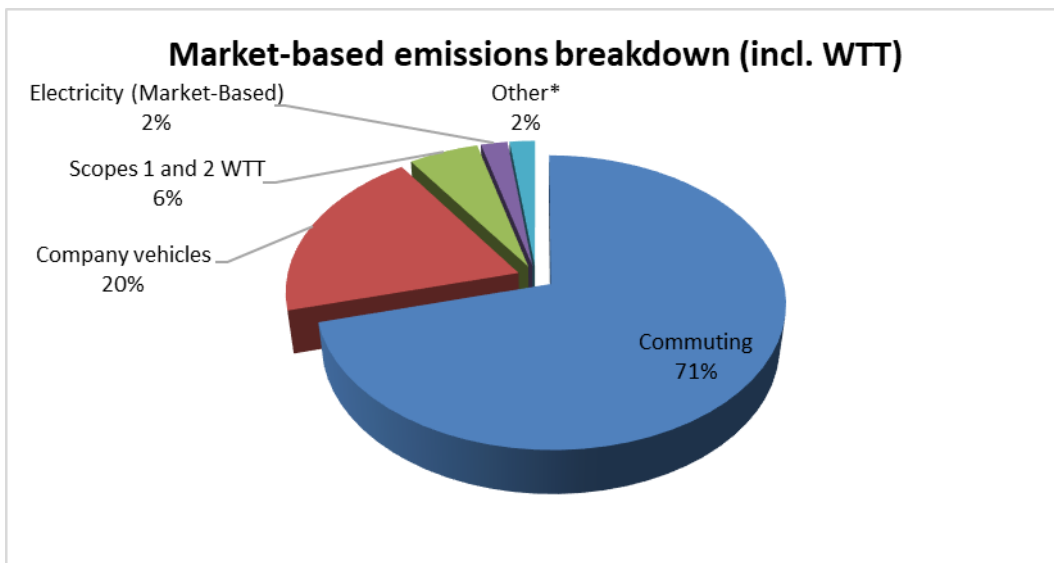
Executive Summary

Current Performance

- Guarding UK’s total market-based emissions are 507.77 tCO₂e (with location-based emissions of 503.17 tCO₂e).
- The most significant market-based emission source is commuting, accounting for 71% of the business’s carbon footprint.
- Total market-based emissions have decreased by 162.98 tCO₂e, from 669.29 tCO₂e to 507.77 tCO₂e, since the last assessment period.

Recommendations

- Encourage more commuting by sustainable means such as rail and cycling, where possible. Consider offering subsidies or financial incentives to facilitate this change.
- Install vehicle telematics on new vehicle fleet, if this is not already the case. This will allow you to track consumption patterns and target any areas of concern.
- Consider switching short haul flights (for example London to Glasgow) to rail.
- Switch to a renewable energy tariff to reduce the emissions associated with electricity use.
- Offset the GHG emissions created within this data period to become carbon neutral.
- Carry out a target setting to facilitate a clear reduction strategy.



*Other= Rail, Flights, Company vehicles off-site charging (scope 2), Transmission & Distribution (Market-Based), Homeworking (Market-Based).

Year/Element	Location based	Market based
Total number of employees	600	
Turnover in £ million	30.6	
Tonnes of CO₂e	503.17	507.77
Tonnes of CO₂e per employee	0.84	0.85
Tonnes of CO₂e per £ million turnover	16.44	16.59

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Quality Control

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1. Introduction

1.1. Company Overview

Guarding UK is a leading security and protection management company in the UK. Managing over 2,000 sites, Guarding UK provides comprehensive security services for commercial, corporate, and residential properties, protecting assets worth around £40 billion. The security services include rapid response, secure technology solutions, security personnel services and closed-circuit television (CCTV) monitoring. The company employs a total of 600 personnel, utilises a fleet of 15 company vehicles, and operates out of 3 office buildings.

1.2. Data supplied for the Carbon Footprint Appraisal

A summary of the data supplied by Guarding UK for the appraisal can be provided on request.

