



PPN 06/21 Carbon Emissions & Reduction Plan Report

ECS Engineering Services Ltd.

Publication Date: April 2023

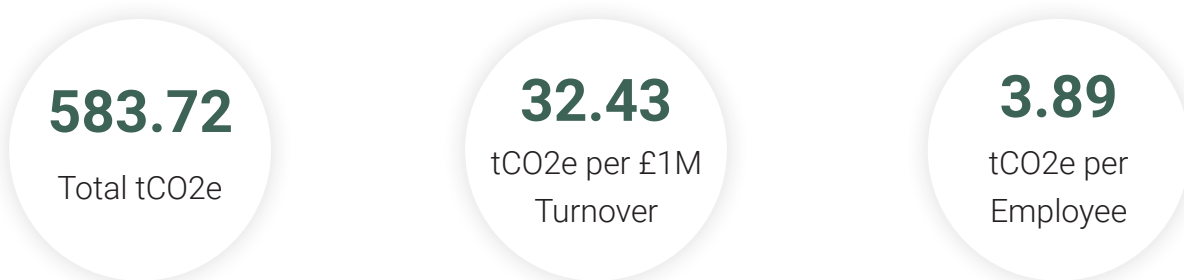




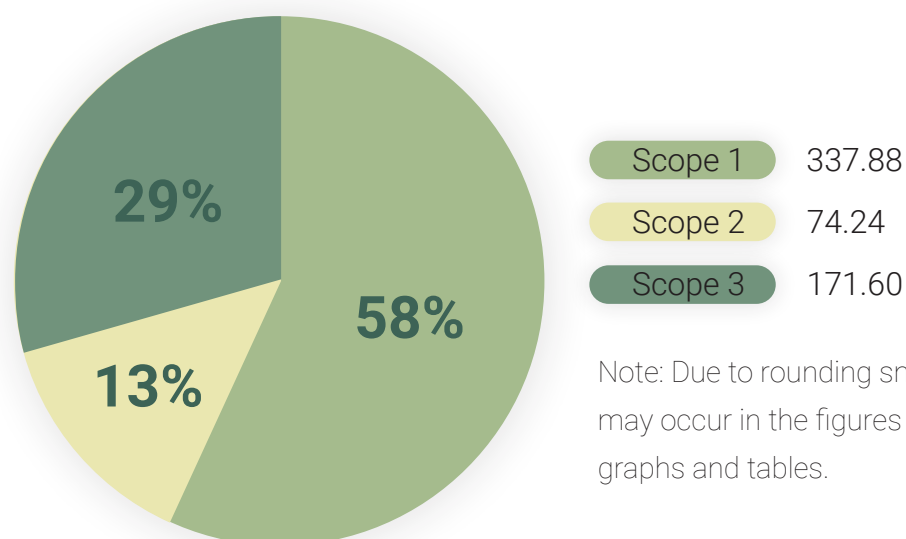
INTRODUCTION

The following page is a summary of the PPN 06/21 Carbon Emission & Reduction Plan Report for ECS Engineering Services Ltd for the year 2022. This report has been assembled using internally collated data, validated by Carbon Solutions Specialist, Auditel.

