WolfLabs
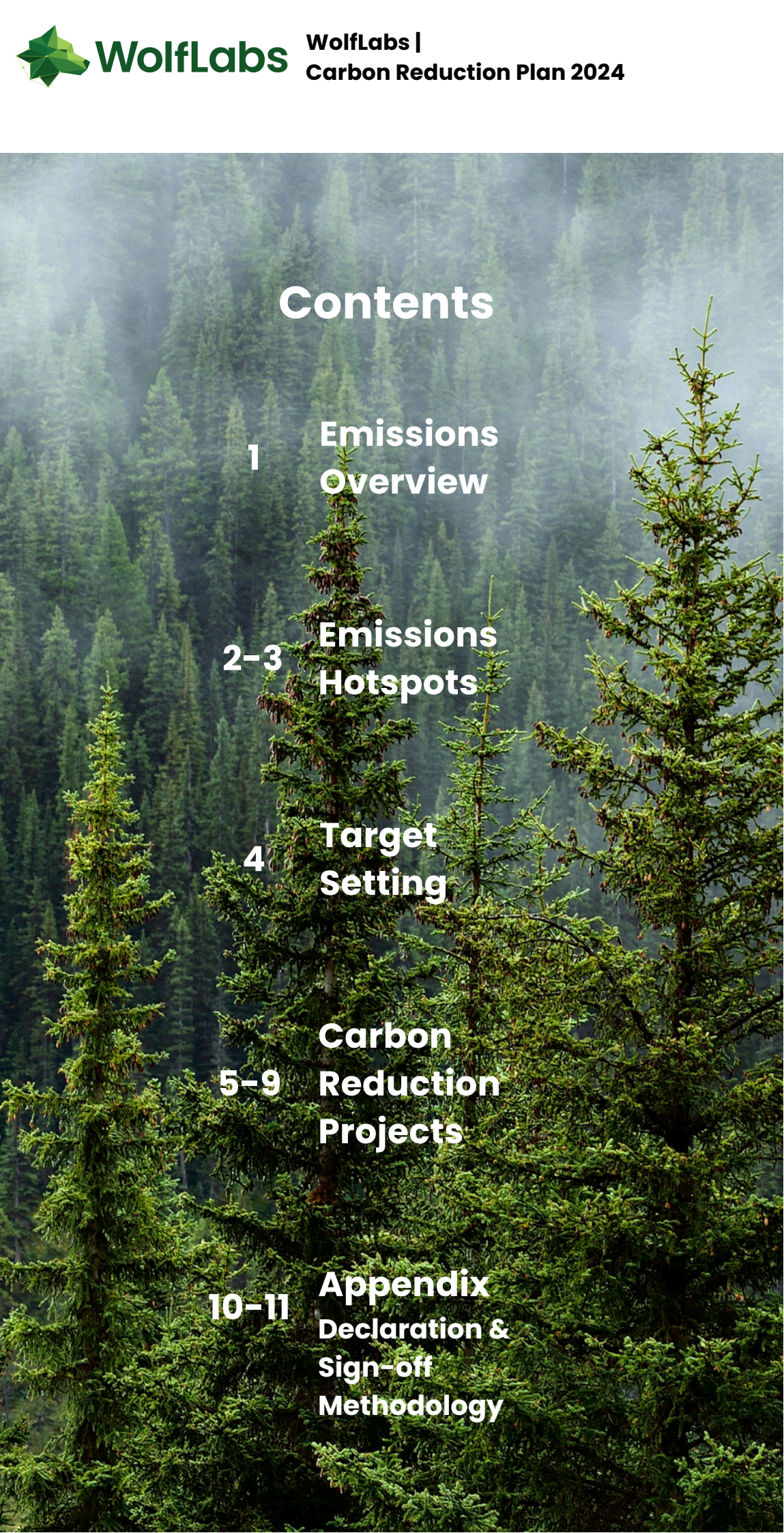
Carbon Reduction Plan January 2024–December 2024
Produced for WolfLabs
Prepared and Verified by CarbonMark™

CarbonMark™

Contents

Purpose

This Carbon Reduction Plan has been developed in response to Procurement Policy Note (PPN) 06/21.

This report demonstrates that WolfLabs is on track to achieve **Net Zero by 2040,** targeting at least a **90% reduction** in emissions as aligned with the Science-Based Targets initiative (SBTi). All specified emissions under this procurement note have been audited and reported in this document.

Reporting Methodology and Compliance:

This report adheres to the **Greenhouse Gas Protocol Corporate Reporting Standard,** ensuring accurate and transparent emissions tracking across all scopes. It also complies with **Procurement Policy Note (PPN) 06/21,** which mandates carbon reduction plans for government suppliers.

The reporting units used throughout this report are **tCO2e,** which are tonnes of carbon dioxide equivalent emissions.

Report Highlights

Reporting Period: 1st January 2024- 31st December 2024

Publication date: 21/03/2025

Sector: *Retail sale of Laboratory Equipment to Academia, Public Sector and Private markets*

