

Hatmill Ltd

Net Zero Report

Reporting period: 1 April 2025 - 31 March 2026

Produced by:

Claire Richards, Principal Consultant, Flotilla

Publication date:

15/05/2026

Reporting period:

1 April 2025 - 31 March 2026

This report sets out Hatmill Ltd's progress against its Net Zero trajectory and provides recommended actions to deliver its Net Zero Plan, as reflected within the Flotilla platform. Ultimately, the purpose of this report is to provide Hatmill Ltd with the knowledge and tools to understand its carbon footprint and inform smarter choices towards decarbonisation.

Throughout this report we have grouped and analysed your data using Flotilla's categories: Governance, People, Travel & Logistics and Supply Chain. These categories allow you to view your data in a way that makes sense to your operations, and to identify the opportunities for change, engagement and influence.

The final recommendations presented in this Net Zero Report were developed by Flotilla's consulting team and were refined in collaboration with Hatmill Ltd's stakeholders through a Net Zero follow up session, which forms a key part of the validation phase.

Purpose of the follow up session

- Validate Net Zero delivery plan with key stakeholders, ensuring alignment with strategic priorities and governance expectations
- Confirm the feasibility and deliverability of the recommended actions and associated implementation timeframes
- Refine and prioritise actions through the lens of risk management, value protection and long-term value creation

Report recommendations validated by:

Aaron Thomas - Consultant

Workshop date:

20/05/26

¹The accuracy of the carbon footprint calculated for this report is reliant on the data provided, Flotilla do not provide assurance or verification of the data collected.



Contents

Executive Summary	...4
GHG Emissions Summary	...8
Net Zero Transition Plan	...14
Appendix	...22





Section 1

Executive Summary

Absolute emissions

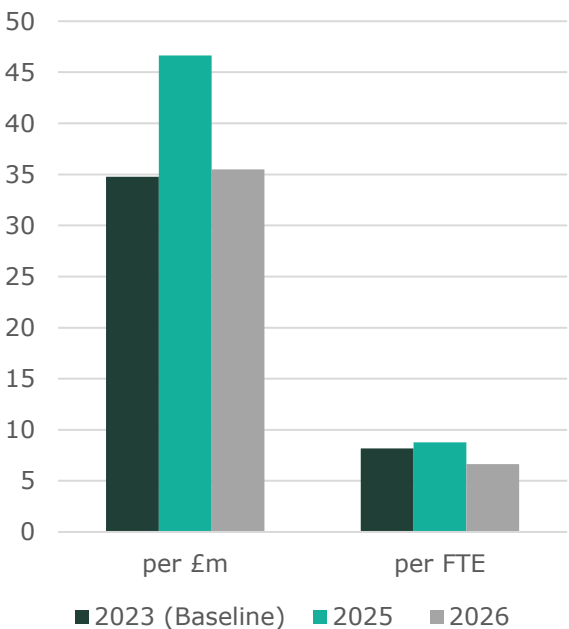
365

tCO2e total

Intensity emissions

35.5 tCO2e per £m turnover

6.6 tCO2e per FTE



Improved carbon efficiency and governance, with higher reported emissions reflecting better Scope 3 visibility across your supply chain.

Key Insights

01. Total emissions decreased year-on-year

Total emissions reduced 28.5% from 2025, showing a strong response to the emissions increase from 2024 to 2025.

02. Significant emissions reductions were achieved in travel

Flight and train emissions reduced by 87% and 85%, respectively, from 2025, thanks to reduced overall mileage and improved accuracy of reporting. Hatmill have a sustainable travel policy in place, which seems to be having an impact.

03. Hatmill's emissions intensity reduced

Emissions per FTE and £m turnover both fell year-on-year, demonstrating business growth without a corresponding increase in emissions.

04. Hatmill are behind on their Net Zero target

Despite strong year-on-year progress, Hatmill's absolute emissions are 24% higher than they need to be to get on track for Net Zero by 2039.

Strategic guidance: Business risk & resilience improved through better data coverage, reducing transition and compliance risk. Falling intensity demonstrates scalable, lower-carbon growth—a commercial opportunity.

Sustainability Value Overview

How emissions management can unlock value for Hatmill.

Cost Reduction

- Reduction in business travel emissions and costs through smarter travel policies and digital-first client delivery.
- Improved data management and reporting processes can lead to operational efficiencies.
- Reduction in fleet and grey fleet mileage costs from having a higher proportion of electric vehicles, which are cheaper to drive per mile.

Value creation drivers:

Cost savings; Strategic Positioning & Investment Readiness.

Commercial Opportunity

- Strengthening client trust and retention through credible ESG and emissions transparency.
- Supporting client ESG and regulatory expectations.
- Differentiation in tenders and RFPs where sustainability and governance criteria are increasingly weighted.

Value creation drivers:

Customer Value & Market Share; Regulation & Compliance.

Risk Management

- Reliance on high-emission or low-transparency suppliers increases susceptibility to reputational risks, and operational instability.
- ESG provides a great opportunity for employee engagement in a fully remote business, improving staff retention.
- Governance and reporting gaps that could undermine ESG credibility as regulations evolve.

Value creation drivers:

Resilience & Risk Reduction; Regulation & Compliance.

Adaptation Potential

- Emissions profile largely indirect and controllable through procurement, travel and operational choices as well as behavioural changes.
- Ability to influence employees, cloud providers, clients and professional services partners.
- Decarbonisation actions typically low-cost and low-disruption.
- Sector-specific guidance aligned to financial and professional services best practice.

Value creation drivers:

Strategic Positioning & Investment Readiness; Employee Engagement.

Company: Hatmill Ltd
Sector: Logistics
Locations: Fully Remote



Strategic Action Recommendations

Key takeaway: Trying to approach business travel in a way which avoids non-essential travel, hotel stays and subsistence spend, as well as incentivising more vehicle travel in EVs will make a big difference to costs and carbon for Hatmill. This was also supported in the employee survey by your staff, so it is worth exploring further.

Recommended Action	Hotspot Activity	2026 tCO2e	2026 Spend Spend	Strategic Importance	Value Drivers
Improve transparency of subsistence hotspot by building out sub-categories and measuring emissions more gradually	Subsistence	73 tCO2e (20%)	£98,669	Travel and subsistence whilst away is essential to business development and client delivery. We recommend for next year looking at further categorising subsistence to more accurately understand the impact of this hotspot area.	Metrics & Targets
Offer the electric vehicle (EV) salary sacrifice scheme to incentivise staff who use their own vehicles for business travel to switch.	Staff-owned petrol & diesel cars	60 tCO2e (16%)	£98,160	A significant proportion of the overall footprint, and essential for Hatmill employees to visit client sites. 80% of Hatmill’s employees drive petrol or diesel cars. If staff shifted away from fossil fuel vehicles, this would be hugely beneficial from a personal cost (particularly given the connection of fuel costs with global geopolitics) and company emissions perspective.	Employee Engagement; Metrics & Targets.
Amend the travel policy to reduce non-essential hotel stays during business travel.	Hotels	51 tCO2e (14%)	£233,608	Travel and hotel stays are essential to business development and client delivery, but at a significant cost to Hatmill. It is critical from a cost and carbon perspective to ensure that only essential business travel journeys and hotel stays are being purchased by the Hatmill team. If the journey must happen, does a hotel stay also need to be included, or are there efficiencies to be gained here?	Cost savings; Employee Engagement; Metrics & Targets.
Launch a supply chain engagement strategy.	Purchased staff training	31 tCO2e (8%)	£255,824	Staff training is a key emissions source for Hatmill, and crucial for maintaining staff satisfaction as a fully remote business, therefore it is likely to persist in future years. Close collaboration with training suppliers will be crucial for Hatmill to improve understanding of the impact of training, and then reduce emissions in this hotspot.	Risk Management; Supplier Relations; Employee Engagement; Target Achievement.

