

# PPN 006

# CARBON REDUCTION PLAN 2026



# McLaughlin & Harvey

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# INTRODUCTION

At McLaughlin & Harvey, we work with our Clients to shape the built environment in a sustainable and considerate way. Our collaborative approach means we deliver on our sustainability commitments on every construction process.

We acknowledge our responsibilities and the actions we must take in contributing to a sustainable future. Our priority is to reduce our carbon emissions every year and ultimately eliminate them from our business. We are committed to adapting our business practices to achieve net-zero direct operational emissions by no later than 2030.

Furthermore, McLaughlin & Harvey has committed to achieving net-zero greenhouse gas emissions across our value chain by FY2045.

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.

This document sets out our commitments and demonstrates how we have implemented them on some of our projects.

# GLOSSARY

## **BOS**

Basic oxygen steelmaking

## **EAF**

Electric arc furnace

## **GGBS**

Ground granulated blast furnace slag

## **SBTi**

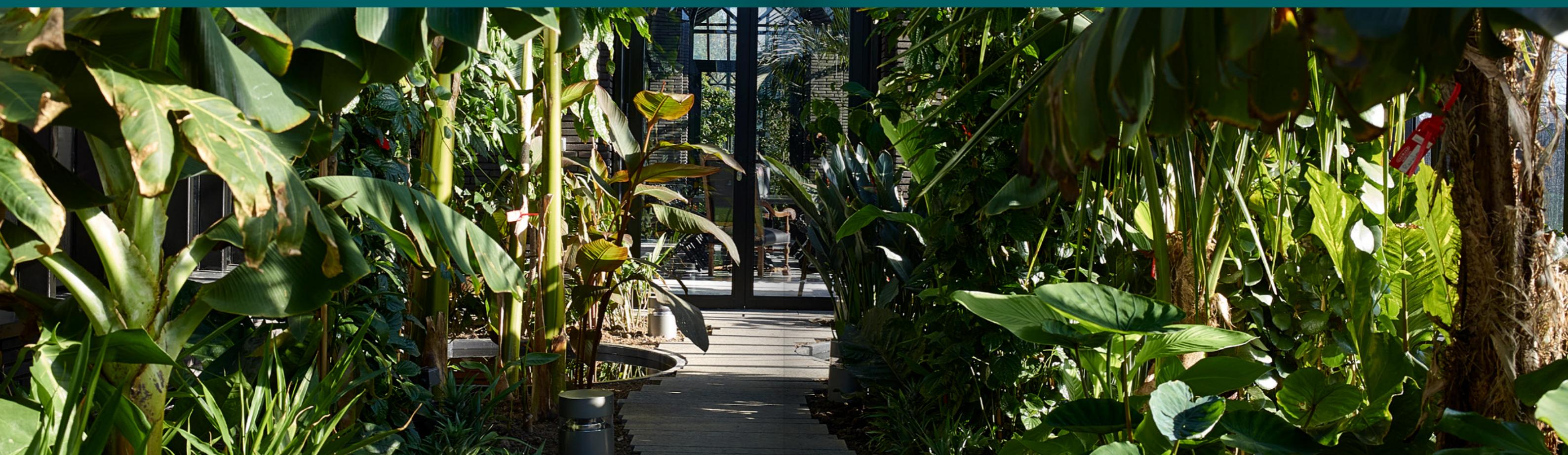
Science Based Target initiatives

## **GHG**

Greenhouse gases

## **SDG**

Sustainable development goals



# 01

## PRINCIPLES AND COMMITMENTS



## PRINCIPLES AND COMMITMENTS

### Principles

1. Reducing the industry's overall environmental impact.
2. Social responsibility.
3. Prioritise circular economy.

### Commitments

- McLaughlin & Harvey commits to reducing absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2024 base year.
- McLaughlin & Harvey further commits that 70% of its suppliers by spend, covering purchased goods and services, upstream transportation and distribution and waste generated in operations, will have science-based targets by FY2029.
- McLaughlin & Harvey commits to reducing absolute scope 3 GHG emissions from

purchased goods and services, fuel- and energy-related activities, upstream transportation and distribution, business travel and employee commuting 35% by FY2034 from FY2024 base year.

- McLaughlin & Harvey commits to reach net-zero greenhouse gas emissions across the value chain by FY2045.



# 02

## EMISSIONS INVENTORY



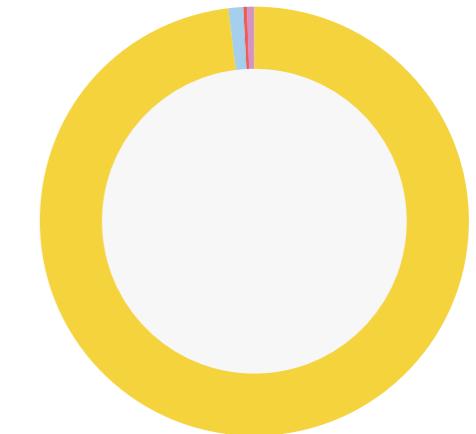
## EMISSIONS INVENTORY

Our baseline year was set at the end of our 2019 financial year.

