

# 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 teams.
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)	15.86
	Server Room Electricity Use (located and power metered from another business, so currently unmeasurable)	0
	<b>Scope 2 Total</b>	<b>15.86</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 (miles evaluated from expenses and credit card payments) 20 return trips to London (1,330km return)	26.600
	Train Travel (miles evaluated from expenses and credit card payments) 10 return trips to London (1,330km return)	0.440
	<b>7. EMPLOYEE COMMUTING</b>	
	Employee Travel to Work in Own Vehicle (guesstimate calculation) 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 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. Mixed Construction- 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. Plasterboard- 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 Inert- 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.	0
	<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>
<b>Total</b>	<b>Total emissions (tCO<sub>2</sub>e):</b> <span style="float:right"><b>262.85</b></span>	

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## CURRENT EMISSIONS REPORTING

Second year of reporting figures taken from November 22 to November 2023

REPORTING YEAR: 2023		
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> <a href="#">Great Britain's monthly electricity stats   ESO (nationalgrideso.com)</a> (Energy mix reference)	
REPORTING YEAR: 2023		
Emissions	Total (tCO <sub>2</sub> e)	
Scope 1	<b>Emission Source</b> <span style="float:right">tCO<sub>2</sub>e</span>	
	Company Vehicle Emissions (Petrol)	3.362
	Company Vehicle Emissions (Diesel)	6.080
	Air Con Emissions (No Recharge or Leaks)	0
	<b>Scope 1 Total</b>	<b>9.442</b>
Scope 2	<b>Emission Source</b> <span style="float:right">tCO<sub>2</sub>e</span>	
	Total Head Office Electricity Use (94846 KW/hr usage established from Total Energy Readings) <a href="#">Energy Mix</a> for Electricity identifies average of 49.2%. Actual figure of countable kWhrs is 50.8% of total energy used = 48182KWhr.	9.317
	Server Room Electricity Use (located and power metered from another business, so currently unmeasurable)	0
	<b>Scope 2 Total</b>	<b>9.317</b>
Scope 3	<b>Emission Source</b> <span style="float:right">tCO<sub>2</sub>e</span>	
	<b>6. BUSINESS TRAVEL</b>	
	No Flights in reporting year. Projects based locally and Teams Meetings Utilised	0
	No Train Travel in reporting year. Projects based locally and Teams Meetings Utilised	0
	<b>7. EMPLOYEE COMMUTING</b>	
	Employee Travel to Work in Own Vehicle (guesstimate calculation) 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 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 182 waste collections within 20km of the waste management station in 2022/23. Mixed Construction-	0
	<b>Construction Waste/ Office Waste</b> Calculation formula [5.1] Supplier-specific method 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 182 waste collections within 20km of the waste management station in 2022/23. <b>Mixed Construction (General Waste description is the same as mixed construction)</b> 278.32 tonnes produced of which 81% (225.43 tonnes) of this material was recycled and make into reusable product. 19% (52.88 tonnes) went to our SRF plant and turned into SRF which is used by Tarmac in their cement kiln which replaces the need to burn fossil fuel.	
	You did not produce any plasterboard or inert material within the past 12 months.	
	<b>With the waste types you generate nothing you send to us is sent to landfill giving you 100% diversion</b>	
	<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>86.538</b>	
<b>Total</b>	<b>Total emissions (tCO<sub>2</sub>e):</b> <span style="float:right"><b>105.30</b></span>	