An aerial photograph of a wind farm is shown, split diagonally. The left side features a bright, high-contrast image of green fields and brown patches with several white wind turbines. The right side is a darker, more muted version of the same scene. The text is overlaid on the right side.

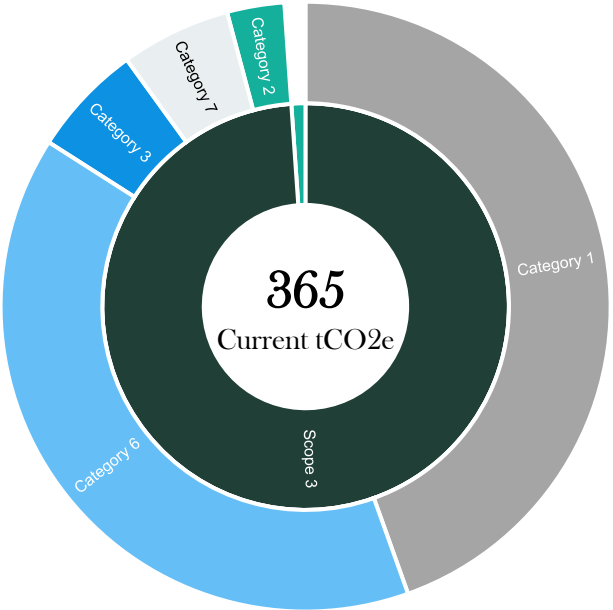
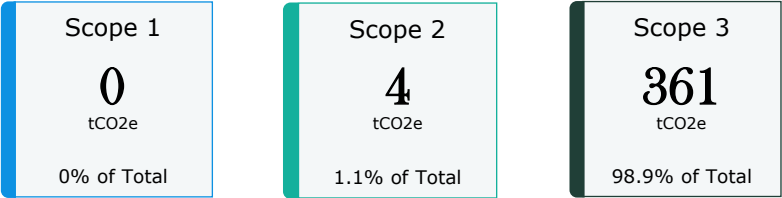
Section 2

GHG Emissions Summary

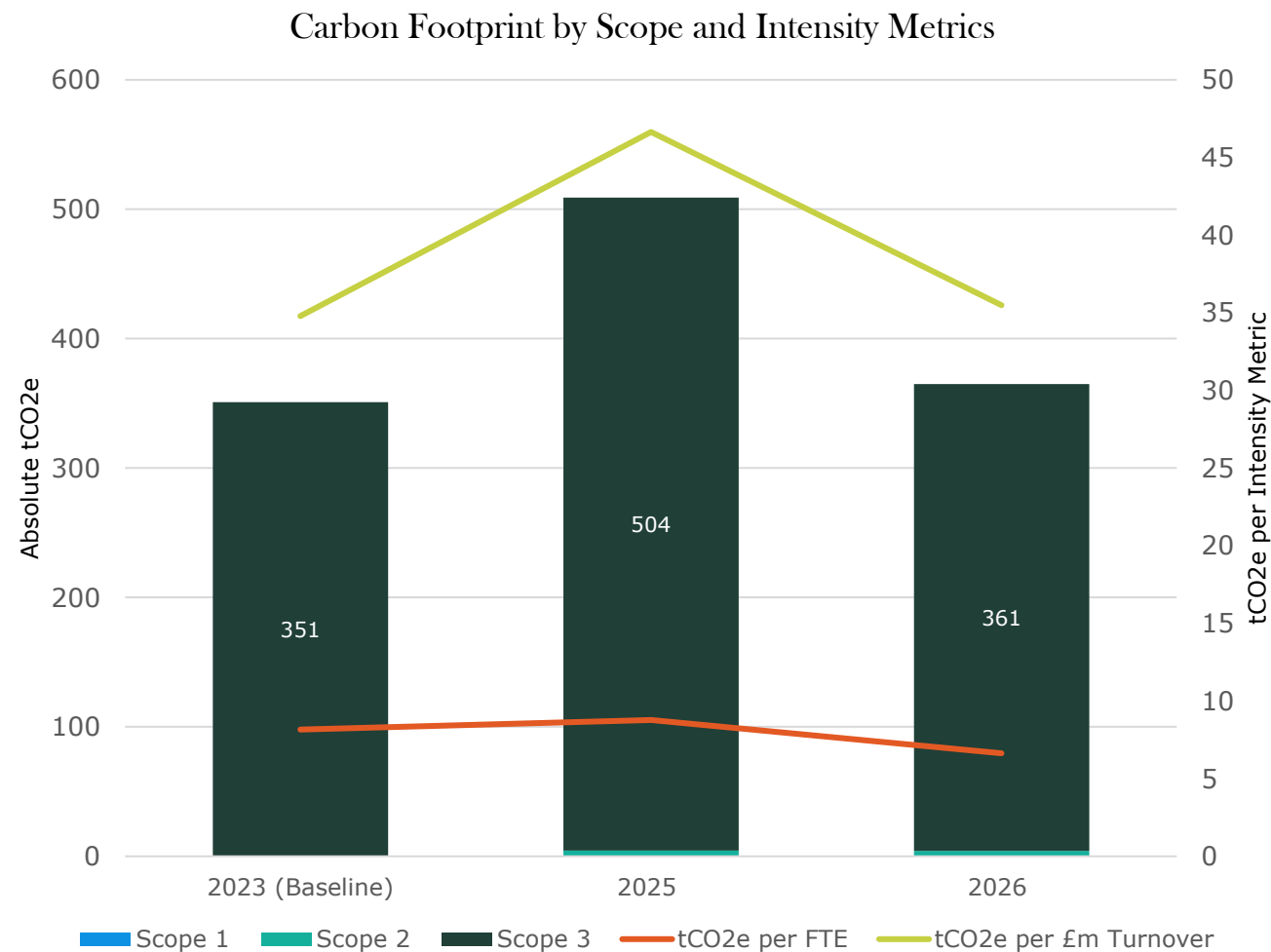
31 March 2026

GHG Emissions Summary

The footprint calculated is reliant on the data provided. Flotilla do not provide assurance or verification of the data collected. Downstream Scope 3 categories are outside the scope of this engagement and are indicated as 'not relevant.'



Scope	GHG Category	2025 tCO2e	2026 tCO2e (Current)	2026 % of emissions	Change
1	Fuel in company vehicles	Not relevant	Not relevant	Not relevant	-
	Direct fuel	Not relevant	Not relevant	Not relevant	-
2	Electricity – location based	4.5	4.1	1.12%	-8.9%
	Indirect fuel usage in leased offices	Not relevant	Not relevant	Not relevant	-
	Indirect fuel usage in leased assets	Not relevant	Not relevant	Not relevant	-
3	Category 1: Purchased goods and Services	162.5	162.5	44.54%	0.0%
	Category 2: Capital goods	13.0	11.0	3.02%	-15.4%
	Category 3: Fuel and Energy-Related (not in Scopes 1 or 2)	56.3	21.8	5.96%	-61.3%
	Category 4: Upstream Transportation and Distribution	Not relevant	Not relevant	Not relevant	-
	Category 5: Waste Generated in Operations	0.0	Not relevant	%	-
	Category 6: Business Travel	250.4	144.2	39.52%	-42.4%
	Category 7: Employee Commuting	22.3	21.3	5.83%	-4.5%
	Category 8: Upstream Leased Assets	Not relevant	Not relevant	Not relevant	-
	Category 9: Downstream Transportations & Distributions	Not relevant	Not relevant	Not relevant	-
	Category 10: Processing of Sold Products	Not relevant	Not relevant	Not relevant	-
	Category 11: Use of Sold Products	Not relevant	Not relevant	Not relevant	-
	Category 12: End of Life of Sold Products	Not relevant	Not relevant	Not relevant	-
	Category 13: Downstream Leased Assets	Not relevant	Not relevant	Not relevant	-
	Category 14: Franchises	Not relevant	Not relevant	Not relevant	-
	Category 15: Investments	Not relevant	Not relevant	Not relevant	-
Total Emissions		509.0	364.8	100.00%	-28.5%



Intensity metrics allow your business to track how efficiently you are reducing emissions per unit of output. Intensity metrics are most impactful when monitoring Scope 3 emissions. They provide an alternative view to total emissions, allowing you to see progress as your business grows.