However, the base year is now reset to 2023-24 from 2019 considering the following:

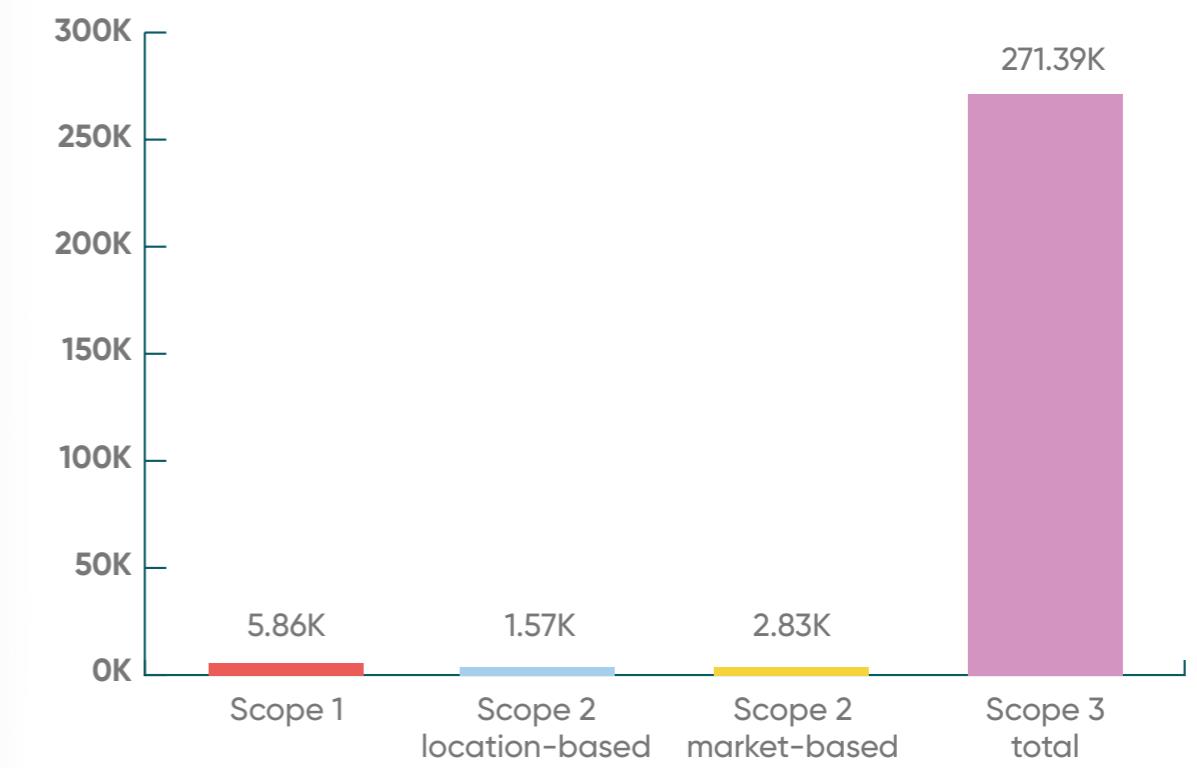
- The increase in turnover from £313m (2019) to £870m (2024) and limit of reporting boundaries.
- Expansion of monitoring and reporting to include non-mandatory scope 3 emissions including full supply chain and purchased goods and services.
- The introduction of renewable energy across the business and market-based reporting.

### SCOPE 3 BREAKDOWN BY CATEGORY



- Purchased goods and services - 98.26%
- Business travel - 0.91%
- Fuel and energy-related activities - 0.37%
- Other - 0.45%

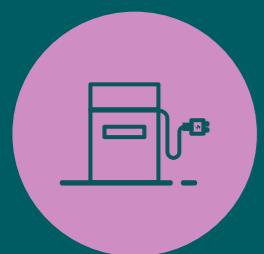
### TOTAL GHG EMISSIONS (tCO<sub>2</sub>e)2024



# OPERATIONAL BOUNDARIES

We have made a commitment to ensure we achieve net zero operational emissions by 2030, supply chain net zero by 2040 and become a beyond net zero company by 2045.