TOTAL EMISSIONS AND INTENSITY METRICS



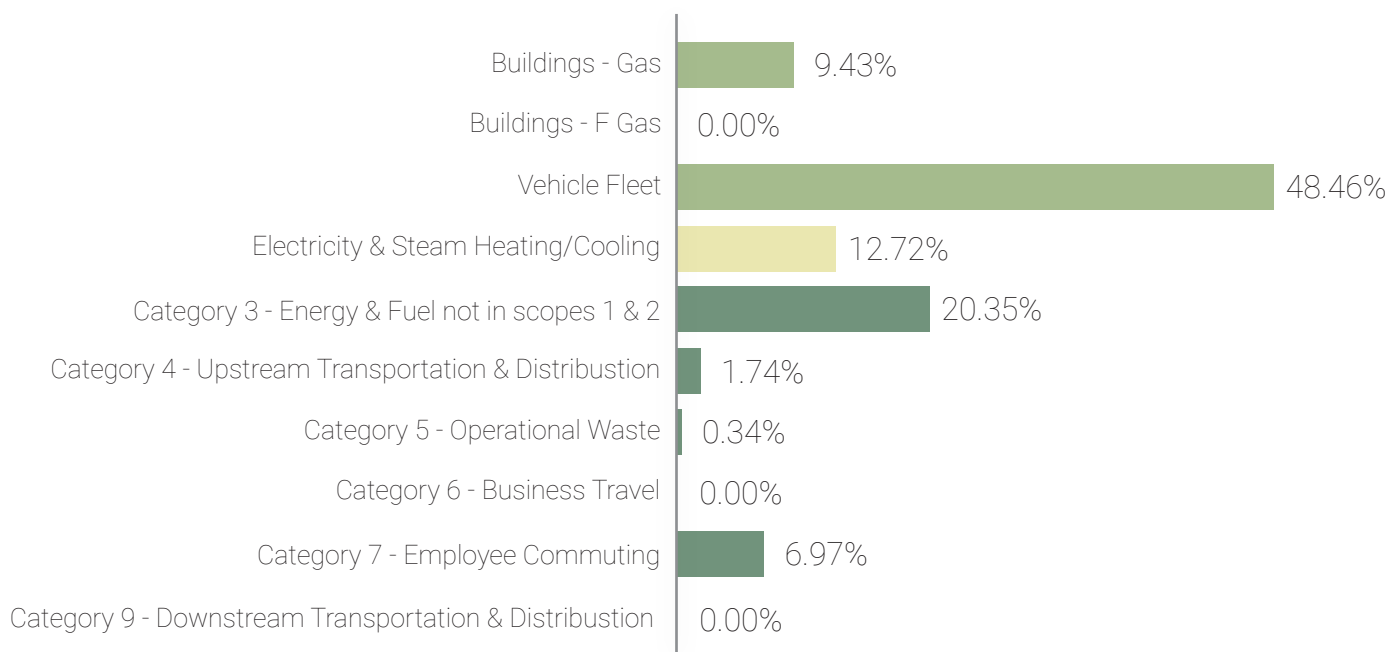
EMISSIONS BY SCOPE



SOURCE	SCOPE	tCO ₂ e	%
Buildings - Gas	1	55.03	9.43%
Buildings - F Gas	1	0.00	0.00%
Vehicle Fleet	1	282.85	48.46%
Electricity & Steam Heating/Cooling	2	74.24	12.72%
Category 3 - Energy & Fuel not in scopes 1 & 2	3	118.77	20.35%
Category 4 - Upstream Transportation & Distribution	3	10.13	1.74%
Category 5 - Operational Waste	3	2.01	0.34%
Category 6 - Business Travel	3	0.00	0.00%
Category 7 - Employee Commuting	3	40.69	6.97%
Category 9 - Downstream Transportation & Distribution	3	0.00	0.00%
OVERALL		583.72	100%

Note: All other scope 3 categories are excluded from this report.

EMISSION PERCENTAGE BREAKDOWN BY SOURCE



COMMITMENT TO ACHIEVING NET ZERO

BUSINESS OPERATIONS NET ZERO

ECS Engineering Services Ltd. is committed to achieving Business Operations Net Zero emissions by 2050.

PROGRAMME RELATED NET ZERO

In some instances ECS Engineering Services Ltd. have a requirement to meet Net Zero Carbon Emissions within the resources utilised by specific contracts and Framework Agreements in a timeframe that is different to that of the Business Operations Net Zero timeframe detailed above. Where this is the case, ECS will work with the specific client to understand how this can be achieved, whilst maintaining the service levels required under the contract.

ECS engaged Auditel, a third party Carbon Specialist, to calculate our carbon footprint emissions for the period 01/01/2022 – 31/12/2022.

We include all seven Kyoto Protocol Greenhouse Gas groups in our emissions calculations.

BASELINE EMISSIONS FOOTPRINT

Baseline emissions are a record of the greenhouse gases that were produced by ECS Engineering Services Ltd. for the year indicated. Baseline emissions are the reference point against which future emissions reduction can be measured.

Baseline Year: 2021

ADDITIONAL DETAILS RELATING TO THE BASELINE EMISSIONS CALCULATIONS

Exclusions:

At the time of collecting & analysing the data and preparing the Baseline Emissions Footprint, the data for Scope 3 Category 7 was not available.

Assumptions:

Scope 3 Categories 4 & 9. We had no means to separate the data into the different categories and have made an assumption that the emission split is Category 4 – 40% and Category 9 – 60%. We are investigating if we can separate the data for the Current Emission Reporting period.