Scope 1: Direct emissions

There are no emissions in this Scope so there has been no movement.

Scope 2: Indirect emissions

Scope 2 has decreased by 9.4% (0.4 tCO2e) due solely to a reduction in Company owned electric car emissions.

Scope 3: Supply chain emissions

Scope 3 has decreased by 28.5% (143.8 tCO2e) driven by:

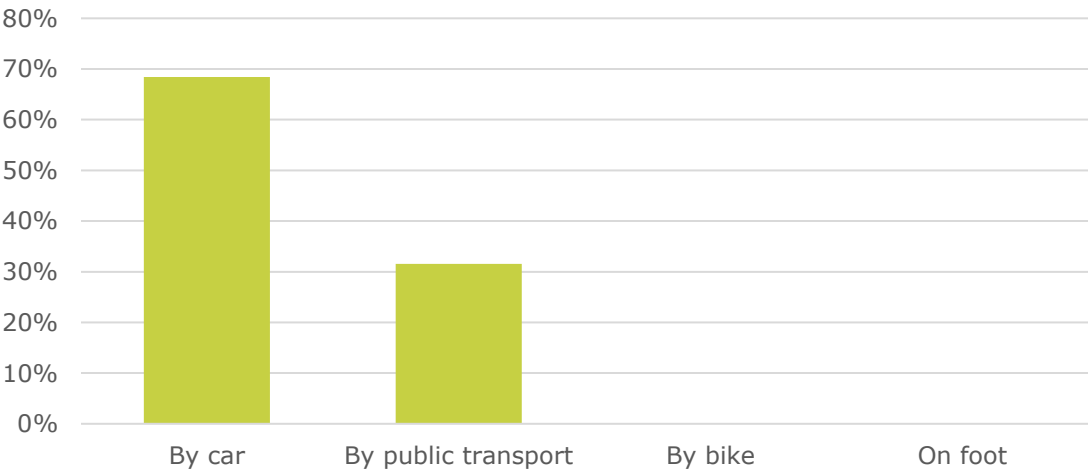
- ▶ Short haul flights - economy class - down 87.8% (48.7 tCO2e)
- ▶ Standard class train - down 84.7% (25.2 tCO2e)
- ▶ Subsistence - up 42.1% (21.7 tCO2e)

Survey Results - Employee Commute and Homeworking Summary

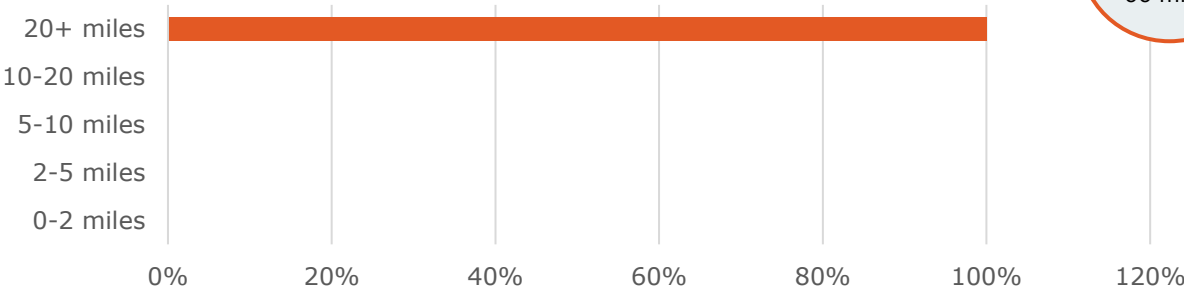
In March 2026, employees were asked about their commuting patterns during this reporting period.

Since Hatmill do not have an office, the 'Commute' reported here is from those staff who travel to site.

How do you commute to work?

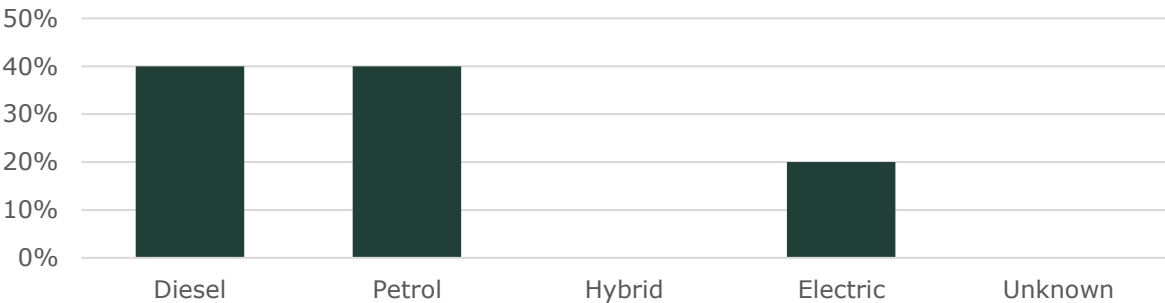


How far is your drive to work (one way)?

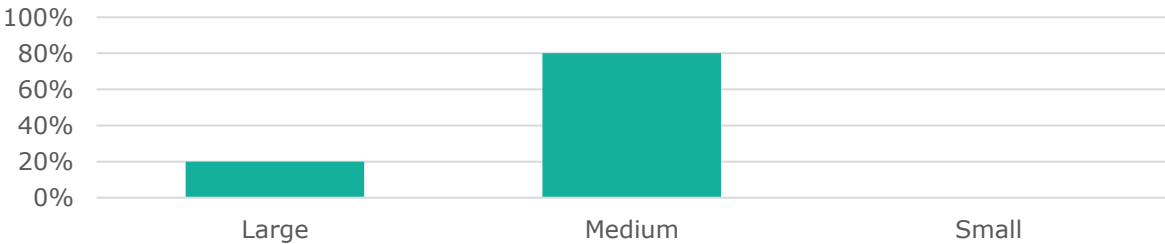


Average driving commute: 66 miles

What car do you drive?