1.3. Methodology for the Carbon Footprint Appraisal

The methodology document can be downloaded using this link,
https://www.carbonfootprint.com/docs/carbon_footprint_appraisal_-_methodology_document.pdf

1.4. Abbreviations

AC	Air Conditioning
CIBSE	Chartered Institution of Building Services Engineers
CO ₂ e	Carbon Dioxide Equivalent
Defra	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
GHG	Greenhouse Gas
ISO	International Standards Organisation
IWA	International Workshop Agreement
km	Kilometres
kWh	Kilowatt Hours
T&D	Transmission & Distribution
WTT	Well-To-Tank

2. Calculation Scope and Accuracy

2.1. Scope of this work

Carbon Footprint has assessed the GHG emissions from 1st April 2023 to 31st March 2024 resulting from the energy consumption at Guarding UK’s facilities and its business transport activities.

Guarding UK's baseline year data and emissions can be found in the 2022/23 report. Guarding UK have been assessing their emissions since 2014/15 however rebaselined to the previous assessment period as a result of a significant increase in the scope of the assessment.

2.2. Organisational & reporting boundaries

Figure 1 shows the full boundaries of the *Greenhouse Gas Protocol Corporate and Value Chain Standards*. The organisation has accounted for all quantified GHG emissions and/or removals from facilities over which it has operational control. This assessment covers the reporting boundaries shown in Table 1, in line with the Greenhouse Gas Protocol Accounting and Reporting Corporate Standard.

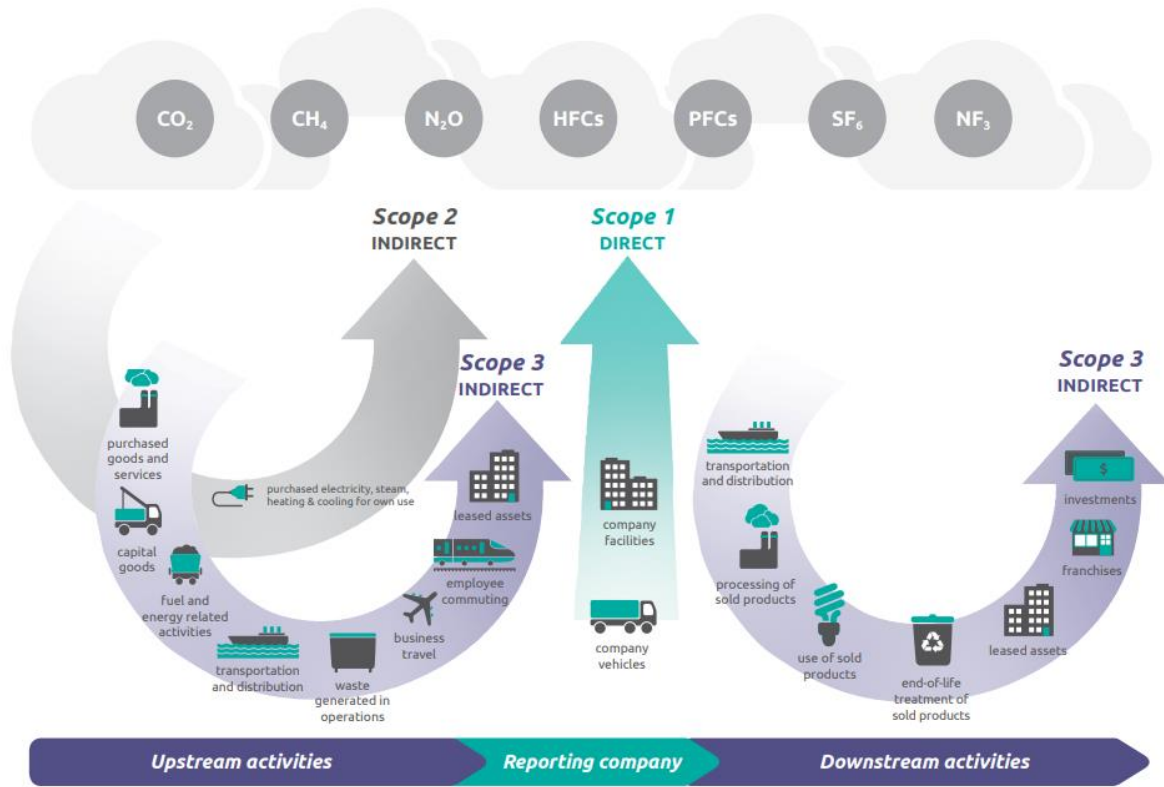


Figure 1: Overview of emissions scopes (GHG Protocol - Scope 3 Calculation Guidance v1.0 - 2013)

Table 1: Guarding UK's GHG Assessment boundary based on the Greenhouse Gas Protocol Accounting and Reporting Corporate Standard

