



LAING O'ROURKE

# Carbon Reduction Plan

PPN 006

OCTOBER 2025



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# Our impact



**Peter Lyons**  
Europe Hub Managing Director

We are a purpose driven business – pushing the boundaries of what’s possible in service of humanity. We are leading the way in transforming how we work and what we build with sustainability at the centre of our thinking. We use science-based targets to drive the change we know we need to benefit our environment, our people and our clients. While there is still work to do – this plan is our commitment to net zero, pioneering innovations and changing the way the construction industry goes to work. We are building next generation clean energy supply to provide energy security to the United Kingdom. We are innovating to change the way our people go to work, with modern methods of construction to create safe and sustainable jobs for the future. We are delivering a measurable impact and I am proud of the tangible progress we are making and look forward to delivering strategies that will continue to drive change in service of humanity.

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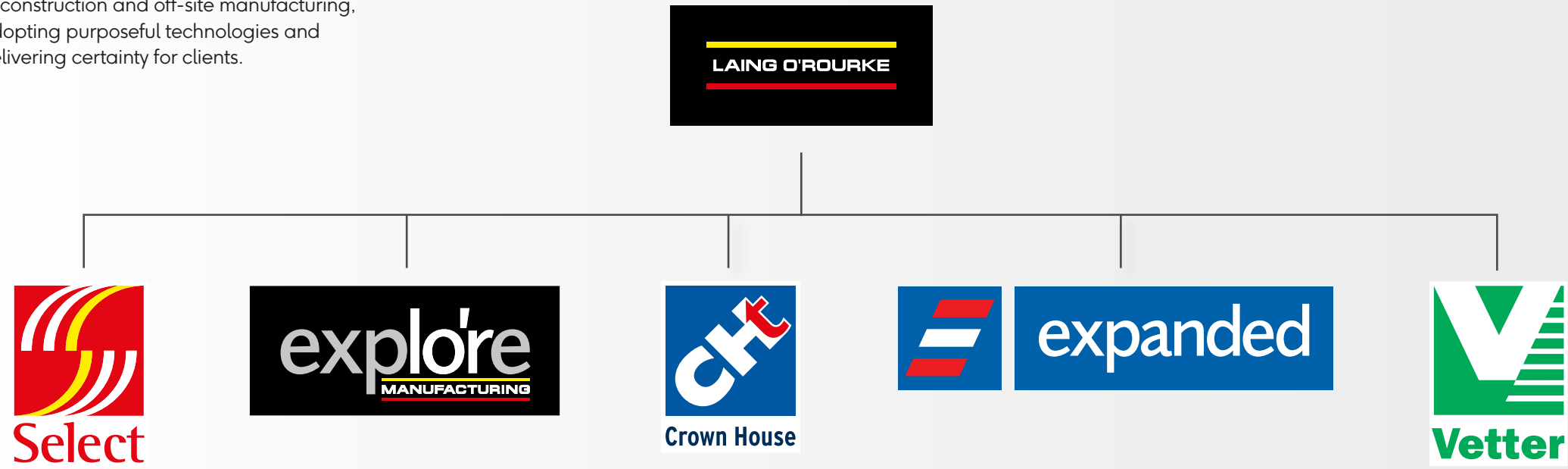
# Our Business

We are an international construction and engineering company responsible for delivering iconic building and infrastructure projects in the UK, Australia and Middle East.

Innovation is central to our ethos. We are proud to be pioneers in modern methods of construction and off-site manufacturing, adopting purposeful technologies and delivering certainty for clients.

We have a number of specialist businesses that operate as an in-house supply chain and enable us to push the boundaries in specific fields, including site plant and equipment, offsite manufacture, piling and groundworks, and specialist finishing.

This carbon reduction plan lays out how we intend to achieve our decarbonisation targets and applies to all of our UK brands:



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# Our approach to Sustainability

## Focus area for Carbon Reduction Plan

The purpose of this Carbon Reduction Plan is to present our understanding of the impact of our sites, projects and depots, and the steps we have put in place to reduce our carbon impact.



