

Alpha Laboratories' Commitment to Achieving Net Zero Carbon

Alpha Laboratories Ltd. (Alpha) is committed to achieving Net Zero Carbon emissions by 2040 (or sooner) for Scopes 1&2, and 2045 for Scope 3.

This target demonstrates our ambition to become industry leaders in reducing our environmental impact in support of the NHS's Net Zero Target.

To underline this ambition, we are focusing not only on our direct emissions sources, but are also actively engaging with our wider supply chain to understand, measure and develop meaningful emissions reductions targets in line with our Net Zero Target.

Achieving Net Zero Carbon requires Alpha to reduce its operational Greenhouse Gas (GHG) emissions as close to zero as possible by 2040.

As a supplier to the NHS, Alpha is also committed to complying with the NHS Social Value Charter and the NHS Evergreen Assessment. Alpha will reduce its emissions in line with NHS emission reductions and ensure no more than 5% of Scope 1 and 2 emissions and 10% of Scope 3 residual emissions remain by 2045. The remaining amount, if it cannot be reduced, will be offset through certified carbon sequestration schemes.

Alpha Laboratories Ltd. operates from one office/warehouse located in Southern England. All recorded emissions cover global emissions produced by Alpha and are not exclusive to the UK, including business travel.

Recalculation of Baseline Year Emissions

Previously, baseline year emissions were calculated for our 2018/19 financial year. However, due to a change in methodology in the latest reporting period, the calculation of our Purchased Goods and Services, (which is a significant portion of our carbon footprint at >92%), along with the additions of Homeworking and Employee commute data, Alpha Laboratories Ltd, found it best to reset its baseline year emissions and recalculate the trajectory to give the most accurate view of the current position in emissions reporting.

We acknowledge our carbon reduction journey includes projects completed prior to the current reporting year. Those projects will still be included in this plan with data to support the decisions. Plans to reduce our carbon emissions further are included, and where data is comparable, we will show differences in emissions recorded with previous years.

Baseline Reporting Year – 2021/22 (1st October 2021 – 30th September 2022)

Alpha's baseline GHG emissions footprint for its 2021/22 financial year are presented below. Baseline emissions presented are a record of GHG gases resulting from our operations and will be used as a benchmark for which our progress towards Net Zero will be measured against.

- Employee commute data made up 3.3% of the carbon footprint as the second most significant emissions source for the company. Over 70% of employees choose to commute via a petrol car, whilst >1% choose to walk or cycle, releasing no emissions.
- Waste (excluding water supply and treatment) accounts of under 0.4% of total emissions.
- Business Travel in total accounts for 0.3% of total carbon emissions at 9.97 tCO₂e, however air travel alone makes up 9.17 tCO₂e, leaving only 0.8 tCO₂e to account for all grey fleet, bus and taxi travel.



Table 1- Baseline GHG Emissions Recordings via Scope and Emissions Source

Reporting Scope	GHG Protocol Category	GHG Emissions Source	GHG Emissions (tonnes CO ₂ e)	Percentage of GHG emissions (%)
Scope 1 (Direct GHG Emissions)		Company Vehicle Travel	19.92	0.5
		Fugitive GHG Emissions (Refrigerants)	4.85	0.1
		Natural Gas	5.72	0.1
Scope 1 GHG Emissions (tCO ₂ e)			30.49	0.7
Scope 2 (Energy Indirect GHG Emissions)		Electricity (Generation)	13.86	0.4
Scope 2 GHG Emissions (tCO ₂ e)			13.86	0.4
Scope 3 (Other Indirect GHG Emissions)*	1	Purchased goods and Services	3698.89	93.4
	3	Well-to-tank (include. Electricity transmission and distribution)	37.24	0.9
	5	Waste	14.44	0.4
	6	Business Travel (Air, Grey fleet, Bus, Taxi)	9.97	0.3
	7	Employee Commuting	130.27	3.3
		Homeworking	24.76	0.6
Scope 3 GHG Emissions (tCO ₂ e)			3890.69	98.9
Total GHG Emissions (tCO ₂ e)			3959.92	-
GHG Emissions per £M turnover (tCO ₂ e)			55.00	-
GHG Emissions per employee (tCO ₂ e)			159.65	-

*For Key Categories that are not presented in the table above, please see Table 2.

Table 2 – Scope 3 Related Unrecorded Emissions of Business Practices

GHG Category	Description	Reason
4	Upstream transportation and distribution	Due to Alpha having one operating location, there are no recorded emissions of travel between facilities which would count towards upstream transportation and distribution emissions. Other emissions that would feed into this category have not been recorded due to data being unavailable at the time of collection.
9	Downstream transportation and distribution	Data has not been available to accurately calculate carbon emissions for this Scope 3 category. As part of the emissions calculations, spend data is used to measure the non-saleable products and services acquired by Alpha. We believe this is where our downstream transportation and distribution contributes into.

Alpha is investigating the appropriate ways to collect all the required unrecorded data for future emissions monitoring.