Reporting Boundary: Main office and Annex, Pocklington

Consolidation Approach: Operational Control

Full-time Employees: 26

Emissions Measured: Scope 1: Gas; Scope 2: Electricity; Scope 3: Purchased Goods and Services, Fuel- and Energy-Related Activities (not included in Scope 1 or 2), Upstream Transportation and Distribution, Waste Generated in Operations, Business Travel (including hotel stays), Employee Commuting (including home working), Upstream Leased Assets, Downstream Transportation and Distribution, Use of Sold Products, and End-of-Life Treatment of Sold Products
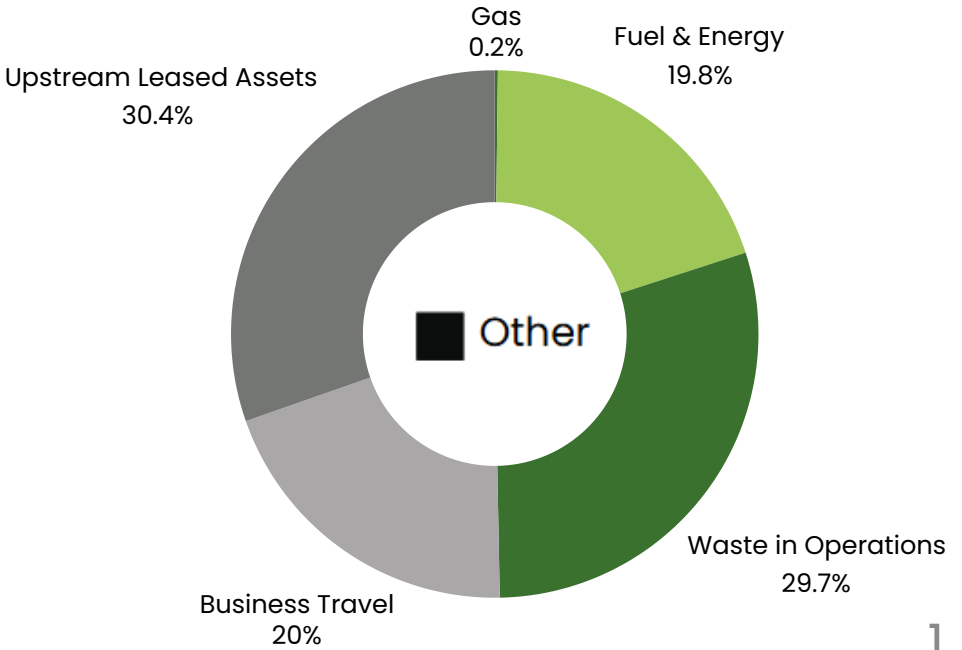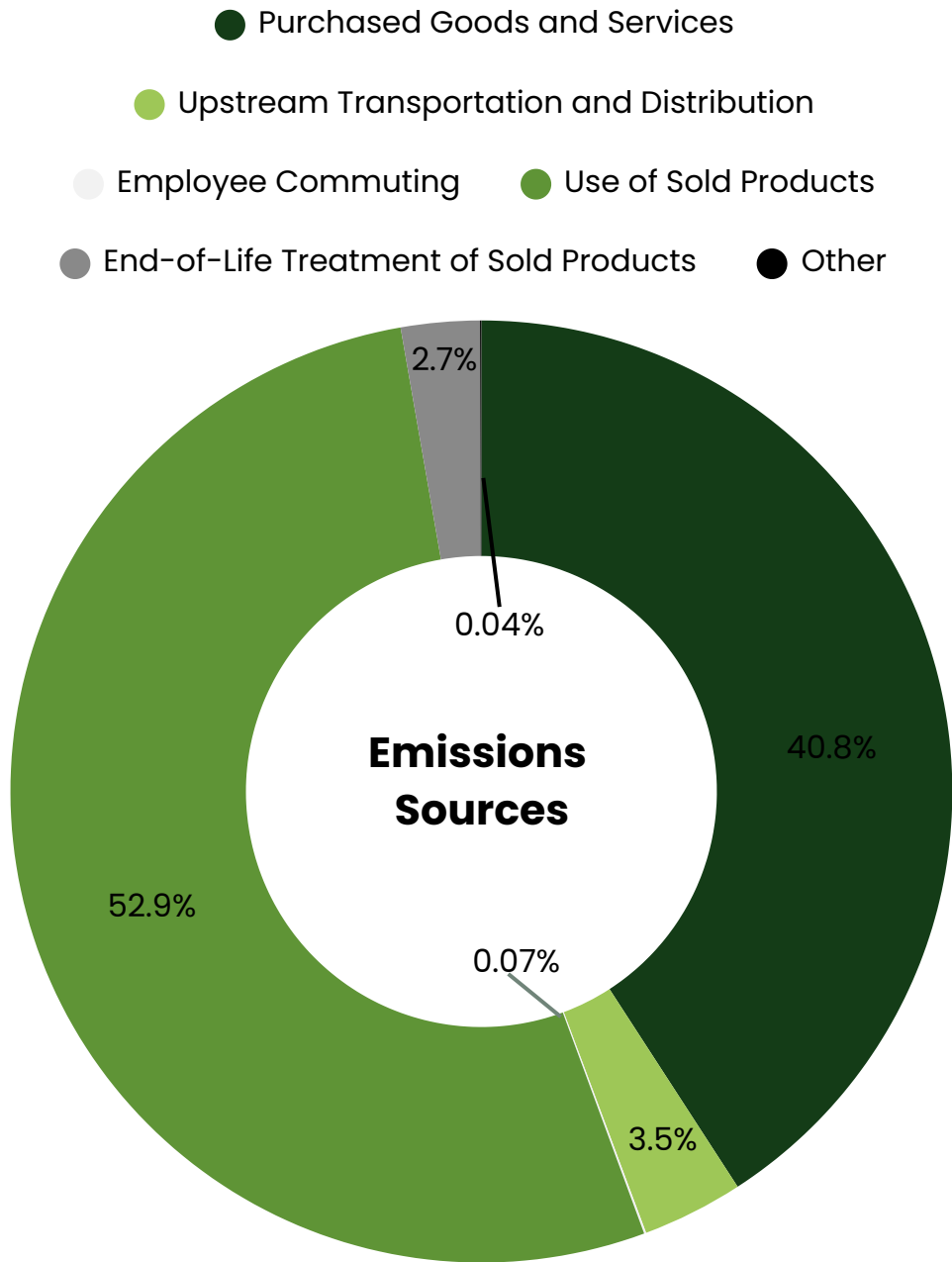
Emissions Hotspots: Use of Sold Products (7907.303 tCO2e), Purchased Goods and Services (6108.622 tCO2e), and Upstream Transportation and Distribution (518.957 tCO2e)