**For our clients**

**Deliver innovative, high performance sustainable solutions**

- Reduce whole life carbon through the use of calculation tools, design partnerships and continuous product development.
- Modern methods of construction enable us to help clients meet their sustainability ambitions.



**For our people**

**Engender an inclusive, healthy working environment**


- Achieve 50/50 gender balance among 5,500 global staff by 2033.
- Maintain industry-leading equal parenting policy.



**For society**

**Make a positive, lasting impact for society**

- Inspire the next generation: Promote STEM and construction careers in schools, colleges and universities.
- Enrich the lives of 2 million people whilst delivering £2 billion social impact by 2030.



**For the environment**

**Preserve our planet**

- Our 2030 goal is to achieve carbon reduction aligned with our approved science-based targets: 42% reduction in Scope 1 & 2 and 25% reduction in scope 3.
- Use 100% low carbon concrete on our UK projects and progress research on net zero materials.
- Understand the impact of our sites, projects and depots on nature and use to inform responsible action.

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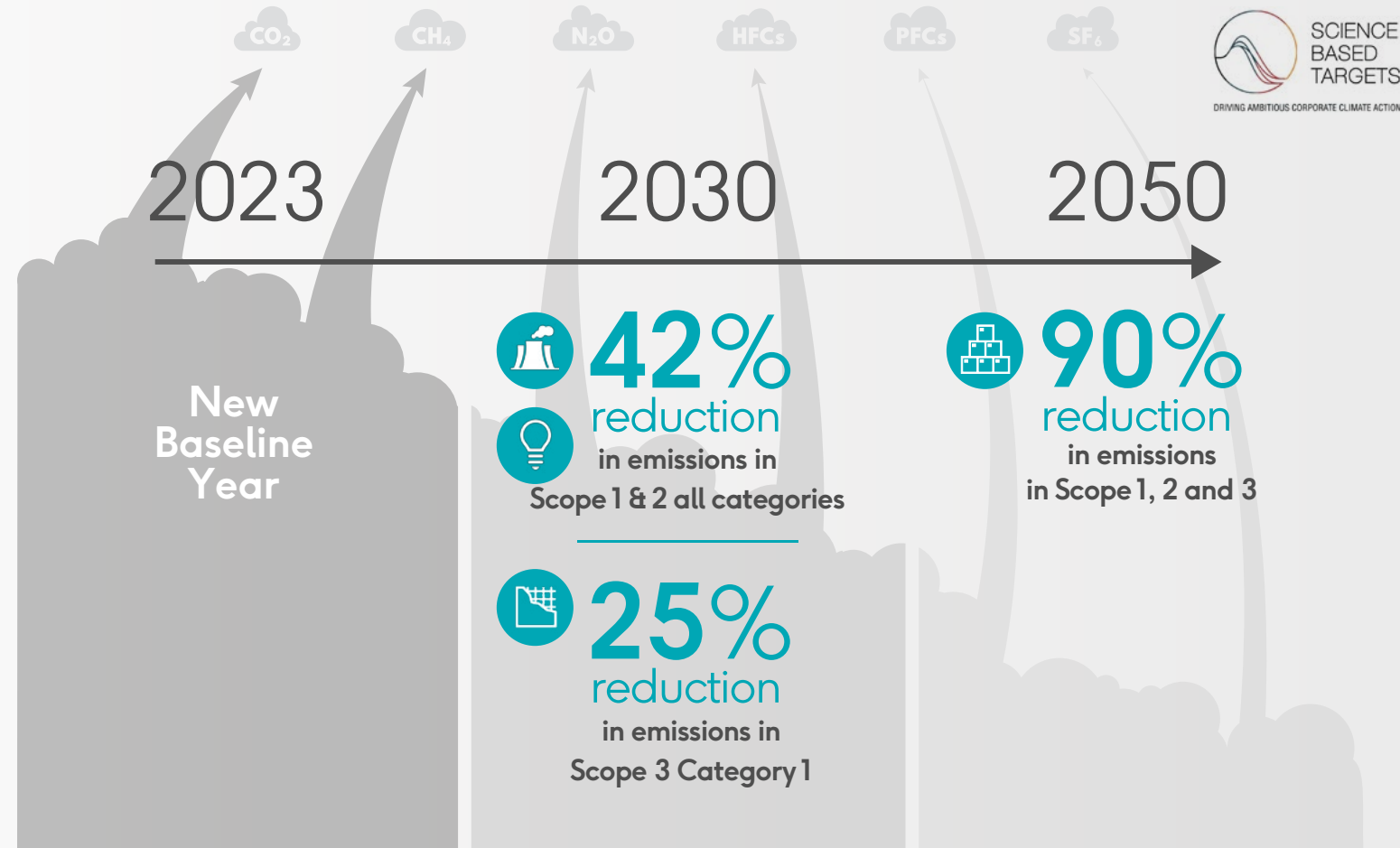
# Commitment to net zero

