GRAHAM

PPN 06/21 Carbon Reduction Plan 2024

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PPN 06/21 Carbon Reduction Plan

This document outlines the Carbon Reduction Plan for John Graham Holdings Ltd (Trading as GRAHAM) in response to Public Procurement Notice (PPN 06/21).

Supplier name: GRAHAM

This Carbon Reduction Plan relates to John Graham Holdings Ltd (Trading as GRAHAM) and all of its subsidiaries.

Publication date: 27th September 2024

Commitment to achieving Net Zero

GRAHAM have committed to reach net-zero greenhouse gas emissions across the value chain by FY2040.

Our commitment has been validated by the Science Based Targets Initiative and therefore aligns with the latest climate science and supports the urgent global action needed to decarbonise industry.

Our commitment to achieving Net Zero has been detailed within our **Environmental Sustainability Strategy "Constructing a Sustainable Future"**. The Strategy sets out our vision and ambition for net zero across our entire value chain and includes specific priority areas as well as short and long-term actions dedicated toward our overarching net zero ambition.

KEY PRIORITY AREAS IDENTIFIED TO SUPPORT OUR TRANSITION TO NET ZERO

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

GRAHAM Group Baseline Year: Financial Year 2021/2022

GRAHAM uses a base year of Financial year 2021/2022 for both its long-term and near-term science based targets.

"Credible data remains an essential and critical element of our transition to net zero. It is the foundation for making carbon reduction decisions, allowing us to take targeted action to reduce the carbon associated with our business".

Lianne Taylor
Head of Environmental Sustainability, GRAHAM

Achilles Carbon Reduce Certified
Powered by Toitū Envirocare

BASELINING AND EMISSIONS REPORTING TIMELINE

2014

GRAHAM started measuring carbon performance in 2014 and this year was the original baseline upon which we targeted emissions reductions. At that time our emissions inventory consisted of scope 1 and 2 and partial scope 3 emissions.

2021

In 2021 GRAHAM achieved external verification to the Achilles Carbon Reduce scheme (formerly CEMARS) for the first time. Each year since 2021, GRAHAM carbon data has been verified in line with ISO 14064-3:2019 and the Carbon Reduce Programme Technical requirements.

2022

Recognizing scope 3 as a critical element in the path to net zero led us to undertake the significant task of extending the scope of our emissions to all scope 3 emission sources in 2022. This was initially undertaken for the 2021/2022 financial year, and then subsequently undertaken for each year thereafter. The additional measured data created a need to re-baseline to financial year 2021/2022 in order to ensure we were comparing "like for like".

2024

In 2024 GRAHAM had its targets verified by the science-based targets initiative.

This ensures our targets align with climate science requirements, designed to limit global temperature rise to 1.5°C, and minimise the effects of climate change.

BASELINE EMISSIONS FOOTPRINT: Yr 21/22

Scope	Emissions Source	Baseline FY21 - 22 (tCO^2e)
SCOPE 1	Gas Oil	8,927
	Company Vans	2,089
	Company Cars	213
	HVO	2
	Other (Gas, Kerosene)	142
	TOTAL SCOPE 1	**11,373**
SCOPE 2	Purchased Electricity[1]	833
	Purchased Electricity[2]	371
	TOTAL SCOPE 2 (Market Based)	**371**
SCOPE 3	*Scope 3 Subcategory Description & Applicability*	
Purchased goods and services[3]	Purchased Goods & Services	359,586
Capital goods[3]	Capital Goods	1,559
Fuel & energy related activities[3]	Electricity T&D & WTT for all Fuel	2,939
Upstream transportation	Upstream Deliveries	3,048
Waste generated in operations	Water Treatment and Supply	18
	Waste (Landfilled & not Landfilled)	538
Business travel	Employee Vehicles	1,786
	Rental cars, Flights, Trains, Hotels	1,695
Employee commuting	Employee Commuting & Home Working	6,240
Upstream leased assets[3]	Not relevant to GRAHAM operations	0
Downstream transportation[4]	Not relevant to GRAHAM operations	0
Processing of sold products[3]	Not relevant to GRAHAM operations	0
End of life treatment of products[3]	Not relevant to GRAHAM operations	0
Downstream leased assets[3]	Not relevant to GRAHAM operations	0
Franchises[3]	Not relevant to GRAHAM operations	0
Investments[3]	Not relevant to GRAHAM operations	0
	TOTAL SCOPE 3	**377,403**
TOTAL EMISSIONS (SCOPE 1,2 & 3)		**389,147**