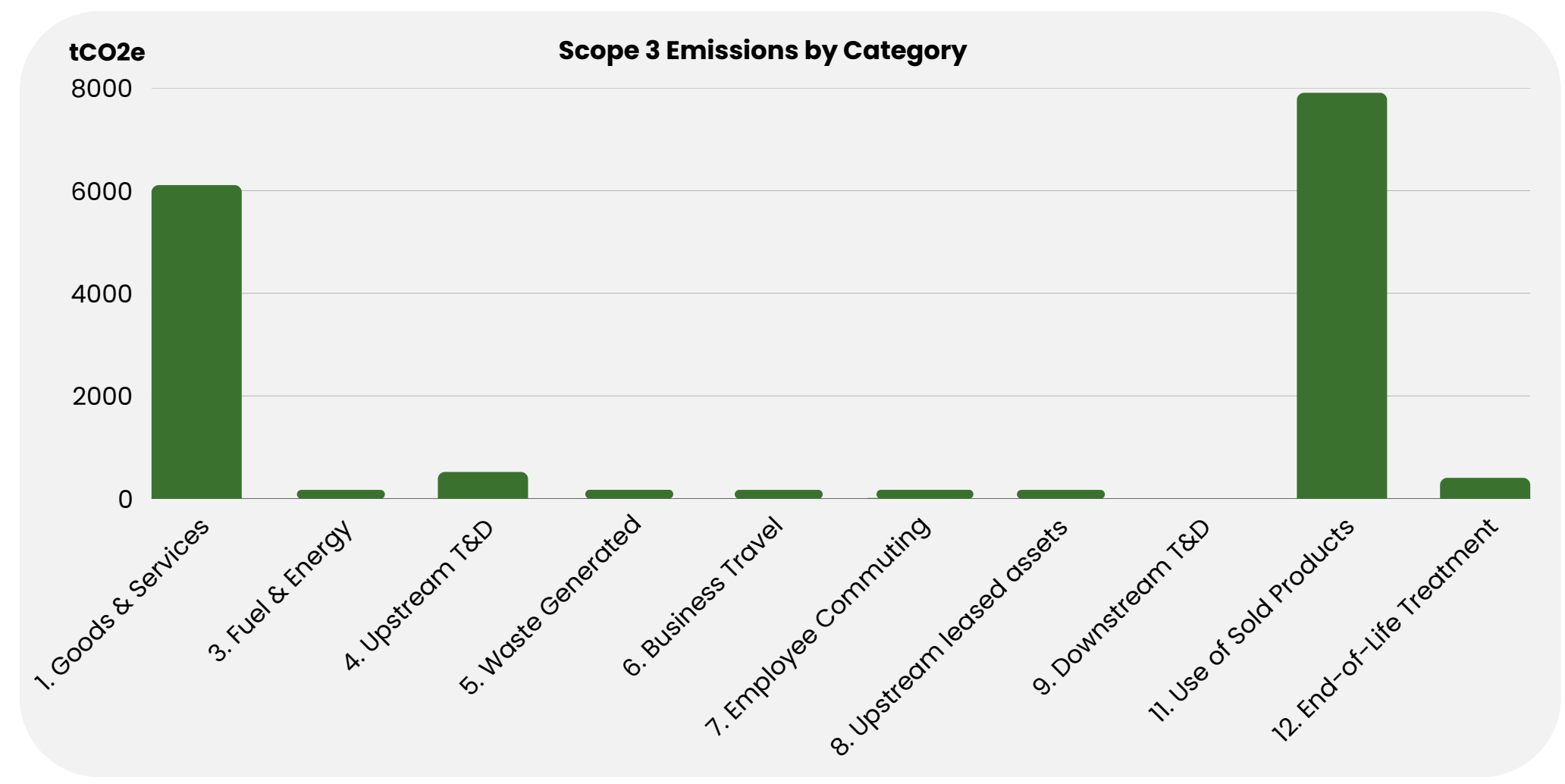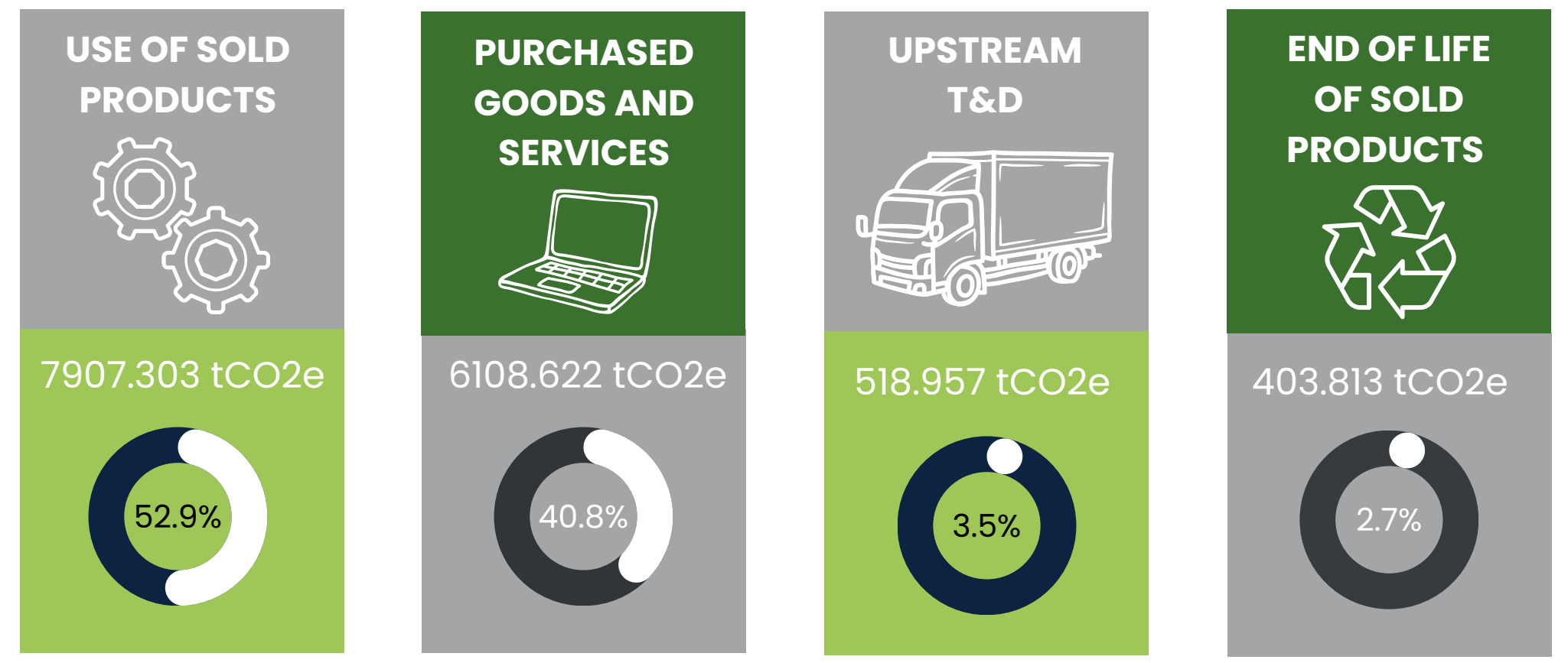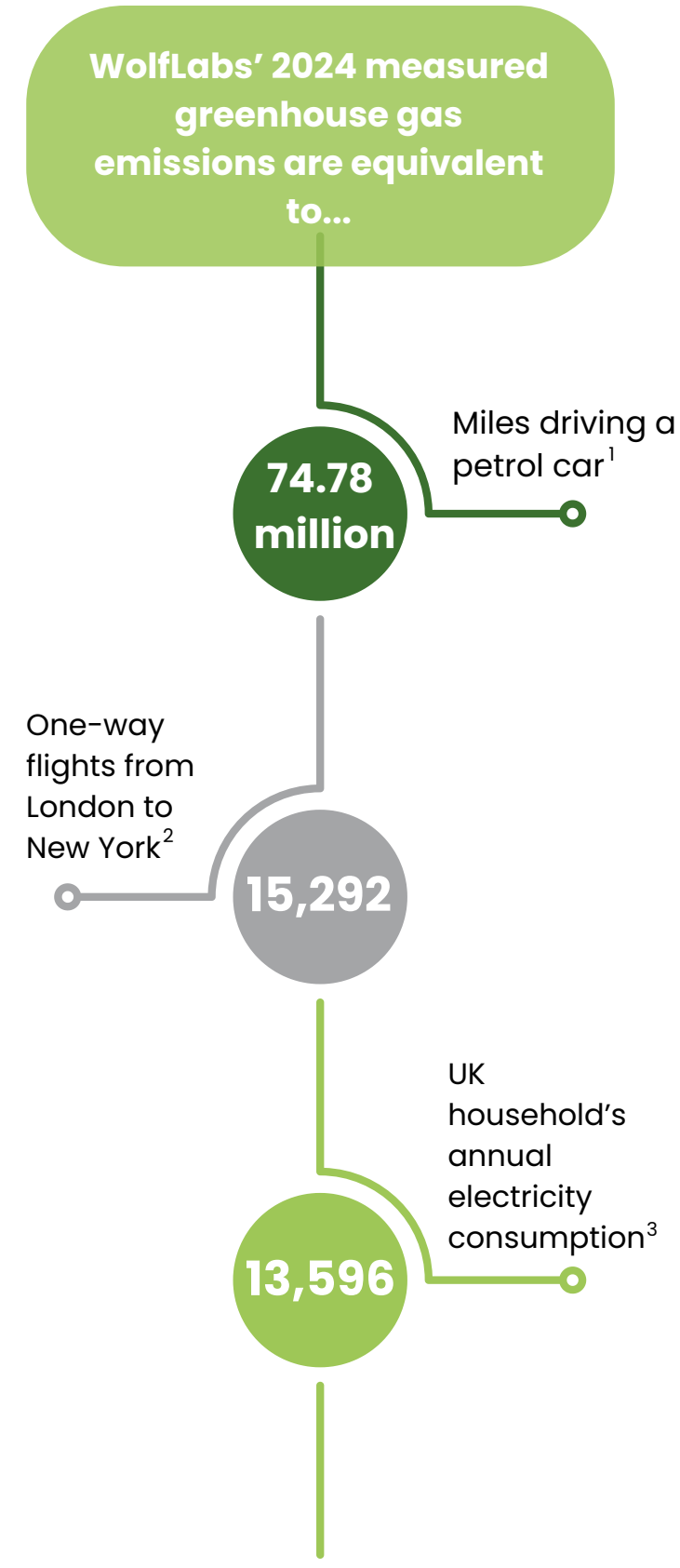*Total Emissions*: **14956.155** tCO2e.

