



CARBON REDUCTION PLAN

FOR



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Marshall Construction Carbon Emissions Report

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1 Net Zero Commitment

Marshall Construction have made a maximum commitment to Net Zero by taking part in a 12-month Net Zero Grangemouth Supply Chain Accelerator program called the Net Zero Accelerator, delivered by social enterprise, Net Zero Nation. The Accelerator is running from October 2023 to October 2024, hosted by Forth Ports.

One of the key outcomes of this program is meeting the UN Race to Zero objectives to Pledge, Plan, Progress, Publish and Persuade and in so doing, being a Climate Champion. Working within a cohort of companies they collaborate and support each other on their journey, providing peer review, creating circular and sustainable approaches to make their business more planet positive and work towards their Net Zero ambitions.

Forth Ports, who are hosting the Supply Chain Accelerator at their Grangemouth site, commented “Our target is to be a carbon neutral company by 2032 and Net Zero by 2042. We are well on our way towards that within the business, but also need to work closely with our partners and supply chain to achieve this. We are pleased to be supporting this program to both contribute and learn the Net Zero best practices that will create a greener future.” Jacqueline Ireland, Forth Ports’ senior procurement manager.

Net Zero Nation is a Scottish-based social enterprise with a partner network across the United Kingdom. The mission of Net Zero Nation is to help SMEs go further and faster towards their Net Zero goals, tackling climate change. Achieved by mass mobilising SMEs on the Net Zero journey to ensure none are left behind and they fully gain the economic advantages in embracing it as a business imperative. The organisation aims to help regions and communities across the UK become fully capable in delivering the Net Zero Transition by involving all stakeholders across the public, private and academic sectors to drive decarbonisation efforts.

Net Zero Nation helps companies who need carbon certification to bid on contracts, supply chain owners and public sector bodies looking to rapidly gain carbon transparency to meet their own carbon reduction targets in procurement and investment.

Marshall Construction recognises the importance of making a full and lasting commitment to reducing the greenhouse gas emissions from our activities, in support of the wider commitment of the world to limit global temperature increases and the impact on the planet.

We commit to the following:

1. For our company to achieve Net Zero in line with the Science Based targets set out by the UNFCCC i.e., to achieve Net Zero no later than 2050 and target a 50% reduction in emissions by 2030.
2. To set realistic short- and long-term targets that are designed to achieve our Net Zero commitments.
3. To report the total Greenhouse Gas emissions of our business, at a minimum, on an annual basis.

	Year	Earlier Year if Possible
Commitment to be Net Zero	2050	2045*
50% Emissions Reduction	2030	

*In line with Scottish Government legislation

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2 Company Overview

Marshall Construction is a Private Limited Company, company number SC174699, registered in Scotland with a registered address of The Whins, Alloa, Clackmannanshire, FK10 3TA.

Year	August 2022 – July 2023
Industry	Construction
No. of Staff	200
No. of Offices – Owned	1
No. of Offices – Leased	1
No. of Company Vehicles - Owned	130
No. of Company Vehicles - Leased	0

Marshall Construction Limited is one of Scotland's foremost Building and Civil Engineering Contractors specialising in General Building and Contracting, Civil Engineering, Design and Development, and Hiring out Construction Machinery and Equipment for the commercial, industrial and residential new build, maintenance and refurbishment markets.

As a business we recognise that our success is dependent on the commitment, knowledge and expertise of our multi-skilled workforce combined with a corporate philosophy dedicated to customer care, quality of product / service and consideration for the environment and health and safety for those affected by our works.

3 Reporting Period

August 2022 – July 2023

4 Organisational Boundary

This report has been constructed using the

- Operational Control Approach

5 Operational Scopes

Emissions from Scope 1 and 2 have been measured along with certain Scope 3 emissions. The Scope 3 emissions that have been included are those that have been practical to measure with available data, which are as follows:

- Transmission and Distribution of Electricity
- Water Supply and Treatment

6 Benchmark Year

This is the first time the company has measured and reported on its carbon emissions and therefore this is the benchmark year, i.e. from **August 2022 – July 2023**.

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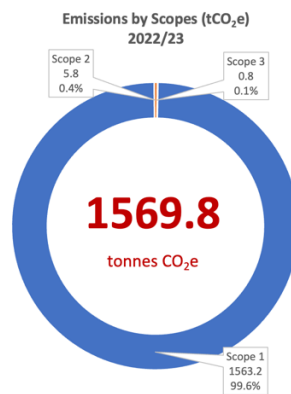
7 Carbon Emissions Overview



The total calculated emissions for the business for the period 2022 - 2023 are 1569.8 tCO₂e. This is the first year the company has measured its carbon emissions. As such this is the benchmark year of the company with the breakdown of emissions analysed throughout this report.

