

Balfour Beatty



PPN 06/21 Carbon Reduction Plan

2023

Balfour Beatty

Achieving net zero

Balfour Beatty has set a 2050 target to achieve net zero across Scope 1, 2 and 3 emissions. The Group has worked closely with the Science Based Targets initiative (SBTi) to validate its 2030 and 2050 targets. Balfour Beatty's Building New Futures Sustainability Strategy has also evolved to keep pace with the Group's approach. You can read it in full at balfourbeatty.com/sustainabilitystrategy

Supplier name: Balfour Beatty Group Limited

Publication date: June 2024

The information set out in this disclosure applies to carbon emissions associated with Balfour Beatty Group Limited (BBGL). BBGL is the principal operating company of the Balfour Beatty Group in the UK, and the contracting principal to which PPN06/21 applies.

Front page images:

Left: One of four carbon intensive vehicles on our Connect Roads M77/Glasgow South Orbital contract that we have retrofitted to run off both hydrogen and diesel.

Right: Electric plant being used on the A63 Castle Street Scheme in Hull for National Highways

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.

UK baseline year: 2020

Additional details relating to the baseline emissions calculations

Balfour Beatty Group Limited has identified calendar year 2020 as its baseline year for measuring carbon reduction against. 2020 has been selected as the baseline year as in December 2020 the company launched the first iteration of its Building New Futures Sustainability Strategy, making a public declaration of its commitment to set a science-based target to reduce its carbon emissions. In 2024, the Group delivered against this commitment with the Science Based Targets initiative (SBTi) validating the company's carbon reduction targets. In June 2024 Balfour Beatty released an evolved Building New Futures Sustainability Strategy.

Balfour Beatty Group Limited has used the Greenhouse Gas (GHG) Protocol operational control methodology to determine its baseline for Scope 1, 2 and 3 emissions. For Scope 2 emissions, the GHG Protocol's market-based methodology has been used.

Through undertaking the detailed carbon analysis required as part of the SBTi submission process, the Group reconsidered the full GHG inventory of the Scope 1, 2 and 3 categories in relation to its organisational and operational boundaries.

As outlined in Appendix 1 - Operational control decision process, certain joint ventures and joint operations where Balfour Beatty does not have full authority to introduce and implement operating policies, i.e. operational control, that were previously included in the Group's Scope 1 and 2 emissions, are now excluded from the operational control boundary and are instead included within the Group's Scope 3 Investments category emissions on a proportional basis in line with ownership interests.

Applying a consistent GHG consolidation approach is important and should reflect an obligation to undertake all measures possible to avert the worst impacts of the climate crisis. To this end, the Group has enhanced its reporting criteria to enable us to communicate the emissions performance of operations for which it has full authority, as well as operations where the Group does not have full authority but does have considerable influence over operating policies and purchasing decisions. The total carbon emissions from these operations are included as part of the Group's operational boundary and reported as part of the Group's total Scope 1 and 2 emissions, including for emissions intensity.

Baseline emissions footprint (continued)

The Group's Scope 1 and 2 emissions for 2023, as applicable to UK operations, are disclosed in the table on page 4 in line with the improved carbon reporting approach described on the previous page, with the comparative figures for the 2020 baseline year stated accordingly.

As part of our Science Based Targets initiative submission, we undertook a detailed analysis of Scope 3 emissions. The Group are therefore able to provide information over and above the minimum requirements of PPN06/21 in this document. This is detailed in the table on page 4, where the minimum Scope 3 categories specific to PPN06/21 requirements are clearly identified.

