



# Carbon Reduction Plan

## 1. Commitment to Achieving Net Zero

HORNE ENGINEERING LTD is committed to achieving Net Zero greenhouse gas emissions by 2050, in alignment with the NHS Net Zero Supplier Roadmap and UK Government policy.

We recognise our responsibility to reduce emissions associated with our operations and the products we supply, and we are committed to continuous improvement in carbon measurement, management, and reduction.

## 2. Baseline Emissions Footprint (2025)

Emissions Source	Scope	Activity Data	Emissions (tCO <sub>2</sub> e)	Notes
Natural Gas (Buildings)	Scope 1	478,139 kWh	87.5	UK Gov GHGCF 2025
Company Vehicles (Fleet)	Scope 1	Mileage-based	29.3	Mixed fleet: diesel, hybrid, EV
Electricity (Purchased)	Scope 2	98,514 kWh	17.4	UK Gov GHGCF 2025
Purchased Goods & Materials	Scope 3	£1.89M (modelled)	1,909.1	See methodology, section 3.1
Employee Commuting	Scope 3	34 staff	69.0	Mixed travel modes
Business Travel	Scope 3	Minimal	TBC	Included in fleet where applicable
Water Supply	Scope 3	1,920 m <sup>3</sup>	0.37	UK Gov GHGCF 2025
Wastewater Treatment	Scope 3	1,824 m <sup>3</sup>	0.31	UK Gov GHGCF 2025
Waste (Operational)	Scope 3	TBC	TBC	Future inclusion
	Scope 1	TOTAL (rounded)	117	
	Scope 2	TOTAL (rounded)	17	
	Scope 3	TOTAL (rounded)	1979	
		<b>GRAND TOTAL</b>	<b>2113</b>	

## 3. Methodology and Data Quality

Emissions have been calculated using the UK Government GHG Conversion Factors for Company Reporting 2025, condensed set figures.

One battery electric vehicle is charged both on-site and off-site. Mileage-based emissions have been used alongside metered electricity consumption. Any overlap is not considered material and will be refined in future.

Scope 3 includes purchased goods and materials, employee commuting, business travel, water and wastewater.

### 3.1 Purchased goods and materials

Emissions are estimated using a **product-based proxy model** derived from sales data.

Products have been grouped by predominant material (e.g. brass, aluminium, plastics, stainless steel, copper, zinc). Sales proportions are used as a proxy for material mix. As this is value-based, indicative £/kg assumptions are applied to derive an **estimated material weight profile**. This is then combined with **kgCO<sub>2</sub>e/kg emission factors** to calculate total emissions.

Emission Factors have been sourced from:

- **ICE Database v4.1** (e.g. aluminium, stainless steel)
- **CIBSE TM65 Tool** (1Kg weight for 100% selected metal) - copper, zinc and brass (A1 lifecycle only)
- **Climatiq database** for average plastics (average source)
- As lifecycle boundaries differ between sources, results are considered a **first-year estimate**.

### 3.2 Employee commuting

Employee commuting emissions are based on actual staff travel mode distribution (34 employees), including private vehicles, public transport, active travel and home working. Some journeys may include a combination of travel modes (e.g. driving and active travel), which has not been explicitly disaggregated at this stage.

### 3.3 Data quality and improvement

Where primary data is unavailable, proxy assumptions and secondary data have been used.

This methodology will be refined through improved material data, TM65 assessments and supplier EPDs. Prior year emissions may be recalculated as data quality improves.

## 4. Current Emissions Reporting

This is our first Carbon Reduction Plan. As such, 2025 represents the baseline year, based on the most recent complete and reliable dataset available across our operations.

Future annual reporting will measure progress against the 2025 baseline, with emissions data and methodologies refined over time to improve accuracy and consistency.

As a manufacturing business, a significant proportion of emissions arises from purchased goods and materials. As the organisation grows, absolute Scope 3 emissions may increase in line with production and sales activity.

To ensure fair and meaningful progress tracking, the company will also monitor emissions intensity metrics (e.g. emissions per unit of revenue or product output) alongside absolute emissions. This will enable the organisation to demonstrate efficiency improvements and carbon reduction per unit of activity over time.

## 5. Emissions Reduction Targets

We commit to the following targets:

- **50% reduction in emissions by 2030** (against 2025 baseline)
- **90% reduction by 2045**
- **Net Zero by 2050**

Progress will be reviewed annually and refined as data quality improves.

## 6. Carbon Reduction Projects

We are implementing and developing the following measures to reduce emissions:

- Improving energy efficiency across facilities (lighting upgrades, controls optimisation, operational improvements)
- Reviewing gas consumption and identifying opportunities for reduction or alternative solutions
- Progressive transition of company vehicles toward lower-emission alternatives

- Our current fleet already includes a significant proportion of hybrid and electric vehicles, and emissions data based on actual mileage is being used to inform future transition decisions
- Remote communication is the default approach for meetings and collaboration, with travel undertaken only where necessary to observe processes, installations, or site-specific conditions
- Engagement with suppliers to reduce embodied carbon in materials and components
- Reduction of waste and improvement of recycling practices
- Monitoring and reducing water consumption where practicable

Future initiatives include:

- Procurement of renewable electricity
- Exploration of on-site renewable energy (e.g. solar PV)
- Improved measurement and reporting of Scope 3 emissions

## 7. Product and Whole-Life Considerations

Our product design philosophy prioritises durability, maintainability, and efficient use of water and energy, supporting reduced whole-life carbon impacts.

By reducing replacement frequency, maintenance interventions, and operational resource use, our products contribute to lower lifecycle emissions within healthcare, institutional and other commercial built environments.

## 8. Declaration and Sign-Off

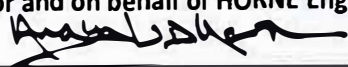
This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol (Corporate Standard).

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions has been reported in accordance with the GHG Protocol Scope 3 Standard.

This Carbon Reduction Plan will be reviewed and updated annually, with progress against targets reported and emissions data refined as measurement capability improves. Oversight of this process sits with senior management to ensure alignment with organisational objectives and regulatory expectations.

Signed for and on behalf of HORNE Engineering Ltd:

Name: 

Position: MANAGING DIRECTOR

Date: 24-03-26