## SCOPE 1



Fuel used



Gas burned

## SCOPE 2



Electricity purchased



## SCOPE 3



Commuting



Business air travel



Transport & distribution



Waste generated in operations



Purchased goods & services



Fuel and energy related activities

## BASELINE EMISSIONS (2023-24)

		Minimum boundary emissions	Bioenergy emissions
SCOPE 1 & 2	Scope 1	5,855.35	75.41
	Scope 2 location-based	1,566.29	N/A
	Scope 2 market-based	2,831.13	N/A
SCOPE 3	Purchased goods and services	266,683.25	N/A
	Capital goods	0.00	N/A
	Fuel and energy-related activities	999.61	90.12
	Upstream transportation and distribution	0.00	N/A
	Waste generated in operations	969.09	N/A
	Business travel	2,479.35	N/A
	Business commuting	225.02	N/A
	Upstream transportation assets	36.00	N/A
	Downstream transportation and distribution	N/A	N/A
	Processing of sold products	N/A	N/A
	Use of sold products	N/A	N/A
	End-of-life treatment sold products	N/A	N/A
	Downstream transportation assets	N/A	N/A
	Franchises	N/A	N/A
	Investments	N/A	N/A

## CURRENT REPORTING YEAR EMISSIONS (2024-25)

		Minimum boundary emissions	Bioenergy emissions
SCOPE 1 & 2	Scope 1	3,189.38	40.05
	Scope 2 location-based	670.75	N/A
	Scope 2 market-based	1,105.74	N/A
SCOPE 3	Purchased goods and services	164,260.35	N/A
	Capital goods	0.00	N/A
	Fuel and energy-related activities	981.05	44.31
	Upstream transportation and distribution	28.43	N/A
	Waste generated in operations	454.81	N/A
	Business travel	2,222.59	N/A
	Business commuting	4,507.10	N/A
	Upstream transportation assets	N/A	N/A
	Downstream transportation and distribution	N/A	N/A
	Processing of sold products	N/A	N/A
	Use of sold products	N/A	N/A
	End-of-life treatment sold products	N/A	N/A
	Downstream transportation assets	N/A	N/A
	Franchises	N/A	N/A
	Investments	N/A	N/A

# 03

## CASE STUDIES



### SCHOOL OF ENGINEERING



#### Site Initiatives

On site, generators were used for less than 16 weeks. The site was powered directly from the grid.

Automated lighting systems were introduced to the site to save energy during non-active hours.

#### Comparison Study on Energy Consumption With a Similar Sized Site

On this project, site welfare facilities were provided by Algeco. The design of the cabins enabled Algeco to issue energy consumption reports prepared by Atamate.

Based on these reports, preset recommendations were made as per the use case by Atamate, and these were implemented.

We recorded usage data for different periods which allowed us to identify which rooms in the facilities were using the highest amount of energy.

Setting up the analytics and regulating the consumption allowed the site to consume less energy compared to a similar-sized site. This reduced the carbon emissions and provides cost savings.

Measurable energy was employed to make the sockets in the welfare facility smart, which allowed their usage to be timed.

#### CO<sub>2</sub> and cost comparison; Woodland View School, Kirkintilloch and Algeco MCLH (monthly only)

Table 1: Indicative CO<sub>2</sub> emissions comparison (per unit floor area)

Carbon emissions (kg.co <sub>2</sub> e/m <sup>2</sup> )	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Woodland View School, Kirkintilloch (2022)	1.61	1.72	1.74	1.30	1.02	0.56	0.38	0.56	0.78	1.51
MCLH - Algeco (2024)	1.13	0.95	0.88	*	*	0.34	0.26	0.23	0.36	0.44
Percentage reduction	29.69%	44.68%	49.14%	*	*	38.74%	32.03%	58.29%	54.48%	70.73%

# SCHOOL OF ENGINEERING

## Steel Supplier

In conventional procurement, 100% of steel procured was manufactured using BOS.

47% of the steel procured was produced by the EAF process and 53% by the BOS process. EAF allows a higher percentage of recycled materials to be used in manufacturing than BOS.

## Concrete Supplier

On this project, 99% of the rebar we used was recycled. This resulted in approximately 65% (~440tCO<sub>2</sub>e) reduction when compared to conventional rebar.

30- 40% of the cement was replaced by GGBS resulting in approximately 150tCO<sub>2</sub>e reduction in embodied carbon of concrete.



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## Material Percentage (Structural Steel)