1. Location Based – Based on grid average fuel mixes
2. Market Based – Reflective of renewable electricity supplies purchased
3. Data provided voluntarily – not mandatory as part of this Carbon Reduction Plan
4. GRAHAM do not transport or distribute downstream as part of their operations

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CURRENT EMISSIONS FOOTPRINT: Yr 23/24

Scope	Emissions Source	Emissions FY23 - 24 (tCO^2e)
SCOPE 1	Gas Oil	5,243
	Company Vans	2,185
	Company Cars	148
	HVO	24
	Other (Gas, Kerosene)	352
	TOTAL SCOPE 1	**7,952**
SCOPE 2	Purchased Electricity[1]	1,078
	Purchased Electricity[2]	547
	TOTAL SCOPE 2 (Market Based)	**547**
SCOPE 3	*Scope 3 Subcategory Description & Applicability*	
Purchased goods and services[3]	Purchased Goods & Services	351,822
Capital goods[3]	Capital Goods	1,899
Fuel & energy related activities[3]	Electricity T&D & WTT for all Fuel	2,412
Upstream transportation	Upstream Deliveries	2,856
Waste generated in operations	Water Treatment and Supply	17
	Waste (Landfilled & not Landfilled)	412
Business travel	Employee Vehicles	2,147
	Rental cars, Flights, Trains, Hotels	2,125
Employee commuting	Employee Commuting & Home Working	6,446
Upstream leased assets[3]	Not relevant to GRAHAM operations	0
Downstream transportation	Not relevant to GRAHAM operations	0
Processing of sold products[3]	Not relevant to GRAHAM operations	0
End of life treatment of products[3]	Not relevant to GRAHAM operations	0
Downstream leased assets[3]	Not relevant to GRAHAM operations	0
Franchises[3]	Not relevant to GRAHAM operations	0
Investments[3]	Not relevant to GRAHAM operations	0
	TOTAL SCOPE 3	**370,136**
TOTAL EMISSIONS (SCOPE 1,2 & 3)		**378,634**

1. Location Based – Based on grid average fuel mixes
2. Market Based – Reflective of renewable electricity supplies purchased
3. Data provided voluntarily – not mandatory as part of this Carbon Reduction Plan
4. Data amended from previous CRP due to updated methodology adopted for reporting of WTT for deliveries, business travel and employee commuting

Current Emissions Footprint

The GRAHAM emissions data contained within this CRP are aligned to the GHG Protocol's Corporate Standard and the corporate value chain (scope 3) accounting and reporting standard using the "operational control" approach. Emissions have been calculated using Department for Business, Energy and Industrial Strategy (DBEIS) Conversion Factors for company reporting of GHG emissions.

Our emissions footprint has been calculated as both "market based" and "location based". For the purposes of this CRP, we have presented the data as market based, reflective of renewable electricity supplies purchased.

All of our scope 1, 2 and partial scope 3 emissions have been certified to the requirements of Achilles Carbon Reduce. In this way we have received independent verification that we have measured our GHG emissions in accordance with ISO 14064-1:2018.

Aligned to the guidance within the corporate value chain (scope 3) accounting and reporting standard, primary data was prioritized for use and where unavailable secondary and proxy data was used and where necessary extrapolated.

"Downstream Transportation and Distribution" has not been included in our inventory as this category is not applicable to our operations. GRAHAM do not own or sell the infrastructure and buildings that we construct and manage.

BIOGENIC EMISSIONS DATA (BASE YEAR – FINANCIAL YEAR 21/22)

	Bioenergy emissions	Bioenergy removals	Biogenic total
SCOPE 1	269	269	**0**
SCOPE 2 Location based	419	419	**0**
SCOPE 2 Market based	197	197	**0**

BIOGENIC EMISSIONS DATA (BASE YEAR – FINANCIAL YEAR 23/24)

	Bioenergy emissions	Bioenergy removals	Biogenic total
SCOPE 1	2,058	2,058	**0**
SCOPE 2 Location based	668	668	**0**
SCOPE 2 Market based	590	590	**0**

Emissions Reduction Targets

GRAHAM have had its science-based greenhouse gas emissions reduction targets validated by the Science Based Targets Initiative. Our submitted targets (as detailed below) were assessed and approved against the SBTi Net-Zero Criteria and guidance. This included submission of our GHG emission sources and inventory, target setting methodologies and the emissions included in the target boundary. With the need for action growing, we believe that our targets will help drive the change needed for us to decarbonise our business.