Current Reporting Period Emissions Overview 2024

Reporting Period: 1st January 2024- December 31st 2024	Consolidation Approach: Operational Control
Emissions Scope & Category	tCO2e
Scope 1 (Gas[1])	**0.013**
Scope 2 (Electricity: Market-based[3])	**0**[2]
Scope 3 (Numbered by category)	**14956.142**[4]
1. Purchased Goods and Services	6108.622
3. Fuel & Energy Related Activities (Gas & Electricity T&D Losses)	1.370
4. Upstream Transportation and Distribution (Land and Air)	518.957
5. Waste Generated in Operations	2.052
6. Business Travel (inc. Hotel Stays)	1.351
7. Employee Commuting (inc. Homeworking)	10.577
8. Upstream Leased Assets	2.098
9. Downstream Transportation and Distribution	0
11. Use of Sold Products (Market-based)	7907.303
12. End-of-Life Treatment of Sold Products	403.813
Total emissions (Market-based)	**14956.155**
Emissions per FT Employee (Carbon intensity metric)	**575.237**

1 Biogas
2 100% renewable fixed tariffs used at both sites
3 Location Based: 4.265 tCO2e
4 All figures have been rounded to three decimal places, this may result in a small variance in figures

Emissions Sources

- Purchased Goods and Services
- Upstream Transportation and Distribution
- Employee Commuting
- Use of Sold Products
- End-of-Life Treatment of Sold Products
- Other

Purchased Goods and Services 40.8%