(All green rows have been included in this assessment; all grey rows are not applicable; orange rows have been excluded)

Scope	Activity	Calculation Type	Completion Status	Justification
1	Electricity, heat or steam generated on-site		Not relevant	Not applicable
1	On-site fuel use		Not relevant	Not applicable
1	Company owned vehicles	Activity Data	Complete	
1	Fugitive emissions (incl. Refrigerant gases and AC)	Activity Data	Complete	No RF gas top-ups
2	On-site Consumption of purchased electricity, heat steam and cooling	Activity Data	Complete	
3	1. Purchased goods and services		Excluded	Relevant and recommended to include in future assessments
3	2. Capital goods		Excluded	Relevant and recommended to include in future assessments
3	3. Fuel- and energy related activities (not included in scope 1 or scope 2)	Activity Data	Complete	
3	4. Upstream transportation and distribution		Not relevant	Not applicable
3	5. Waste generated in operation		Excluded	Relevant and recommended to include in future assessments
3	6. Business travel (not included in scope 1 or scope 2)	Activity Data	Complete	
3	7. Employee commuting	Activity Data	Complete	
3	8. Upstream leased assets		Not relevant	Not applicable
3	9. Downstream transportation and distribution		Not relevant	Not applicable
3	10. Processing of sold products		Not relevant	Not applicable
3	11. Use of sold products		Not relevant	Not applicable
3	12. End-of-life treatment of sold products		Not relevant	Not applicable
3	13. Downstream leased assets		Not relevant	Not applicable
3	14. Franchises		Not relevant	Not applicable
3	15. Investments		Not relevant	Not applicable

2.3. Calculation uncertainty assessment & materiality

The result of a carbon footprint calculation varies in accuracy depending on the data set provided. The more accurate the data supplied, the more accurate the final result. Materiality is determined by the percentage contribution of each element to the overall footprint.

Based on the accuracy of the data provided (Table 2), a simple uncertainty analysis has been used to estimate the potential error margin for the appraisal results.

Table 2: Assessment accuracy, materiality and simple error analysis

Emission Source	Data source / comments	Materiality	Uncertainty	Market-based Error Margin (tCO ₂ e)
Commuting	Due to the national spread of sites that Guarding UK provide services to, a select number of staff were surveyed. Average days worked in the year has been estimated as 260 per person. 93 staff were questioned, out of a total of 600 and the total emissions have been extrapolated to represent the total number of staff	Very High (>40%)	50%	179.44
Company vehicles	A mix between individual claims and fuel card records. Fuel card records could not be provided as evidence as the vehicles in question have since been returned (mileage information however was provided before fleet changeover). Annual mileage, fuel type, emissions ratings, and vehicle efficiency per vehicle provided.	High (20-40%)	5%	6.34
Rail	Number of passenger trips and departure and destination station provided for some data. 5,770 tube journeys taken with no stations attached - an average distance from Zone 1 to Zone 4 has been used for calculation purposes. Also, 120 train journeys were made with no information attached; average rail journey distance used.	Low (1-5%)	90%	4.89
Electricity (Market-Based)	Half-hourly meter readings were provided for the Enfield site only, giving consumption in kWh. The CIBSE factor for typical practice energy in a standard office (226 kWh/m ² /yr) was employed to calculate the kWh consumption for the Birmingham office using the floor area provided in square feet. This was then used as a benchmark for the Reading office as they are of a similar size and have the same employee count.	Low (1-5%)	5%	0.56
Home-working (Market-Based)	Number of staff, occupancy type, and total annual hours worked at home provided.	Very Low (<1%)	50%	0.27
Company vehicles off-site charging (scope 2)	EV mileage and vehicle details provided, no onsite charging.	Very Low (<1%)	10%	0.15
Flights	Departure and destination airports, cabin class and whether each journey was a return were provided.	Very Low (<1%)	1%	0.02
			Total	191.66