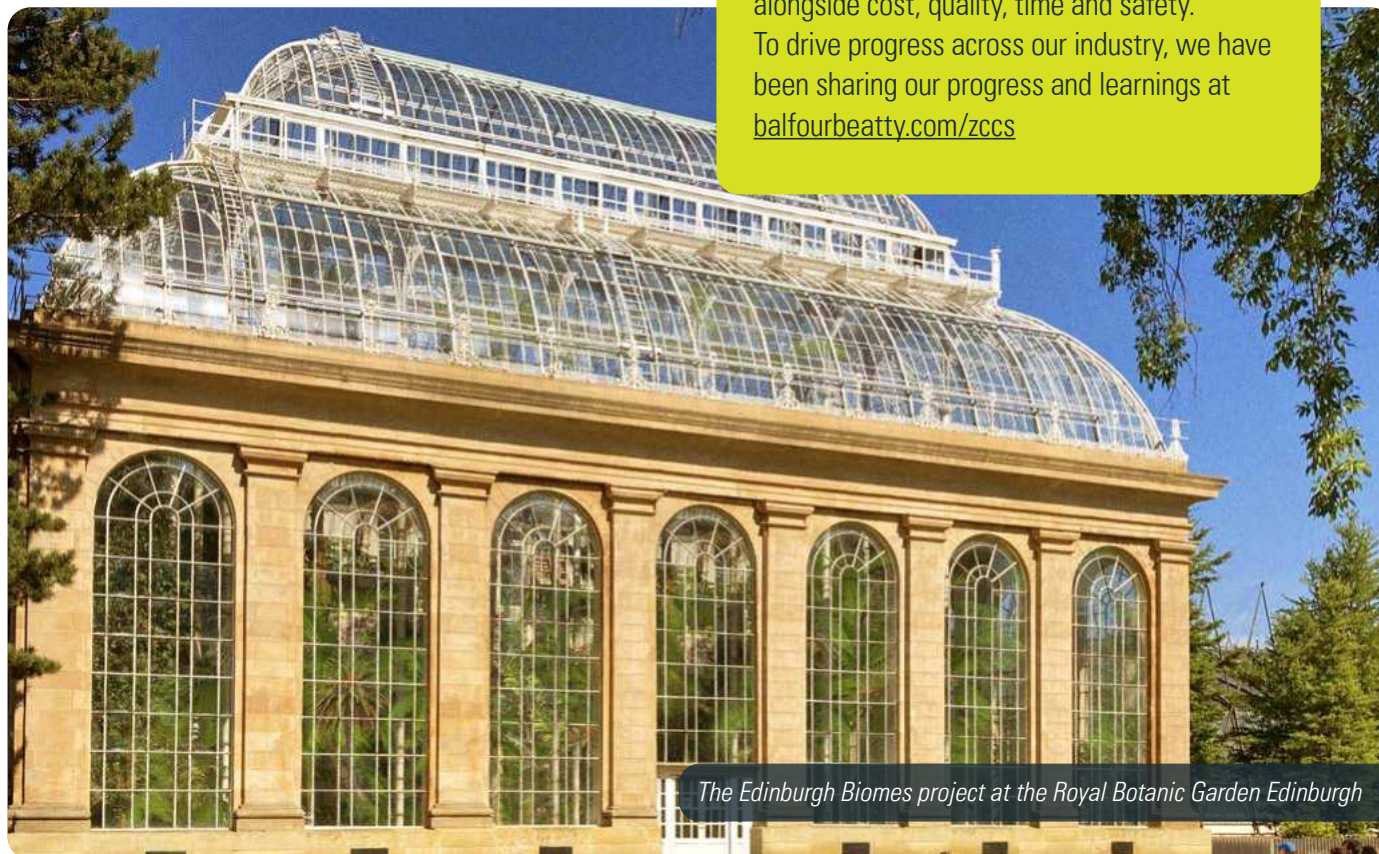
The calculation methodology for the Scope 3 data reported in this Carbon Reduction Plan is shown in Appendix 2 - Scope 3 calculation methodology.

The emissions defined within this Carbon Reduction Plan are specific to Balfour Beatty Group Limited and cover Balfour Beatty's operations in the UK. Balfour Beatty plc's 2023 global emissions and further detail on total GHG emissions and energy consumption are reported in its 2023 Annual Report and Accounts. Balfour Beatty Group Limited is a subsidiary of Balfour Beatty plc. 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 our 2023 Annual Report and Accounts. Carbon reduction approaches for Balfour Beatty Group Limited for Scope 1 and 2 and selected Scope 3 categories are detailed in its Building New Futures Sustainability Strategy and supported by this document.

Since 2021, working via the SCAPE Civil Engineering Scotland framework with our customer, the Royal Botanic Garden Edinburgh and our supply chain partners, we have been examining every element of the Royal Botanic Garden Edinburgh project to find lower carbon options and solutions – integrating carbon into our decision-making and making it a priority alongside cost, quality, time and safety.