Upstream Transportation and Distribution 3.5%
Use of Sold Products 52.9%
End-of-Life Treatment of Sold Products 2.7%
Employee Commuting 0.07%
Other 0.04%

Other

Gas 0.2%
Fuel & Energy 19.8%
Upstream Leased Assets 30.4%
Business Travel 20%
Waste in Operations 29.7%

Emissions Hotspots

WolfLabs' 2024 measured greenhouse gas emissions are equivalent to...

74.78 million

Miles driving a petrol car[1]

One-way flights from London to New York[2]

15,292

13,596

UK household's annual electricity consumption[3]

USE OF SOLD PRODUCTS

7907.303 tCO2e

52.9%

PURCHASED GOODS AND SERVICES

6108.622 tCO2e

40.8%

UPSTREAM T&D

518.957 tCO2e

3.5%

END OF LIFE OF SOLD PRODUCTS

403.813 tCO2e

2.7%

Scope 3 Emissions by Category

tCO2e

Bar chart categories: 1. Goods & Services, 3. Fuel & Energy, 4. Upstream T&D, 5. Waste Generated, 6. Business Travel, 7. Employee Commuting, 8. Upstream leased assets, 9. Downstream T&D, 11. Use of Sold Products, 12. End-of-Life Treatment
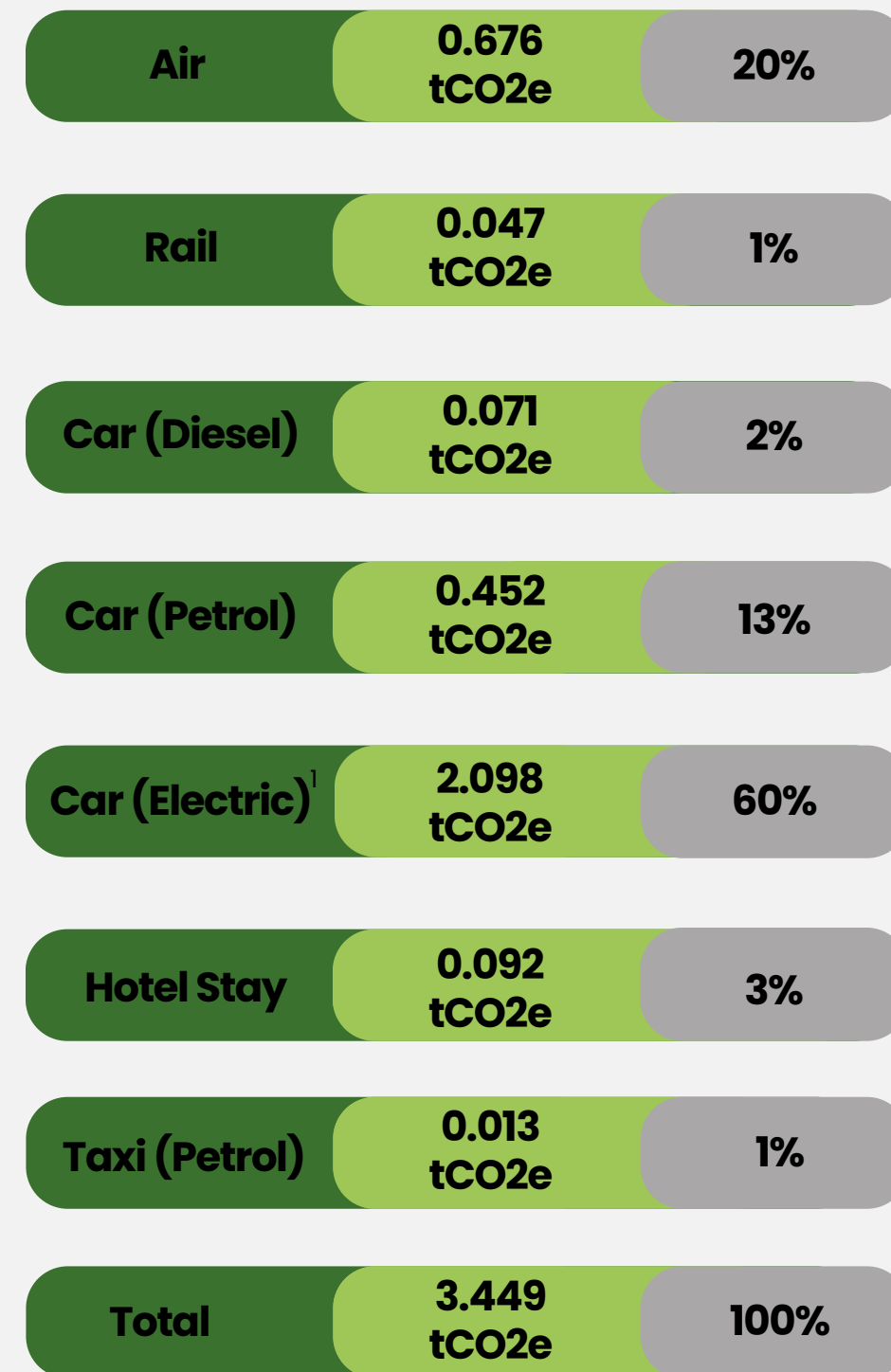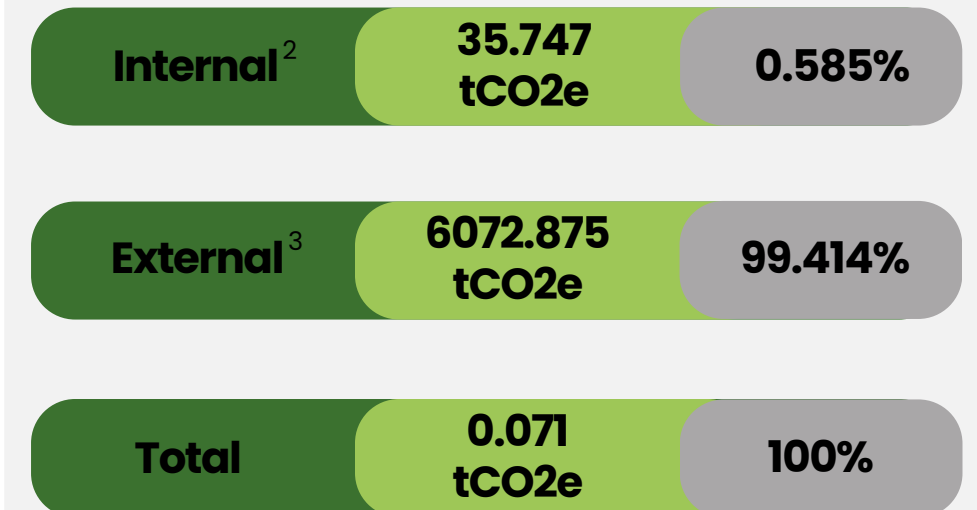
1 5000 miles in a petrol car is equivalent to 1 tCO2e.
2 A single flight from London Heathrow to JFK New York is calculated at 0.978 tonnes.
3 In 2023 on average each household produced emissions from electricity that equated to 1.1 tCO2e.
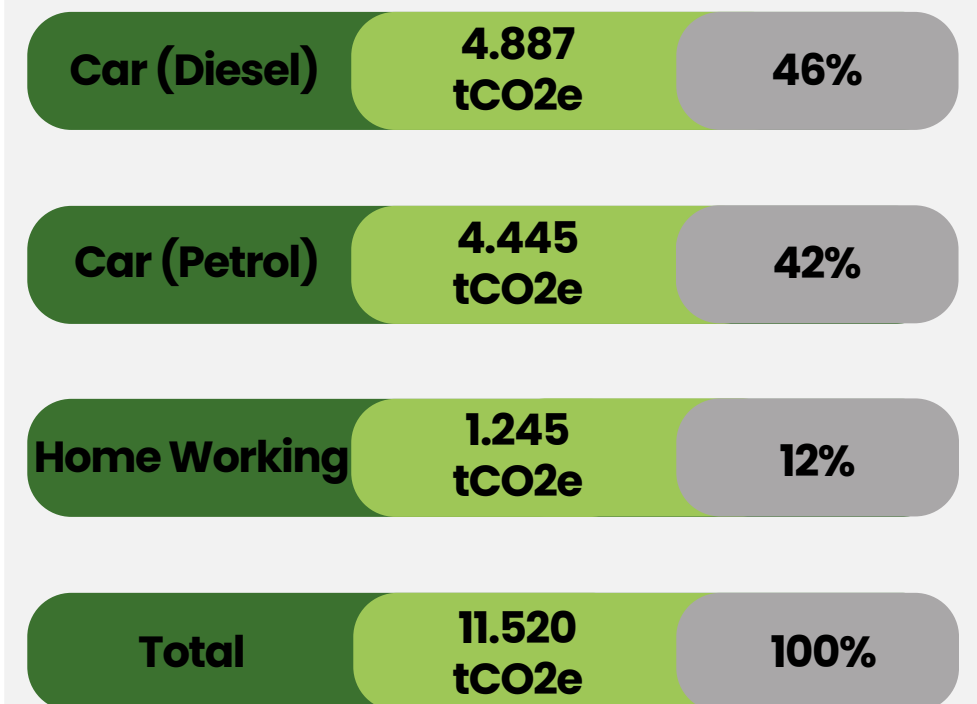
Scope 3 Category Breakdown