3. Carbon Footprint Results

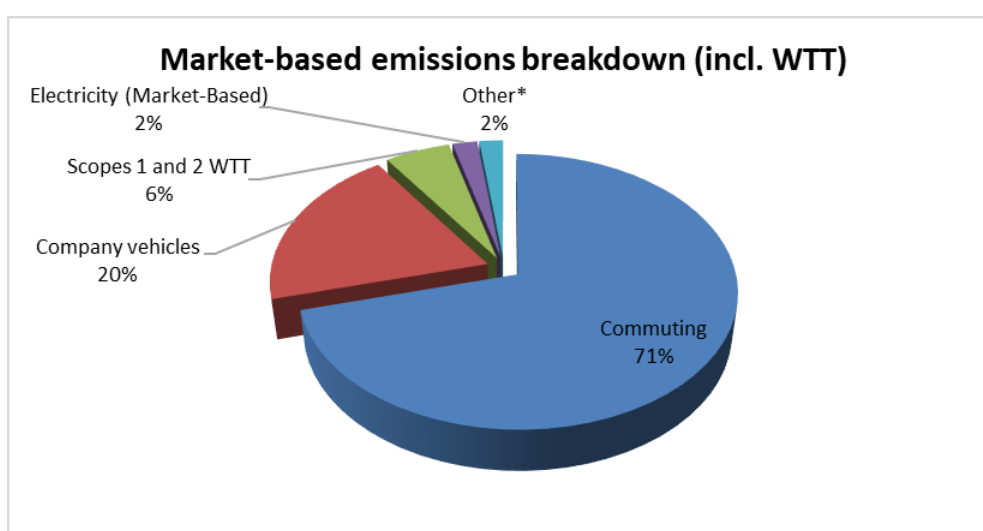
3.1. Summary of results

The total location-based carbon footprint for Guarding UK for the period ending 31st March 2024 is 503.17 tonnes CO₂e, and the market-based total is 507.77 tonnes CO₂e.

Table 3: Results of Guarding UK's carbon footprint assessment by scope and GHG Protocol emission categories

Scope	Emission Source	Location-Based (tCO ₂ e)	Market-Based (tCO ₂ e)
1	Company vehicles	98.82	98.82
1	Scope 1 Total	98.82	98.82
2	Electricity	6.02	10.62
	Company vehicles off-site charging	1.45	1.45
2	Scope 2 Total	6.95	11.55
3.3	Scopes 1 and 2 WTT	29.76	29.76
	Transmission & Distribution	0.64	0.64
3.6	Rail	5.44	5.44
	Flights	2.15	2.15
3.7	Commuting	358.88	358.88
	Home-working	0.53	0.53
3	Scope 3 Total	397.40	397.40
All	Tonnes of CO₂e	503.17	507.77
	Tonnes of CO₂e per employee	0.84	0.85
	Tonnes of CO₂e per £ million turnover	16.44	16.59

A full breakdown of emissions by source has been provided in Annex A.



*Other= Rail, Flights, Company vehicles off-site charging (scope 2), Transmission & Distribution (Market-Based), Homeworking (Market-Based).

Figure 2: Percentage contribution of each element of Guarding UK's market-based carbon footprint

3.2. Emissions from Commuting

A survey was conducted by Guarding UK, for which 93 responses out of 600 were collected. The results of the survey have been extrapolated to represent the full staff count; this can be seen below in Table 4 and Figure 3.

Commuting emissions have decreased substantially in comparison to the previous appraisal period; a greater proportion of respondents use rail to commute to sites than was the case in the previous appraisal period. Similarly, the response rate for the commuting survey has increased compared to the previous appraisal period, in which 72 out of 680 employees were surveyed.

Table 4: Results of commuting survey

Commuting method	Share of respondents (%)	Total mileage	Share of mileage (%)	Scaled Emissions (tCO ₂ e)	Share of emissions (%)	Emissions per Employee (tCO ₂ e/employee)
Cars	29%	98,120	28%	209.8	58%	1.25
Rail	43%	193,840	55%	80.6	22%	0.32
Bus	27%	54,403	15%	68.5	19%	0.44
Walk/Bicycle	1%	6,517	2%	0	0%	0.00
Total / Average for per employee	100%	352,880	100%	358.9	100%	0.60