### Scheme 1 Procurement



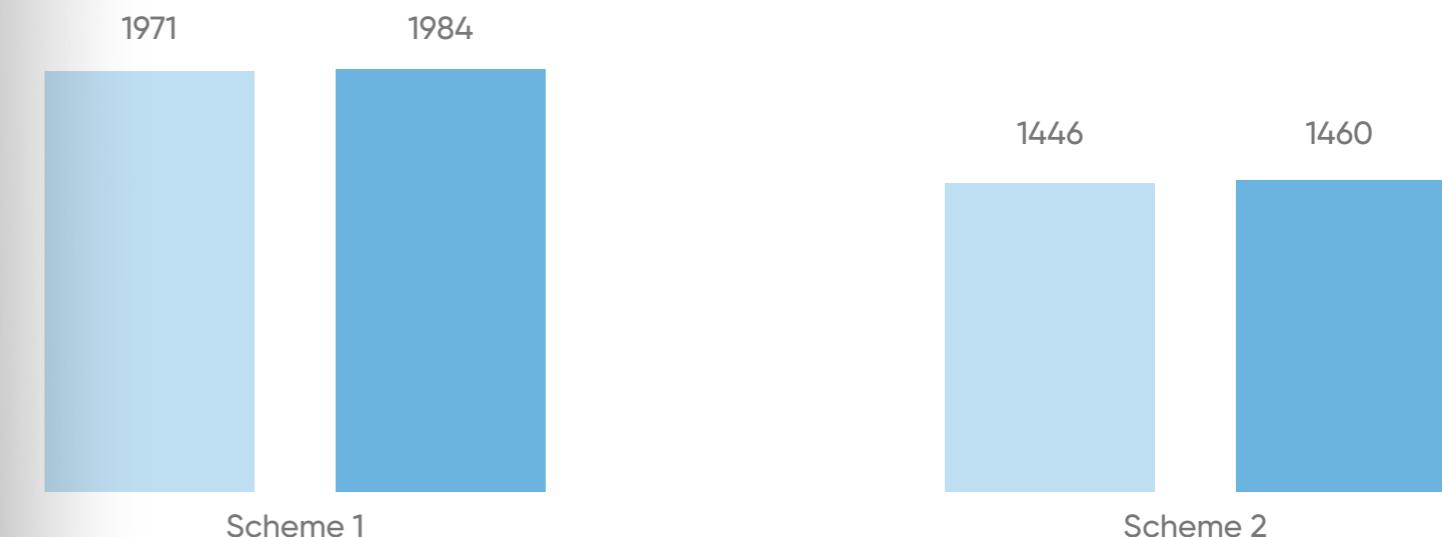
### Scheme 2 Procurement



Section EAF  
Flats & Angles EAF  
Hollows EAF  
Section BOS

Flats & Angles BOS  
Hollows BOS  
Plates BOS

## Embodied Carbon tCO<sub>2</sub>e (All Materials)



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# THE JANET HARVEY HALL



## Quarried Stone Transport

The project required ~110,000 tonnes of quarried stone for marine and structural works.

Barge transport was used instead of conventional road haulage, significantly reducing fuel use and on-road congestion.

This logistics strategy led to an estimated 5,000 tonnes of CO<sub>2</sub>e savings, strengthening the project's overall sustainability profile.

## GGBS Concrete

The project required ~27,000 m<sup>3</sup> of concrete for structural and marine works.

A significant portion of Ordinary Portland Cement (OPC) was replaced with Ground Granulated Blast-Furnace Slag (GGBS), reducing embodied carbon in concrete production.

This substitution resulted in ~5,000 tonnes of CO<sub>2</sub>e savings, contributing meaningfully to the project's decarbonisation strategy.

## Prefabricated Modules

The project adopted carbon-efficient mechanical and electrical systems, reducing operational energy demand and embodied impacts.

Prefabricated modular units were used for office spaces, minimising onsite construction, reducing waste, and improving resource efficiency.

Together, these strategies delivered an estimated ~250 tonnes of CO<sub>2</sub>e emissions avoided, further strengthening the project's overall sustainability impact.

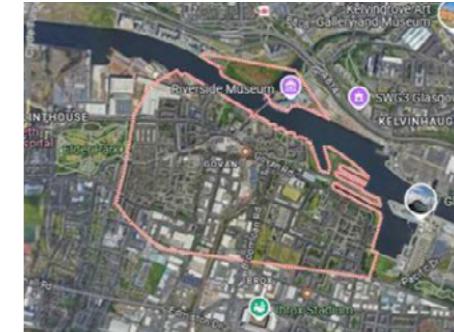


## The Small Things Count

Saving trips off site for lunch.