Business Travel/Upstream Leased

Air	0.676 tCO2e	20%
Rail	0.047 tCO2e	1%
Car (Diesel)	0.071 tCO2e	2%
Car (Petrol)	0.452 tCO2e	13%
Car (Electric)[1]	2.098 tCO2e	60%
Hotel Stay	0.092 tCO2e	3%
Taxi (Petrol)	0.013 tCO2e	1%
Total	3.449 tCO2e	100%

Goods and Services

Internal[2]	35.747 tCO2e	0.585%
External[3]	6072.875 tCO2e	99.414%
Total	0.071 tCO2e	100%

Commuting[4]

Car (Diesel)	4.887 tCO2e	46%
Car (Petrol)	4.445 tCO2e	42%
Home Working	1.245 tCO2e	12%
Total	11.520 tCO2e	100%

1 Electric vehicle is an Upstream Leased Asset
2 Internal procurement goods are products used in WolfLabs operations and consist of Food and Beverage, Business Services, Chemicals, 0.01% of Average Electrical Items, Furniture, Stationary, Digital Network, and IT Services
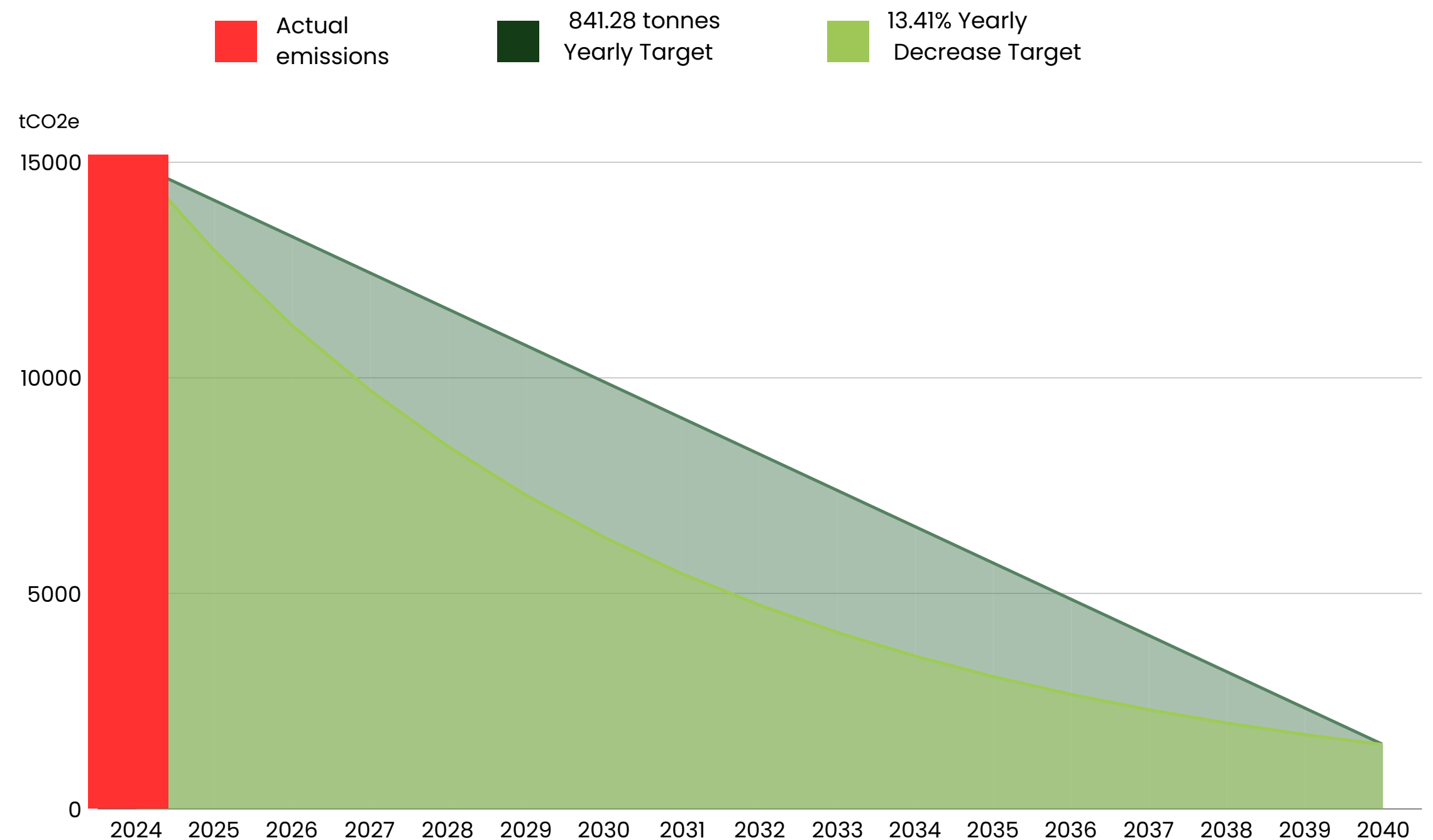3 External procurement goods are products sold by WolfLabs and consist of Machinery, Medical Furniture, 99.99% of Average Electrical Items, and pallets (Wood)
4 11 employees walk to work and one cycles to work: these actions do not result in any greenhouse gas emissions.
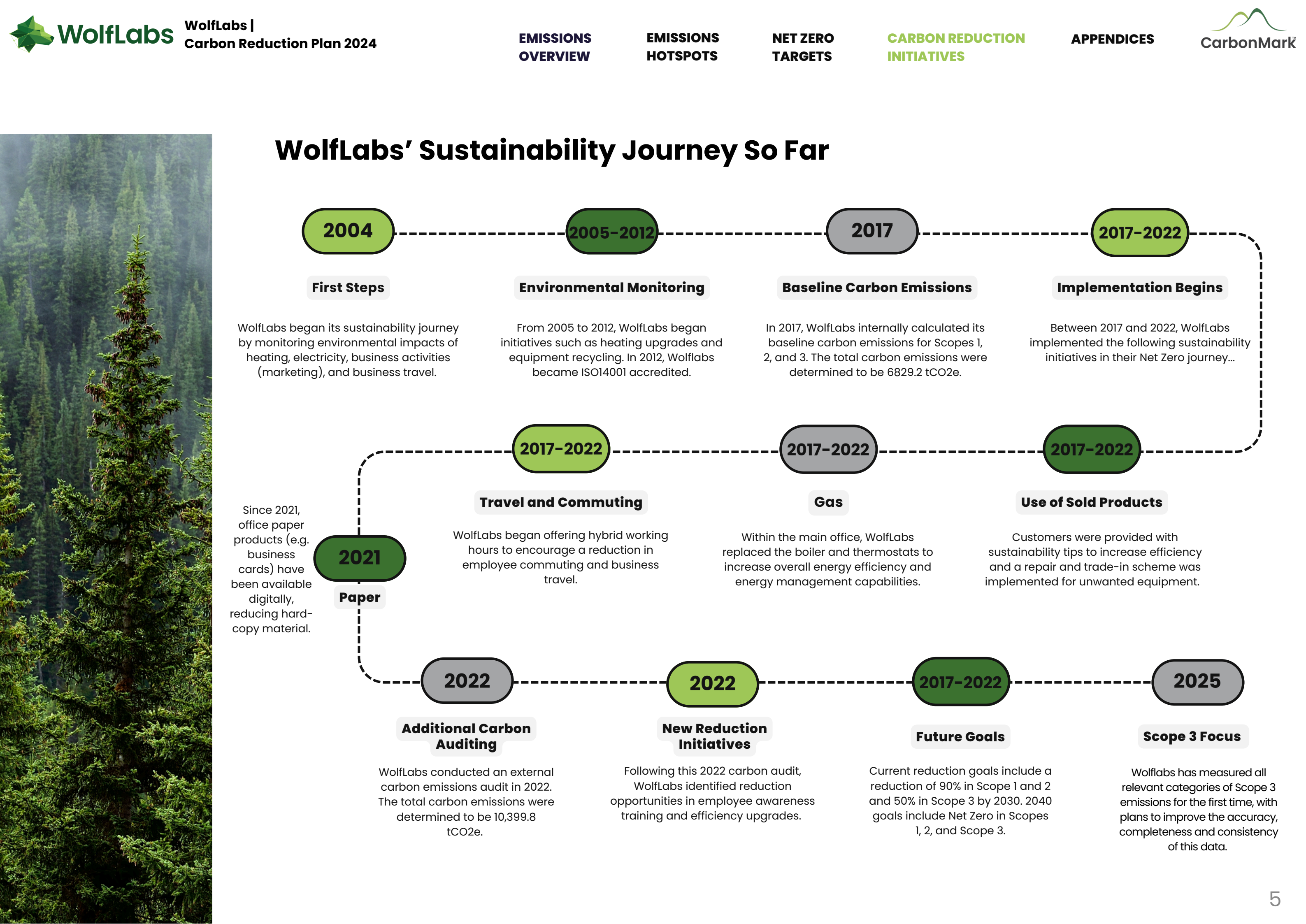
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Net Zero Target Setting

WolfLabs has committed to reducing Scope 1, 2 & 3[1] emissions by 90% by 2040 from a 2024 baseline year using a science-based targeting approach. Under this target, two emissions pathways have been mapped: a fixed yearly emissions reduction of 841.21 tonnes or a cumulative yearly 13.41% decrease.

Near-term targets have also been set. By 2030, WolfLabs has committed to reducing Scope 1 & 2 emissions by 90% and Scope 3 emissions by a 50%.

Legend:
- Actual emissions
- 841.28 tonnes Yearly Target
- 13.41% Yearly Decrease Target

1 Not all 15 categories of Scope 3 are applicable to WolfLabs; therefore, these categories have not been measured within the context of this report and are not accounted for in this graph.

WolfLabs' Sustainability Journey So Far

2004
First Steps

WolfLabs began its sustainability journey by monitoring environmental impacts of heating, electricity, business activities (marketing), and business travel.

2005-2012
Environmental Monitoring

From 2005 to 2012, WolfLabs began initiatives such as heating upgrades and equipment recycling. In 2012, Wolflabs became ISO14001 accredited.

2017
Baseline Carbon Emissions

In 2017, WolfLabs internally calculated its baseline carbon emissions for Scopes 1, 2, and 3. The total carbon emissions were determined to be 6829.2 tCO2e.

2017-2022
Implementation Begins

Between 2017 and 2022, WolfLabs implemented the following sustainability initiatives in their Net Zero journey...