Laing O'Rourke has committed to achieving net zero emissions, inclusive of all scopes 1, 2 and 3, by 2050.

We have set out near-term and long-term targets in order to achieve net zero status by 2050. These targets apply to all business subsidiaries outlined in the 'our business' section.

In 2024, our near-term and long-term targets were validated by the Science Based Targets Initiative (SBTi) to ensure alignment with the Paris Climate Agreement. All reduction targets have been applied to a FY23 baseline year.

In order to achieve net zero by 2050 we have developed near-term (2030) science-based targets for Scopes 1, 2 and 3. These commitments are to reduce Group Scope 1 and 2 emissions by 42%, and Scope 3 emissions by 25% for purchased goods and services.



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# Emissions Report

## Baseline emissions footprint



Laing O'Rourke PLC has actively been measuring, reporting and working to reduce carbon emissions since 2008, when the company first joined the CEMARS programme – now known as Carbon Reduce. We have had our carbon inventory independently verified annually since that time.

We have undertaken a substantial programme over the last three years to expand and improve our carbon data across Scopes 1, 2 and 3, both in the UK and across our global operations. While this Carbon Reduction Plan focuses solely on our UK operation, our Group-wide data programme has enabled us to develop a whole-company baseline and carbon management plan, aligned with science-based targets.

To support consistency and comparability with our other public disclosures, we have included our total Scope 3 emissions in this Carbon Reduction Plan. This encompasses the Scope 3 categories required under PPN 006 and ensures alignment with our SBT reporting.

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# Scope 3 Categories

Scope 3 emissions included within the emissions report

## Scope 3 PPN Aligned Categories



**Category 4:**  
Upstream transportation and distribution



**Category 5:**  
Waste generated in operations



**Category 6:**  
Business travel



**Category 7:**  
Employee commuting



**Category 9:**  
Downstream transportation and distribution

## Other Scope 3 Categories



**Category 1:**  
Purchase goods and services



**Category 2:**  
Capital goods



**Category 3:**  
Fuel and energy-related activities



**Category 13:**  
Downstream leased assets



**Category 15:**  
Investments

Categories 8, 10, 11, 12 and 14 aren't included as they are not relevant to LOR's operations within this reporting period

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# Emissions Report

## Baseline emissions footprint

Over this reporting year, we have undertaken a rebaselining exercise which required amendments to our baseline year emissions. This involved reallocating emissions, updating emissions factors, inclusion of category 15 into the baseline year as per SBTi requirements and incorporating improved data sources and methodologies. As a result, figures for the baseline year differ from those presented in our previous Carbon Reduction Plan.

