

# Carbon Reduction Plan

## POLICY

Sharkey is committed to reduce carbon emissions to Net Zero by 2050.

## CARBON REDUCTION OBJECTIVES

- Minimise Energy Use
- Switch to Green Energy Providers
- Avoid Waste
- Recycle Waste
- Minimize Grey CO2 Emissions

## CURRENT CARBON REDUCTION PROJECTS

- Battery Storage Investigation
- Electrification of Fleet Vehicles
- Server Room Energy Use Reduction Planning
- Building Heating Monitoring and Control
- Waste Management Review
- Site Energy Monitoring and Management

## ROLES & RESPONSIBILITIES

ROLE	RESPONSIBILITIES
Billy Harrison, Managing Director	Overview and Direction of Policy
Stewart Campbell, Business Systems and Compliance Director	Required to review and produce annual Carbon Reduction Plan, lead and promote implementation.
Leadership Team	Engage with Carbon Reduction Plan measures, lead and promote implementation through their tams.
Steven Halliday HSQE Manager	Monitor, lead and promote implementation of Carbon Reduction Plan.

# Carbon Reduction Plan

## BASELINE EMISSIONS FOOTPRINT

The boundaries for Sharkey Emissions footprint include our Head Office, Server Room (housed in adjacent building), Company Vehicles and Onsite Activities. Baseline Year selected as 2021, as data available for a reflective picture of building and business operations.

BASELINE YEAR: 2021		
Calculation Details	<a href="https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf">Energy benchmark tool   The Carbon Trust, Travel Emissions Calculator - GoClimate</a> <a href="https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf">https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf</a>	
BASELINE YEAR EMISSIONS: 2021		
Emissions	Total (tCO <sub>2</sub> e)	
Scope 1	<b>Emission Source</b> <span style="float:right"><b>tCO<sub>2</sub>e</b></span>	
	Company Vehicle Emissions (Petrol)	3.575
	Company Vehicle Emissions (Diesel)	3.726
	Air Con Emissions (R410A System Recharge)	126.115
	<b>Scope 1 Total</b>	<b>133.416</b>
Scope 2	<b>Emission Source</b> <span style="float:right"><b>tCO<sub>2</sub>e</b></span>	
	Head Office Electricity Use (82043.6 KW/hr usage established from EOn investigation completed on 01/06/2022)	34.841
	Server Room Electricity Use (located and power metered from another business, so currently unmeasurable)	0
	<b>Scope 2 Total</b>	<b>34.841</b>
Scope 3	<b>Emission Source</b> <span style="float:right"><b>tCO<sub>2</sub>e</b></span>	
	<b>6. BUSINESS TRAVEL</b>	
	Flights ( <i>miles evaluated from expenses and credit card payments</i> ) 20 return trips to London (1,330km return)	26.600
	Train Travel ( <i>miles evaluated from expenses and credit card payments</i> ) 10 return trips to London (1,330km return)	0.440
	<b>7. EMPLOYEE COMMUTING</b>	
	Employee Travel to Work in Own Vehicle ( <i>guesstimate calculation</i> ) 80 employees 15 EV's, all average live within 15km of work location. WFH 30 days per year with 30 days holiday per year. So, 196 work days per year x 65 employees x (15km x2)= 382,200km per year diesel use, plus 88,200 EV miles	86.538
	<b>5. WASTE GENERATED IN OPERATIONS</b>	
	<b>Construction Waste/ Office Waste</b> Calculation formula [5.1] Supplier-specific method <i>Hamilton Waste and Recycling Ltd provide waste collection and management services to Sharkey and are a Net Zero company. Their reporting covers waste transportation from site, as well as waste management activities. Sharkey had 104 waste collections within 20km of the waste management station in 2021.</i>	0
	<i>Mixed Construction-</i> 481.93 tonnes of which 82% of this material was recycled and made into a reusable product. 18% of this tonnage (86.75 tonnes) was re-used to make a fuel called SRF (Solid Recoverable Fuel) which is used by tarmac to burn in their cement kiln to make cement, this replaces the need to use fossil fuels.	
	<i>Plasterboard-</i> 11.30 tonnes of plasterboard was 100% recycled in our Plasterboard recycling plant where the powder is used for land enhancement application and the paper residual used for cattle bedding	
	<i>Inert-</i> 10.38 tonnes of inert was produced which is processed through our soil and stone plant and the soil reused in land restoration and the stone turned into a product called 6F2/5 which is sold back into the construction sector With waste types generated nothing supplied was sent to landfill giving a 100% diversion from landfill.	
	<b>4. UPSTREAM TRANSPORTATION AND DISTRIBUTION</b>	
	Sharkey do not supply product for resale, or distribution, only supply management services	0
<b>9 DOWNSTREAM TRANSPORTATION AND DISTRIBUTION.</b>		
Sharkey do not supply product for resale, or distribution, only supply management services	0	
<b>Scope 3 Total</b>	<b>113.578</b>	
Total	<b>Total emissions (tCO<sub>2</sub>e):</b> <b>281.835</b>	

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## CURRENT EMISSIONS REPORTING

First year of reporting so baseline year the same as reporting year.