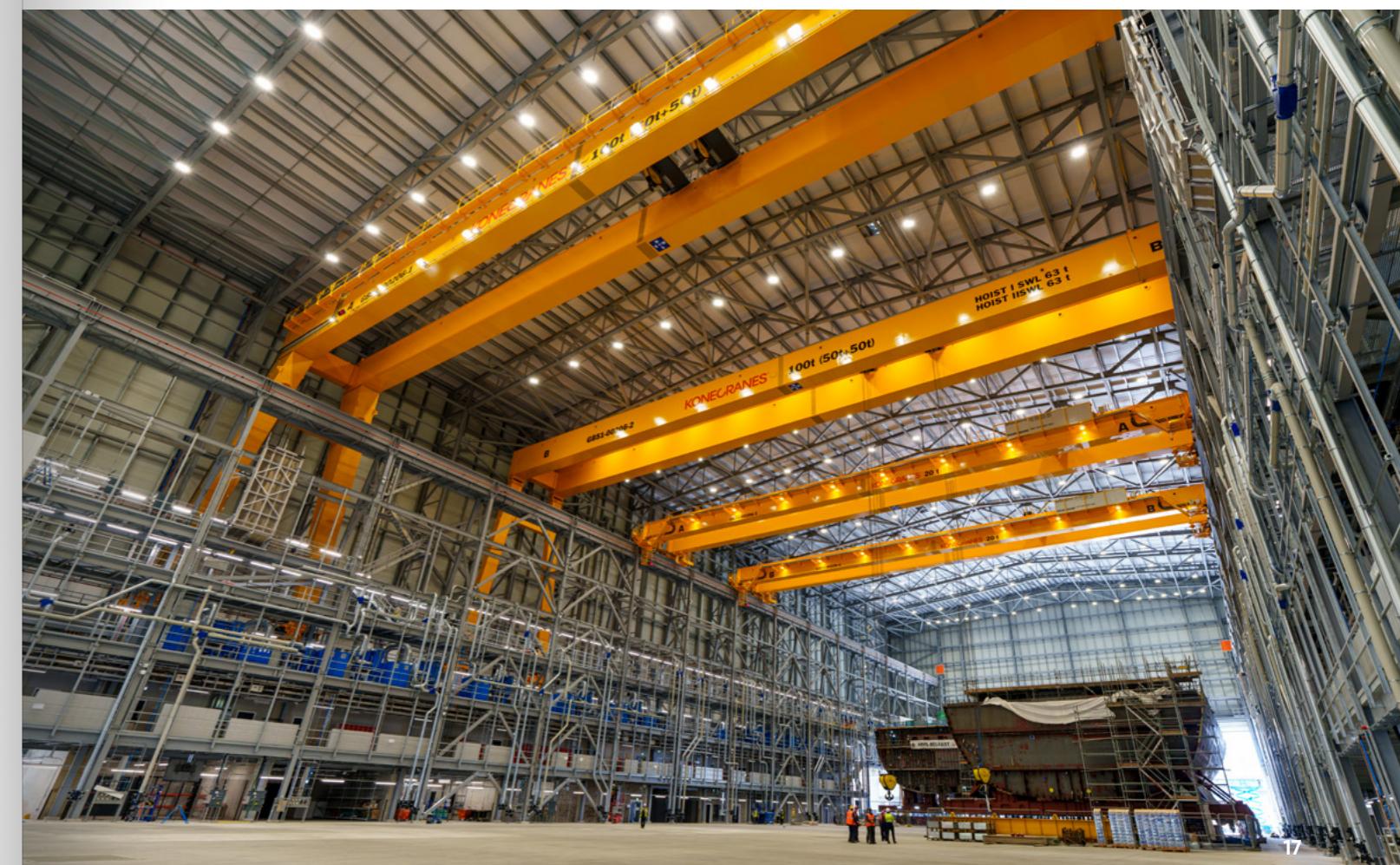
Local supply chain/local hotels (2 mile radius).



99.1% waste off site diverted from landfill.



## Franks Rehomed Bees.



# 04

## ACHIEVEMENTS/ MEMBERSHIPS



## ACHIEVEMENTS/MEMBERSHIPS



# 05

## STRATEGY FRAMEWORK



### STRATEGY FRAMEWORK



#### Governance

Our business governance policies oversee, support and incentivise the implementation of the strategy.



#### Metrics

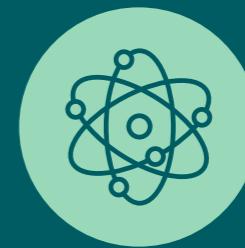
We continue to monitor and improve our suite of metrics and targets to assess progress towards our net-zero strategy objectives.



#### Implementation: Net-Zero Action Plan

Our Net-Zero Action Plan manages the implementation from cradle to grave.

This aligns business activities, products and services with the net-zero objectives of the strategy.



#### Innovation

Research, development and adoption of new technologies is crucial to achieving net-zero emissions. To help us identify new technologies and opportunities we will continue to work with key industry partners to support field trials of emerging technologies to allow us to rapidly assess and embrace them.

