



Carbon Reduction Plan

October 2021

Balfour Beatty



This document sets out the Carbon Reduction Plan for Balfour Beatty Group Limited in response to Public Procurement Notice (PPN) 06/21. This plan covers Balfour Beatty's UK operations and the requirements of PPN 06/21. The data presented in this plan therefore differs from the data presented in respect of carbon reduction commitments for Balfour Beatty plc and the wider group of Balfour Beatty companies (Balfour Beatty), including that found in Balfour Beatty's Annual Report and Accounts and Sustainability Strategy, [Building New Futures](#).

Commitment to achieving Net Zero

Balfour Beatty is committed to achieving Net Zero emissions by **2050**. It is our ambition to go Beyond Net Zero Carbon by 2040.

Emissions reduction targets

In December 2020, Balfour Beatty launched its new sustainability strategy, Building New Futures, outlining our 2040 ambition to go Beyond Net Zero Carbon which covers Scope 1, 2 and 3 greenhouse gas emissions. We also committed to formally setting a science-based target for 2030. Whilst we develop our science-based target, we have signed up to the United Nation's Race to Zero campaign to build momentum around the shift to a decarbonised economy. This requires us to set a net zero target in line with a 1.5°C warming limit scenario to hold off some of the worst climate impacts. For Balfour Beatty, this means halving emissions by 2030.

Balfour Beatty continues to take steps to reduce carbon from its direct and indirect operations by implementing the Institute of Environmental Management and Assessment's (IEMA) Greenhouse Gas (GHG) Management Hierarchy.



IEMA's Greenhouse Gas Management Hierarchy

We are taking steps to reduce our Scope 1, 2 and 3 greenhouse gas emissions and reliance on fossil fuels through the use of energy efficient technology, renewables, processes and algorithms that have been developed in-house to assist decision making and to drive sustainability performance improvement.

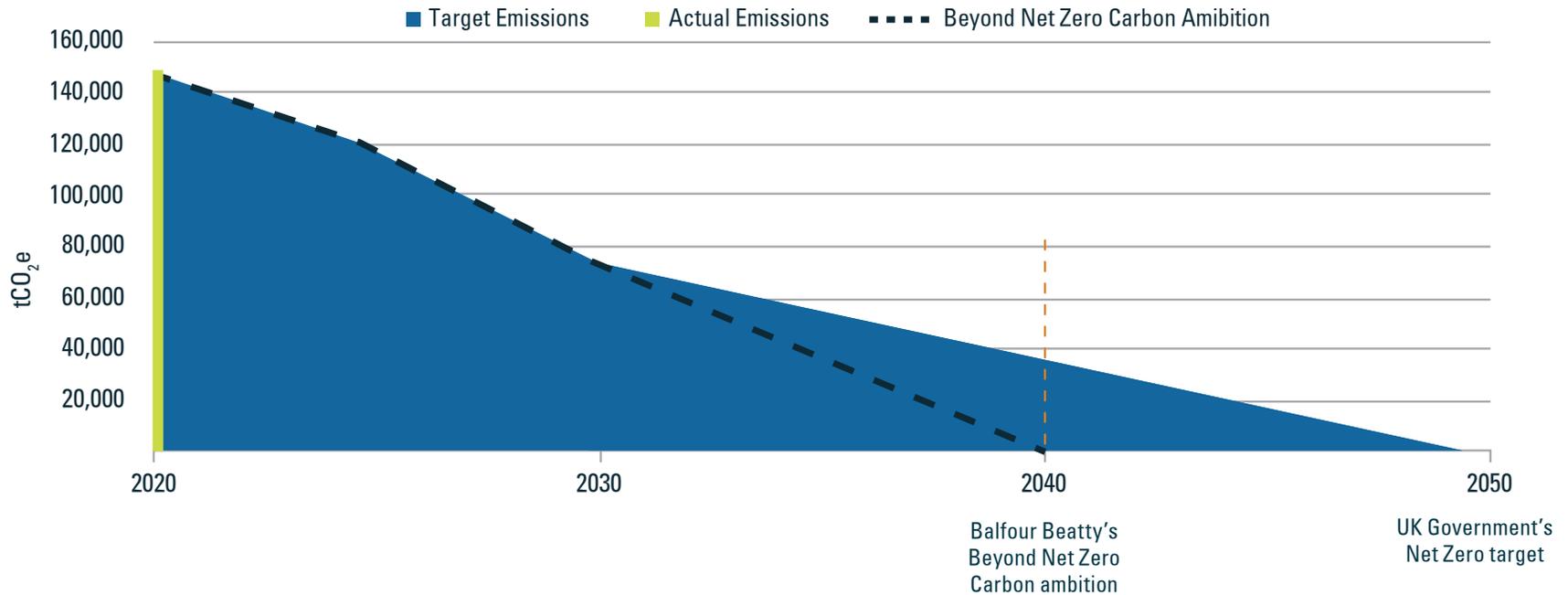
Through collaboration with our supply chain partners, we aim for all products and materials we procure to be net zero carbon by 2040. In limited cases, where we are unable to reduce emissions, we will aim to invest in environmental projects, in the form of carbon offsets, to go beyond net zero carbon by 2040.