GRAHAM SCIENCE BASED TARGETS

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

GRAHAM Overall Net Zero Target
GRAHAM commits to reach net-zero greenhouse gas emissions across the value chain by FY2040.

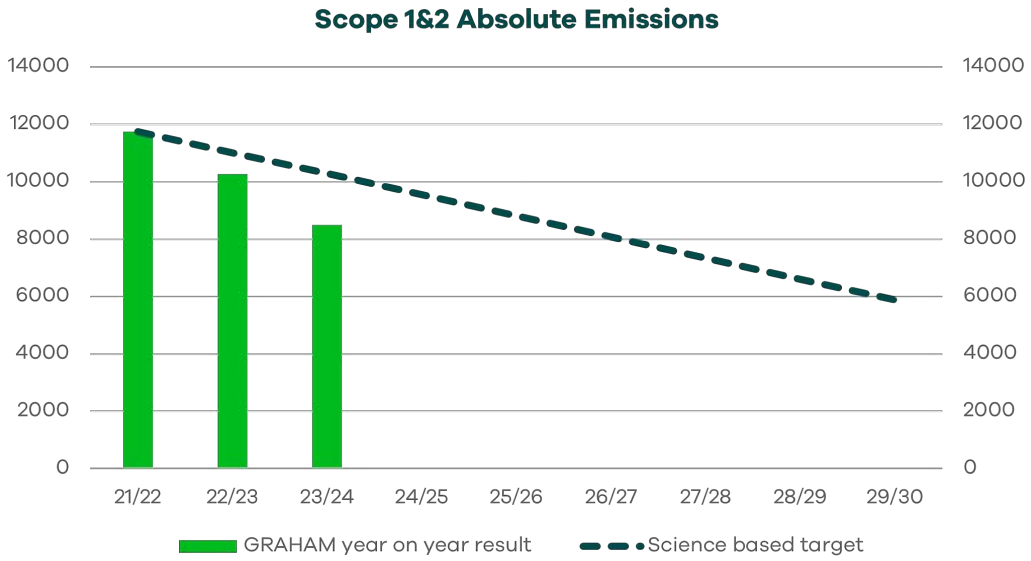
GRAHAM Near Term Target
GRAHAM commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from FY2022 base year*. GRAHAM commits to reduce absolute scope 3 GHG emissions 40% by FY2030 from FY2022 base year.

GRAHAM Long Term Target
GRAHAM commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2040 from FY2022 base year*. GRAHAM commits to reduce absolute scope 3 GHG emissions 90% by FY2040 from FY2022 base year.

**The target boundary includes land-related emissions and removals from bioenergy feedstocks.*

Scope 1 & 2 Absolute Emissions

We project that our scope 1 and 2 carbon emissions will decrease over the next five years to 6,606tCO^2e by 2028/2029. This represents an absolute reduction of 43.7% from the baseline. It is noted that this is the minimum reduction that we have set out to achieve and we are aiming to go beyond this minimum target. Additionally, we project that our scope 3 emissions will decrease over the next five years to 250,000 tCO^2e by 2027/2028. This is a reduction of 33%.



Emissions Reduction Target (cont'd)

Scope 3 Absolute Emissions
Data for scope 3 emissions spans multiple systems, millions of products and services and is notoriously difficult to unlock and quantify. We are continuing to review and refine our methodologies for measuring scope 3 data and are making good progress in transitioning away from spend based and hybrid methodologies. It is acknowledged that in the short term, data reliability issues relating to purchased goods and services are likely to cause fluctuations in results. In the future we intend to re-baseline our scope 3 emissions using transaction level data relating to products and services.