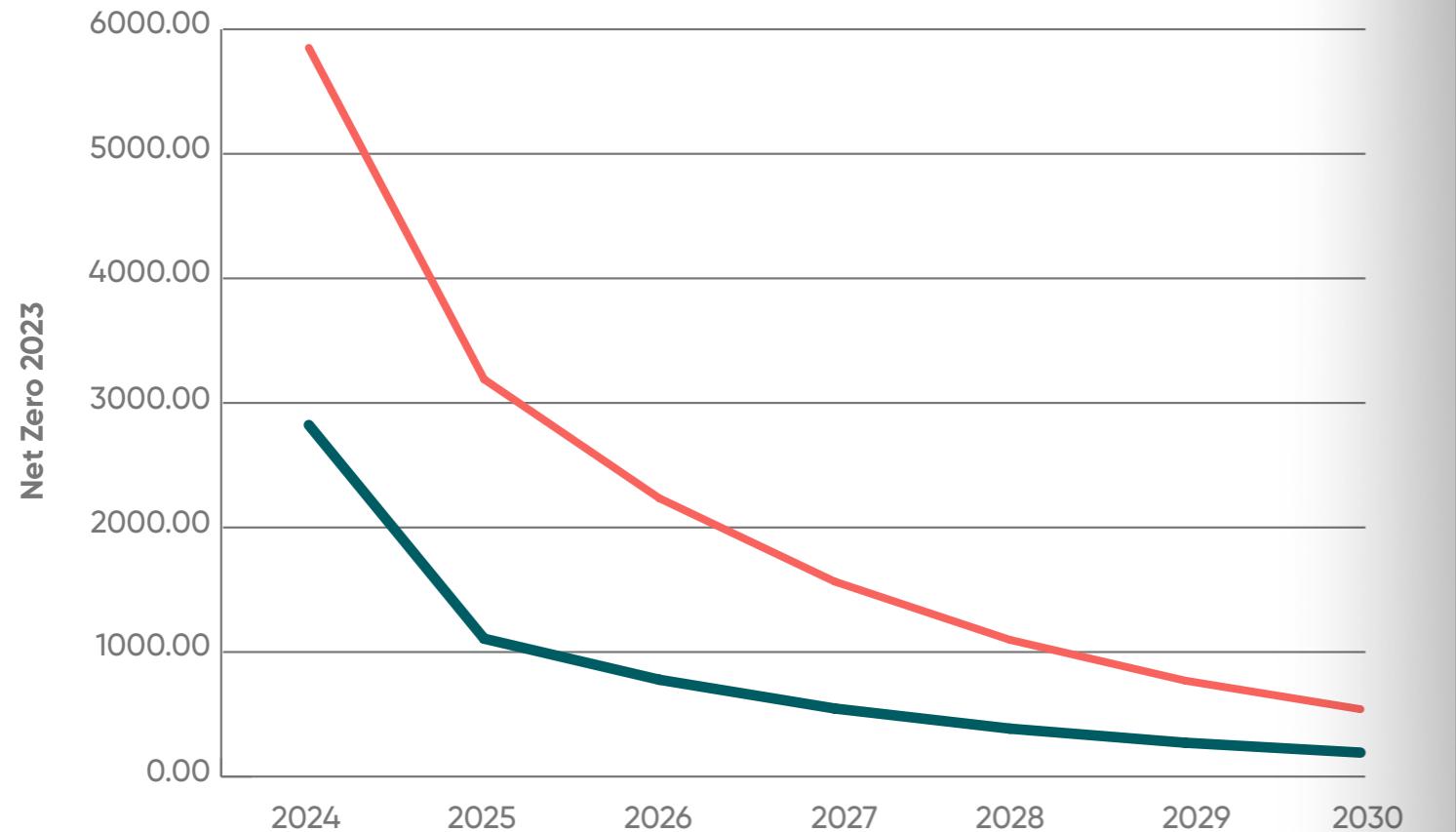


#### Engagement and Communications

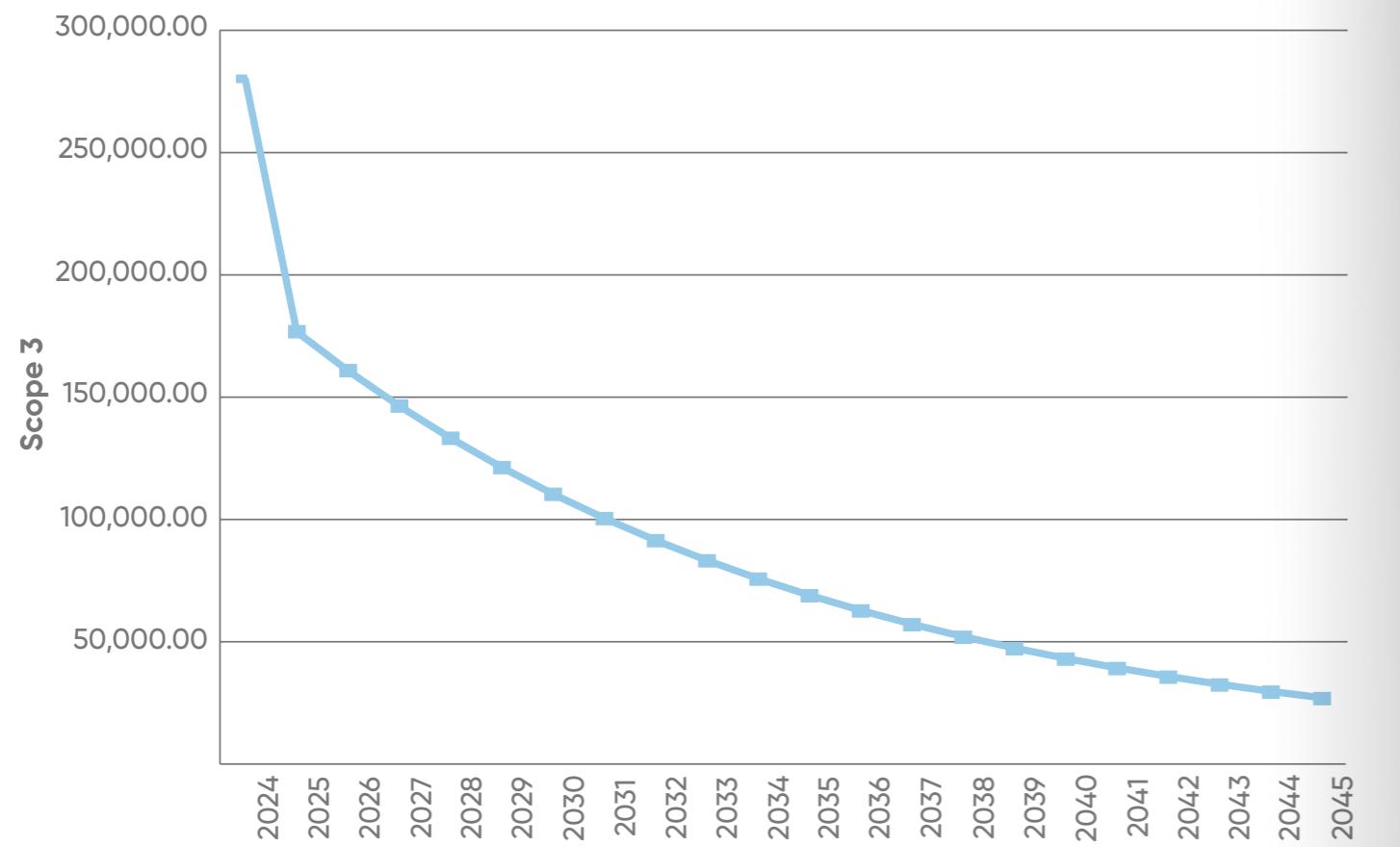
We continue and enhance our plans to work with key stakeholders, including the Scottish and UK Governments, to ensure that the regulatory framework facilitates and supports emissions reduction across a level playing field.

# PROJECTED REDUCTION

Projected Reduction of Scope 1 and 2



Projected Reduction of Scope 1, 2 and 3



30% Annual Reduction Scenario

Year	Scope 1	Scope 2
2024	5855.35	2831.13
2025	3189.38	1105.74
2026	2232.57	774.02
2027	1562.8	541.81
2028	1093.96	379.27
2029	765.77	265.49
2030	536.04	185.84

9% Annual Reduction Scenario

Year	Scope 3	Year	Scope 3
2024	279,810.85	2035	68,830.02
2025	176,751.84	2036	62,635.31
2026	160,844.17	2037	56,998.14
2027	146,368.20	2038	51,868.30
2028	133,195.06	2039	47,200.16
2029	121,207.51	2040	42,952.14
2030	110,298.83	2041	39,086.45
2031	100,371.94	2042	35,568.67
2032	91,338.46	2043	32,367.49
2033	83,118.00	2044	29,454.41
2034	75,637.38	2045	26,803.52



# 06

## ROAD MAP



## COMPLETED CARBON REDUCTION INITIATIVES

2024-25

- Mandated Project Sustainability Management Plan.
- PAS 2080 gap analysis was completed and stage II audit scheduled.
- PVs installed in the head offices.
- Our net-zero and near-term targets have been validated by SBTi.
- Provided carbon reporting training to supply chain partners in association with Supply Chain Sustainability School.
- Continued engagement with clients and stakeholders to collaboratively achieve their sustainability targets.
- Annual emissions disclosed through CDP.
- Improved application of low-emission concepts in the pre-construction stage.
- Integrated Sustain IQ to record and monitor life cycle stage A4-A5 emissions for all projects.
- Implementation of Supply Chain Charter.



# ROAD MAP

2026

- Implementation of Carbon Management Process aligned with PAS2080 standards.
- Promote reuse of materials between sites.
- Maintain material passports and EPD banks.
- Trial circularity KPIs on new projects.
- Establish low carbon fuel policy to aid preparation of Project Sustainability Management Plan.
- Early engagement with supply chain in regards to science-based targets.
- Improved Scope 3 emission reporting.
- Smart energy systems for site accommodations by default.
- Implementation of Bio-Diversity Net Gain Policy.
- Recording and monitoring usage of high embodied carbon materials like concrete, steel and timber.