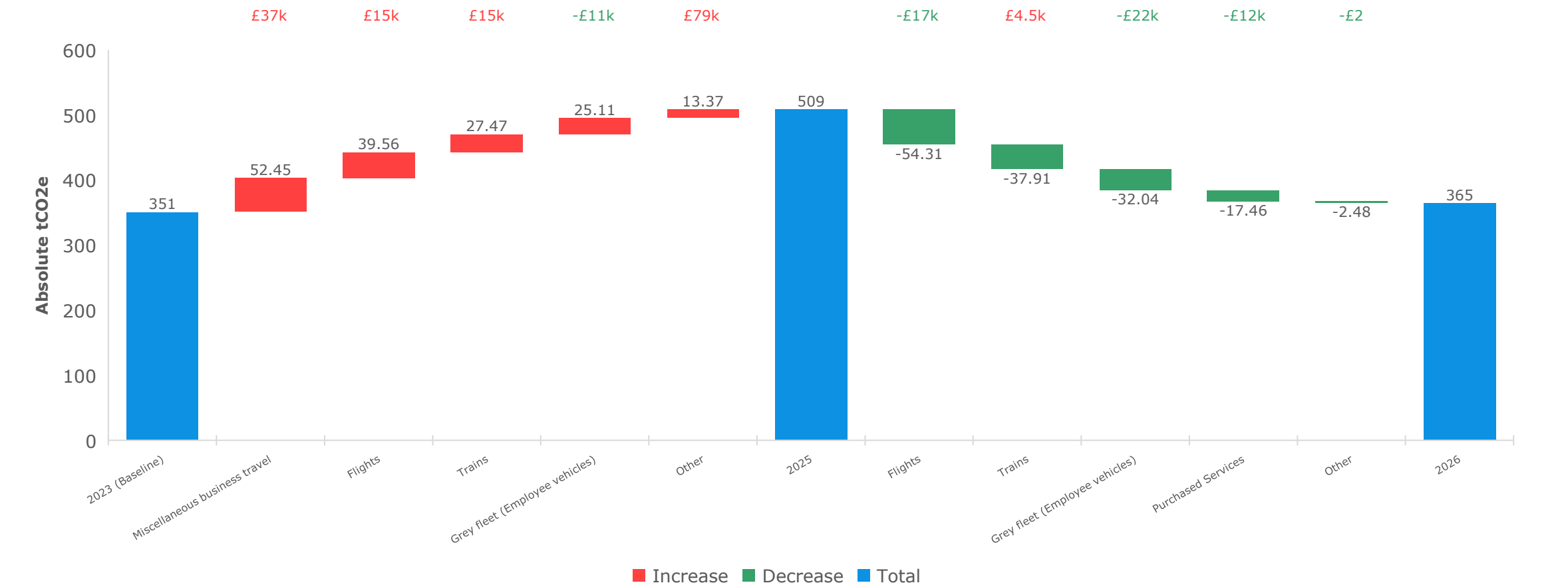


How big is your car?



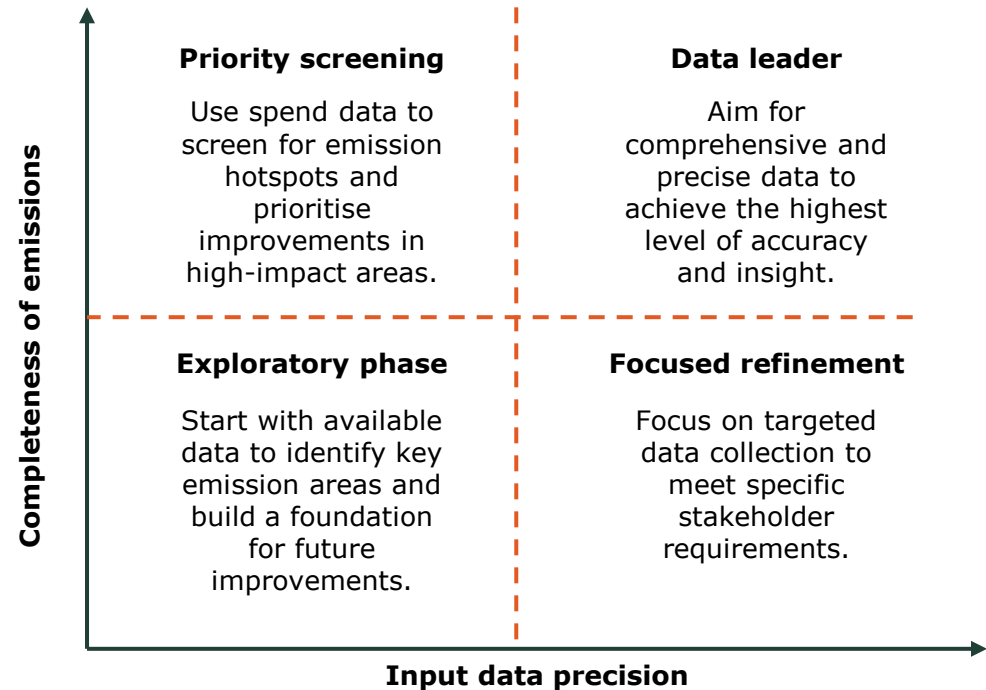
Carbon Footprint Trends Explained

Using spend data collected since 2023, we have mapped the financial activities that had the greatest impact on your emissions overtime, both positive and negative. By isolating spend driven movements, we have highlighted where operational decisions lowered emissions and where cost increases or shifting spend patterns drove emissions up. This helps pinpoint the commercial levers that matter most for decarbonisation while showing where the business has the strongest influence.



The quality and accuracy of GHG emissions calculations are highly dependent on the completeness and appropriateness of the data provided.

All relevant business activities, Scope 3 categories, and emission sources should be captured. The input data should reflect the actual activity as precisely as possible. High-quality data reduces the amount of estimation within the emissions calculation, improving the accuracy of the output.



The Flotilla data score considers precision and completeness of input data to give a score out of 100. As part of the data collection process, an employee survey is issued to gather good quality employee commuting data. The response rate of the survey naturally impacts the quality of the employee commuting data. Hatmill Ltd's current data quality score and employee survey response rates are:



Recommended data improvement actions in priority order:

To strengthen reporting quality and support more confident decision-making, Hatmill Ltd should prioritise collecting further data on their travel and logistics, replacing spend-based emissions estimates with more accurate activity-based metrics (e.g. kWh, m³, tonnes of waste), and improving employee presence tracking to reduce reliance on estimates. More specifically, Hatmill Ltd could:

- ▶ Provide mileage data for first-class train travel
- ▶ Provide the nights stayed in hotels
- ▶ Specifically categorise the 'Undefined travel' spend



Section 3

Net Zero Transition Plan

Emissions Reduction Target and Forecast

Hatmill have a target of achieving Net Zero by 2039, and reducing emissions by 50% by 2030, compared to a baseline of 2023. The target pathway shows the emissions trajectory required to achieve these target annual emissions of 211 tCO2e in 2030 and 35 tCO2e in 2039. Target emissions in FY2026 were 291 tCO2e, however, Hatmill’s actual emissions were 24% above this level at 365 tCO2e.

Key Targets

Target Year	2039
tCO2e Per FTE	0.7
tCO2e Per £m Turnover	3.5
Target annual emissions reduction	16.2%

Reduction Targets	2030	2039
Scope 2	50%	90%
Scope 3	50%	90%



Impact areas provide a crucial framework for developing effective climate action plans. Identifying key levers and areas of influence allows for targeted action and meaningful strategies. Below is a summary of the impact areas and their associated major emission:



Travel & Logistics

Includes travel in fleet vehicles as well as business travel on flights, trains and nights in hotels. To decarbonise this impact area, the focus is on governance and culture change to reduce non-essential travel, which was supported by Hatmill employees in the survey. The most significant emissions in this area are Subsistence (73.3 tCO2e), Hotels (51.4 tCO2e) and Privately owned petrol cars (30.0 tCO2e).



People

Includes the impact of employees working from home. To decarbonise this impact area, the focus is on engaging and influencing employee behaviours, making it easier for them to adopt renewable energy tariffs/installations at home. Support in this area was one of the employee-suggested ideas fed back from the Hatmill survey. The only emissions in this area are from Homeworking (21.3 tCO2e).