Emissions Reduction and Target Trajectory

Alpha Laboratories is currently in the process of developing our Net Zero Carbon Strategy and defining interim targets that we will set, aligned with our ambition to become Net Zero by 2040 (Scope 1 & 2) and 2045 (Scope 3).

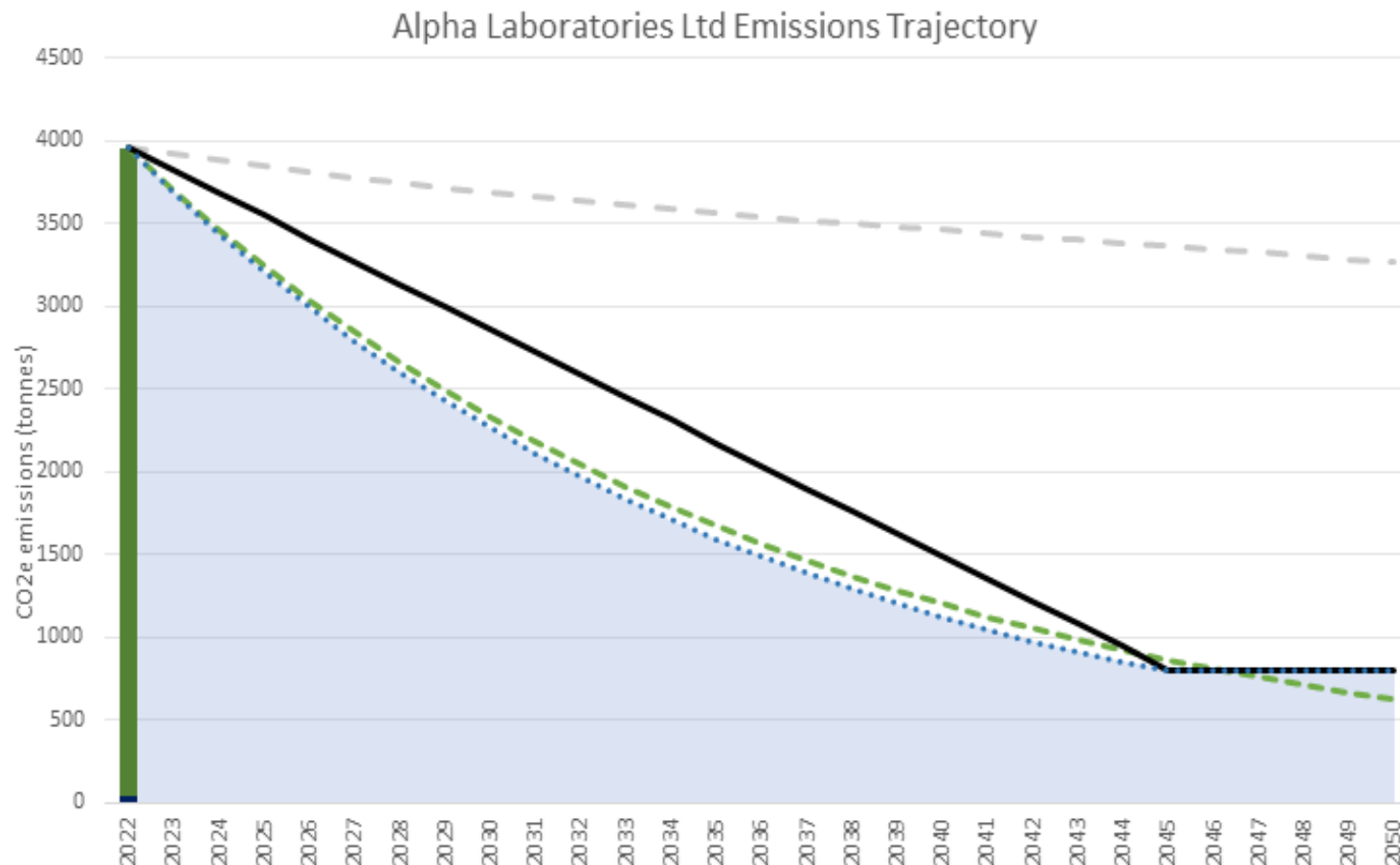
The trajectories outlined here present different reduction pathways aligned with warming scenarios outlined by the Science Based Targets Initiative (SBTi) Absolute Contraction Approach, which will act as a benchmark to compare our GHG emissions against.

This approach is designed to provide trajectories which are aligned with published climate science and the aims of the Paris Agreement for 6.4% target reduction per annum based on a Warming Scenario of well-below 1.5°C by 2100.

The black line represents the NHS Evergreen target, with the allowance of a residual amount of 10% Scope 3 emissions and 5% Scope 1 & 2 emissions.

The blue dotted line represents an average annual reduction of 6.75% to reach the NHS Evergreen target, which is a slightly higher annual reduction than the SBTi Absolute Contraction Approach.

