



Carbon Reduction Plan

Supplier name: Alternative Heat Ltd.

Publication date: 12/12/2023

Commitment to achieving Net Zero

Alternative Heat Ltd. is committed to achieving Net Zero emissions by 2050.

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: 2022 (October 2021 – September 2022)
Additional Details relating to the Baseline Emissions calculations.
2022, October 2021 – September 2022, is set as the Baseline Year.

Baseline year emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	166.625 Gross
Scope 2	78.523 Gross
Scope 3	965.472 Gross
(Included Sources)	Category 4 Upstream Transport & Distribution Category 5 Waste generated in operations Category 6 Business Travel Category 7 Employee Commute Category 9 Downstream Transport & Distribution
Total Emissions 2022 Gross	1,210.620 (tCO₂e) Gross

[Note: Scope 1 and 2 emissions are calculated. Scope 3 emissions categories 4, 5, 6, and 9 are estimated using the evaluator tool provided by the Greenhouse Gas Protocol. Scope 3 category 7 is based on employee commute surveys.]

Alternative Heat achieves CO₂ emissions reductions via renewable energy technologies, as summarised below.

Savings via Renewables 2022	213.517 (tCO₂e)
Total Emissions 2022 Actual (including savings via Renewables)	997.103 (tCO₂e) Actual (including savings via Renewables)

Current Emissions Reporting

Reporting Year: 2023	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	189.466 Gross
Scope 2	73.279 Gross
Scope 3	1,275.118 Gross
(Included Sources)	Category 4 Upstream Transport & Distribution Category 5 Waste generated in operations Category 6 Business Travel Category 7 Employee Commute Category 9 Downstream Transport & Distribution
Total Emissions 2023 Gross	1,537.863 (tCO ₂ e) Gross

[Note: Scope 1 and 2 emissions are calculated. Scope 3 emissions categories 4, 5, 6, and 9 are estimated using the evaluator tool provided by the Greenhouse Gas Protocol. Scope 3 category 7 is based on employee commute surveys.]

Alternative Heat achieves CO₂ emissions reductions via renewable energy technologies, as summarised below.

Savings via Renewables 2023	208.154 (tCO ₂ e)
Total Emissions 2023 Actual (including savings via Renewables)	1,329.709 (tCO ₂ e) Actual (including savings via Renewables)

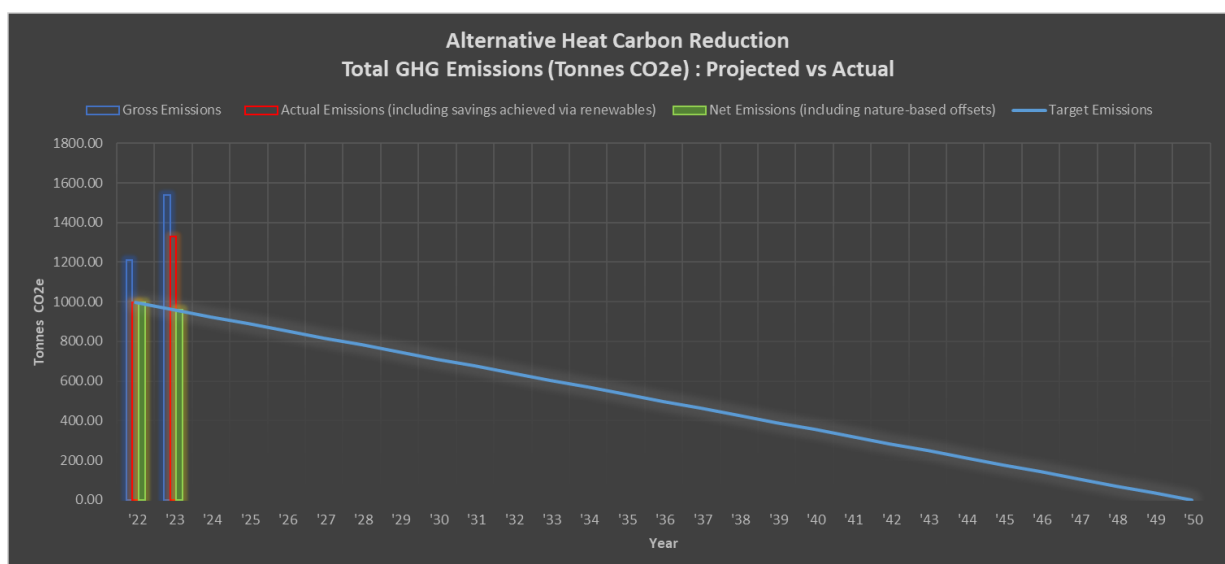
Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets which include emissions reductions, and offsets via nature-based initiatives such as tree planting.

We project that our total Scope 1, 2 and Scope 3 [Subset] net carbon emissions will decrease over the next five years to 781.33 tCO₂e by 2028. This is a reduction of approximately 19% on the current year, 2023.

2022 is set as the Baseline.