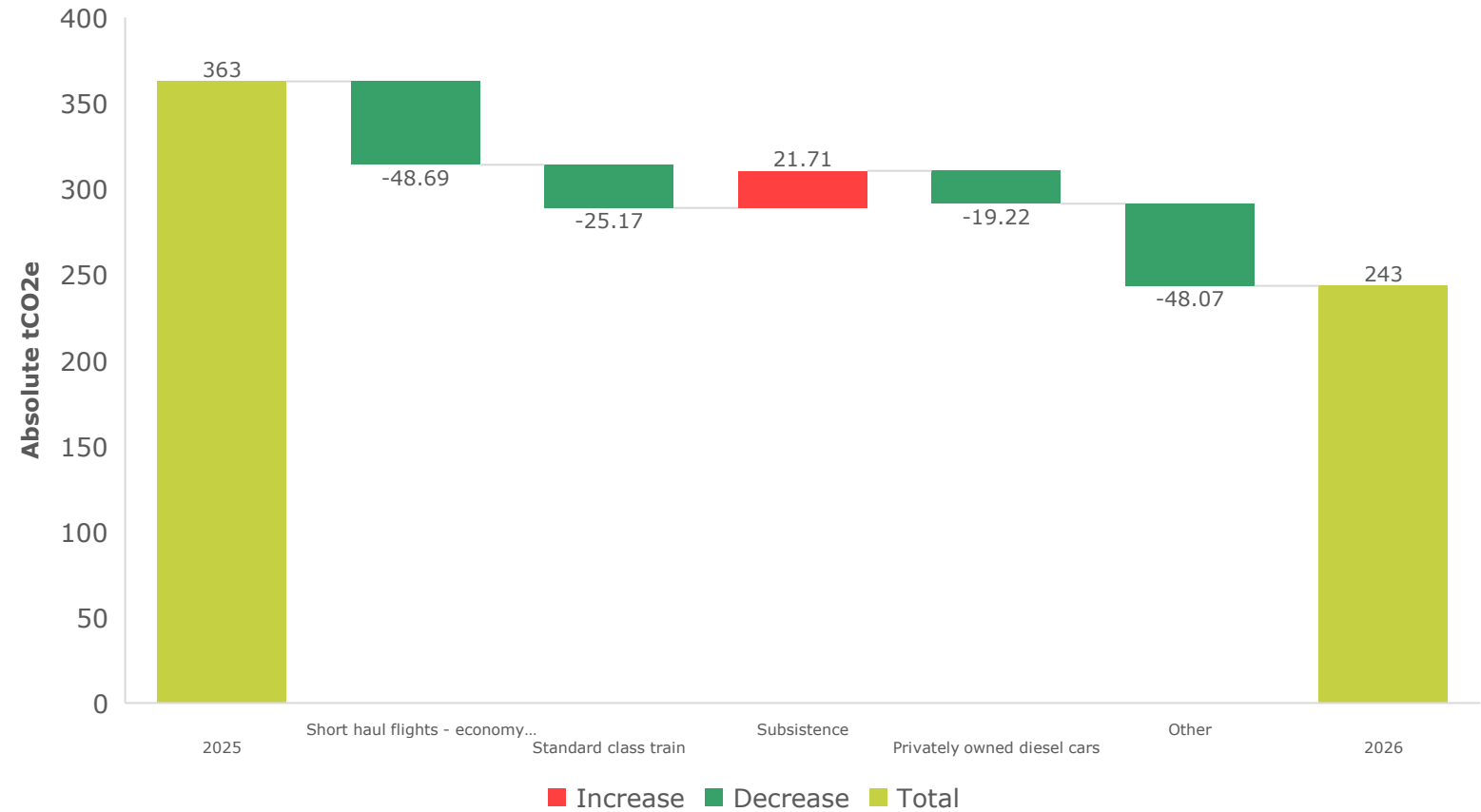


Supply chain

Includes purchased good and services, asset acquisitions, as well as technology. To decarbonise this impact area, the focus is on supplier engagement and sustainable procurement. The most significant emissions in this area are Staff training (30.7 tCO2e), Other professional fees (19.0 tCO2e) and Computer services incl software licences (17.8 tCO2e).

Impact Areas - Travel

Business travel will be optimised by promoting remote meetings and encouraging alternative transport options. Inbound and outbound logistics will be streamlined to enhance operational efficiency and minimise environmental impact. The overall goal is to contribute to a cleaner, greener future. You can see below what has changed in your travel emissions from this year to last as well as to the right, what reduction initiatives have been completed and planned.



Completed actions in 2025 & 2026

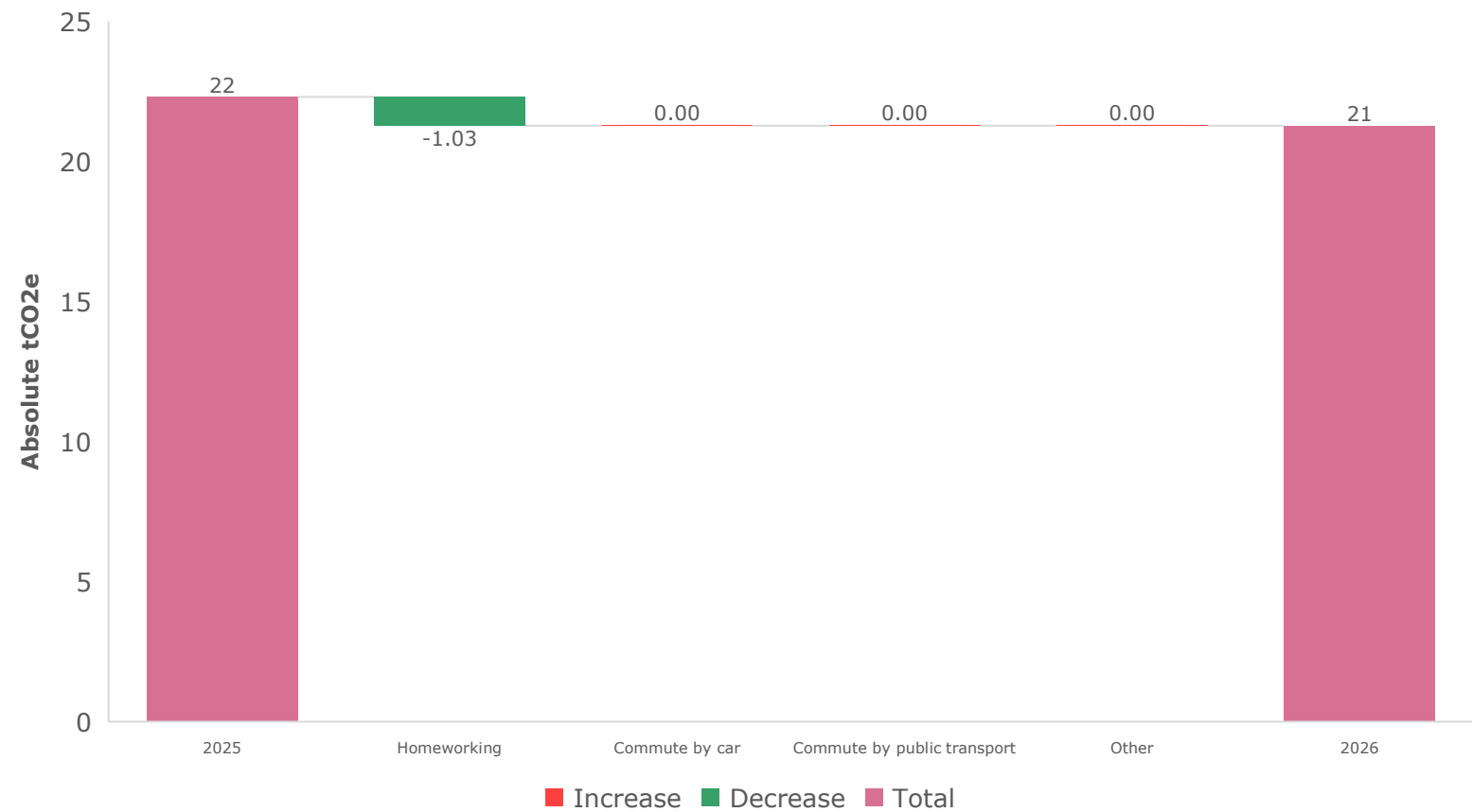
Initiative	Date Completed
Serve vegan or vegetarian food at company's events	10/01/2025
Flights - Move from £ to track flight miles by class of ticket	28/10/2025

Planned actions in 2026

Initiative	Due Date
Review travel policy and engage employees to see if non-essential travel miles, hotel stays and subsistence spend can be avoided.	31/12/2026
Implement EV salary sacrifice scheme for business miles	31/12/2035

Impact Areas - People

The focus is on fostering a culture where individuals feel empowered to contribute to sustainability efforts. From core values to policies, there is a commitment to cultivating a workplace that supports building a more sustainable business and world, recognising people as the greatest asset. You can see below what has changed in your people emissions from this year to last as well as to the right, what reduction initiatives have been completed and planned.

