

Human Engine Limited

Carbon Reduction Plan

Published: ...28/02/2025.....

Commitment to achieving Net Zero

Human Engine is committed to achieving Net Zero emissions by 2045. As a responsible management consultancy, we are dedicated to reducing our environmental impact and aligning with global efforts to combat climate change.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2024
Additional Details relating to the Baseline Emissions calculations.
<p>This is Human Engine's first Carbon Reduction Plan, and as such, 2024 has been selected as the baseline year for emissions reporting. Prior to this, no formal assessment or reporting of greenhouse gas emissions had been conducted.</p> <p>The baseline emissions calculations reflect our current operational structure as a remote-working management consultancy, with Scope 3 emissions derived from business travel and proportional energy usage of a shared workspace at Westminster Business Library.</p> <p>No Scope 1 or Scope 2 emissions are currently attributable to the organisation, given the absence of owned or directly managed facilities or vehicles. This baseline will serve as a reference point against which future emissions reduction efforts will be measured and tracked.</p> <p>As Human Engine operates a remote working model, our primary sources of emissions are associated with homeworking, occasional business travel, and a shared workspace at Westminster Business Library.</p> <h3>Scope 3 Emissions</h3> <p>Scope 3: 4 Upstream Transportation and Distribution – N/A</p> <p>Human Engine does not procure physical goods that require significant transportation. Our supply chain primarily consists of digital services and software subscriptions, which do not contribute to material upstream transportation emissions.</p>

Scope 3: 5. Waste Generated in Operations – N/A

Human Engine operates a remote-first working model, meaning we do not have a dedicated office space where we generate or dispose of materials as part of daily operations.

Our use of a shared workspace at Westminster Business Library does not result in directly attributable waste, as the library itself manages all waste disposal under its own operational footprint. Since Human Engine does not procure, produce, or dispose of significant waste materials, emissions from waste generation in operations are considered negligible.

Scope 3: 6. Business Travel

- Based on historical expense reports and travel logs.
- Modes of Transport: Includes car travel, public transport (train and bus). We have no air travel this year.
- Conversion Factors: Applied standard GHG emissions factors for each mode, based on distances travelled.
- **Total Emissions: 8.00 tCO₂e/year.**

Scope 3: 7. Employee Commuting (Includes Remote Working)

- Employees: 20 employees primarily working remotely.
- Working Hours: 225 working days per year × 8 hours per day = 1,800 hours per FTE annually.
- Total Hours: 1,800 hours × 20 employees = 36,000 hours annually.
- Emissions Factor: 0.33378 kgCO₂e per working hour (includes office equipment and heating).
- Calculation:
$$36,000 \text{ hours} \times 0.33378 \text{ kgCO}_2\text{e/hour} = 12,016.08 \text{ kg CO}_2\text{e/year}$$
$$\text{Convert to tonnes: } 12,016.08 \div 1,000 = 12.02\text{tCO}_2\text{e/year}$$
- **Total Emissions: 12.02 tCO₂e/year**

Scope 3: 9. Downstream Transportation & Distribution – N/A

Human Engine provides professional services with no physical product distribution. All client deliverables are digital, and as such, emissions related to downstream transportation are not applicable to our operations.

Additional Scope 3 Emissions

Additional Scope 3: 1. Purchased Goods and Services (Includes Shared Workspace)

- Workspace Size: 50 square feet.
- Energy Use Benchmark: 22.5 kWh per square foot annually.
- Total Energy Consumption for 50 Square Feet:
$$\text{Energy Consumption} = 50 \text{ sq ft} \times 22.5 \text{ kWh/sq ft/year} = 1,125 \text{ kWh/year.}$$

- Conversion Factor for Electricity: 0.20705 kgCO₂e per kWh.
- Emissions Calculation:

$$\text{Emissions} = 1,125 \text{ kWh/year} \times 0.20705 \text{ kgCO}_2\text{e/kWh} = 232.91 \text{ kgCO}_2\text{e/year}.$$

$$\text{Convert to tonnes: Emissions in tCO}_2\text{e} = 232.91 \text{ kgCO}_2\text{e/year} \div 1,000 = 0.233 \text{ tCO}_2\text{e/year}.$$
- **Total Emissions: 0.233 tCO₂e/year**

Baseline year emissions: 2024

EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	0.00
Scope 2	0.00
Scope 3 (Upstream Transportation and Distribution)	0.00
Scope 3 (Waste Generated in Operations)	0.00
Scope 3 (Business Travel)	8.00
Scope 3 (Employee Commuting - including Remote Working)	12.02
Scope 3 (Downstream Transportation & Distribution)	0.00
Additional Scope 3 (Purchased Goods and Services - including Shared Workspace)	0.233
Total Emissions	20.253

Current Emissions Reporting (same as above as Baseline Year)

Reporting Year: 2024 (first year)	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	0.00
Scope 2	0.00
Scope 3 (Upstream Transportation and Distribution)	0.00
Scope 3 (Waste Generated in Operations)	0.00
Scope 3 (Business Travel)	8.00
Scope 3 (Employee Commuting - including Remote Working)	12.02
Scope 3 (Downstream Transportation & Distribution)	0.00
Additional Scope 3 (Purchased Goods and Services - including Shared Workspace)	0.233
Total Emissions	20.253

Emissions Reduction Targets

To achieve Net Zero by 2045, Human Engine has set the following reduction targets:

- By 2030:
 - Reduce homeworking emissions by 20% through employee education on energy efficiency and related initiatives.
 - Reduce business travel emissions by 25%, targeting a maximum of 6.0 tCO₂e.
 - Optimise shared workspace usage and work with providers to explore energy efficiency improvements, aiming for a 15% reduction in associated emissions.
- By 2040:
 - Achieve a 50% reduction in emissions across all categories compared to the 2024 baseline.
- By 2045:
 - Achieve Net Zero emissions across all scopes.

Carbon Reduction Projects

This is our baseline year and our first CRP. However, initiatives we have in place already and additional that we are planning are included below.

Completed Initiatives:

- Operate with 90% of work done remotely, significantly reducing the need for travel requirements.
- Limited use of shared workspaces to essential client meetings or collaborative tasks.
- Adopted platforms like Microsoft Teams and a range of other collaborative digital software to reduce travel requirements.
- We minimise computer energy consumption and use laptop computers, which have lower energy usage compared to desktop PCs, reducing overall electricity demand.
- Encourage use of public transport wherever possible including through means such as purchasing all eligible employees railcards which they can use outside of work to reduce cost of travel.

Planned Initiatives:

- Educate employees on energy-saving practices, such as using energy-efficient equipment and managing heating effectively.
- Incentivise our team to use electric vehicles for essential business travel by 2030.
- Explore the use of salary sacrifice schemes for bikes/ULEVs
- 'No standby' policy for IT equipment
- Source locally, where possible, to avoid distribution emissions.
- Partner with verified carbon offset initiatives to address unavoidable emissions.
- Work with Westminster Business Library to explore energy-saving opportunities for shared workspace operations.

Declaration and Sign Off

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

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

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 in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard³.

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

Signed on behalf of the Supplier:

Name: Jonathon Noble.....

Title: Chief Executive Officer.....

Signature:..........

Date: ...28/02/2025.....

¹ <https://ghgprotocol.org/corporate-standard>

² <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

³ <https://ghgprotocol.org/standards/scope-3-standard>