We have projected Balfour Beatty Group Limited's carbon emissions will decrease to 120,679 tCO₂e by 2025. This is a reduction of 18%.

Balfour Beatty Group Limited's baseline and projected emission reductions to go beyond net zero is shown in the graph provided. As this is the first reporting year against PPN 06/21 the baseline and actual data sets are the same.

The graph shows our Scope 1, 2 and selected Scope 3 category emissions as detailed on page 4.

Carbon Reduction Projected vs Actual – Balfour Beatty Group Limited



Baseline emissions footprint

Baseline year: **2020**

Additional details relating to the baseline emissions calculations.

Balfour Beatty Group Limited has identified calendar year 2020 as the baseline year for measuring carbon reductions against.

We have used greenhouse gas (GHG) protocol operational control methodology to determine our baseline for our Scope 1, 2 and 3 emissions. 2020 has been selected as this is the first year delivering our refreshed Sustainability Strategy, Building New Futures, and setting out our 2040 ambition to go Beyond Net Zero Carbon.

For Scope 2 emissions, the GHG protocol's market-based methodology has been used. The selected Scope 3 category data is comprised from GHG calculations from actual and estimated data. Actual data has been used to derive tCO₂e totals for waste and business travel. For employee commuting, we have employed estimations using the GHG Protocol Quantis Scope 3 Evaluator.¹ For both Upstream and Downstream transportation, we have used an estimation methodology to arrive at the baseline total.

The baseline defined within this Carbon Reduction Plan is specific to Balfour Beatty Group Limited and covers Balfour Beatty's operations in the UK. Balfour Beatty Group Limited, is a subsidiary of Balfour Beatty plc. The baseline has been established to measure compliance with PPN 06/21. Further detail on Balfour Beatty plc's total GHG emissions, Sustainability Strategy and energy consumption is available in Balfour Beatty plc's Annual Report and Accounts. Balfour Beatty plc complies with the UK Government's Streamlined Energy and Carbon Reporting (SECR) requirements. PricewaterhouseCoopers LLP (PwC LLP) is engaged by Balfour Beatty plc to provide limited assurance over selected greenhouse gas performance data for Scope 1 and 2 annual reporting purposes as stated in the annual report. Carbon reduction strategies for Balfour Beatty Group Limited for Scope 1 and 2 and all Scope 3 categories are detailed within the UK addendum of our sustainability strategy, 'Sustainability in the UK'.

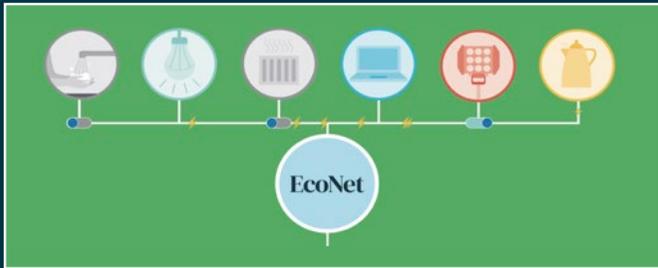
Our carbon data is compiled at year end. We will update our current emissions data for 2021 in April 2022.

Year: 2020 - Baseline year emissions:		Year: 2020 - Current emissions reporting	
EMISSIONS	TOTAL (tCO ₂ e)	EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	80,612.57	Scope 1	80,612.57
Scope 2	5,419.41	Scope 2	5,419.41
Scope 3 (Included Sources)	86,031.98	Scope 3 (Included Sources)	86,031.98
Total emissions	147,169.13	Total emissions	147,169.13

Our carbon reduction projects

The following environmental management measures and projects have been completed or implemented in 2020:

Reducing on-site carbon emissions by up to 80%



Managing the power supply to our site compounds in the UK, our new EcoNet technology automatically turns appliances and equipment off when not in use, including over weekends and when sites are not occupied. This helps to regulate consumption when demand is at its highest, reducing demand on grid connections or diesel generators used to power sites.

Developed in collaboration with Sunbelt Rentals and Invisible Systems, EcoNet was first trialled on our East Leeds Orbital Route project, a large-scale highways contract to build 7km of outer ring roads around Leeds city centre. On ELOR it resulted in an incredible 83% reduction in carbon emissions for our site compound just by optimising heating, hot water and external lighting schedules.

The technology has now been fully rolled out to over 61 sites, including all new sites consisting of six cabins or more.

Zero carbon emission excavators



On the A63 Castle Street scheme in Hull, we've used three of the industry's first electric mini excavators that produce zero tailpipe emissions. These electric excavators need to be charged daily on a site that has no mains power. Previously a diesel generator would have run 24/7 to provide on-site power, but this would eliminate the environmental benefits gained through the electric excavators. As such, the team turned to innovation yet again, acquiring the Proelectric ProPower Solar Hybrid Generator. This reduced emissions and fuel use by up to 78%, providing clean and silent energy for the electric excavators.