Key improvements include:

- Enhanced data capture and calculation methodologies
- Inclusion of carbon data from our Middle East operations, which were previously unavailable (although not relevant to this CRP)
- Integration of Well-to-Tank (WTT) emissions, which account for the extraction, refinement, and transportation of fuels

WTT emissions, which result in an overall increase in reported emissions, have been incorporated into Scope 3 Categories 3, 4, 6, 7, 9, 13 and 15. These updates ensure greater alignment with best practice and strengthen the robustness of our carbon reporting.

Baseline year emissions: Apr 2022 to Mar 2023	
Emissions	TOTAL (tCO <sub>2</sub> e)
Scope 1	6,330.80
Scope 2	3,070.33
Scope 3	532,845.79
<b>Total emissions</b>	<b>542,246.92</b>

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# Emissions Report

## Progress to date

The table opposite presents our emissions footprint in tCO<sub>2</sub>e for financial year 2025 (24/25).

The scope 3 categories included in the figures opposite are the same as presented in the baseline emissions footprint.

Our near-term (2030) and net zero (2050) carbon reduction targets were validated by the Science Based Targets Initiative (SBTi) in July 2024, using a new baseline year of FY23 (April 2022 – March 2023). As such, we have aligned the baseline year on this report to provide consistency and transparency across all our reporting. We have also presented detailed emissions data across all applicable Scope 3 categories, providing a comprehensive view. This report describes our current position for GHG emissions covering a full view of Scopes 1, 2 and 3 for Laing O'Rourke PLC and our reduction plans under PPN 006.

Reporting Year: Apr 2024 to Mar 2025	
Emissions	TOTAL (tCO <sub>2</sub> e)
Scope 1	5,530.35
Scope 2	2,443.62
Scope 3	562,339.35
<b>Total emissions</b>	<b>570,313.31</b>

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# Emissions Report

## Progress to date

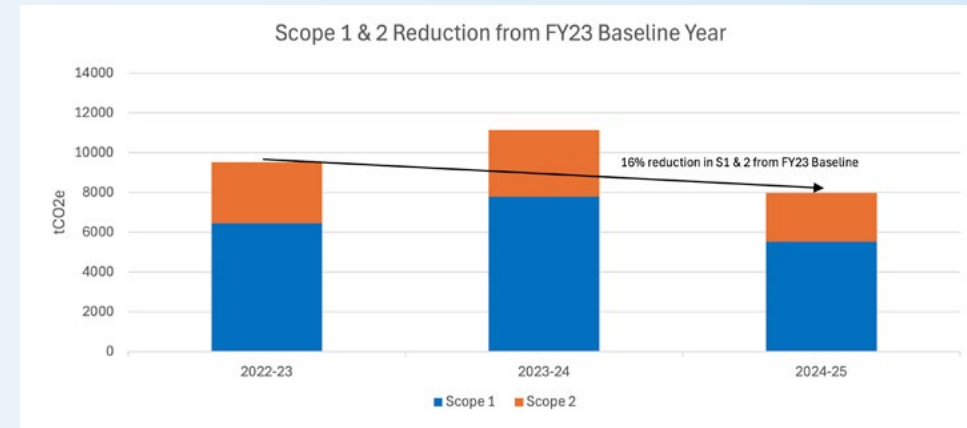
Our UK operations demonstrate strong decarbonisation progress. Scope 3 emissions rose only 5% from baseline despite active construction, while reducing 3% year-on-year from FY24. Scope 1 fell 12.6% and Scope 2 fell 20.4% from FY23, delivering a combined 15% reduction.

The continued implementation of carbon reduction initiatives, including the use of hydrotreated vegetable oil (HVO) in place of diesel, deployment of electric plant on many sites and use of 100% renewable electricity all enabled us to minimise Scope 1 and 2 emissions, which had consistently reduced up to baseline year.

Overall, our Scope 3 emissions rose in line with higher spend and material demand as major projects advanced into construction. Industry-wide reliance on spend-based data continues to inflate reported emissions, but we've made progress in improving accuracy and coverage. We're investing in better Scope 3 data integrity by working with suppliers of our most carbon-intensive products to secure high-quality, activity-based data. Alongside this, we're embedding sustainable procurement practices, engaging suppliers on decarbonisation requirements, and exploring innovative construction methods that reduce embodied carbon.