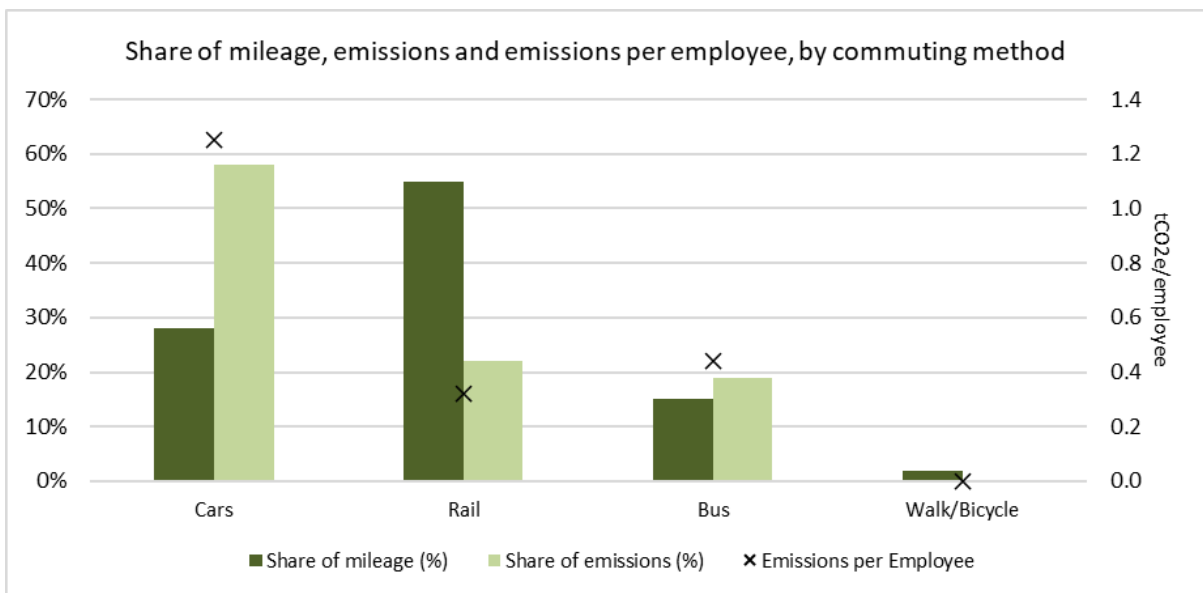


Figure 3: Share of mileage, emissions and emissions per employee by commuting method

3.3. Emissions from business travel

Due to the nature of Guarding UK's business operations, emissions associated with company owned vehicles are the second highest contributor to the company's emissions. Annual mileage for the fleet is high relative to its size, at 684,459 miles for 15 vehicles. 4% of the mileage stems from EV usage, whilst the remaining mileage is a result of petrol hybrid vehicle usage. Table 5 details the remaining emissions associated with business travel. Emissions associated with rail travel are highly uncertain, as detailed in section 2.3.

Guarding UK has investigated the feasibility of transferring the fleet to 100% EVs but have found that currently the infrastructure does not exist to support their specific mode of transport operations. Guarding UK have therefore recently upgraded the fleet to more fuel-efficient petrol hybrid vehicles.

Table 5: CO₂e emissions associated with business travel

GHG Protocol Emission Category	Emission Source	Well-to-Tank (tCO ₂ e)	Tank-to-Wheel (tCO ₂ e)	Well-to-Wheel (Total) (tCO ₂ e)
Company owned vehicles	Company vehicles	27.90	98.82	126.72
	Company vehicles off-site charging (scope 2)	0.53	0.92	1.45
Subtotal: Company owned vehicles		28.43	99.74	128.17
6. Business travel (not included in scope 1 or scope 2)	Rail	1.12	4.32	5.44
6. Business travel (not included in scope 1 or scope 2)	Flights	0.24	1.91	2.15
Subtotal: 6. Business travel (not included in scope 1 or scope 2)		1.35	6.23	7.58
Total		29.78	105.98	135.76

- Well-to-Tank (WTT): refers to the upstream emissions of getting the fuel/energy to the point of use (extraction, refining and distribution to a fuel station)
- Tank-to-Wheel (TTW): emissions generated during operation (while fuel/energy is being used)
- Well-to-Wheel: full lifecycle combined emissions from source to consumption (WTT and TTW combined)

3.4. Emissions from Well to Tank

Well-to-tank emissions relate to the upstream emissions of fuel and energy; accounting for extraction, processing, and transport of fuels/energy. **Guarding UK can reduce these emissions by reducing fuel and energy usage.**

Table 6: Well-To-Tank CO₂e Emissions breakdown

Emission Source	Market-Based (tCO ₂ e)
Commuting	75.43
Company vehicles	27.90
Electricity	1.34
Rail	1.12
Company vehicles off-site charging (scope 2)	0.53
Flights	0.24
Transmission & Distribution	0.12
Total	106.66