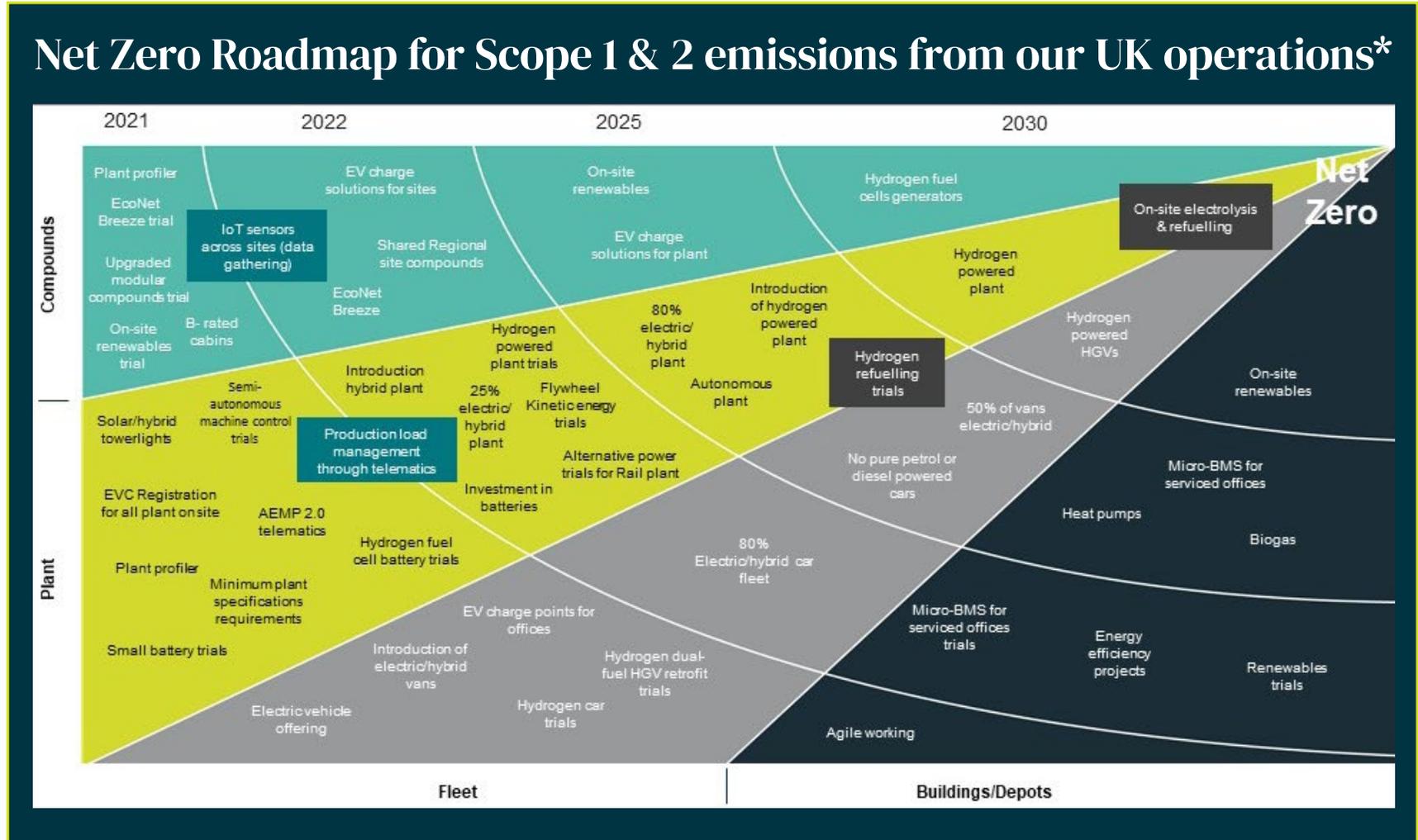
The carbon emissions reduction achieved by these schemes in 2020 equate to 7,000 tCO₂e. Further work for energy and carbon savings in 2021 is ongoing.

We will continue to explore opportunities to reduce emissions as outlined in our net zero roadmap for Scope 1 and 2 emissions for Balfour Beatty Group Limited.

These include improving the fuel efficiency of our fleet by introducing fully electric cars, installing electric vehicle charging points, expanding electric plant options and much more.

In the future, we aim to implement further measures such as:

- Working with our supply chain partners to report and reduce embodied carbon in materials they supply to us and other Scope 3 emission sources
- Developing new solutions and technologies to drive net zero outcomes for our customers by collaborating across the supply chain
- Decarbonising our plant and fleet, including switching from diesel to electric, hybrid or hydrogen powered solutions



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 standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.²

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.³

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of Balfour Beatty Group Limited:

Philip Harrison

Chief Financial Officer

22/10/2021

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Think before you print!

You can find our Sustainability Strategy online
at balfourbeatty.com/sustainabilitystrategy