The Company will aim to measure an increasing amount of Scope 3 emissions and is committed to reducing their emissions across all scopes.

8 Analysis by Scope



Scope 1 emissions amount to 1563.2 tCO₂e, representing 99.6% of the company's emissions. Scope 1 emissions include fuel used in company vehicles using the company's own fuel pump located at the head office, fuel purchased with Company fuel cards, and natural gas heating the premises.

Scope 2 emissions accounts for 0.3% of calculated emissions. This is the electricity used at the company's office. Scope 2 emissions were 5.8 tCO₂e in this period. The office is not on a renewable tariff.

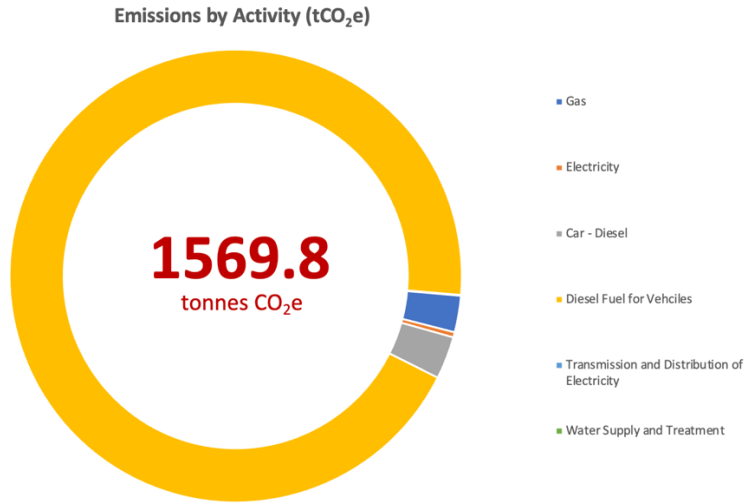
Scope 3 emissions accounts for 0.1% of calculated emissions and includes:

- Transmission and distribution of electricity
- Water Supply and treatment

Scope 3 emissions were 0.8 tCO₂e in this period.

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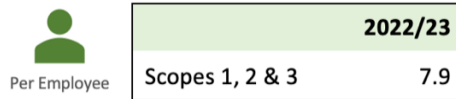
9 Emissions by Activity



Data Details 2022-2023				
Emission Type	Scope	tCO ₂ e	Data Source	Data Confidence
Energy & Fuels				
Gas	1	41.0	Gas Bills	High
Electricity	2	5.8	Electricity Bills	High
Diesel Fuel for Vehicles	1	1,474.4	Fuel Purchased Report	High
Business Travel				
Car - Diesel	1	47.8	Fuel Card Spend	High
Other Emissions calculated				
Transmission and Distribution of Electricity	3	0.5	Electricity Bills	High
Water Supply and Treatment	3	0.3	Water Bills	High
TOTAL		1,569.8		

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10 Intensity Metric Analysis