*We are committed to achieving absolute reduction year-on-year, in line with our science-based targets*



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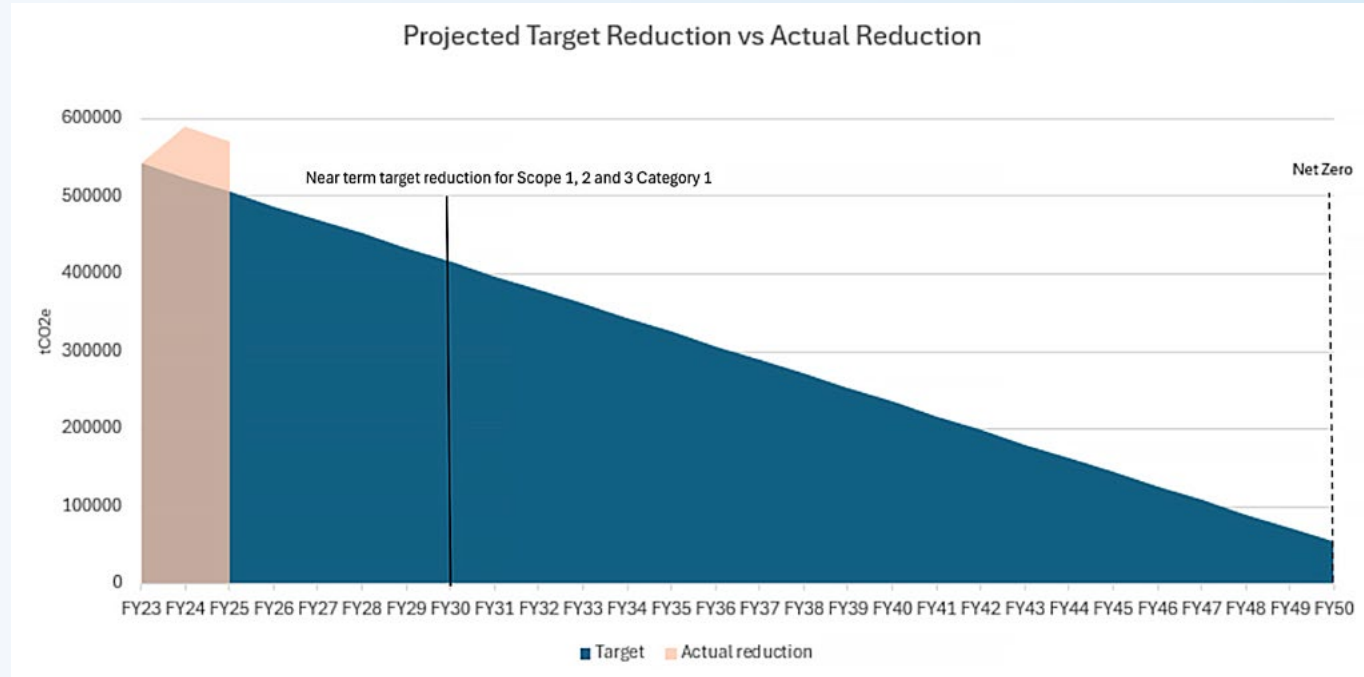
# Emissions Report

## Roadmap to net zero

In order to continue our progress to achieving net zero, we have adopted the following carbon reduction targets;

Our 2030 target is to reduce Scope 1 & 2 carbon emissions by 3,948 tCO<sub>2</sub>e, which represents a 42% reduction, and Scope 3 Category 1 emissions by 111,578 tCO<sub>2</sub>e, which represents a 25% reduction. Our long-term target is to achieve net zero in our operational and value chain emissions (Scope 1, 2 & 3 all categories) by 2050.