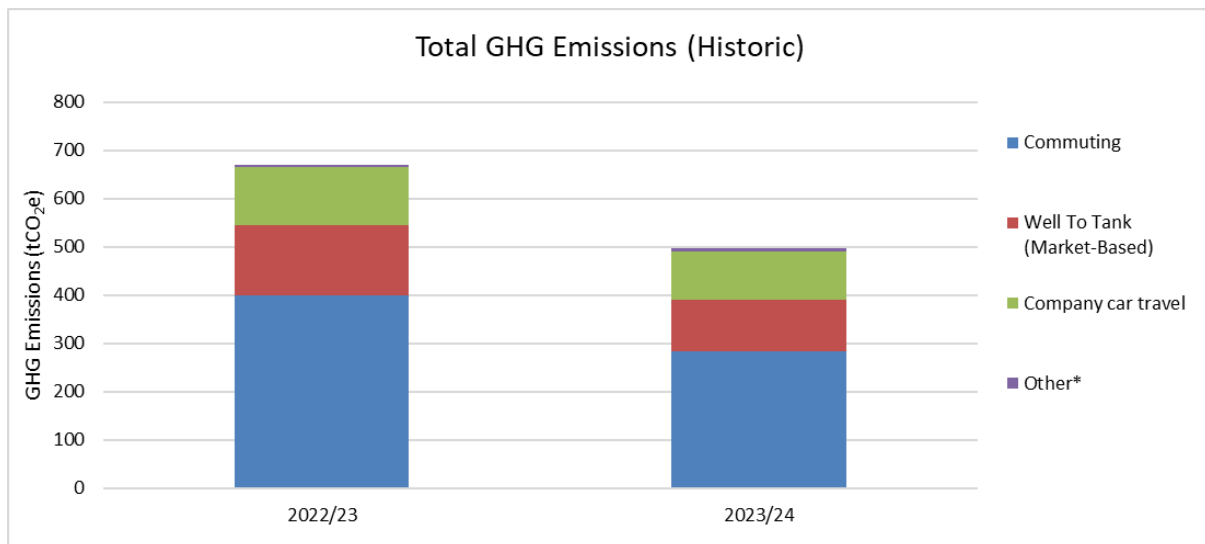
4. Comparison, Publication, and Benchmarking

4.1. Comparison to base year emissions

The table below shows historical emissions per activity, as well as the total carbon footprint and carbon intensity metrics (tonnes of CO₂e per employee and tonnes of CO₂e per £M turnover).

Table 7: Guarding UK’s carbon footprint comparison and percentage change

Element	2022/23	2023/24	% change on baseline year (2022/23)
Company car travel	121.16	99.75	-17.7% ▼
Employee-owned car travel (grey fleet)	0.21	0.00	-100% ▼
Taxi travel	0.04	0.00	-100% ▼
Rail travel	1.12	4.32	284.7% ▲
Flights	2.63	1.91	-27.4% ▼
Home-workers	0.38	0.53	42% ▲
Well To Tank (Market-Based)	145.21	106.66	-27.5% ▼
Commuting	398.55	283.45	-28.9% ▼
Total Tonnes of CO₂e (Market-based)	669.29	507.77	-24.4% ▼
- Tonnes of CO₂e per employee (including contingent staff)	0.98	0.85	-13.4% ▼
- Tonnes of CO₂e per £ M turnover	18.77	16.59	-11.6% ▼



Other= Electricity (Market-Based), Rail, Flights, Company vehicles off-site charging (scope 2), Transmission & Distribution (Market-Based), Homeworking (Market-Based).

Figure 4: Detailed emissions comparison for the various aspects of Guarding UK’s emissions

Benchmarked against employee numbers and company turnover (adjusted for inflation) the carbon emissions statistics show a decrease in both intensity metrics since 2022/2023. Guarding UK's emissions were rebaselined in the previous appraisal period; the company has completed appraisals going back to 2014/2015; however, the scope of emissions accounting has expanded in recent years due to the inclusion of commuting in this assessment.