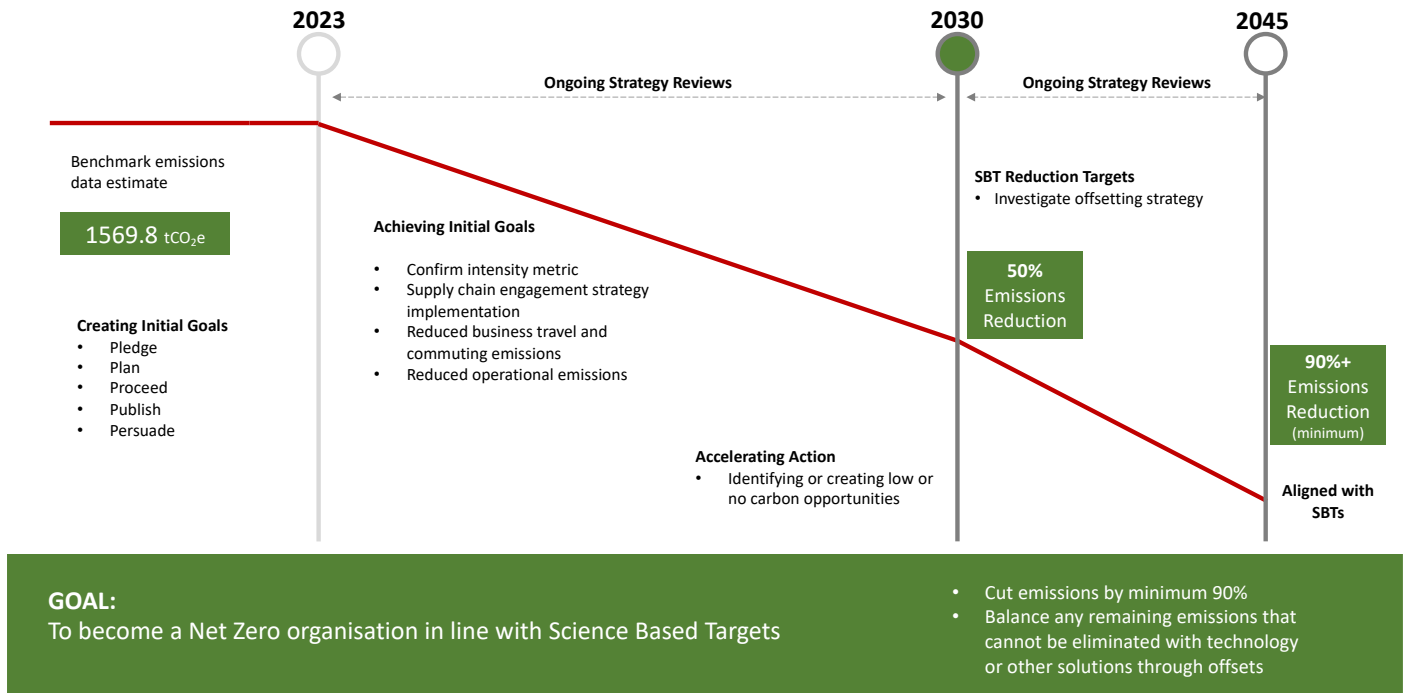


The chosen intensity metrics shows a carbon emissions value of 7.9 tCO₂e per employee. The business headcount averaged 200 people during the reporting period.

11 Emissions Reductions Targets

The following graph summarises the carbon emissions reduction targets.

Marshall Construction Carbon Reduction Plan – Baseline Year



Marshall Construction Carbon Emissions Report

12 Carbon Reduction Projects

Marshall Construction will develop the following initiatives that will support the company's strategies to meet Science Based Targets:

Strategy	Initiative
Net Zero Nation Accelerator	<ul style="list-style-type: none"> Marshall Construction have joined the Net Zero Nation Accelerator on a 12-month program to measure, manage and reduce business emissions in collaboration with other organisations and as part of a wider business initiative.
Engagement of Team	<ul style="list-style-type: none"> To engage the entire team throughout the organisation in the Net Zero transition plan and to encourage staff to support lower carbon ideas, opportunities, and activities. This will be shared through the normal regular staff communication process in the first half of 2024. To create a sustainability committee within the organisation in 2024 and to set governance and company actions.
Sustainable Travel Policy	<ul style="list-style-type: none"> To introduce a sustainable travel policy encouraging use of public transport and lower carbon options when practical to do so. To encourage car and van sharing where possible. This will be implemented during 2024.
Carbon Emissions Dashboard	<ul style="list-style-type: none"> Marshall Construction has made the commitment to complete its carbon emissions dashboard on a regular basis. This is overseen by a member of the Senior Management Team and shared with the wider team on a quarterly basis. By partnering with Net Zero Nation, we gain access to their expertise and support in reporting our emissions and how to reduce them, including best practice and insights. We will also promote our activities on social media to encourage others to make lower carbon decisions.
Supply Chain Review	<ul style="list-style-type: none"> To carry out a review of the supply chain, developing a plan in 2024, followed by the introduction of a sustainable supply chain policy in 2025.
Fleet Review	<ul style="list-style-type: none"> To conduct a review of our fleet, including switching the vans to electric when practical to do so. This review will be carried out in 2024 for implementation over a significant period of time.
Data Quality	<ul style="list-style-type: none"> To improve the data collected and include new elements of Scope 3 to include: waste, employee commuting, business travel in 2024.

Signed on behalf of Marshall Construction

Name: **Brian McDermott**



Position: **Managing Director**

Date: 31.01.2024

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13 Emissions Data

The data contained in the table below represents total emissions calculated and is consistent with SECR requirements. All sources of emissions that have been measured are included in the totals below. Emissions from key activities are summarised in the previous sections.