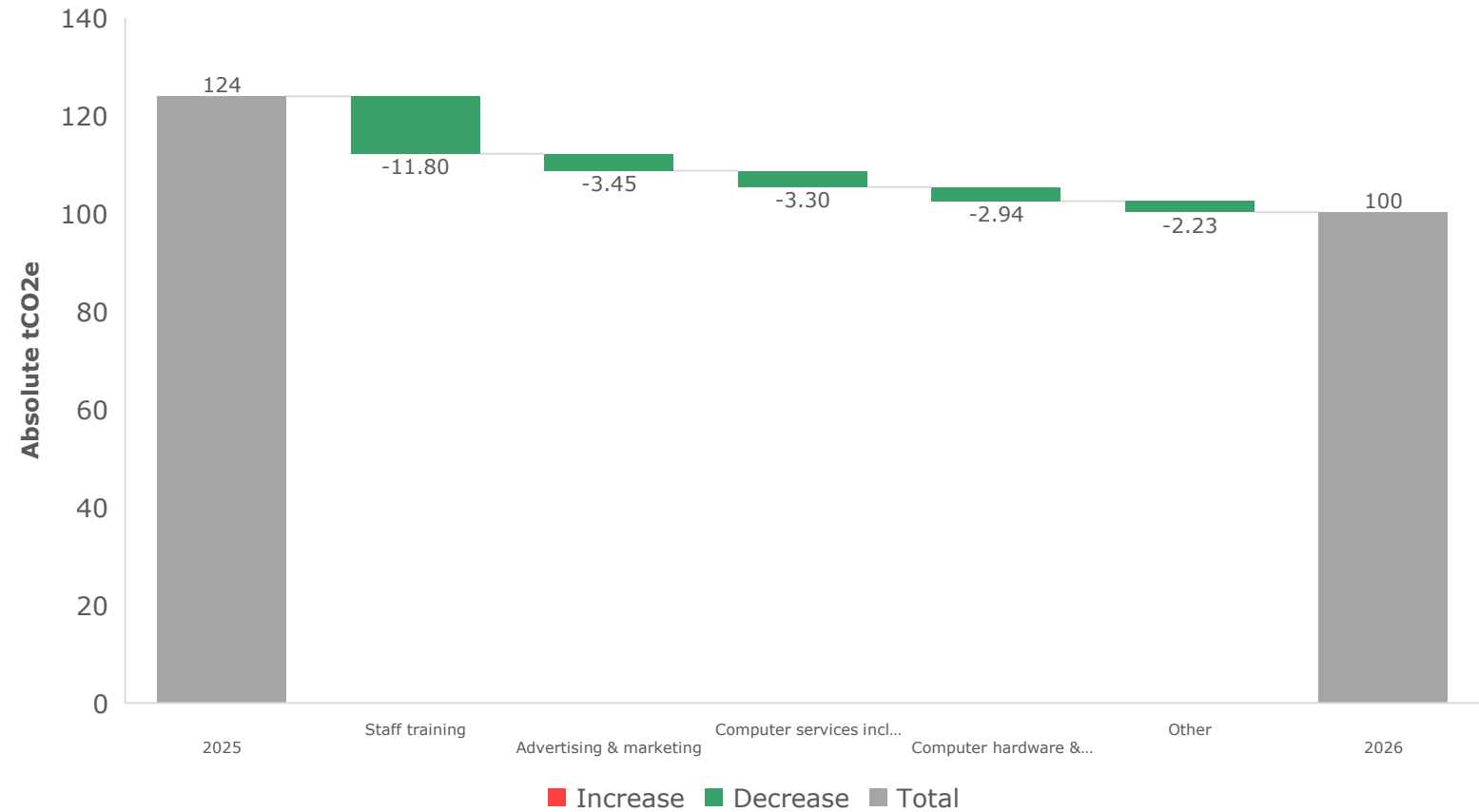


Completed actions in 2025 & 2026	
Initiative	Date Completed
Implement sustainable home-working guidance	11/02/2026
Provide your employees with job-specific sustainability training	11/02/2026

Planned actions in 2026	
Initiative	Due Date
Provide comprehensive training for your sustainability lead	31/12/2026
Incentivise employees to switch to renewable electricity tariffs by providing a Green Tariff Perks Package	31/12/2027

Impact Areas - Supply Chain

Engagement with the supply chain is crucial to the net-zero plan. Sustainable procurement practices will be developed by prioritising options with a low environmental and climate impact. In alignment with circular economy principles, the aim will be to minimise waste generation and optimise the use of raw materials, energy, and other resources. You can see below what has changed in your supply chain emissions from this year to last as well as to the right, what reduction initiatives have been completed and planned.



Completed actions in 2025 & 2026	
Initiative	Date Completed
Educate employees on ways to reduce online emissions	13/05/2025
Repair before replace end-user devices	11/02/2026

Planned actions in 2026	
Initiative	Due Date
Engage suppliers to move your data to a green data centre	31/12/2026
Issue a sustainability questionnaire to 'other professional' service suppliers	31/12/2026
Launch a supply chain engagement strategy	31/03/2027

The governance framework will embed sustainability into core values, business strategies, and daily operations. Risks and opportunities in the shift to a low-carbon economy will be assessed, ensuring active stakeholder participation in achieving net-zero goals. Sustainability will be a central element of decision-making and long-term planning. Unlike the other impact areas, governance actions have no direct emissions savings, and no footprint is measured relating to governance, but through their implementation they can help drive sustainability and reduction indirectly across the other impact areas.

Below are details of the governance initiatives completed and planned this year and last.

Completed actions in 2025 & 2026	
Initiative	Date Completed

Planned actions in 2026	
Initiative	Due Date
Incorporate sustainability into your procurement processes and policies	31/12/2026
Create a sustainability-focused supplier code of conduct	31/12/2026
Ensure the board has oversight of sustainability	31/12/2026

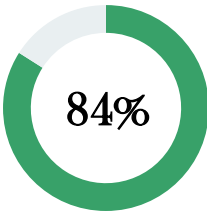


Sustainability actions voted for by your employees which are included in your project plan:

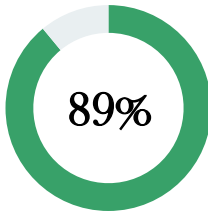
1	Promote and incentivise public transport initiatives	32 Votes
2	Adopt levers to reduce business travel emissions	30 Votes
3	Implement a Cycle to Work Scheme (including e-bikes)	17 Votes
4	Improve waste & recycling practices	11 Votes
5	Focus on energy-efficient behaviours in the office	7 Votes

Ideas shared by your employees:

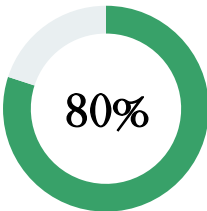
- **EV & green energy support** – Introduce an employer-contributed EV company car scheme and provide incentives for home solar/renewable energy installations, reflecting that home is the primary place of work.
- **Smarter travel choices** – Improve guidance on sustainable travel options, factor in consultant location when allocating client work to minimise travel emissions and eliminate non-essential face-to-face meetings in favour of Teams calls.
- **Carbon offsetting** – Contribute to carbon offsetting initiatives to account for the environmental impact of working from home.
- **Relevance & practicality** – Ensure any sustainability initiatives are tailored to the reality of a remote/office-free business model, rather than applying generic office-based policies.



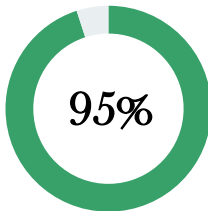
Of your employees want to work for an organisation that focuses on reducing emissions.



Of your employees are willing to support you to reduce your emissions.



Of your employees are interested in undertaking training related to climate action in the context of their work.



Of your employees acknowledge personal responsibility to reduce their impact at work and home.