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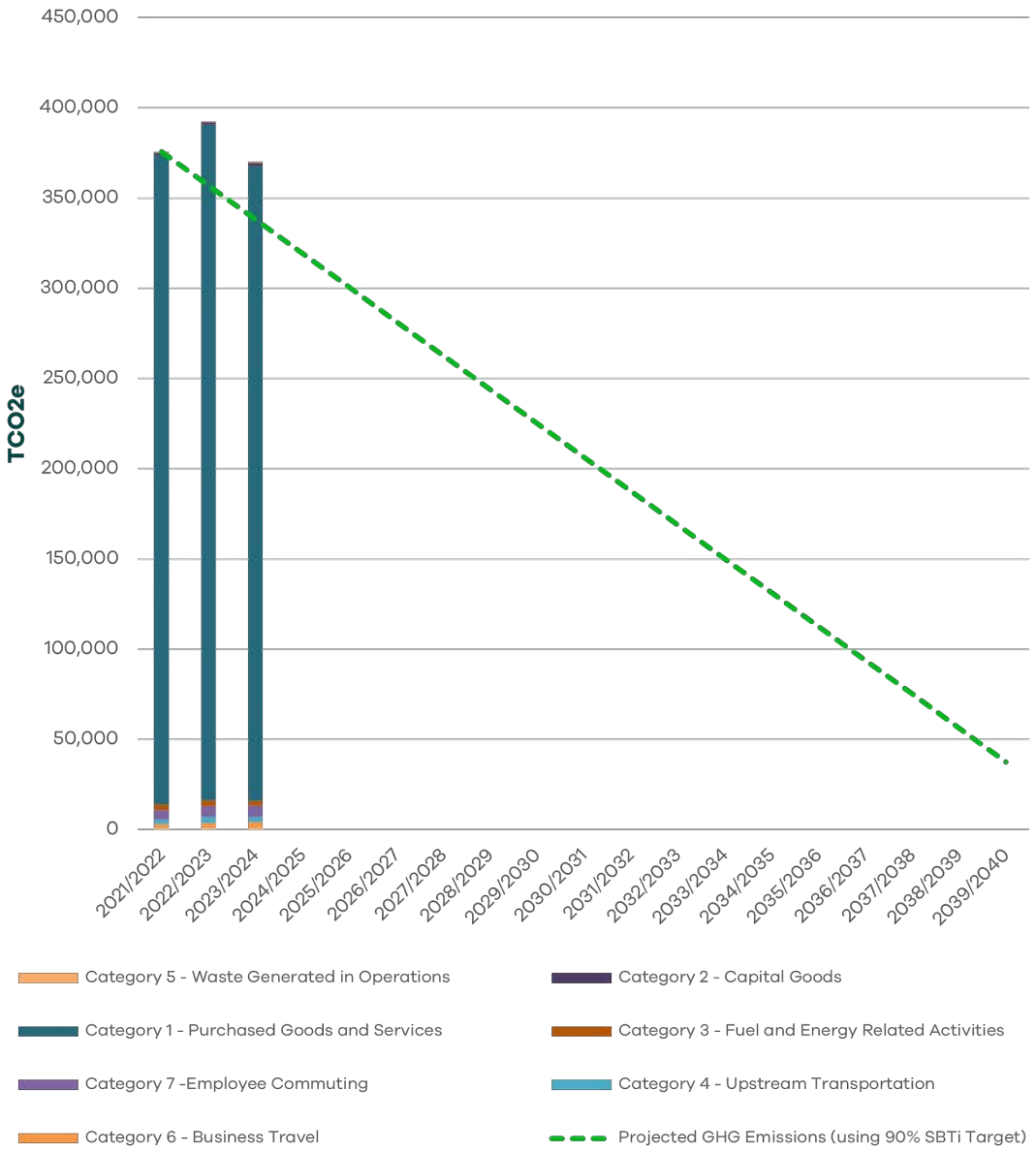
Scope 3 Absolute Emissions



Detailed Greenhouse Gases Inventory

Direct GHG emissions are quantified separately below for each applicable gas.