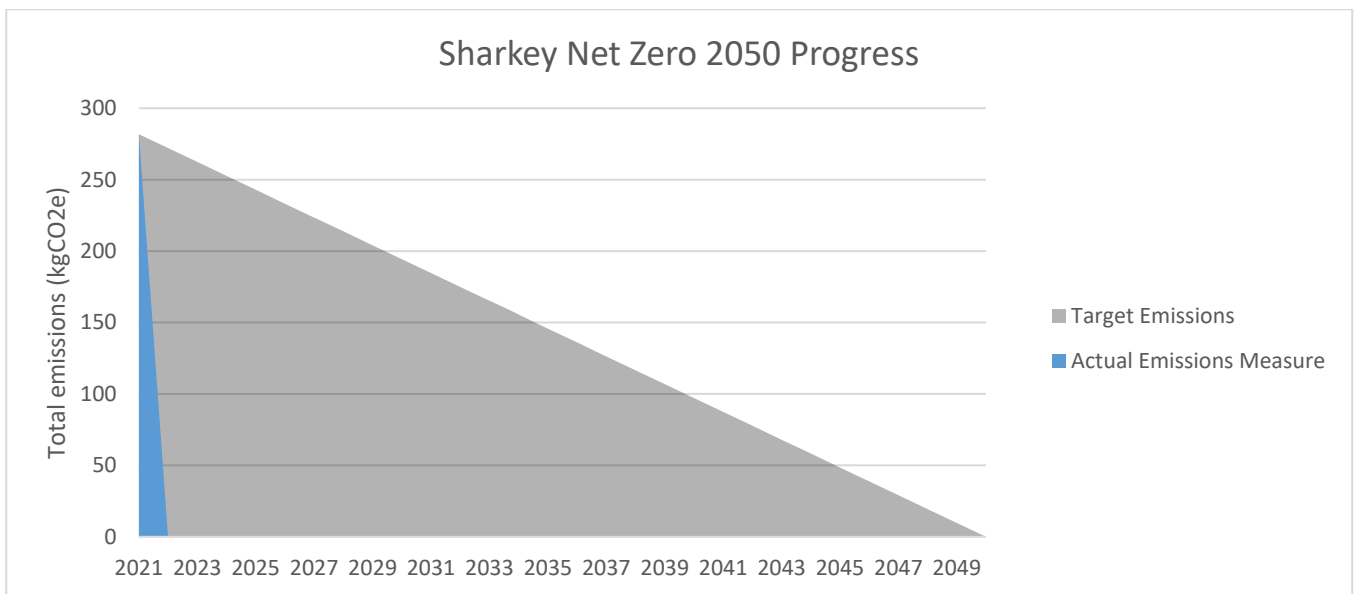
REPORTING YEAR: 2021		
Calculation Details	<a href="#">Energy benchmark tool   The Carbon Trust</a> , <a href="#">Travel Emissions Calculator - GoClimate</a> <a href="https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf">https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf</a>	
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## EMISSIONS REDUCTION TARGETS

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

We project that carbon emissions will decrease over the next five years to 233 tCO<sub>2</sub>e by 2026. This is a reduction of 17%



# Carbon Reduction Plan

TABLE OF PROJECT PROGRESS

REPORTING YEAR: 2022	
Reduction of On Premises Server footprint <b>(Scope 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> SIMOn Information Management System planned move to Cloud October 2022, Physical Equipment reduction and new equipment planned with lower energy rating to replace older equipment.
Equipment Maintenance <b>(Scope 1)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> Air con equipment maintained twice a year
Energy Supplier Contract Review <b>(Scope 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> Renewal due in 2022. The objective is to minimise cost increase, and obtain better monitoring of Site Contract energy use, through central procurement and use of smart meters. This can be used to identify ways to reduce energy waste, emissions and cost.
Energy Control and Regulation <b>(Scope 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> This has been hampered by incorrect metering of our electrical supply set up by NPower in 2017. This has now been resolved by Eon, allowing accurate evaluation of energy consumption for our building and ability now to monitor and measure any beneficial changes we make to local heating and cooling controls. Utilising our energy broker, we will have the ability to better measure and monitor onsite energy consumption from both Gas and Electricity, allowing better planning to control and minimise energy use.
Fleet Electrification <b>(Scope 1)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> Government tax incentive, and the business investment in EV charging points (13), encourage the employee with company car benefit to select a new EV as a company vehicle. The charging points draw from an energy supply supplemented by 40KW Solar PV System.
Hybrid Working <b>(Scope 1 and 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> COVID enforced working from home successfully stress tested our IT flexibility and agility, allow Sharkey to make hybrid working an option for staff, who were previously 100% office based. The reduction of commuting miles and power draw from the office should have a beneficial impact. Meetings are more likely to be virtual, avoiding traveling.
Energy Saving Investigation <b>(Scope 2)</b>	<b>Progress Status:</b> Planned <b>Notes:</b> Review building air conditioning local controls, educate staff, investigate use of window film and insulation to reduce the requirement to run air conditioning.
Renewable Generation and Storage Investments <b>(Scope 1 and 2)</b>	<b>Progress Status:</b> Planned <b>Notes:</b> A review based upon return of investment is now feasible because we now have accurate energy consumption readings. A general review will consider: <ol style="list-style-type: none"> <li>1. Additional Solar PV</li> <li>2. Battery Storage</li> <li>3. Additional Building Insulation</li> <li>4. Glazing coating to reduce solar heat gain in summer</li> </ol>
Investigate ways to influence <b>(Scope 3)</b>	<b>Progress Status:</b> Planned <b>Notes:</b> Review how we can influence Suppliers and Subcontractors toward Net Zero by 2050 or sooner.

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# Carbon Reduction Plan

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## 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

## SIGNED ON BEHALF OF GEORGE SHARKEY AND SONS LTD

Stewart Campbell, Business Systems and Compliance Director

DATE: 25 November 2022