To drive progress across our industry, we have been sharing our progress and learnings at balfourbeatty.com/zccs



The Edinburgh Biomes project at the Royal Botanic Garden Edinburgh

UK baseline year emissions 2020

Emissions	Total (tCO ₂ e) ¹
Scope 1	80,613
Scope 2 market based	5,419
Scope 3 breakdown	1,823,357
Purchased goods and services	1,543,785
Capital goods	7,331
Fuel and energy related activities	20,293
Upstream transportation & distribution ²	106,917
Waste generated in operations ²	2,485
Business travel ²	1,596
Employee commuting ²	1,868
Downstream transportation & distribution ²	-
Use of sold products	118
End of life treatment of sold products	16
Downstream leased assets	1,434
Investments	137,512
Scope 3 total	1,823,357
Scope 1, 2 and 3 total	1,909,387

UK current emissions Reporting 2023

Emissions	Total (tCO ₂ e) ¹
Scope 1	106,914
Scope 2 market based	7,148
Scope 3 breakdown	1,576,744
Purchased goods and services	1,400,490
Capital goods	20,894
Fuel and energy related activities	29,150
Upstream transportation & distribution ²	25,241
Waste generated in operations ²	2,390
Business travel ²	3,761
Employee commuting ²	1,849
Downstream transportation & distribution ²	-
Use of sold products	244
End of life treatment of sold products	17
Downstream leased assets	1,834
Investments	90,874
Scope 3 total	1,576,744
Scope 1, 2 and 3 total	1,690,806

¹ tonnes of carbon dioxide equivalent ² PPN 06/21 minimum requirement

Emissions reduction targets

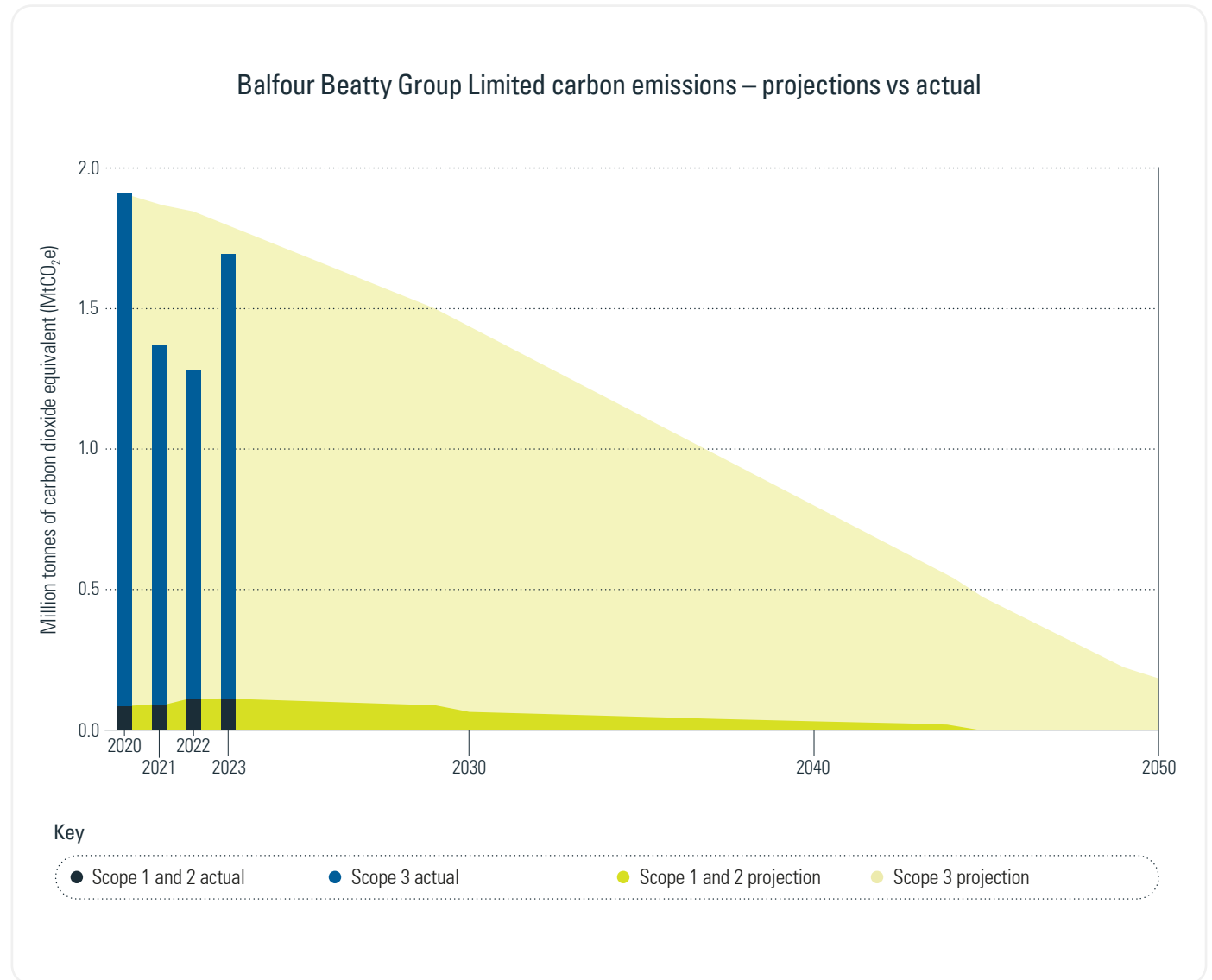
In order to continue our progress towards achieving net zero, we have adopted near and long-term carbon reduction targets.