2017-2022
Travel and Commuting

WolfLabs began offering hybrid working hours to encourage a reduction in employee commuting and business travel.

2017-2022
Gas

Within the main office, WolfLabs replaced the boiler and thermostats to increase overall energy efficiency and energy management capabilities.

2017-2022
Use of Sold Products

Customers were provided with sustainability tips to increase efficiency and a repair and trade-in scheme was implemented for unwanted equipment.

2021
Paper

Since 2021, office paper products (e.g. business cards) have been available digitally, reducing hard-copy material.

2022
Additional Carbon Auditing

WolfLabs conducted an external carbon emissions audit in 2022. The total carbon emissions were determined to be 10,399.8 tCO2e.

2022
New Reduction Initiatives

Following this 2022 carbon audit, WolfLabs identified reduction opportunities in employee awareness training and efficiency upgrades.

2017-2022
Future Goals

Current reduction goals include a reduction of 90% in Scope 1 and 2 and 50% in Scope 3 by 2030. 2040 goals include Net Zero in Scopes 1, 2, and Scope 3.

2025
Scope 3 Focus

Wolflabs has measured all relevant categories of Scope 3 emissions for the first time, with plans to improve the accuracy, completeness and consistency of this data.

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Implemented Carbon Reduction Initiatives

As of 2023, WolfLabs has implemented the following company-wide sustainability initiatives:

1. Reductions in Natural Gas
- Timers, automated control systems and new thermostats to optimise energy use have been installed to ensure that heating systems are only active when needed, further reducing energy waste.
- Gas usage has been switched to a 100% biogas fixed tariff from natural gas.

2. Electricity Efficiency
- Energy-saving measures including optimising energy use through upgraded systems and efficient technologies to reduce overall consumption have been successfully implemented.
- WolfLabs has transitioned to 100% renewable green energy tariffs to lower its carbon footprint and support clean energy generation.
- All leased vehicles are electric.

3. Emission Reduction Strategies
- Tailored emission reduction strategies have been developed and implemented, which have set clear targets and action plans to reduce carbon emissions across the company's operations and supply chain.

4. Internal Audits
- Comprehensive internal sustainability audits have been conducted to assess and track WolfLabs' environmental performance, identifying opportunities for further emissions reductions and resource optimisation across operations with the yearly publication of a Carbon Reduction Plan (CRP).
- The company has increased the scope of its emissions reporting to include all relevant categories of Scope 3.

5. Employee and Consumer Awareness
- Behavioural changes such as turning off devices when not being used to reduce gas and electricity usage in facilities have been encouraged.
- Staff training on operational efficiency and other environmental actions and consequences have been conducted.
- A trade-in scheme for customers to reduce electrical waste has been implemented.
- Sustainability articles on products are available for customers on the WolfLabs website.

6. Waste Generated in Operations
- Waste is recycled where applicable.
- Online catalogue and WolfLabs' staff business cards are only available digitally.

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Proposed Carbon Reduction Initiatives

1. Sustainable Supply Chains and Procurement

- Build a sustainable supplier and procurement framework and engage suppliers in conversations over transportation options, manufacturing processes, and material use.
- Determine if supply chain mapping will be a valuable tool used to highlight emissions hotspots within the value chain.
- Where deliveries are arranged by WolfLabs, use transportation companies that utilise both electric vehicles and Hydrotreated Vegetable Oil (HVO) fuel, with a focus on last-mile delivery, optimising delivery routes, and reducing vehicle idling.
- Provide greener delivery time slots offered to customers. This involves grouping together orders from the same area, which is more fuel-efficient and helps to lower upstream transportation and distribution emissions while also attracting climate-conscious customers.

2. Staff Engagement and Training

- Continue to conduct staff education workshops and/or training sessions to increase carbon literacy and embed sustainable practices throughout the organisation. Utilise free platforms such as Supply Chain Sustainability School to increase carbon literacy throughout the organisation.
- Encourage employees to choose low-carbon commuting options and car sharing where possible.

3. Enhanced Data and Auditing

- Improve data collection processes to enhance audit quality and reduce extrapolation.
- Determine, where feasible, if activity-based or supplier-based data can be recorded and utilised for future carbon auditing, with a specific focus on activity-based data for Upstream Transportation and Distribution.
- Achieve complete data sets on product weight and kwh used over the product lifetime, to improve the accuracy of Use of Sold Products reporting.
- Gather supplier data such as Life Cycle Assessments (LCAs) where possible; however, it is acknowledged this may be limited by the suppliers' production of this data.
- To ensure continuous improvement and alignment with best practices, WolfLabs should implement a formalised monitoring and review process for its Carbon Reduction Plan (CRP). The CRP will be reviewed annually, with updates reflecting progress toward emissions reduction targets, changes in operational activities, and advancements in data quality and availability.

4. Waste Management

- Establish a sustainable waste strategy to minimise environmental impact through increased recycling and reduced internal purchasing.
- Move from volume measurements to waste-type measurements.

5. Business Travel

- Where possible, offset relevant flights directly through the airline's website during the booking process.
- Opt for low-carbon public transport options, such as buses or trains, when travelling for business.
- Explore various car-sharing applications to reduce single-occupancy car use.

6. Energy Efficiency

- Implement an Energy Management System (EMS) to monitor, optimise, and reduce energy consumption across operations.
- Determine if long-term planning for green retrofitting office buildings, such as improving insulation, ensuring all windows are double-glazed, and employing solar panels, are feasible given WolfLabs' status as a tenant.

7. Beyond Value Chain Mitigation

- Invest in both local and community-based value chain mitigation options, including donations to biodiversity and conservation groups and corporate volunteering days.
- Consider switching to ethical and environmentally conscious banks to ensure all company finances are supporting sustainable initiatives and not contributing to the growth of the fossil fuel industry.
- Explore green pension schemes, to align employee pensions with low-carbon investments and contribute positively to the company's wider sustainability goals.

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Proposed Carbon Reduction Initiatives

To enhance employee engagement, WolfLabs sought input from staff on proposed carbon reduction initiatives, ensuring that employee priorities are integrated into the company's sustainability strategy. The employee-generated recommendations are:

1. Sustainable Office & Operations
- Minimise single-use plastics across the office.
- Use more biodegradable items where possible.
- Ensure all printer paper is FSC-certified.
- Install PIR sensors for all lights to reduce unnecessary energy use.
- Implement a 'no-mow zone' in the garden to encourage biodiversity, with pollinator-friendly flowers and insect houses.
- Improve insulation and green retrofitting as part of a long-term sustainability plan.
- Install a hot water tap over traditional kettles to improve energy efficiency.

2. Sustainable Transport & Commuting
- Offer a Cycle-to-Work scheme to encourage greener commuting.
- Provide an electric bike for staff to borrow, charged using Colenso's Green Electricity Tariff.
- Encourage last-mile delivery via cargo bikes.
- Work with suppliers to consolidate shipments (e.g., move from weekly to biweekly deliveries where feasible).
- Offer greener shipping options to customers (e.g., slower but more efficient delivery routes like EcoRoute).

3. Employee & Customer Engagement
- Increase focus on sustainable lab practices within the Alpha Insights webinars.
- Incorporate Carbon Reduction Plans (CRPs) into staff training.
- Provide all staff with fleeces made from recycled plastics to reduce reliance on electric heaters.
- Offer carbon footprint data on products to help customers make informed, sustainable choices.