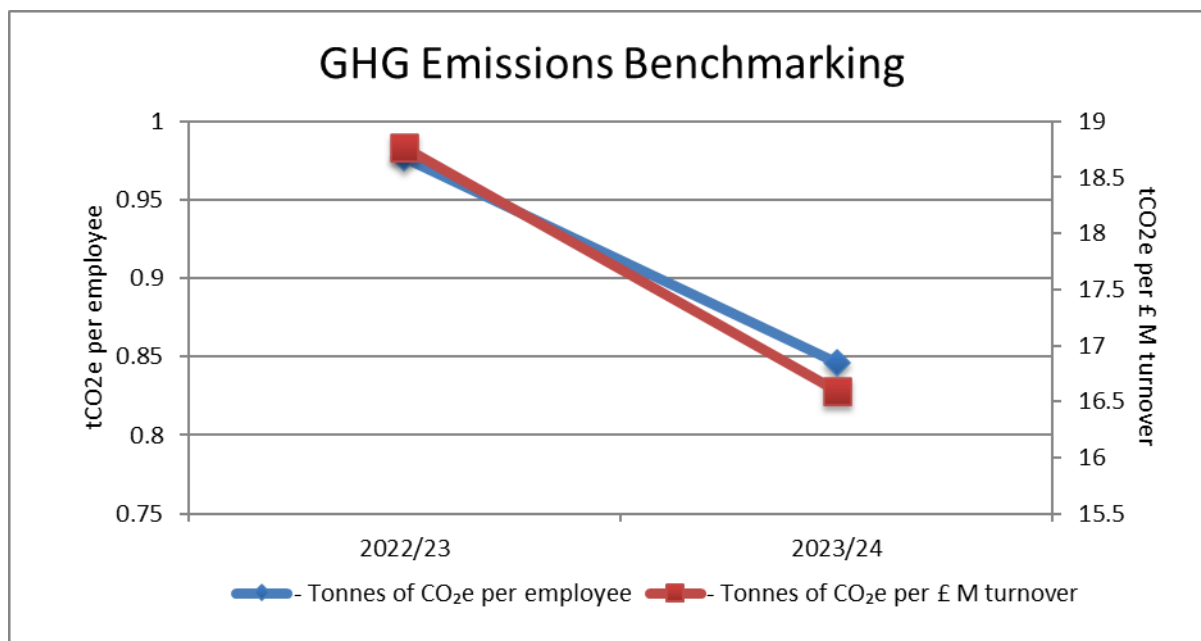


Figure 5: Carbon footprint of Guarding UK for internal benchmarks

4.2. External Publication and Benchmarking of Your Carbon Footprint

We strongly encourage you now to [publish your carbon footprint results on Carbon Database Initiative \(CaDI\)](#) – our new global platform.



External publication demonstrates your commitment to carbon management and to responsible transparency. Your results will also be endorsed on CaDI as ‘Verified’ for additional peace of mind for you and viewers of the data.

Using CaDI, you can also search other organisations that have reported their emissions to benchmark your performance.

As a Carbon Footprint client, your headline carbon footprint results will be automatically uploaded to your CaDI account for your ease – **though, rest assured, they will only be made public upon you choosing to publish them.**

Many companies report Scope 1 & 2 emissions for comparison against others as elements included in Scope 3 can vary greatly. Table 8 summarises the emissions across these Scopes, along with metrics showing emissions per unit turnover and per employee, to help your benchmarking.

Table 8: Guarding UK’s benchmarked GHG emissions

Year/Element	Location based	Market based
Total number of employees	600	
Turnover in £ million	30.6	
Tonnes of CO₂e	503.17	507.77
Tonnes of CO₂e per employee	0.84	0.85
Tonnes of CO₂e per £ million turnover	16.44	16.59
Scope 1 & 2 Emissions		
Tonnes of CO₂e	104.85	109.44
Tonnes of CO₂e per employee	0.17	0.18
Tonnes of CO₂e per £ million turnover	3.43	3.58

5. Conclusion

Guarding UK, in conjunction with Carbon Footprint Ltd, has assessed its carbon footprint and has achieved CO₂e assessed organisation and CO₂e reduced organisation status.

By achieving this, Guarding UK has qualified to use the Carbon Footprint Standard branding. This can be used on all marketing materials, including website and customer tender documents, to demonstrate your carbon management achievements.



6. Recommendations

6.1. Carbon & sustainability targets

6.1.1. Improving the accuracy of future carbon footprint assessments

The estimated overall error margin is +/- 37.8% (which represents +/- 191.66 tCO₂e of the total assessed emissions).