In the latest evolution of our Building New Futures Sustainability Strategy, which was launched in June 2024, we have outlined our Group-wide carbon reduction targets, which have been validated by the Science Based Targets initiative (SBTi) and are aligned to the goals of the Paris Agreement to limit global warming to no more than 1.5°C and to reach net zero by 2050. Our targets, measured against a 2020 baseline are:

- 42% reduction in Scope 1 and 2 carbon emissions by 2030
- 25% reduction in Scope 3 purchased goods and services emissions by 2030
- Net zero Scope 1 and 2 carbon emissions by 2045³
- Net zero Scope 1, 2 and 3 carbon emissions by 2050.

As shown on the graph opposite, our target is to have reduced our Scope 1, 2 and 3 carbon emissions by 90% by 2050 and use permanent carbon removal and storage to counterbalance the final residual 10% of our emissions. This is in line with the Oxford Principles for Net Zero Aligned Carbon Offsetting⁴ as required by the SBTi.

In 2023, our Scope 1 and 2 carbon intensity reduced by 18% against our previous year's performance, although our absolute carbon emissions increased. This demonstrates that our energy efficiency actions are taking effect.



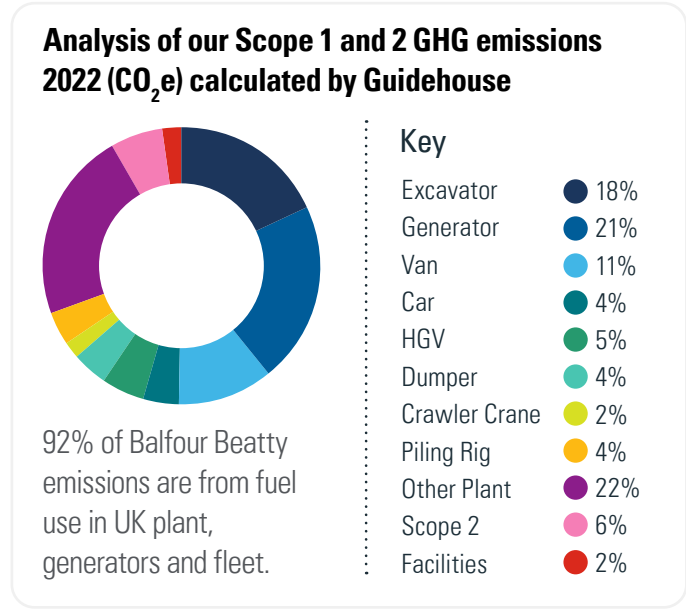
³ not verified by the SBTi as the SBTi only validate our near (2030) and long (2050) term targets ⁴ <https://www.smithschool.ox.ac.uk/research/oxford-offsetting-principles>

Carbon reduction management

The following environmental management measures have been completed or implemented.

- Our UK-wide Business Management System is certified to ISO14001:2015 environmental management systems standard. The certification demonstrates our commitment to environmental excellence and ensures that we have a robust process for identifying and managing compliance obligations, environmental risks and opportunities, and for setting and monitoring progress against environmental objectives and targets.
- Where applicable, we include a minimum of 10% sustainability weighting in the tenders we issue to our supply chain partners.
- In 2020, we implemented a Renewable Energy Guarantee of Origin (REGO) tariff and in 2023 purchased 26,627 MWh of grid electricity via the tariff - an increase of 40% compared to 2022, whilst decreasing our overall electricity use.
- In 2023, we rolled out Bridging the Gap action plans, for each of our business units with material carbon emissions. The action plans focus our efforts where we can have the biggest impact and chart a course to deliver our carbon reduction targets. Adopting a uniform approach across our business units, the action plans follow the same framework so best practice can be quickly identified and shared across our organisation. A Bridging the Gap framework sets out minimum expectations and is aligned to our Building New Futures Sustainability Strategy.