Section 4

Appendix

Greenhouse gases (GHG)

Greenhouse gas emissions are the release of gases into the atmosphere that trap heat from the sun, causing the planet to warm. These gases act like a blanket, allowing sunlight to enter but preventing some of the Earth's heat from escaping back into space. There are 7 GHGs stated in the GHG protocol:

- ▶ Carbon dioxide (CO₂)
- ▶ Methane (CH₄)
- ▶ Nitrous oxide (N₂O)
- ▶ Hydrofluorocarbons (HFCs)
- ▶ Perfluorocarbons (PFCs)
- ▶ Sulphur hexafluoride (SF₆)
- ▶ Nitrogen trifluoride (NF₃)

tCO₂e

Different activities produce different gases. For carbon accounting purposes, greenhouse gases are converted into CO₂ equivalents for easier reporting and comparison. We refer to a business carbon footprint as 'tCO₂e', which is short for 'tonnes of carbon dioxide equivalent'.

Baseline year

A reference point against which emissions reductions are measured. This is used by Flotilla in creating a Net Zero plan and determining reduction targets.



Scopes 1, 2 & 3

Carbon footprint measures are categorised into three scopes: 1, 2 and 3.

Scope 1

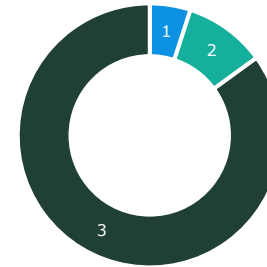
Direct emissions from sources that the company owns or controls.

Scope 2

Indirect emissions from electricity, steam, heat or cooling.

Scope 3

All other indirect emissions from activities of the organisation



Scope 3 can account for up to 90% of a business' carbon footprint. We measure all three scopes, so you can understand the full impact of your business activities. Further detail about the scopes and the methodology is detailed on the next page.

Net Zero

Net Zero is a target set by businesses and countries with the aim of limiting global temperature rises to 1.5c. Put simply, Net Zero means reducing GHG emissions to as close to zero as possible with any remaining emissions re-absorbed from the atmosphere. To achieve Net Zero, following science-based targets, a business must:

- ▶ Measure emissions across their value chain
- ▶ Focus on deep, rapid emission cuts, ideally halving emissions by 2030, and reducing by at least 90% by 2050
- ▶ Remove remaining hard-to-abate emissions from the atmosphere via carbon removal solutions

Impact Areas

Whilst the GHG protocol measures footprints based on scope, analysing the footprint by impact area is beneficial because they provide a more meaningful way to understand your data, set reduction targets and take meaningful action. The impact areas are:

- ▶ Travel & Logistics
- ▶ People
- ▶ Buildings
- ▶ Supply chain
- ▶ Governance*

Employee commuting and homeworking

Where surveys have been conducted to collect employee commute and homeworking data, this data is utilised and extrapolated to provide an accurate representation of your footprint. Where not, government average commute data is utilised to provide an estimate of those emissions based on the number of workers and your sector/industry.

Intensity metrics

Intensity metrics allow your business to track how efficiently you are reducing emissions per unit of output. Intensity metrics are most impactful when monitoring scope 3 emissions.

They provide an alternative view to total emissions, allowing you to see progress as your business grows.

*Governance does not include any emissions or carbon footprint calculations

Baseline emissions are the emissions produced in the earliest possible reporting year when a holistic, representative GHG emissions measurement was completed. Baseline emissions are the reference point against which emissions reduction can be measured.

Hatmill Ltd’s emissions have been calculated against a baseline year of 2023.

Hatmill Ltd’s GHG emissions inventory is aligned to the GHG Protocol and covers:

Scope 1: Direct emissions

Direct emissions from sources owned or controlled by an organisation, such as natural gas used in boilers, fuel combustion in company vehicles, manufacturing processes, and onsite energy production.

Scope 2: Indirect emissions

Indirect emissions from the consumption of purchased electricity, steam, heating, and cooling. These emissions occur at the source of energy production but are attributed to the organisation that uses the energy.



Scope 3: Supply chain emissions and categories

Scope 3 emissions encompass all indirect greenhouse gas (GHG) emissions that occur in an organisation's value chain, both upstream and downstream, that are not included in Scope 1 or Scope 2.

Scope 3 GHG Category	Description
Category 1: Purchased Goods and Services	Emissions from the production of goods and services a company buys.
Category 2: Capital Goods	Emissions from producing long-term assets such as buildings or equipment.
Category 3: Fuel and Energy-Related (not in Scopes 1 or 2)	Emissions from extraction, production, and transportation of fuels and energy purchased, no captured in Scope 1 or 2.
Category 4: Upstream Transportation and Distribution	Emissions from transporting and distributing products purchased by the reporting company.
Category 5: Waste Generated in Operations	Emissions from waste disposal and treatment.
Category 6: Business Travel	Emissions from travel by employees outside of company-owned vehicles (e.g., flights, rental cars).
Category 7: Employee Commuting	Emissions from employees commuting to and from work.
Category 8: Upstream Leased Assets	Emissions from leased assets not included in Scope 1 or 2, occurring upstream in the value chain.
Category 9: Downstream Transportations & Distributions	Emissions from transporting and distributing sold products to customers.
Category 10: Processing of Sold Products	Emissions from processing intermediate products sold by the company.
Category 11: Use of Sold Products	Emissions from the use of goods and services sold.
Category 12: End of Life of Sold Products	Emissions from waste disposal and treatment of sold products at their end-of-life.
Category 13: Downstream Leased Assets	Emissions from assets leased to other entities.
Category 14: Franchises	Emissions from operations of franchises.
Category 15: Investments	Emissions from investments made by the company, such as loans and equity.

Methodology

- ▶ Flotilla's carbon accounting platform is developed in accordance with the Greenhouse Gas (GHG) Protocol which provides the world's most widely used accounting standards. The report issued covers scope 1, 2 and 3 in line with this protocol. The GHG Protocol principles of relevance, completeness, consistency, transparency and accuracy have been followed throughout.
- ▶ Flotilla's reporting is designed to align to the Government's SECR (Streamlined Energy and Carbon Reporting) guidelines which are compulsory for large organisations. This in turn is aligned with the ISSB (International Standards Sustainability Board) upcoming regulations IFRS S1 and IFRS S2.
- ▶ Flotilla's methodology has been reviewed and endorsed by Prof Piers Forster, Climate Scientist at Leeds University and Interim Chair of the Climate Change Committee (CCC). Piers has served on the CCC since December 2018. He is founding Director of the Priestley International Centre for Climate and has acted as lead author for several Intergovernmental Panel on Climate Change (IPCC) reports.
- ▶ The data collection process gives the option of providing activity data or spend data.
- ▶ Activity data allows a more accurate footprint as it measures the activities themselves. For example, activity data for electricity use would be kWh. Spend data can be retrieved directly from the company's financial accounting systems and indicates the total spend in specific categories.
- ▶ Both activity data and spend data are converted to emissions of carbon dioxide equivalent using relevant emission factors such that: Emissions = Business Data x Emission factor.
- ▶ The primary source of activity emission factors is the annual UK government factors, additional data collected from ONS and DEFRA is utilised.
- ▶ Flotilla have captured the full impact of the business operations using the data submitted in the platform, and the activities of the employees from the employee questionnaire, which are often missed despite forming a significant proportion of a business' carbon footprint.
- ▶ The footprint calculated by Flotilla may omit specific operations when the associated footprint is immaterial (<5% of the total footprint). Page 11 shows what emission categories have been included and excluded.
- ▶ It is important to note that it is impossible to accurately guarantee the impact of all activities; as referenced herein, certain calculations are based on the information provided, the current available conversion data, and governmental resources. Page 11 shows what emission categories have been included and excluded.

Carbon footprints are subject to change

- ▶ Flotilla routinely updates emission factors to reflect the latest data, methodologies, and industry standards, including alignment with the GHG Protocol.
- ▶ These updates ensure carbon accounting remains accurate and consistent by incorporating changes in economic conditions, inflation, and methodology. This means that your carbon footprint calculations remain accurate, transparent, and reflective of the latest data and methodologies.
- ▶ **Please note** that updated factors may result in changes to previously reported emissions due to improvements in data quality and calculation methods.
- ▶ Our team is here to help you understand the impact of these updates and support you to communicate these changes to your stakeholders, reassuring them that these changes reflect your commitment to best practice in sustainability reporting.