BASELINE YEAR EMISSIONS



Scope:

Category 4 - Upstream Transportation & Distribution	77.0 tCO2e
Category 5 - Waste Generated in Operations	0.80 tCO2e
Category 6 - Business Travel	0.90 tCO2e
Category 7 - Employee Commuting	No Data
Category 9 - Downstream Transportation & Distribution	No Data

CURRENT EMISSIONS REPORTING

Reporting Year: 2022
Operational Boundary: Operational Control

NOTES & EXCLUSIONS

- Emissions for Scope 3 Category 3 were not included in the Baseline Report. This has added 118.77 tCO₂e.
- Data for Scope 3 Category 4 needs to be improved. We will work with our suppliers to achieve this and this will form part of our Data Improvement Plan for 2024.
- Data for Scope 3 Category 5 needs to be improved. We will work with our suppliers to achieve this and this will form part of our Data Improvement Plan for 2024.
- No data for Scope 3 Category 6 is currently unavailable. This will form part of our Data Improvement Plan for 2024.
- Data for Scope 3 Category 7 needs to be improved. This will form part of our Data Improvement Plan for 2024.
- Data for Scope 3 Category 9 is not available. We will work with our suppliers to secure the data and this will form part of our Data Improvement Plan for 2024.

EMISSIONS

The emissions for 2022 are under calculation. These will be completed by the time of Tender Submission.

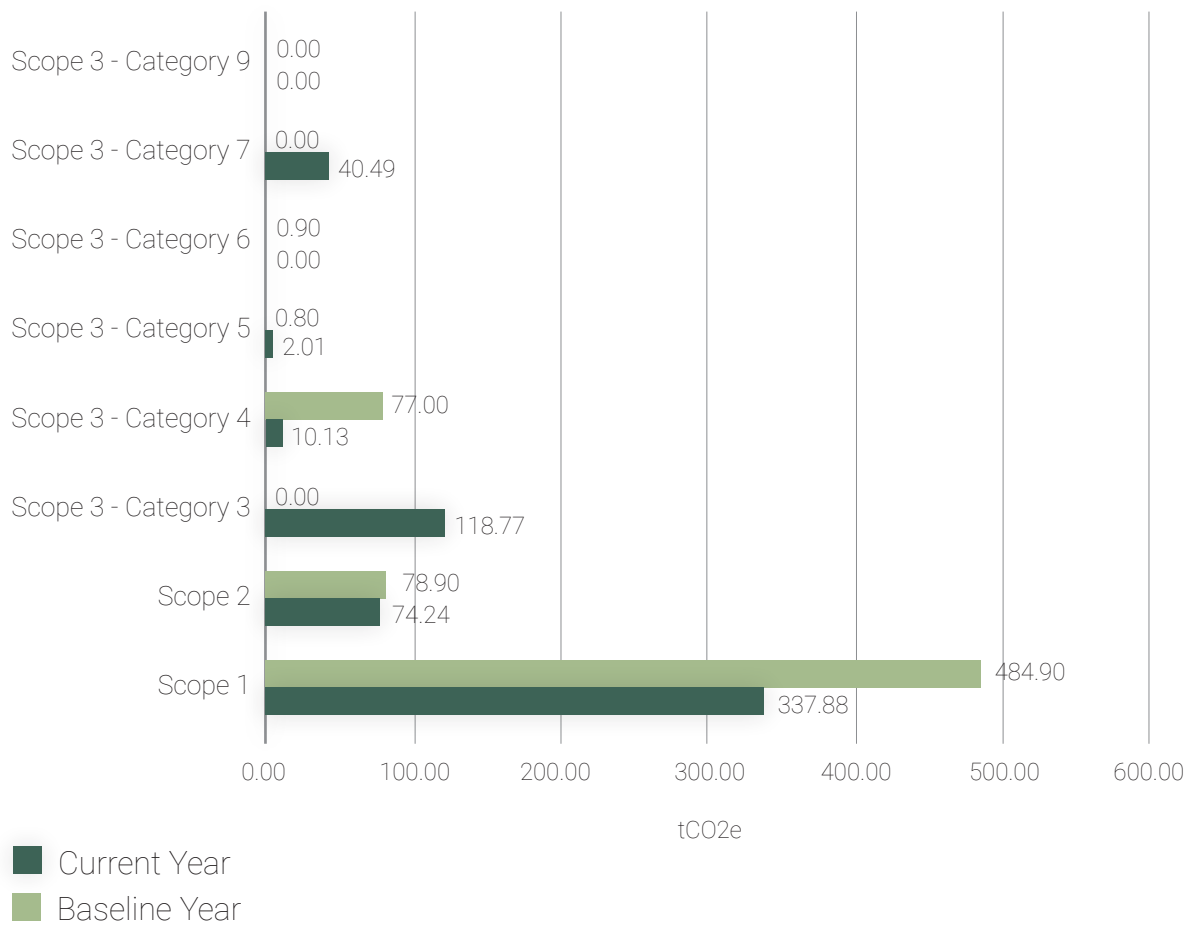
Scope 1	337.88 tCO ₂ e	Total Emissions 583.72 tCO ₂ e
Scope 2	74.24 tCO ₂ e	
Scope 3*	171.60 tCO ₂ e	