- In 2023, we developed our decarbonisation pathway, aligning it with the goal to cap global warming at 1.5°C, and submitted both near and long-term targets for validation by the Science Based Targets initiative (SBTi) in December 2023. In preparation for submitting our targets to the SBTi for validation, we engaged our sustainability consultant, Guidehouse, and undertook a robust study to fully map our Scope 1, 2 and 3 carbon emissions across our portfolio.



This exercise enabled us to identify key emissions categories, including our plant, generators and fleet which are responsible for 98% of Balfour Beatty Group Limited's

Scope 1 carbon emissions and purchased goods and services which make up 84% of our Scope 3 carbon emissions. Using this analysis, we have produced bespoke decarbonisation pathways balancing cost, reduction potential and feasibility against our own decarbonisation ambitions. Collectively these pathways provide a Group-wide roadmap for all our key assets, and combine to form the reduction approach for our Scope 1 and 2 emissions, focussing on efficiency, electrification and alternative fuels. With this greater level of understanding of how we can reduce our carbon emissions, the next step we took was to translate the data into focused decarbonisation pathways for each of our business units with material carbon emissions. Each of these pathways account for the differing financial projections, project mixes and asset types across our business units and the pathways have enabled us to set business unit level carbon budgets with detailed plans to meet them.

- In 2024, our Highways business has achieved PAS 2080:2023 verification, the gold standard for buildings and infrastructure carbon management. Verification demonstrates our Highways business has a resilient and robust carbon management system in place, including an approach to developing baselines and targets alongside an accurate monitoring regime. PAS 2080:2023 verification also demonstrates that carbon management philosophies and procedures are embedded at all levels of our Highways business and shows a commitment to

Carbon reduction management (continued)

continual improvement. Following the verification of our Highways business, we are embedding key elements of PAS 2080:2023 into our UK-wide Business Management System and other business units are progressing towards their own PAS 2080:2023 verified carbon management approach.

- In 2024, we signed the Nature Positive Business Pledge, recognising that restoring nature and enhancing the natural environment is crucial for reducing carbon emissions in our atmosphere.
- In 2024, the Science Based Targets initiative (SBTi) validated our near- and long-term carbon reduction targets.
- In 2024 we launched our evolved Building New Futures Sustainability Strategy. Detailing a holistic approach to sustainability, the carbon reduction targets in the Strategy will be delivered through detailed action plans in each of our business units that address local challenges and drive Company-wide progress.

Did you know?

Our implementation of carbon emission reduction measures has resulted in an

18% decrease in carbon emissions intensity between 2022 and 2023

Hydrogen trials

Alongside electricity generated from renewable sources, green hydrogen is the lowest carbon solution available to fuel plant, equipment and vehicles. Whilst the use of this fuel is in its infancy, we are partnering with customers, Government and our supply chain to trial solutions to help speed up adoption. This includes using hydrogen powered generators on the National Highways A63 Castle Street

Scheme in Hull and the retrofit of carbon intensive vehicles to run off both hydrogen and diesel on our Connect Roads M77/Glasgow South Orbital contract, where we expect the technology to deliver a 40% reduction in carbon emissions from four retrofitted vehicles.

In 2023, we generated 109 MWh of energy from green hydrogen which equates to enough energy to power approximately 37 UK households.



A hydrogen powered generator on the National Highways A63 Castle Street Scheme in Hull

Reducing our Scope 1 and 2 carbon emissions (2024-2029)

To reduce emissions from the fuel we purchase for our plant, fleet and generators, which accounts for 92% of our Scope 1 and 2 carbon emissions, our business units with material carbon emissions, are targeting the areas where they can make the biggest reductions. They are adopting a three-pronged approach; efficiency, electrification and alternative fuels.

01/ Efficiency

To help us operate our plant, fleet and generators more efficiently in order to reduce the fuel they use, we are introducing telematics technology and local management controls. The telematics provide us with real-time data about how any given piece of plant is using energy, allowing us to reduce carbon emissions by reducing the speed of, or turning off, engines whilst they are idling. We are also using hybrid generators where feasible, this technology uses battery storage to make our energy supply to sites more efficient.

03/ Alternative fuels

As we transition away from fossil fuels as quickly as we can, we are appraising alternative fuels as they become viable for use. To help everyone at Balfour Beatty and our supply chain partners to do this, we have produced our fuel hierarchy tool which provides information on the carbon intensity of the different fuel options available to help guide decisions that will reduce our carbon emissions.