Estimation and uncertainty in carbon footprinting

Carbon footprinting, like any measurement, comes with its share of uncertainty. These uncertainties can arise from a variety of factors, making it crucial to understand their existence and potential impact. Here are some key reasons why carbon footprint calculations can be uncertain:

- ▶ **Activity data:** Measuring our activities that generate emissions, like fuel usage or electricity consumption, isn't always precise. Estimations or incomplete records can lead to inaccuracies in footprint calculations.
- ▶ **Emission factors:** Emission factors, which convert activities into their equivalent carbon emissions, can vary depending on factors like location or specific technology used. Flotilla use the UK government factors as a primary source which are regarded amongst the most reliable in the UK. However, there remains estimation in the emission factor which considers the UK average emissions by activity.

Where primary activity data could not be collected, the following assumptions and estimations were used by Flotilla:

- ▶ **Employee survey:** The footprint associated with employees (homeworking and commuting) has been derived using an employee survey. This is extrapolated across the employee population when a response rate of 100% is not obtained.
- ▶ **Working day:** There is an assumption that for a full-time employee there are 8 hours in a working day for 48 weeks a year. The number of days an employee works is collected within the employee survey.
- ▶ **Public transport:** The employee survey details commute by public transport but not by transport type and thus an average of the UK government emission factors for public transport is used.



Key terms explained:

Term	Description
Baseline	A reference point against which emissions reductions are measured.
Boundaries	GHG accounting and reporting boundaries can have several dimensions, i.e. organisational, operational, geographic, business unit, and target boundaries. The inventory boundary determines which emissions are accounted and reported by the company.
Carbon dioxide (CO ₂)	The most significant GHG, primarily emitted from burning fossil fuels like coal, oil, and natural gas. CO ₂ traps heat efficiently and remains in the atmosphere for centuries.
Carbon footprint	The total amount of GHG emissions produced by an individual, organisation, event, or product. Measured in metric tonnes of carbon dioxide equivalent (CO ₂ e).
Carbon neutral	Investing in offset projects that reduce GHG emissions elsewhere, to counter-balance GHG emissions generated by the business.
CO ₂ -equivalent (CO ₂ e)	The amount of CO ₂ that would cause the same integrated radiative forcing over a given time horizon as an emitted amount of another GHG or mixture of GHGs. Conversion factors vary based on the underlying assumptions and as the science advances.
Consolidation approach	Refers to how an organisation sets boundaries for GHG accounting. Types include equity share approach, financial control, and operational control.
Dual reporting	The disclosure of two separate Scope 2 electricity emissions figures: one based on the average grid emissions (location-based) and another based on the company's specific energy contracts (market-based).
Emission factor	A value that represents the average amount of GHG emissions produced per unit of activity, such as the amount of CO ₂ emitted per kilowatt-hour of electricity generated.
Emission scopes	The GHG Protocol Corporate Accounting and Reporting Standard classifies an organisation's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting organisation, including both upstream and downstream emissions.

Key terms continued:

Term	Description
GHG Protocol	Comprehensive global standardised frameworks to measure and manage GHG emissions from private and public sector operations, value chains, and mitigation actions. The GHG Protocol supplies the world's most widely used GHG accounting standards. The Corporate Accounting and Reporting Standard provides the accounting platform for virtually every corporate GHG reporting program in the world.
Greenhouse gases (GHG)	Greenhouse gases (GHGs) are atmospheric gases that absorb and re-emit heat radiation, creating a warming effect on the planet. This phenomenon, known as the greenhouse effect, is essential for maintaining Earth's habitable temperature. However, increased GHG concentrations due to human activities are causing an intensification of the greenhouse effect, leading to global warming and climate change.
Hexafluoride (SF6)	Man-made greenhouse gas used in electrical equipment, windows, and soundproofing. Extremely potent GHG (23,000x more effective than CO2), very long atmospheric lifespan (3,200 years).
Hydrofluorocarbons (HFCs)	Man-made synthetic greenhouse gases used in refrigerants, air conditioners, and foams. Thousands of times more effective at trapping heat than CO2, variable atmospheric lifespans.
Intensity metric	Expresses the amount of GHG emissions per unit of some activity or output. It helps normalise emissions and allows for better comparison and tracking of progress over time.
Indirect emissions	Emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity.
Impact area	Categories of emissions, aligned with business functions and suppliers. There are 4 impact areas in the Flotilla report: Travel, Energy, Facilities, Supply Chain.
Location-based method	This figure calculates GHG emissions for electricity using average emissions intensity of the grid from which the company purchases electricity. In the UK this is the national grid.
Market-based method	This figure calculates GHG emissions for electricity using the specific energy contracts or instruments held by the company. It therefore shows lower emissions for renewable tariffs and higher emissions for non-renewable tariffs.

Key terms continued:

Term	Description
Materiality	The relevance of an ESG issue to a company's business.
Methane (CH ₄)	A potent GHG released from natural sources like wetlands and human activities like livestock farming, landfills, and energy production. Methane traps heat about 25 times more effectively than CO ₂ but has a shorter lifespan in the atmosphere (around 12 years).
Nitrogen Fluoride (NF ₃)	Man-made greenhouse gas used in electronics and semiconductor production. Highly potent GHG (7,200x more effective than CO ₂), very long atmospheric lifespan (740 years).
Nitrous Oxide (N ₂ O)	Emitted during fertiliser use, land clearing, and combustion processes. It's less abundant than CO ₂ and methane but traps heat about 300 times more effectively than CO ₂ and persists in the atmosphere for over 100 years.
Operational boundary	Operational boundaries outline the specific activities and emissions sources that an organisation includes within its GHG inventory. They define which emissions fall under Scope 1 (direct emissions) and Scope 2 (indirect emissions associated with purchased energy) for reporting purposes.
Perfluorocarbons (PFCs)	Man-made synthetic gases used in semiconductors, electronics, and some industrial applications. Extremely potent GHGs (thousands of times more effective than CO ₂), very long atmospheric lifespans (thousands of years).
Scope 1 emissions	Direct GHG emissions that occur from sources owned or controlled by the reporting company i.e., emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.
Scope 2 emissions	Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company. Scope 2 emissions physically occur at the facility where the electricity, steam, heating, or cooling is generated.
Scope 3 emissions	All other indirect GHG emissions (not included in Scope 2) that occur in the value chain of the reporting company. Scope 3 can be broken down into upstream emissions and downstream emissions: Upstream emissions include all emissions that occur in the life cycle of a material/product/service up to the point of sale by the producer, such as from the production or extraction of purchased materials. Downstream emissions include all emissions that occur because of the distribution, storage, use, and end-of-life treatment of the organisation's products or services.

Trust Flotilla with your carbon accounting and Net Zero journey.

“The Flotilla carbon accounting platform enables real, evidence-driven change. With science-based measurement and reporting, Flotilla allows businesses to take an honest look at their emissions, set achievable goals, make wise data-led decisions and become genuinely sustainable.”

Professor Piers Forster

Founder Director of the Priestley International Centre for Climate, University of Leeds, IPCC Sixth Assessment Report, Lead Author, Nobel prize winner for climate action

“The United Nations Climate Change Initiative is pleased to recommend Flotilla's science-based carbon reduction service, supporting businesses on their crucial journey to net zero. The Flotilla approach creates positive action throughout the entire ecosystem of a company, involving, motivating and empowering every individual to drive meaningful change.”

Miguel Naranjo

Programme Officer - UN Climate Change



SCIENCE
BASED
TARGETS





*Produced by Flotilla on behalf of
Hatmill Ltd*



flotillagroup.com

flotilla