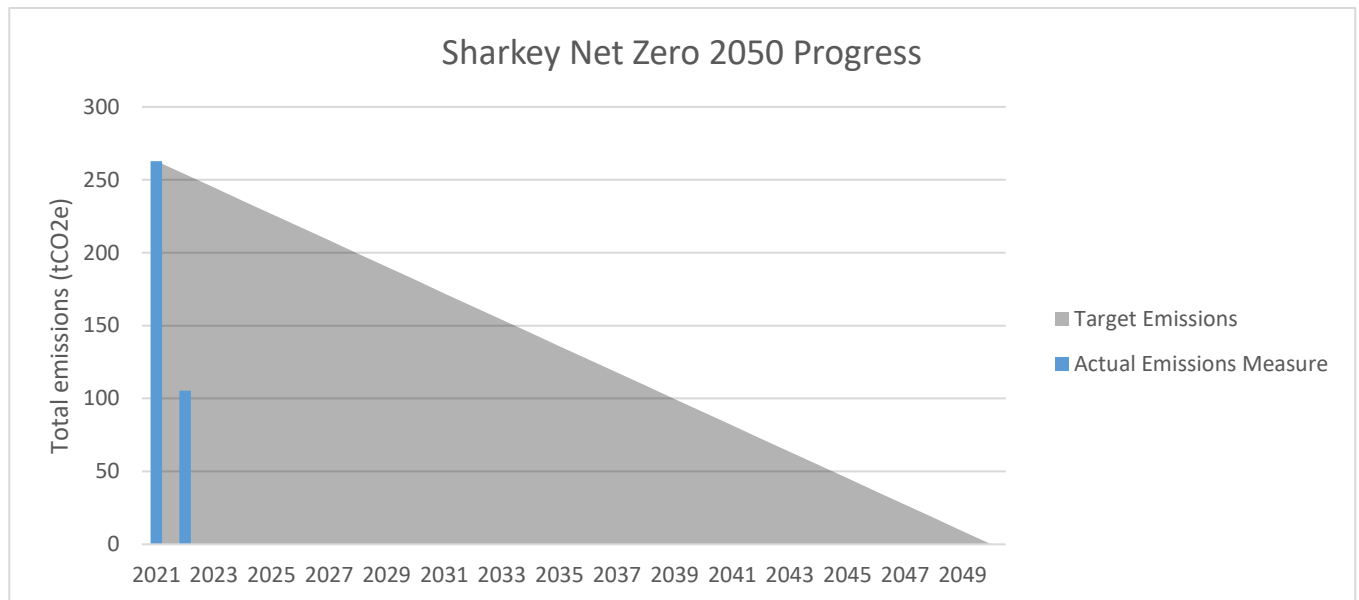
# Carbon Reduction Plan

## 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 be more challenging to tackle in the next 5 years, due to reliance upon National Grid Energy Mix of renewable and current government strategic timetable to replace fossil fuels with renewables. Areas we can tackle are avoiding air conditioning leaks through good maintenance, considering use of Solar PV, encouraging public transport use for staff commuting, and use of electric vehicles. Maintaining a reliable IT system will continue to replace business travel with Teams Meetings, and online collaboration.

Target a 10% reduction in emissions by 2027 equating to removal of 10.53tCO<sub>2</sub>e.



# Carbon Reduction Plan

TABLE OF PROJECT PROGRESS

REPORTING YEAR: 2023	
Reduction of On Premises Server footprint <b>(Scope 2)</b>	<b>Progress Status:</b> Completed <b>Notes:</b> On Premises Servers minimised
Equipment Maintenance <b>(Scope 1)</b>	<b>Progress Status:</b> Established <b>Notes:</b> Air con equipment maintained twice a year
Energy Supplier Contract Review <b>(Scope 2)</b>	<b>Progress Status:</b> Completed <b>Notes:</b> Energy Supplier reports 50% Electricity Sourced from Renewable Sources. All new Onsite Supplies added to supplier. Explore REGO 100% Renewable Source costs-expected to be 2-3pKWh higher.
Energy Control and Regulation <b>(Scope 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> Half Hourly Energy Monitoring Project underway, also to apply to all Sharkey NHH meters (including site operations), to better monitor and control energy use.
Fleet Electrification <b>(Scope 1)</b>	<b>Progress Status:</b> Established <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> Established <b>Notes:</b> Flexible working policy adopted. 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. Maintain and invest in IT Systems and Development.
Energy Saving Investigation <b>(Scope 2)</b>	<b>Progress Status:</b> In Progress <b>Notes:</b> Local air conditioning controls set appropriately for season on a scheduled timer, staff informed of most efficient use of controls for both comfort and minimising energy use. Energy Champions monitoring local controls.
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> </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 2023