Key

- Excavators
- Specialist rail plant
- Cars
- Light Commercial Vehicles
- Heavy Goods Vehicles
- Site electricity supply

02/ Electrification

With electricity from the grid being the most readily available low or zero carbon fuel available, we are adopting a wide range of electric fuelled plant and fleet. We are also generating our own electricity from renewable resources and using it to power our offices, depots and projects where it is feasible to do so. Our Group electricity supply is backed by the Renewable Energy Guarantees of Origin (REGO) scheme and we are reviewing opportunities for Power Purchase Agreements through which we directly connect to renewable energy sources.

Target areas for carbon reduction emissions by business

Business unit	2024-2026	2026-2030
Regional Scotland	● ● ●	● ● ● ● ●
Regional Civils	● ●	● ● ● ●
Regional Buildings	●	● ● ●
Living Places	● ●	● ● ● ●
Power Transmission and Distribution	● ● ●	● ● ● ●
Highways	● ● ●	● ● ● ●
Rail	● ●	● ● ●
Major Projects	● ● ● ●	● ● ● ●
Ground Engineering	Under development	Under development

Reducing our Scope 1 and 2 carbon emissions (2024-2029) (continued)

The actions we are taking to reduce carbon emissions from our plant, fleet and generators are outlined below.

Excavators

- Following successful trials of smaller electric powered excavators, we are working closely with suppliers to understand operational impacts before wider roll-out by 2027.
- We are engaging with suppliers and manufacturers on the use of hydrogen as an alternative fuel as the technology emerges.
- We will introduce biofuels by 2028.

Specialist rail plant

- We are in dialogue with manufacturers around alternative fuels such as hydrogen and electricity.
- We are investigating biofuel options.

Cars

- Our UK company car list is 100% hybrid or electric vehicles.
- We are rolling out electric vehicle charging infrastructure across our own estate.
- We offer an electric vehicle salary sacrifice scheme and discounts on home electric vehicle chargers for employees.

Light Commercial Vehicles

- We are rolling out fully electric Light Commercial Vehicles where it is feasible to do so, including for small and medium sized vans and dropside pick-up trucks.
- We are working with vehicle manufacturers to trial alternative fuel options as they become available.

Heavy Goods Vehicles

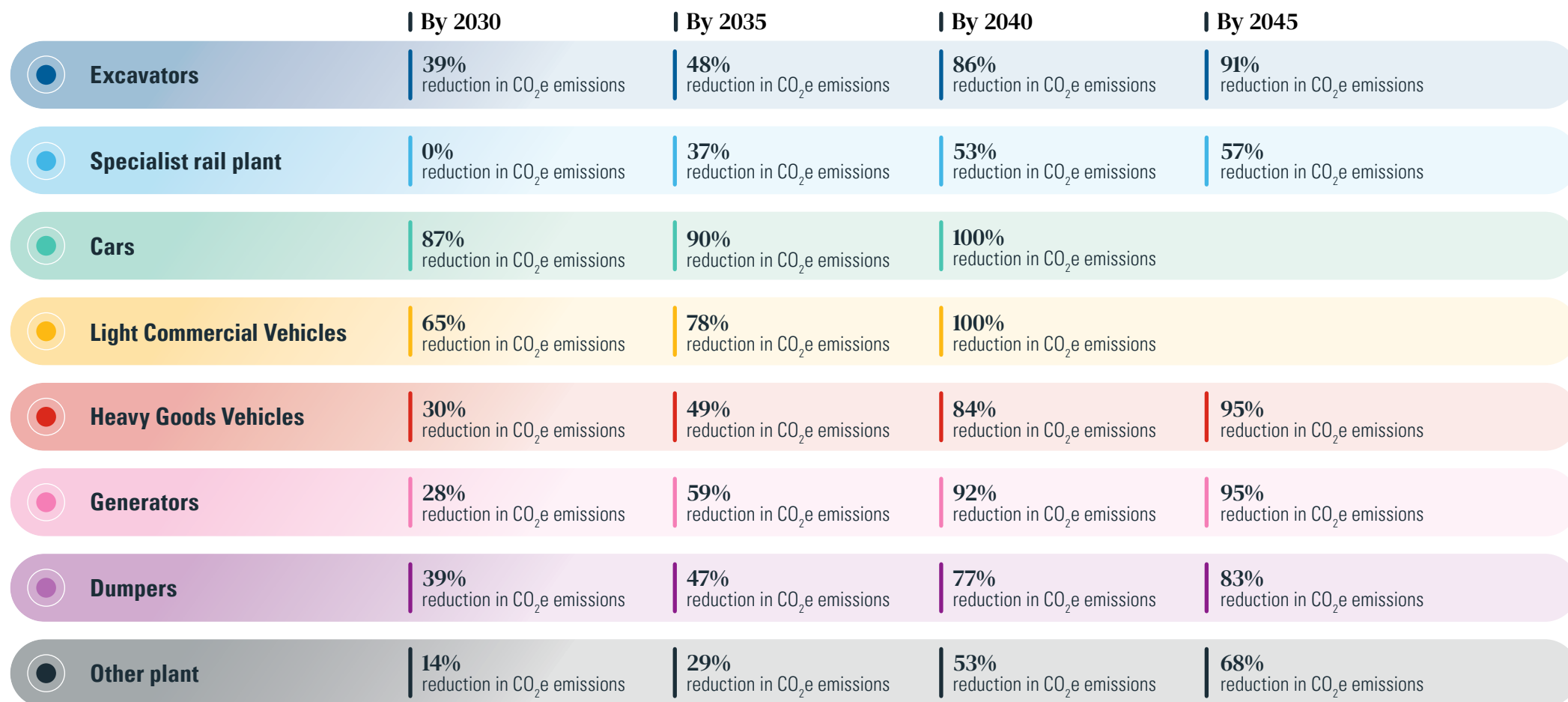
- We are trialling alternative fuel sources including hydrogen and electricity, with an aim to start transitioning our Heavy Goods Vehicles to alternative fuels by 2028.