Progress against these targets can be seen in the graph:



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# Carbon Reduction Projects

## Completed carbon reduction initiatives

The carbon abatement measures and initiatives described in this section have been completed or implemented to date. While they have been effective in containing increases associated with an operational upturn, the total carbon emission increase from the baseline year is 5.15%. Although, a 3.76% decrease from FY24 which is considerable progress in comparison to the last fiscal year.

This comprises:

- 1427 tCO<sub>2</sub>e, equivalent to 15% reduction against our FY23 scope 1 & 2 emissions, and;
- 29,494 tCO<sub>2</sub>e, a 6% increase against the FY23 baseline across scope 3.
- Laing O'Rourke is a Platinum Status participant of the Toitu Carbon Reduce Programme (formerly CEMARS), and our carbon emissions are independently verified.

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# Carbon Reduction Projects

## Process improvement to reduce emissions:

### Renewable electricity

We continue to exclusively use 100% renewable electricity, backed by Renewable Energy Guarantee of Origin (REGO) certification at all our sites.

### Energy management

Our organisation has successfully integrated ISO 14001 Environmental Management and ISO 50001 Energy Management systems across all operations, with annual audits ensuring compliance and continuous improvement. Each project has a bespoke environmental and energy management plan, incorporating the development and execution of energy action plans aimed at reducing energy consumption throughout the project lifecycle.

A significant investment in new boilers and chillers at our Dartford head office, prompted by the enhanced Energy Management system, has notably improved our energy efficiency.



Laing O'Rourke Dartford Office

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# Carbon Reduction Projects

## Transition away from diesel with HVO:

Our Hydrotreated Vegetable Oil (HVO) mandate, implemented in April 2022, has already achieved significant carbon reductions. In FY23, our transition to HVO resulted in a reduction of nearly 8,500 tonnes of carbon, accounting for 75% of our total direct (Scope 1 & 2) emission reductions. We have successfully replaced 80% of our plant diesel with ethically-sourced HVO and are actively pursuing the use of electric alternatives where feasible.

We prioritise sustainable sourcing and are committed to understanding the origins of our fuel to ensure responsible procurement. It is crucial that our shift to more sustainable fuels does not inadvertently increase emissions or contribute to unsustainable practices within the supply chain.

As a company, we are dedicated to phasing out diesel usage. While we acknowledge that HVO serves as a transitional fuel rather than a permanent solution, it currently represents our most viable option. This approach allows us to bridge the gap until the market for fully renewable alternatives matures and becomes available at the necessary scale.



HVO is used in place of diesel as standard

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# Carbon Reduction Projects

Transition away from diesel at our sites:

## Electric Crawler Crane

Via Select, we purchased the UK's first fully electric crawler crane in 2021 and since then purchased a further 6 fully electric crawler cranes (7 in total), which are in active use across our sites.

## Battery storage solutions

Ampd Enertainer and Zenobe – are being deployed on our sites to support our transition away from diesel use in favour of cleaner power.

We've been working with the 2022 Earthshot Prize finalists to bring their innovative battery storage technology to Europe for the first time. The Enertainer acts as a replacement for diesel generators, delivering an emission-free solution to powering electrical plant and equipment on site, including cranes, hoists and welders.

Zenobe powerskid



Ampd Enertainer



Select Electric Crawler Crane

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# Carbon Reduction Projects

Transition away from diesel at our sites:

## Flybrids

We are employing hybrid generators, such as the Dumarey Flybrid (formerly Punch Flybrid), to significantly enhance fuel efficiency and reduce on-site consumption. These flybrid systems substantially decrease the fuel usage of tower cranes, which have highly variable power demands. Tower cranes typically operate at low load for most of the time but require a 'surge' of power when lifting. Traditionally, this necessitated the use of generators large enough to handle peak load capacity, leading to inefficient operation, wasted energy, and high emissions.