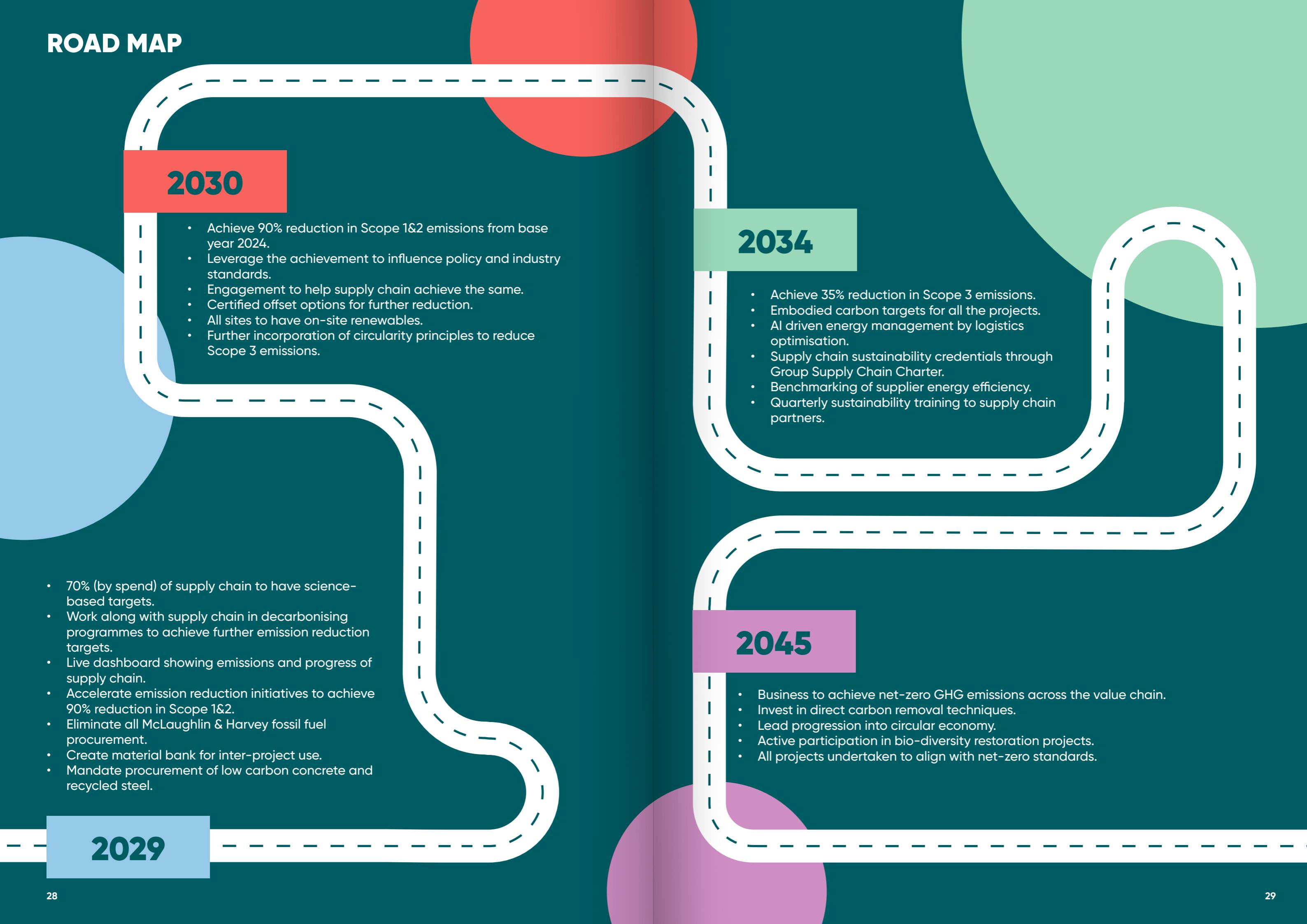
2028

- Increased adoption of MMCs.
- On-site generation of energy.
- Adoption of low-carbon fuel machineries and plant for site activities aligned with market availability.
- Mandate procurement of low emission vehicles.
- Adopt climate resilient designs and nature-based solutions.
- Support supply chain partners to achieve science-based targets.

2027

- Incorporating circular economy concepts into our workflow.
- Equip business for growing sustainability demands.
- Complete transition from spend-based emissions to actual emissions.
- Top supply chain partners to achieve science-based targets.

# ROAD MAP



# DECLARATION AND SIGN OFF

## Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 006 and associated guidance and reporting standard for Carbon Reduction Plans.

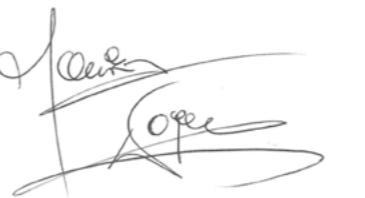
Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

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 McLaughlin & Harvey



Monika Wojda  
Head of Environmental