Site electricity supply

- We are implementing efficiency measures to reduce our demand from generators.
- We are trialling hydrogen powered generators to assess if we can roll these out at scale.
- We are reviewing our internal processes to enable the quicker connection of our projects to the electricity grid.
- Where we rely on our customers for electricity supply, we encourage them to use renewable electricity.

Reducing our Scope 1 and 2 carbon emissions (2024-2029) (continued)

Going beyond the actions our business units are taking between now and 2029 to reduce the carbon emissions from their plant, fleet and generators, we have developed a longer-term roadmap which details our anticipated emissions reductions as we phase in alternative fuels. This roadmap is dynamic and will evolve over time.



Carbon reduction and energy efficiency in action

01/ Efficiency



In 2023 we mobilised over 60 battery storage units to off-grid sites. The batteries enable generators to work more efficiently by switching them off when they are not needed. This reduces fuel usage and, when the battery is able to provide all of the power required, noise and air pollution.

On our A63 Castle Street Improvement Scheme in Hull for National Highways, we have been using telematics data alongside Eco-Operator training. Across a five-month test period, the team saw significant benefits including an increase in plant utilisation and a 50% reduction in plant idling rates. Carbon emissions associated with idling were reduced from 36% to 17% of total plant carbon emissions on the project.

We are using our EcoNet energy management solution on projects and contracts with four or more cabins. It reduces energy use by automatically turning off equipment when it is not in use and selecting the lowest carbon energy sources from those available. In 2023, we installed 69 EcoNet systems – saving 1,290 MWh of energy. We also use EcoSense cabins as standard on all projects, they produce up to 30% less carbon emissions than traditional cabins.



02/ Electrification



Following a successful trial in 2022, our Bottesford plant depot has been using thin solar film to power their cabins and reduce the need for diesel-generated electricity. In 2023, the film contributed 6,268 kWh of electricity to the site, enough to power 2.3 average households in the UK.



We installed a 320 solar panel array at our Raynesway Asset and Technology Solutions depot in Derby – saving 102 MWh of electricity.

We installed solar panels on our Canvey Island flood defence project, in Essex displacing 18,907 kWh of energy usually produced by diesel generators.

We have increased our options for electric-powered fleet and provided electric small vans to our Southampton Highways Service Partnership contract.

The vans are part of our efforts to reduce carbon emissions on the contract, whilst also providing our workforce with quality, comfortable, safe and efficient vehicles.

By the end of 2024 all vans on the contract will be fully electric.

03/ Alternative fuels



We are implementing our fuel hierarchy, available at balfourbeatty.com/fuelhierarchy, to ensure we select the right energy sources for our plant, fleet and generators, and continuing our due diligence on new fuels to ensure we fully understand their environmental impacts, both in production and in use.