	Current Reporting Year Aug 22 – Jul 23
Energy consumption used to calculate emissions Electricity Scope 2 - UK and Offshore (kWh)	28,789
Energy consumption used to calculate emissions – Global, excluding UK and Offshore (kWh)	N/A
Basis of Energy reporting (Location or Market)	Market
% of total energy sourced from certified renewable sources	0%
Emissions associated with energy consumption - UK, Offshore and Global (tCO ₂ e)	5.8
Emissions from activities for which the company is responsible including combustion of fuel and operation of facilities - Scope 1 (tCO ₂ e)	1,563.2
Emissions from purchase of electricity, heat, steam and cooling purchased for own use - Scope 2 (tCO ₂ e)	5.8
Total Scope 1 and 2 Emissions (tCO₂e)	1,569.0
Emissions from upstream activities out of operational control - Scope 3 (tCO ₂ e)	0.8
Emissions from use of sold products and services out of operational control - Scope 3 (tCO ₂ e)	None included
Total Gross Scope 3 Emissions (tCO₂e)	0.8
Total Scope 1, 2 and 3 Emissions (tCO₂e)	1,569.8
Intensity ratio tCO ₂ e (gross Scope 1, 2 and 3) per employee	7.9
Carbon offsets (tCO ₂ e)	0.0
Total Annual Net Emissions (tCO₂e)	1,569.8

14 Standard and Methodology Used

Marshall Construction categorises its Greenhouse Gas (GHG) Emissions as Scope 1, 2 or 3 as referred to in the WBCSD – WRI Greenhouse Gas Protocol (revised edition, dated March 2014). Emissions in Carbon Dioxide equivalent (CO₂e) for all scopes are calculated using the conversion factors listed in DESNZ Greenhouse Gas Conversion Factors for the relevant 12-month period over which the Carbon Footprint is calculated. Procured renewable electricity and gas is calculated in accordance with the WBCSD – WSI Scope 2 Guidance on procured renewable energy (2015).

15 Data Quality / Confidence

The data used to generate this report has been collected from various sources from both within the company and using assumptions gathered by Net Zero International. These emissions have been converted to CO₂e using GHG Protocol and DESNZ frameworks and conversion factors for the relevant period.

16 Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with SECR, 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 agreed by the board of directors (or equivalent management body)

Signed on behalf of Net Zero International

Name: **David Hawes**



Position: **Co-Founder**

Date: 30 January 2024

Signed on behalf of Net Zero Nation

Name: **Gavin Tweedie**



Position: **Chief Executive Officer**

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17 Glossary

Benchmark Data	The chosen 12-month period that sets the calculated emissions that need to be mitigated and/or offset.
Carbon Reduction	Reduction in measured CO ₂ e emissions
Carbon Reduction Plan	Plan to reduce CO ₂ e emissions over a period of time, updated annually
Carbon Emissions (Gross)	CO ₂ e emissions from Company activities
Carbon Emissions (Net)	CO ₂ e emissions from Company activities minus verified carbon offsets the Company purchases
Carbon Neutral	When emissions are fully offset including those emissions that could be mitigated.
Carbon Offsets	A removal or reduction of carbon emissions through a verified scheme.
CO₂e	All greenhouse gases expressed in terms of Carbon Dioxide equivalent (CO ₂ e) for consistency of reporting.
DESNZ	Department of Energy Security and Net Zero (https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)
EEIO	Environmentally Extended Input Output – Emissions estimated on spend https://ghgprotocol.org/
GHG Protocol	Greenhouse Gas Protocol https://ghgprotocol.org/
Greenhouse Gases	Carbon Dioxide (CO ₂), Methane (CH ₄), Nitrous Oxide (N ₂ O), Chlorofluorocarbons (CFCs and HCFCs), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF ₆)
Greenhouse Gas Conversion Factors	Annually published conversion factors normally published by relevant government departments. Converts activity into CO ₂ e emissions.
Greenhouse Gas Emissions (GHG)	Gases in the atmosphere that absorb and radiate heat
Intensity Metric/Ratio	A metric that measures carbon emissions per relevant unit of activity in a business.
Market Reporting v Location Reporting	Market is based on specific tariffs. Location is based on the emissions factor published for the country from which you are reporting.
Net Zero	GHG emissions are mitigated and those that cannot are offset
Renewable Tariff	An energy tariff that is 100% powered by renewable energy and is certified.
SBT	Science Based Targets – reducing emissions by 50% by 2030 and by 90% by 2050 and offsetting the remaining amount.
Scope 1	The fuels that are burnt (gas, transport the company owns, refrigerant gases)
Scope 2	The energy that is bought (electricity from the grid, purchased heat)
Scope 3	Emissions embedded in everything a company buys and emitted as a consequence of everything a company sells.
SECR	Streamlined Energy and Carbon Reporting
tCO₂e	Metric tonnes of CO ₂ equivalent emitted.
WBCSD	World Business Council for Sustainable Development https://www.wbcsd.org/
WRI	World Resource Institute https://www.wri.org/