4. Waste Reduction & Circular Economy
- Donate used IT equipment to local schools or small businesses for reuse.

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Summary of Carbon Reduction Initiatives

	Emissions (tCO2e)	Hotspots	Currently Implemented	Proposed Reduction Initiatives
Scope 1	0.013	Biogas	• Transitioned boilers from natural gas to a 100% biogas tariff. • Energy efficiency upgrades. • All upstream leased assets (vehicles) are electric.	• Develop an EMS. • Behavioural changes to reduce consumption. • Longer-term suggestions include considering investing in energy-saving retrofitting.
Scope 2	0	N/A	• Implemented a 100% renewable fixed tariff.	• Develop an EMS. • Behavioural changes to reduce consumption. • Longer-term suggestions include considering investing in energy-saving retrofitting and onsite solar installations.
Scope 3	14956.142	Purchased Goods and Services, Use of Sold Products, End of Life Disposal of Sold Products, Upstream T&D	• Customer trade-in scheme. • Hybrid working policy. • Waste is recycled where applicable. • Online catalogues and staff business cards are only available digitally.	• Partner with low-carbon upstream transportation companies. • Focus on sustainable supply chains and purchasing through mapping, gaining supplier data and collaborating and engaging with suppliers. • Facilitate low-carbon business travel and commuting. • Implement reduce, reuse, and recyce principles for purchasing and in operations.
Beyond Value Chain	N/A	N/A	• Staff training, customer awareness and education. • Internal auditing processes.	• Staff engagement and action days, charity donations and exploring green finance options. • Improve auditing processes in terms of completeness, accuracy, and consistency.

Reporting Methodology

CarbonMark Compliance Overview:
- GHG Protocol: Adheres to GHGP Corporate Accounting and Reporting Standard by WRI and WBCSD.
- Scope 3 emissions have been calculated based on the guidance in the Greenhouse Gas Protocol "Corporate Value Chain (Scope 3) Standard".
- ISO 14064-1:2018: Follows global standards and IPCC guidelines for GHG inventories and emissions factors.
- Sector-Specific Standards: Complies with industry-specific frameworks such as the GLEC Framework for Freight.
- Legislative Reporting:
  - EU Directive 2022/2464 (Corporate Sustainability Reporting).
  - EPA's Guide to GHG Management for Organisations.
  - UK Technical Standard for Carbon Reduction Plans (all 5 mandatory categories have Scope 3 have been measured and reported).
  - SECR Guidelines.

Carbon Accounting Methodology:
- Utilises the IPCC 2006 library and both AR5 and AR6 Global Warming Potentials.
- Reports all 7 Kyoto GHGs and additional Montreal Protocol gases.
- Follows GHGP Scopes 1-3 for disaggregated reporting. Some emissions sources have emissions in more than one scope. For example, electricity usage produces both Scope 2 and Scope 3 emissions.
- Custom grid factors are generated for regions without available emissions data, based on local fuel mixes.

Resources:
- *GHG Protocol - Revised Standards*
- *UK Procurement Policy Note 06/21*
- *UK Government Conversion Factors*

GHG Accounting Methodology:
Our greenhouse gas (GHG) emissions inventory has been prepared in alignment with the Greenhouse Gas Protocol. The methodology for each emissions category is outlined below.
Reasonable assumptions, aligned with GHG Protocol decision-making principles, were applied where data was unavailable.
The operational control approach was used to define operational boundaries. Under this approach, emissions were accounted for from operations where WolfLabs had the authority to introduce and implement operating policies, health and safety measures, and environmental management practices.

Scope 1: Direct Emissions
- The company's gas supply is 100% biogas, resulting in no associated fossil fuel emissions.
- No company-owned vehicles are in operation, eliminating emissions from this category.

Scope 2: Indirect Emissions from Purchased Energy
- Both the main office and annex operate under a fixed green tariff, sourcing 100% renewable energy.
- Emissions were calculated using the market-based method, which accurately reflects the company's intentional energy purchasing decisions.

Scope 3: Indirect Emissions from the Value Chain
Category 1: Purchased Goods & Services
- Purchases were aggregated into the most appropriate categories.
- The spend-based method was applied in most cases.
- Packaging purchases (excluding pallets) were omitted due to data unavailability.
- Water usage was recorded in meters squared.

Declaration & Sign Off:

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standards for Carbon Reduction Plans. Emissions have been reported and recorded by the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported following the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of WolfLabs:

Jenny Foss   Operations Director

20/03/2025   20/03/2025

Reporting Methodology

Category 3: Fuel- and Energy-Related Activities
- Transmission and distribution (T&D) losses were calculated for both electricity and gas.

Category 4: Upstream Transportation & Distribution
- The spend-based method was applied as distance information was unavailable.
- For road and air transport, it was assumed that 20% of spend was attributed to road travel and 80% to air travel.

Category 5: Waste Generated in Operations
- Waste emissions were measured for landfill and recycling, with quantities recorded in 660L bins.
- Activity data was collected for all waste generated in operations.

Category 6: Business Travel
- The distance-based method was used for all transport methods apart from taxi travel. For taxi travel, the spend-based method was used due to data constraints.
- Car travel was assumed to be in an "average-sized" vehicle.
- Hotels were measured by rooms per night.

Category 7: Employee Commuting
- The distance-based method was applied, assuming a 46-week working year.
- Employee vehicles were assumed to be "average-sized".

Category 8 – Upstream Leased Assets
- One leased electric car on reporting period, total mileage has been reported.

Category 11: Use of Sold Products
- Direct use-phase emissions were measured.
- 98% of shipments occur within the UK; therefore, the UK grid mix (2024) was used for electricity-related calculations.
- Where kWh usage or product lifetime hours were unavailable, estimates were derived from the most similar product.

Category 12: End-of-Life Treatment of Sold Products
- It was assumed that all products were disposed of via landfill.
- Where the weight of products was unavailable weights were used from the most similar product as an estimate.
- Packaging disposal emissions were excluded due to data limitations.

Excluded Categories:
The following Scope 3 categories were deemed not applicable to company operations and were excluded:
- Category 2 – Capital Goods (No major asset acquisitions in period)
- Category 9 – Downstream Transportation & Distribution (No downstream logistics, all shipments are paid for and arranged by WolfLabs)
- Category 10 – Processing of Sold Products (No processing of sold products by third parties)
- Category 13 – Downstream Leased Assets (No leased assets within the reporting boundary)
- Category 14 – Franchises (No franchise operations)
- Category 15 – Investments (No reportable financial investments with associated emissions)

Uncertainty:
Total emissions carry ±19.5% uncertainty (root sum square method) following ISO 14064-3 and GHG Protocol guidance, which is within typical industry ranges for Scope 3-heavy inventories.

Assurances:
CarbonMark™ has conducted a limited assurance engagement over WolfLabs' Carbon Reduction Plan and GHG emissions inventory for the period 1st January 2024 to 31st December 2024. The review was performed in accordance with the GHG Protocol, ISO 14064-3, and PPN 06/21 guidance. Based on the procedures performed, including a review of data collection processes, sampling of emissions data, and assessment of methodologies used, no findings have emerged indicating that the report has not been prepared, in all material respects, in accordance with the stated criteria.

CarbonMark™ **Certified**
This business is on the road to **Net Zero**

WolfLabs

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