Flybrid systems optimise energy usage by capturing and storing energy that would otherwise be wasted during low-load operations. This stored energy is then utilised to provide a boost during lifting operations when the most power is needed. As a result, the generator size can be significantly reduced, leading to more efficient and sustainable operations.

*Flybrid systems optimise energy usage by capturing and storing energy that would otherwise be wasted during low-load operations*



Dumarey Flybrid energy storage system

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# Carbon Reduction Projects

## Transition away from diesel within our fleet:

Our commitment to sustainability is further demonstrated by our plan to fully transition our car and van fleets to electric vehicles, driving forward our mission to reduce our environmental impact.

We have successfully transitioned our entire diesel and petrol company car fleet to hybrid electric and fully electric vehicles.

In addition, electric vans have been integrated into the Select van fleet. To enhance fuel efficiency, driver behaviour monitors have been deployed across our van fleet. To support the transition to an all-electric fleet, EV charging infrastructure has been installed at all our owned fixed facilities.

We continue to invest in innovative site technologies that improve efficiency, reduce consumption, and eliminate diesel use.



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# Carbon Reduction Projects

## Advancing sustainability with low carbon concrete – tackling embodied carbon

The introduction of a low carbon concrete mandate for all new UK projects from April 2023 has led to significant carbon savings, amounting to 6,719 tonnes of tCO<sub>2</sub>e, a 15.5% reduction compared to FY22.

As a founding and active member of ConcreteZero, we are committed to achieving net zero concrete targets in alignment with their stringent commitments. Our approach includes comprehensive carbon hotspot analysis and measurement for every bid, ensuring that we propose effective strategies to reduce embodied carbon as part of our governance process.

Our ongoing in-house R&D programme is dedicated to testing, trialling, and scaling lower carbon materials, including concrete and reinforcement, as well as carbon-efficient designs. This continuous innovation is crucial to driving the transformational change required for a sustainable future.



*Continuous innovation is crucial to driving the transformational change required for a sustainable future*

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# Carbon Reduction Projects

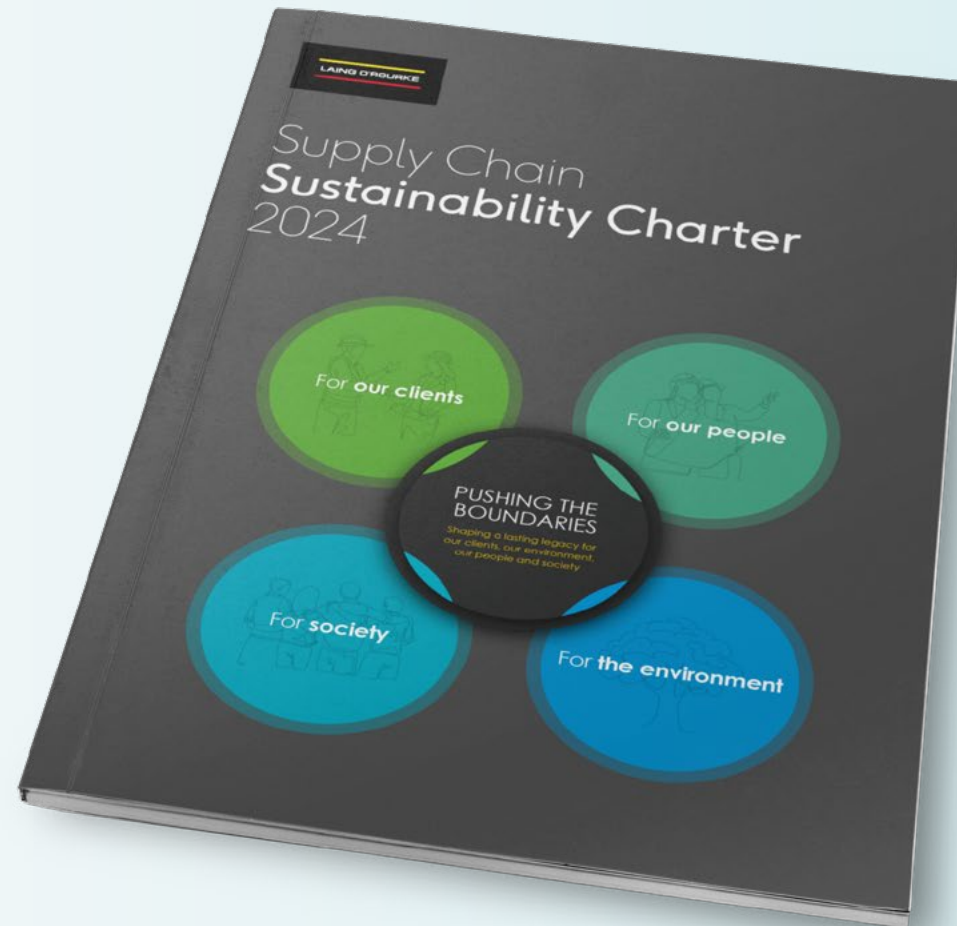
## Collaborative approach to sustainability