Category	CO2	CH4	N2O	NF3	SF6	HFC	PFC	Desflurance	Sevoflurance	Isoflurance	Emissions Total (tCO^2e)
Stationary Combustion	5,558.00	6.90	54.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,619.09
Mobile Combustion (incl. company owned and leased cars)	2,302.00	0.65	29.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,332.58
Emissions - industrial processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Removals - industrial processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Leakage of refrigerants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment of waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment of wastewater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions - land use, land use change, and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Removals - land use, land use change, and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fertiliser use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Addition of livestock waste to soils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Addition of crop residue to soils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enteric fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open burning of organic matter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity generated and consumed onsite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medical gases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL NET EMISSIONS	7,860.92	7.55	83.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,951.68

Carbon Reduction Projects

Completed Carbon Reduction Initiatives

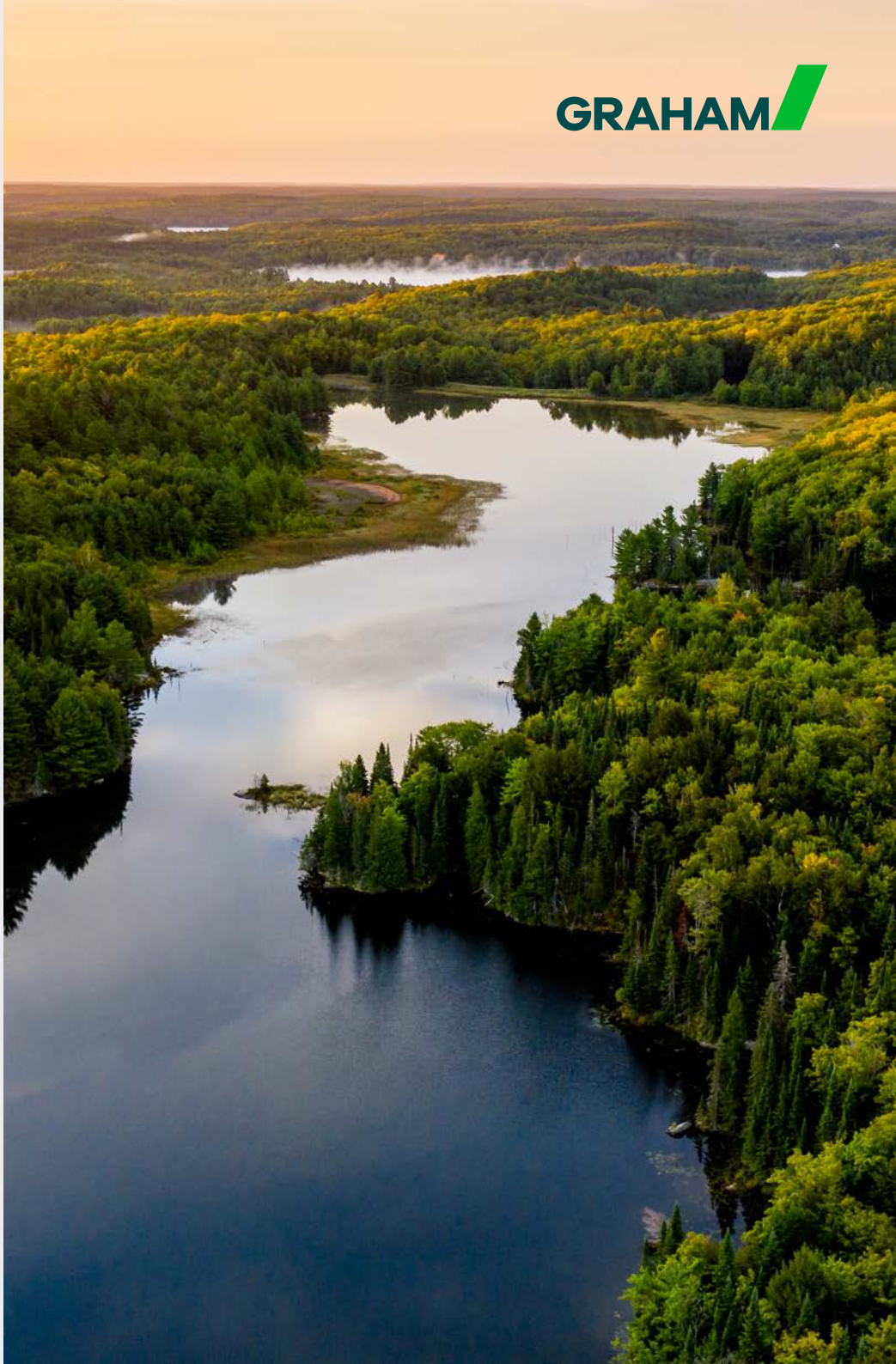
The following environmental management measures and projects have been completed or implemented since the 2021/22 baseline. The carbon emission reduction achieved by these schemes equate to 3,246 tCO^2e (Scope 1 and 2), a 27% reduction against the baseline and the measures will be in effect when delivering the contract.