Scope:

Category 3 - Energy & Fuel not in scopes 1 & 2	118.77 tCO₂e
Category 4 - Upstream Transportation & Distribution	10.13 tCO₂e
Category 5 - Waste Generated in Operations	2.01 tCO₂e
Category 6 - Business Travel	No Data
Category 7 - Employee Commuting	40.69 tCO₂e
Category 9 - Downstream Transportation & Distribution	No Data

COIMPARISON CURRENT YEAR V BASELINE YEAR

CATEGORY / SCOPE	CURRENT YEAR tCO2e	BASELINE YEAR tCO2e
Scope 1	337.88	484.90
Scope 2	74.24	78.90
Scope 3 - Category 3	118.77	0.00
Scope 3 - Category 4	10.13	77.00
Scope 3 - Category 5	2.01	0.80
Scope 3 - Category 6	0.00	0.90
Scope 3 - Category	40.69	0.00
Scope 3 - Category 9	0.00	0.00
OVERALL	583.73	642.50



CARBON REDUCTION PLAN

EXECUTIVE SUMMARY

When we are looking at projects for carbon reduction and improvements to carbon and financial operations, we look at three key areas:

- Capital Projects – Projects where new systems, equipment or technology is purchased and capitalised as a business asset to help reduce cost and carbon, e.g. Solar power.
- Procurement Projects – These are projects where improving current supplier practices or changing supplier or items purchased will improve cost or carbon performance.
- Behavioural & Process Projects – These projects are through change in behaviour of staff within a company through education, awareness or involvement as a result have direct cost and carbon improvements.

THE PLAN

- ECS Engineering Ltd is working through its long-term strategic plan. One element of this plan is to demonstrate how the business will meet its Environmental, Social and Governance (ESG) obligations and the needs and wishes of its stakeholders.
- A fundamental part of developing such a plan is gathering evidence with which to inform decision-making and direct future strategy. This project is part of that evidence-gathering process.
- The results from this work will assist ECS to optimise sustainability, minimise emissions and maintain climate-related concerns as a core element of their strategic plans in the future.
- A key focus in 2024 will be improving the data quality, both internal and from suppliers.

CARBON REDUCTION PROJECTS

COMPLETED CARBON REDUCTION INITIATIVES

We initiated Carbon Reduction initiatives as a result of the Baseline Carbon Footprint produced by the University of Derby but these were delivered after the Baseline period. Where the initiatives are completed, they are detailed below in the Delivered Carbon Reduction Initiatives section.

DELIVERED JANUARY 2022

PROJECTED ANNUAL CARBON SAVING

Installation of LED lighting

The emission savings are being calculated as part of our Current Emissions Reporting. We project a reduction of 50% in emissions for lighting the workshop area.

DELIVERED AUGUST 2023

PROJECTED ANNUAL CARBON SAVING

Install Solar PV panels
August 2023

The analysis is ongoing to accurately quantify the reduction but we estimate a reduction of 20%.

DELIVERED Q4 2022

PROJECTED ANNUAL CARBON SAVING

Change to Working Practices
WFH Friday, No night-shift
workshop working

We have seen a decrease in our monthly electricity & gas usage. The analysis and calculations are ongoing to accurately quantify this.

DELIVERED Q3 & Q4 2022

PROJECTED ANNUAL CARBON SAVING

Change to Electric Vehicles
1 x Car – Q3 2022
1 x E-Van – Q4 2022

The analysis and calculations are ongoing to accurately quantify the emission reduction.

DELIVERED Q4 2023

PROJECTED ANNUAL CARBON SAVING

Change of Electrical Provider

This has reduced the CO₂ g/kWh to 87 from the national average of 186.

FUTURE CARBON REDUCTION INITIATIVES

**PLAN ELECTRIFICATION OF
VEHICLE FLEET SCHEDULE**

PROJECTED ANNUAL CARBON SAVING (tCO₂e)

From 2024 Onwards. We estimate this will be planned over 3-4 years.

TBC after planning is completed.

