Carbon Reduction Plan

December 2022

Commitment to achieving Net Zero

STS Defence is committed to achieving Net Zero emissions by 2050 or earlier.

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 plans to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2021

Additional Details relating to the Baseline Emissions calculations.

STS Defence Baseline Emissions calculations are taken from the following sources used between November 2020 and October 2021:

Scope	Source of CO_2	Tonnes of CO_2 equivalent (tCO_2e)
Scope 1	Natural Gas (for heating)	85.7
	Vehicle fuel (for business use)	35.5
Scope 2	Electricity	183
Scope 3	Category 5: Waste Generated in Operations	76
	Category 6 - Business Travel	70.4

2021 was the first year that STS Defence measured and reported our carbon impact. Over time we have improved our data capture methods and have been able to apply this retrospectively to our baseline data, and as such form the baseline against which future emissions are measured. The aim of this plan is identify steps to ensure a year on year improvement in awareness and carbon reduction with a focus on net zero by at least 2050. There is a deviation from the measurable Scope 3 requirements as we are not yet able to fully assess the exact impact of our supply chain.
The supply chain impact will be calculated using the total amount spent on goods and services, and broken down further to identify in addition to the baseline scope:

Category 1 - Purchased goods and services
Category 2 - Capital goods
Category 3 - Fuel- and energy-related activities
Category 4 - Upstream transportation and distribution
Category 7 - Employee commuting
Category 8 - Upstream leased assets
Category 9 - Downstream transportation and distribution

In 2021, we projected that carbon emissions would decrease by 20% over 5 years. In 2022, we saw an in-year reduction of 17%. The reduction was the result of a number of initiatives coming in to effect. Our Scope 1 fuel consumption from our vehicle fleet was reduced due to the implementation of the Lightfoot telematics system. Scope 1 gas use was down due to a more controlled use of the central heating system. Waste generation reduced through the disposal of a number of large pieces of machinery in 2021, which affected the data positively.

Baseline year (2021) emissions:	
EMISSIONS	**TOTAL (tCO_2e)**
Scope 1	121.2
Scope 2	183
Scope 3	146.4
Total Emissions	**450.6**

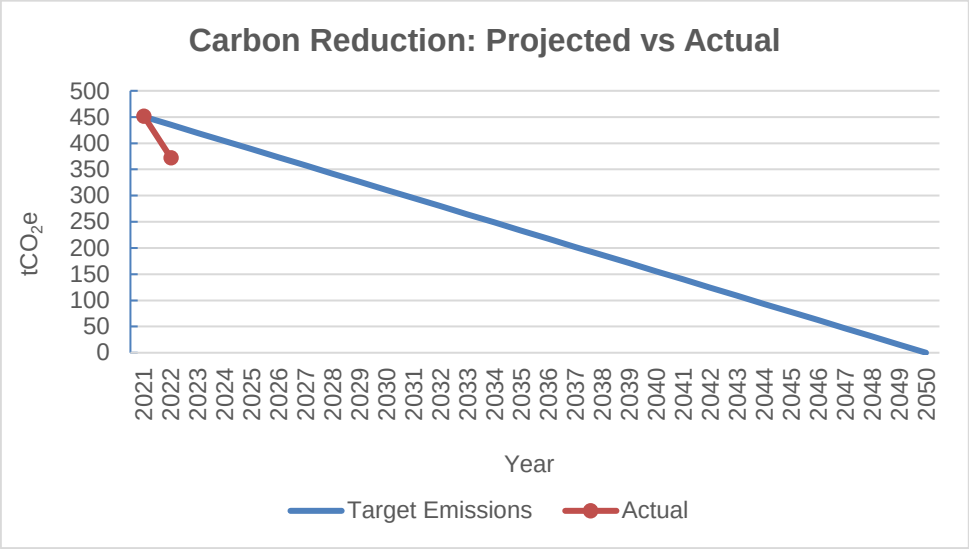
Current Emissions Reporting

Reporting Year: 2022	
EMISSIONS	**TOTAL (tCO_2e)**
Scope 1	111.3
Scope 2	177.3
Scope 3	83.6
Total Emissions	**372.2**

Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

We are projecting that carbon emissions will now decrease over the next 5 years to **298 tCO_2e** by the end of 2027. This is reduction of **20%**; and progress against these targets will be tracked as per the graph below:



Carbon Reduction Projects

Current Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2021 baseline.

- ISO14001 accreditation by Lloyds Register.
- Installed a telematics system to our vehicle fleet to gain accurate data.
- Promotion of employee Bike2Work scheme.
- Waste separation on site for metals, WEEE, mixed dry recyclables and general waste.
- The use of teleconferencing with partners, customers and suppliers, as well as within our own teams.
- Sign up to a zero carbon energy tariff in November 2022 when we renewed our energy supplier.

Future Carbon Reduction Initiatives

Looking forward, we will build on this positive progress by pursuing further measures such as:

- Implement a system to enable accurate tracking of supply chain emissions.
- Facilities redevelopment to create a low energy building with modern air handling systems to reduce heating costs.
- A modern and more efficient hot water system will use fewer natural resources.
- Upgrade our older less efficient fabrication equipment to more modern solutions, which use less energy, as well as investigating viability of voltage optimisation.
- Completing an upgrade to LED lighting throughout the site.
- Implement a car share scheme, which links drivers or passengers with the same work patterns.

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[1] and uses the appropriate Government emission conversion factors for greenhouse Gas Company reporting[2].

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) Standard[3].

This Carbon Reduction Plan has been reviewed and signed off by the Managing Director

Jonathan Bowley
Managing Director
December 2022

[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