Recognising that our sustainability goals cannot be achieved in isolation, we emphasise the importance of collaboration with our supply chain partners. Our Supply Chain Sustainability Charter serves as a comprehensive framework, outlining clear sustainability expectations for our partners.

We engage extensively with our supply chain, offering free sustainability resources and learning pathways through our Gold membership with the Supply Chain Sustainability School. This initiative ensures that our partners have access to the necessary tools and knowledge to meet our sustainability standards.

The launch of our Supply Chain Sustainability Charter, along with a balanced scorecard, aims to encourage and reward sustainable practices among our supply chain partners. This approach fosters a culture of continuous improvement and accountability.

We are committed to true partnership and actively seek input on how we can enhance engagement opportunities and drive innovation. Together, we are dedicated to advancing our collective journey towards a sustainable future.



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# Carbon Reduction Projects

## Future carbon reduction initiatives - Scope 3 emissions reduction

Given the high proportion of our carbon footprint associated with Scope 3 and our new near-term targets, reducing these emissions is a priority, as it will deliver the most significant impact.

Some of the key initiatives we expect to implement during FY26 are:

### Carbon Management

Implementation of carbon forecasting during project evaluation stage, ensuring that carbon metrics are considered for every project and likely impact is understood.

Continue to improve Scope 3 data integrity, providing visibility of hotspot areas to guide priority initiatives, and increasing the proportion of data from higher quality sources (e.g. quantity-based data from suppliers and Environmental Product Declarations, or EPDs).

Introduce PAS2080 principles into our standard delivery framework.

Improve carbon literacy across all staff via ongoing training and engagement programmes.

### Collaboration & Innovation

Continue to work closely with supply chain partners to innovate and decarbonise collaboratively.

Work with our customers and design consultants to develop lower-carbon projects, deploying lean and innovative designs and technologies.

Expand our R&D programmes to continue to trial, test and implement lower carbon solutions within Laing O'Rourke and across the wider industry, driving the transformational change required.

### Waste Reduction & Circular Economy

Expand waste reduction initiatives, including product sharing schemes across projects, implementation of circular economy principles and tightening up of design specifications and procurement practices to reduce excess material use.

### Advocacy & Industry Engagement

Lobby industry and regulators to deliver changes that will enable decarbonisation at a greater pace.

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CO<sub>2</sub> emissions reduction



# Declaration & 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 the Supplier:



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Date:

29th September 2025

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# Appendices

## Abbreviations

Abbreviations	Detail
CRP	Carbon Reduction Plan
SBTi	Science Based Targets initiative
WTT	Well-to-Tank
HVO	Hydrotreated vegetable oil
EV	Electric Vehicle
RTFO	Renewable Transport Fuel Obligation
ISCC	International Sustainability and Carbon Certification
EPD	Environmental Product Declaration

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# Thank you