**IMPROVE PREMISES
ENERGY EFFICIENCY**

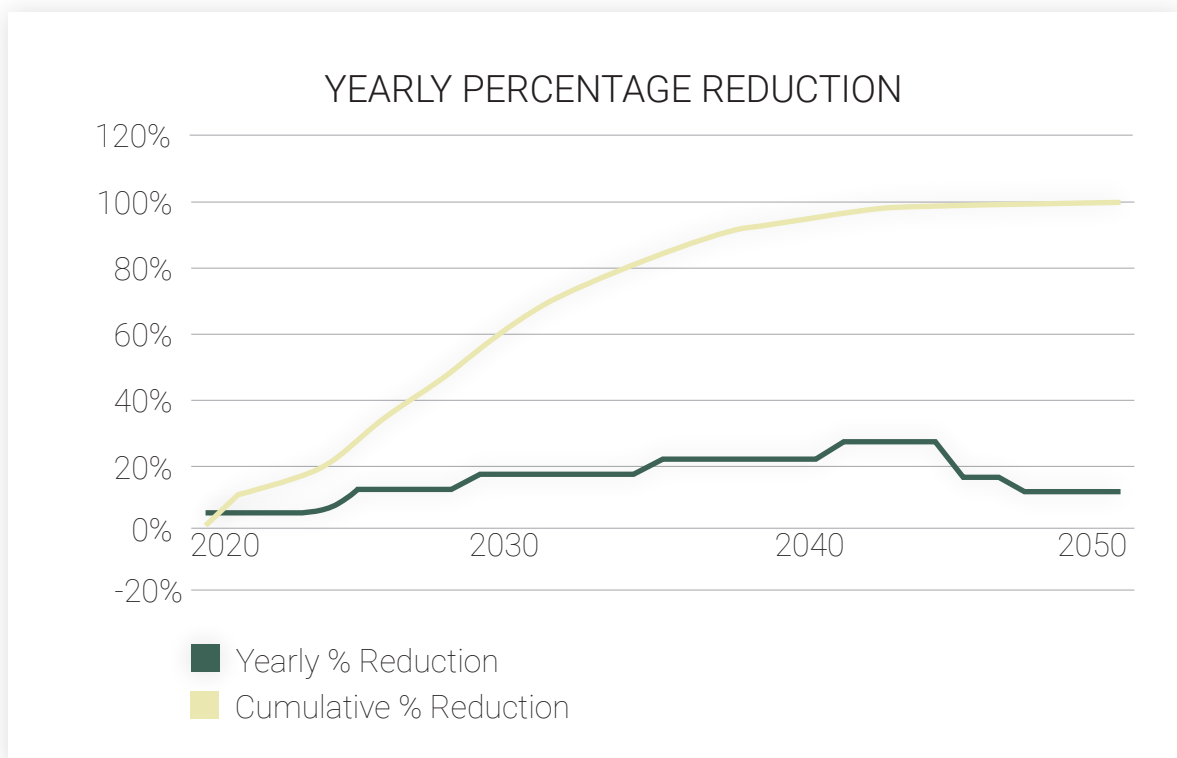
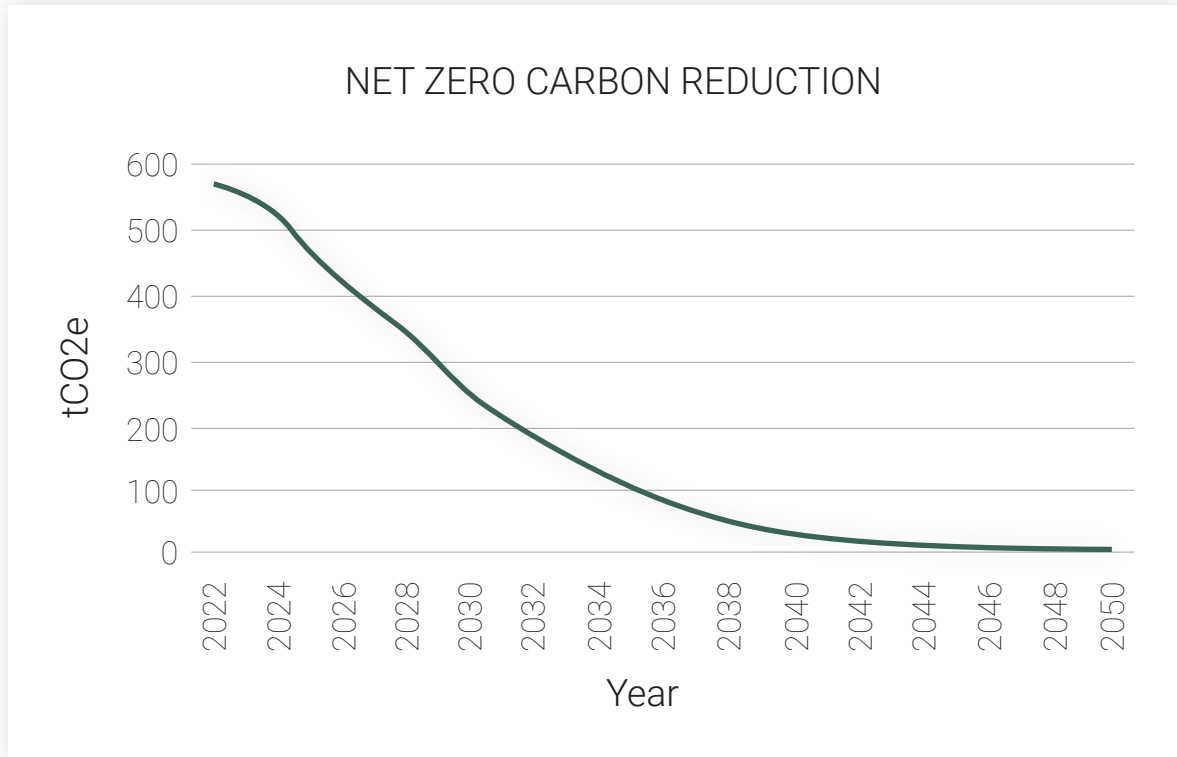
PROJECTED ANNUAL CARBON SAVING (tCO₂e)