Progress against these targets can be seen in the graph below:



Carbon Reduction Projects

Completed Carbon Reduction Initiatives

During Year 2 Alternative Heat moved into new, modern, energy efficient Head Office premises which led to reductions in consumption of gas and electricity. We also replaced several older fleet vehicles with new cleaner diesel vehicles.

During Year 3, 2023, Alternative Heat purchased two electric vehicles, five pallet trucks, and one electric combi-lift to replace diesel vehicles and plant. This replacement process will continue as remaining diesel vehicles and plant approach the end of their useful life.

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We achieved a reduction in our Scope 2 emissions between Year 2 and Year 3, however there was an increase in our Scope 1 and Scope 3 emissions. This relates to our continued business growth and company expansion and, as such, by applying a Normalising Factor based on full-time equivalent staff (FTE), we achieved a reduction in Gross Emissions per FTE from 9.24 to 8.89 tCO₂e, and a reduction in Net Emissions per FTE from 7.59 to 5.54 tCO₂e between Year 2 and 3.

To address Scope 1, 2 and Scope 3 emissions going forward, the following carbon reduction measures will be in effect when performing the contract.

Carbon Reduction Initiatives

The following environmental management measures and projects are being implemented. The carbon emission reduction achieved by these schemes will be assessed against the 2022 Baseline and the measures will be in effect when performing the contract.

1. ISO 14001

2. Company Policies resulting in reduction in company emissions:

- Energy Policy.
- Environmental Policy.
- Sustainability Policy.
- Sustainable Procurement Policy.
- Corporate Social Responsibility Policy.

2.1 Energy:

- Heating & Lighting Controls. Upgrade lighting controls to implement time control and PIR on ALL office lighting.
- Integrate a heat pump to reduce gas consumption in Head Office.
- Regular servicing of all heating plant.
- Use of sleep mode when office equipment is idle and switched off when not in use.
- Purchasing energy efficient equipment.
- Sourcing from local suppliers where applicable.

2.2 Travel & Transportation:

- Greater use of teleconferencing to reduce the amount of business travel.
- Use of email rather than postal services where possible.
- Reduce commuting distance. (Our Head Office complex is located near urban centres and public transit facilities.)
- Incentives for use of public transit, bicycling, carpooling, etc. (Bicycle storage facilities and showers are in place. Car sharing is encouraged.)
- Implement teleworking/telecommuting programs. (Teleworking is made available to key staff as and when required.)
- Vehicle maintenance. Regular service programme to maximise efficiency.

2.3 Water:

- Minimise use of water.
- Dual flush toilets in place.
- Signage in place to encourage staff to save water.
- Reduce hot water usage on site, regulate time control on hot water Return Pump.

2.4 Procurement:

- Low Green House Gas (GHG) procurement/purchasing policies in place.
- High GHG emitting raw materials replaced with low GHG emitting raw materials where possible. (e.g., We substitute alternatives for steel where possible.)
- High GHG emitting capital goods replaced with low GHG emitting capital goods. (e.g., Ongoing replacement of diesel vehicles and plant with electric versions.)
- Reduce quantity of waste generated in operations. (e.g., Our design processes minimise waste in the first instance, and our materials are bought to order.)
- Recycling measures in place that lead to net GHG reductions. (e.g., From Oct 2022 to Sept 2023, 77% of our Skipway waste was separated and collected for recycling/recovery.)

3. The Alternative Heat wind turbine and wood pellet boilers achieve emissions savings.

4. In the future we aim to implement further measures such as:

- To consider various standards and initiatives to assist with achieving Net Zero.
- To achieve PAS 2038:2021 certification.
- To gradually update the company fleet to electric vehicles.
- To install a solar PV system at Head Office.
- To continue to support nature-based initiatives such as tree planting to remove carbon from the atmosphere and offset our emissions.

5. In addition to the above measures and projects, in the future we will also endeavour to identify and reduce our Scope 3 emissions further, via the following measures.

Category 1. Purchased goods and services.

- Encourage our Suppliers to commit to reducing their emissions and to provide their Carbon Reduction Plan and/or details of carbon reduction initiatives and relevant policies.

Category 2. Capital goods.

- Further enhance our low GHG procurement policies.

Category 4. Upstream transportation and distribution.

- Encourage our Suppliers to optimise efficiency of transportation and distribution.
- Replace higher-emitting transportation modes (e.g., air transport) with lower emitting transportation modes (e.g., marine transport).
- Shift toward lower-emitting fuel sources.

Category 5. Waste generated in operations.

- Encourage our Waste Carriers to implement lower-emitting waste treatment methods.

Category 6. Business travel.

- Encourage lower-emitting modes of travel (e.g., rail instead of plane).

Category 9. Downstream transport.

- Encourage our Suppliers to optimise efficiency of transportation and distribution.
- Replace higher emitting transportation modes (e.g., air transport) with lower emitting transportation modes (e.g., marine transport).
- Shift toward lower-emitting fuel sources.

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:



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Connel McMullan, Managing Director.

Date: 12/12/2023

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>