To meet our own Net Zero and NHS Evergreen targets, Alpha Laboratories must not exceed the Evergreen trajectory for fear of veering too far off the reduction pathway.



Carbon Reduction Projects

To reach Alpha's Net Zero targets, audits have been conducted across our sites to identify problematic areas which need addressing. These audits have already led to the implementation of several strategies to improve energy efficiency.

Alpha is committed to innovative sustainability practices and promoting a culture of environmental responsibility through training and equipping staff to follow the green working practice. We have implemented an effective Environmental management system that is certified to the ISO14001:2015 (environmental management) standard.

Alpha will continue to deliver regular reviews to monitor performance, investigate incidents to identify root causes and implement control measures to protect the environment. Alpha will focus on reducing waste, reusing, and recycling materials, improving energy efficiency, and investigating potential carbon sequestration projects.



Completed Carbon Reduction Projects

Retrofit/Office Refurbishment

We have replaced the standard roofing with an advanced Trisomet trapezoidal roofing system which provides greatly improved insulation. We have added sky lights to reduce the need for artificial lighting and upgraded existing lighting to LEDs.

The improvements these changes have brought about are reflected in reduced electricity consumption compared to the baseline levels. Alpha's offices had total emissions of 17.13 tCO₂e from electricity consumption in 2020-21, down from 23.42 tCO₂e in the 2018-19 financial year. Alpha conducted energy efficiency audits and identified several areas for improvement.

Alpha has committed to phasing out fossil fuels and this is evidenced by the significant reduction in natural gas use in our operations. During the financial year 2018-19, natural gas accounted for 14.33 tCO₂e (0.18%) of the total carbon footprint and this has been reduced to 5.17 tCO₂e (0.02%). This reduction is due to Alpha's installation of a new, more efficient boiler and the proactive electrification of current systems and simultaneously increasing energy efficiency. The decarbonisation of the national grid has also indirectly benefitted the reduction in GHG emissions from this section of business operations.

Alpha has provided warehouse employees with heated jackets to keep them warm rather than heating open spaces.



Business Travel and Owned Vehicles

Alpha owned vehicles were primarily diesel during the 2018-19 financial year, having now switched to encourage an uptake of hybrid and electrical vehicles.

Within the 2021/22 baseline year the number of Electric vehicles increased from 1 to 3 cars, an increase of 14 to 17 for hybrid vehicles, and a decrease of 12 to 4 for diesel vehicles compared to the previous financial year (2020/21). This has subsequently reduced our owned fleet emissions by almost 70% since calculations began in 2018. Alpha is continuously updating our owned fleet.

Alpha has invested in 10 Electric vehicle charging points at its HQ, to encourage the uptake of both hybrid and electric vehicles. Alpha purchased an E-transit Van in 2023 to complete more local deliveries, this remains in trial at present, focusing on route optimisation.



Future Carbon Reduction Projects

Waste Disposal

Emissions from waste totalled 0.21 tCO₂e in 2020-21, an increase from 0.08 tCO₂e in the baseline year. Alpha uses sustainable alternatives, recycled and plastic free products whilst also committing to recycling as much waste as possible.

Alpha will also review all existing materials and packaging to reduce and replace where possible with more sustainable alternatives. The type and quantity of waste produced because of Alpha's operations will be monitored and recorded to ease the introduction of waste reduction measures.



Refrigerant Gases

Alpha Laboratories has successfully reduced its emissions from refrigerant gases from 33.94 tCO₂e in the baseline year of 2018-19 to 0.00 tCO₂e in 2020-21. Alpha will continue to monitor refrigerant gases to ensure the level remains as low as practically possible. Alpha has a regular preventive maintenance service contract for all cooling systems, including air conditioning systems, refrigerators, freezers and walk in cold rooms. Systems will be regularly reviewed and replaced with models with lower GWP if this is practical.



Operational Natural Gas Use

Following on from a decarbonisation audit of the offices and warehouse, further opportunities to minimise the reliance on natural gas for heating and streamline processes to avoid energy waste have been identified. Alpha plans to implement these policies over the next two years.

Electricity Generation

Alpha Laboratories intends to harness renewable energy in the future through the implementation of various technologies, including the installation of solar panels. This will reduce electricity emissions as well as reliance on the national grid.

Alpha has already started upgrading the existing lighting to LEDs and will continue to upgrade lighting across the business where required. Alpha has invested in Electric Vehicle charging points as well as the addition of an E-transit Van (2023) to cover local deliveries, reducing the reliance on fossil fuel-based courier services.

Alpha Laboratories will also continue to conduct energy efficiency audits across the business to identify more opportunities to improve energy efficiency. Indirect reductions in electricity emissions will occur in future years due to decarbonisation of the national grid.




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 Standard, using the appropriate Government emission Conversion Factors for GHG 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 in accordance with the published reporting standard from 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.

Signed of behalf of Alpha Laboratories Ltd:

Signature: 

Name: Robert Vint

Position: Managing Director

Date: 1st July 2023