Investigate energy monitoring technologies.

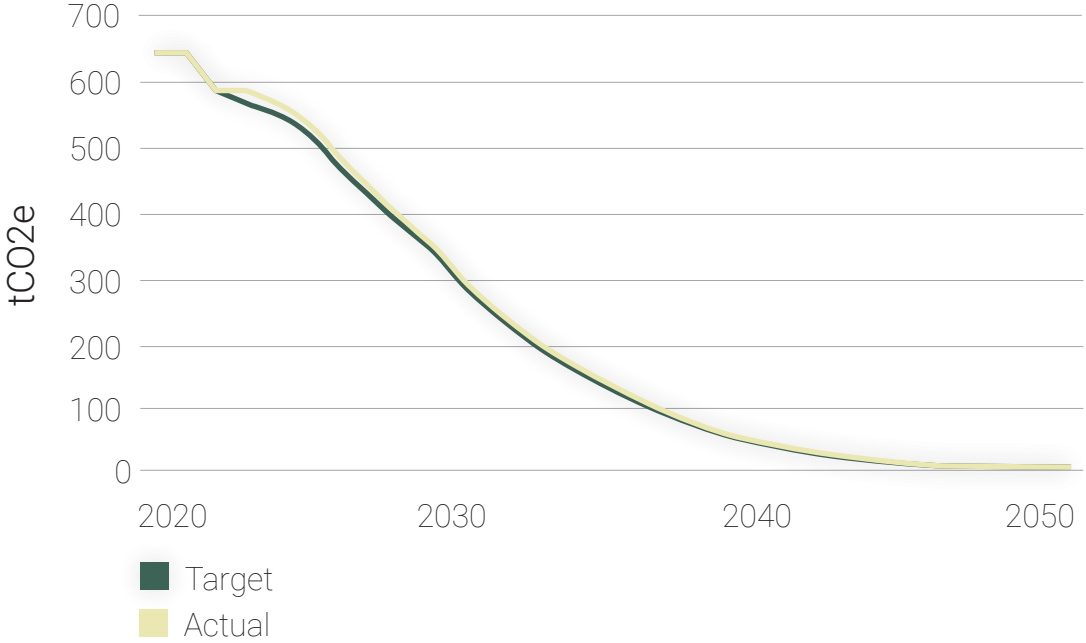
Early investigation projects a 10-20% across current energy usage.

CARBON EMISSION REDUCTION TARGETS

The graphs below detail the targeted and actual reductions achieved to date. We believe the percentage reduction targeted per year is realistic.



NET ZERO EMISSION REDUCTION



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 and uses the appropriate Government emission conversion factors for greenhouse gas 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 for 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 (or equivalent management body).

Signed on behalf of the supplier:

Steve Crapper
Precontract Director at ECS Engineering Srvices Ltd.



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Date: 1st April 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>