- Launched our revised Group wide Sustainability Strategy "Constructing a Sustainable Future", setting out our enhanced approach to how we will meet our ambitious targets.
- Achieved external verification of our carbon management system to the requirements of PAS 2080.
- Met the requirements of Achilles Carbon Reduce certification (four years running) having measured our greenhouse gas emissions in accordance with ISO 14064-1:2018 and having committed to managing and reducing our emissions in respect of the operational activities of our organisation.
- Had our targets approved as "Net Zero" by the Science based targets initiative (SBTi). In this way we used a science-based approach to ensure our targets align with requirements to ensure a 1.5o scenario, limiting the effects on climate change.
- Business Unit carbon targets for key emission sources were set out, supported by provision of monthly carbon data. This assisted the leadership teams in reviewing progress against the targets set.
- We continue to implement our anti-idling policy, supported by telematic data to motivate machine drivers to reduce idle times where possible.
- Telemetry has been mandated for all generators and data is collated monthly and analysed in order to enhance operating efficiency, minimising fuel consumption.
- We switched from gas oil to Hydrotreated Vegetable Oil (HVO) for over a quarter of all fuels purchased. This has allowed us to further reduce our emissions from fuel use as it has 90%+ fewer carbon emissions than diesel or gas oil. HVO is being used as a transitionary option and is subject to careful monitoring and due diligence.
- We became signatories to the "Pledge to Net Zero", have joined the "Contractors Declare" movement and have committed to "The Climate Action Pledge". In addition, we have been selected as a "Construct Zero Business Champion" within the Construction Leadership Councils Construct Zero programme.
- Having worked with industry partners to develop the UK's first construction orientated Carbon Literacy Training, we are continuing to roll out this training out throughout our organisation. By investing in our people's awareness of the climate emergency, we ensure that our teams understand the urgency with which we must all act.

- We worked with our energy management consultancy to procure new renewable electricity contracts for sites and offices, backed by Renewable Energy Guarantees of Origin (REGO's).
- We undertook Energy Audits across our sites and offices in order to identify carbon hotspots and opportunities for improvement.
- We worked with our fleet provider to accelerate our transition to low and zero carbon company cars. 87% of all company cars are now fully electric or plug-in hybrid (PHEV).
- We continue to develop our bespoke software system to enable the enhanced visibility of energy and carbon data arising at site level.
- During design stage (where we have design responsibility), each element of construction is reviewed to identify whether products with increased recycled content or lower embodied carbon can be used as alternatives. For example, we undertake a review to ascertain whether elements of concrete could be replaced with steel or timber alternatives or whether using cement replacements is feasible. In addition, we apply lean design through material efficiency and lean structural solutions to lower operational carbon emissions and embodied carbon impact.
- We continue to run net zero working groups to provide support and to deliver against specific objectives. The working groups assist in building case study evidence and focus our activities on areas where we can make the most substantial reductions.
- We continue to work with our supply chain to embed into our operations best practice in energy efficiency and low carbon construction techniques.
- We undertook a programme of tree planting as a tangible way of taking positive action to help tackle climate change.
- We continue to invest in new technologies in order to gain understanding of the advantages, benefits and potential barriers to low or zero carbon technologies and alternative sources of energy.
- Hybrid working policy in place, ensuring that working practices remain effective but also flexible, facilitating the reduction of carbon emissions from unnecessary travel.
- We continue to undertake energy and carbon related communication and engagement activities via our intranet site and social media channels.

In future, we hope to implement further measures such as:

Our Environmental Sustainability Strategy details a range of carbon reduction projects that we propose to undertake in the future. This includes continuing to roll out climate awareness training, working with our supply chain to reduce their emissions, moving towards zero diesel site operations and continuing our transition to an ultra-low emissions fleet.



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

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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 GRAHAM:

Lianne Taylor
Head of Environmental Sustainability

27th September 2024

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