To improve the accuracy of future assessments, we recommend the following:

- Implement a monthly data and carbon tracking system, such as Carbon Footprint Ltd's Sustrax MX platform. This will aid in highlighting any hotspots and inaccuracies in your data, allowing for a more immediate rectification.
- Expand the number of commuters surveyed to give a more accurate cross section of commuting habits.
- Maintain fuller rail travel records, detailing start and end points of all journeys. To do this, encourage employees to input relevant data when filing expense claims.
- Keep accurate fuel consumption records moving forwards for your new fleet. The most accurate data you could provide would be litres of fuel consumed and fuel type. This could either be on a per vehicle basis, or a lump sum.

6.1.2 Expand the Scope of the Assessment

We recommend that the scope of the assessment is expanded in future to include the aspects that are identified as excluded in Table 1.

The most material element would likely be purchased goods and services as Guarding UK have begun to outsource some activities which were previously related to company vehicles, so we recommend you focus on capturing data for this ready for next year's appraisal.

6.1.3 Target setting for net zero

Guarding UK should set targets based on per employee and/or per £M turnover, which will account for business growth. Many organisations are now setting targets based on typical mid-term and longer terms goals to reach net zero (ISO's International Workshop Agreement on Net Zero Guidance - IWA 42:2022¹):

- A 50% reduction in emissions per £M turnover/employee by 2030.
- A 90% reduction in emissions per £M turnover/employee by 2045.

All targets set should be reviewed regularly and amended accordingly (i.e. target increased if it is met ahead of schedule). A clear roadmap for individual emissions sources should be in place. This will ensure the strategy for reducing CO₂e emissions and tracking toward a net zero target is appropriate for the business.

¹ [ISO - Net Zero Guidelines](#)

A hyperlink to Carbon Footprint Ltd's whitepaper on target setting can be found below:

https://www.carbonfootprint.com/docs/2021_12_cfp_practical_target_setting_-_white_paper_v10.pdf.

6.2. Reducing emissions

To reduce GHG emissions, we recommend the following:

- Consider switching short-haul flights to rail transport where possible (e.g. London to Edinburgh or Glasgow)
- Continue to promote more sustainable methods of commuting to workplaces; if an employee is driving or taking the bus in areas where rail is available, consider offering subsidies for rail so as to encourage greater take up. If it is possible to cycle or walk, and an employee is able to do so, this initiative could be encouraged by offering incentives to cyclists such as the cycle to work scheme.
- Install vehicle telematics on new vehicles if this is not already the case. This should be carried out with a view to assess driver behaviours and target improvements in fuel efficiency.
- Switch to a renewable energy tariff to reduce emissions associated with electricity use. Many "green" electricity tariffs are now the same price as the traditional brown tariffs. Once you have done this you will be able to report your market-based emissions alongside your location based.

6.3. Carbon offsetting

Carbon offsetting is a pragmatic way to compensate for the emissions that you cannot reduce, by funding an equivalent carbon dioxide saving elsewhere.

The majority of projects focus on the development of renewable energy in developing countries, however there are others which have a greater focus on social benefits as well as environmental benefits. Further detail on the type and specific projects that we currently have in our portfolio can be provided on request or be found at: <http://www.carbonfootprint.com/carbonoffsetprojects.html>.



Annex A

A full breakdown of Guarding UK's emission sources is given below. This aligns with the GHG Protocol classification methodology and provides each associated emission source:

Scope	GHG Protocol Emission Category	Emission Source	Location-Based (tCO ₂ e)	Market-Based (tCO ₂ e)
1	Company owned vehicles	Company vehicles	98.82	98.82
Scope 1 Total			98.82	98.82
2	On-site Consumption of purchased electricity, heat steam and cooling	Electricity	6.02	10.62
		Company vehicles off-site charging (scope 3)	1.45	1.45
Scope 2 Total			6.95	11.55
3.3	3. Fuel- and energy related activities (not included in scope 1 or scope 2)	Scopes 1 and 2 WTT	29.76	29.76
		Transmission & Distribution	0.64	0.52
3.6	6. Business travel (not included in scope 1 or scope 2)	Rail	5.44	5.44
		Flights	2.15	2.15
3.7	7. Employee commuting	Commuting	358.88	358.88
		Home-working	0.53	0.53
Scope 3 Total			397.40	397.40
All	Tonnes of CO₂e		503.17	507.77
	Tonnes of CO₂e per employee		0.84	0.85
	Tonnes of CO₂e per £ million turnover		16.44	16.59