We have continued our investment in hydrogen fuel technology including through a partnership with the Scottish Government, Logan Energy and ULEMCo Ltd to retrofit and deploy two gritters, an impact protection vehicle and a pickup truck with dual fuel technology on our Connect Roads M77/Glasgow South Orbital contract. The dual fuel technology is anticipated to reduce carbon emissions by 40% in the retrofitted vehicles.



We are trialling hydrogen fuel cell and hydrogen internal combustion engine generators as well as solar and hydrogen fuelled mobile welfare units and electric excavators to replace the current diesel versions. In 2023, we generated 109 MWh of energy from green hydrogen, including from the operation of two hydrogen fuel cells on Balfour Beatty sites. This contributed towards the 173 MWh of renewable energy that Balfour Beatty generated in 2023.

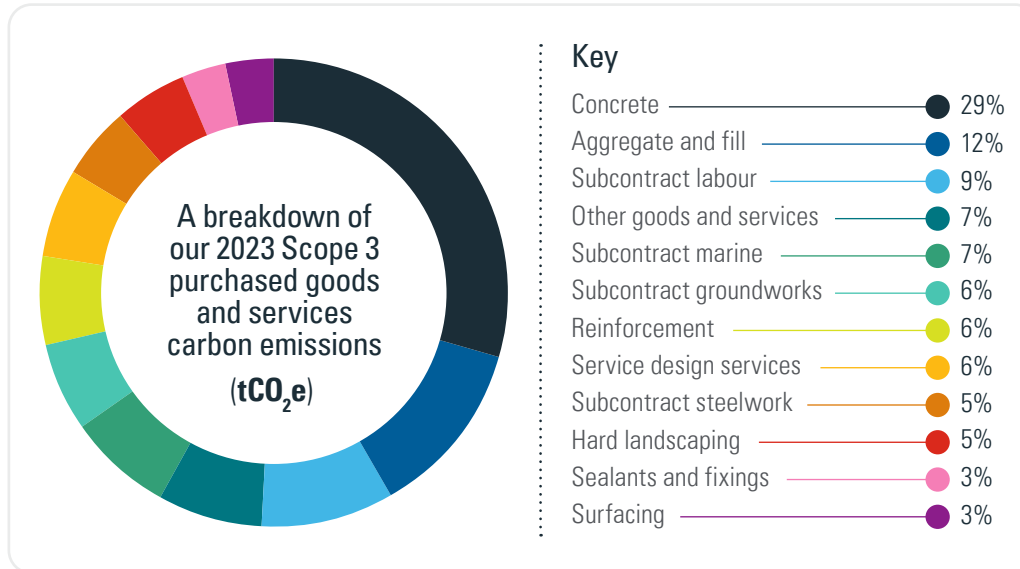
Reducing our Scope 3 carbon emissions

As part of our Science Based Targets initiative submission which details the steps we need to take to achieve net zero carbon emissions by 2050, we undertook a detailed analysis of our Scope 3 carbon emissions.

This analysis showed that the goods and services we purchase represented 84% of our Scope 3 carbon emissions in 2023 and included hard to decarbonise products like cement, steel and aggregates. To achieve our 2030 Scope 3 carbon emissions target, we are focussing our efforts on this category as well as carbon emissions from our Investments category as these are the areas where we can have the biggest impact.

Our analysis also shows that a group of around 450 of our UK supply chain partners included in our long-term target were responsible for 86% of our Scope 3 purchased goods and services carbon emissions, with 50 partners within this group having already set their own Science Based Targets to reduce their absolute carbon emissions by, on average, 30% by 2030. Whilst we do not directly control their efforts to reduce their own carbon emissions, the results will be beneficial as they will directly contribute to Balfour Beatty's own Scope 3 reduction targets.

Our Scope 3 carbon emissions are calculated based on best available data in line with Appendix 2 - Scope 3 calculation methodology.



Did you know?

86% of our Scope 3 purchased goods and services emissions come from c.10% of our suppliers

Reducing embodied carbon in concrete

Working with our Strategic Design Partner, Jacobs, to deliver the Environment Agency's project to renew the flood defences at Canvey Island in Essex, we have used a low carbon precast concrete. The precast concrete was manufactured using Cemfree Rapid based concrete which has a lower carbon footprint than Portland cement and resulted in a reduction of 29.5 tCO₂e of carbon emissions when compared to traditional solutions.



Canvey Island flood protection scheme

Reducing our Scope 3 carbon emissions (continued)

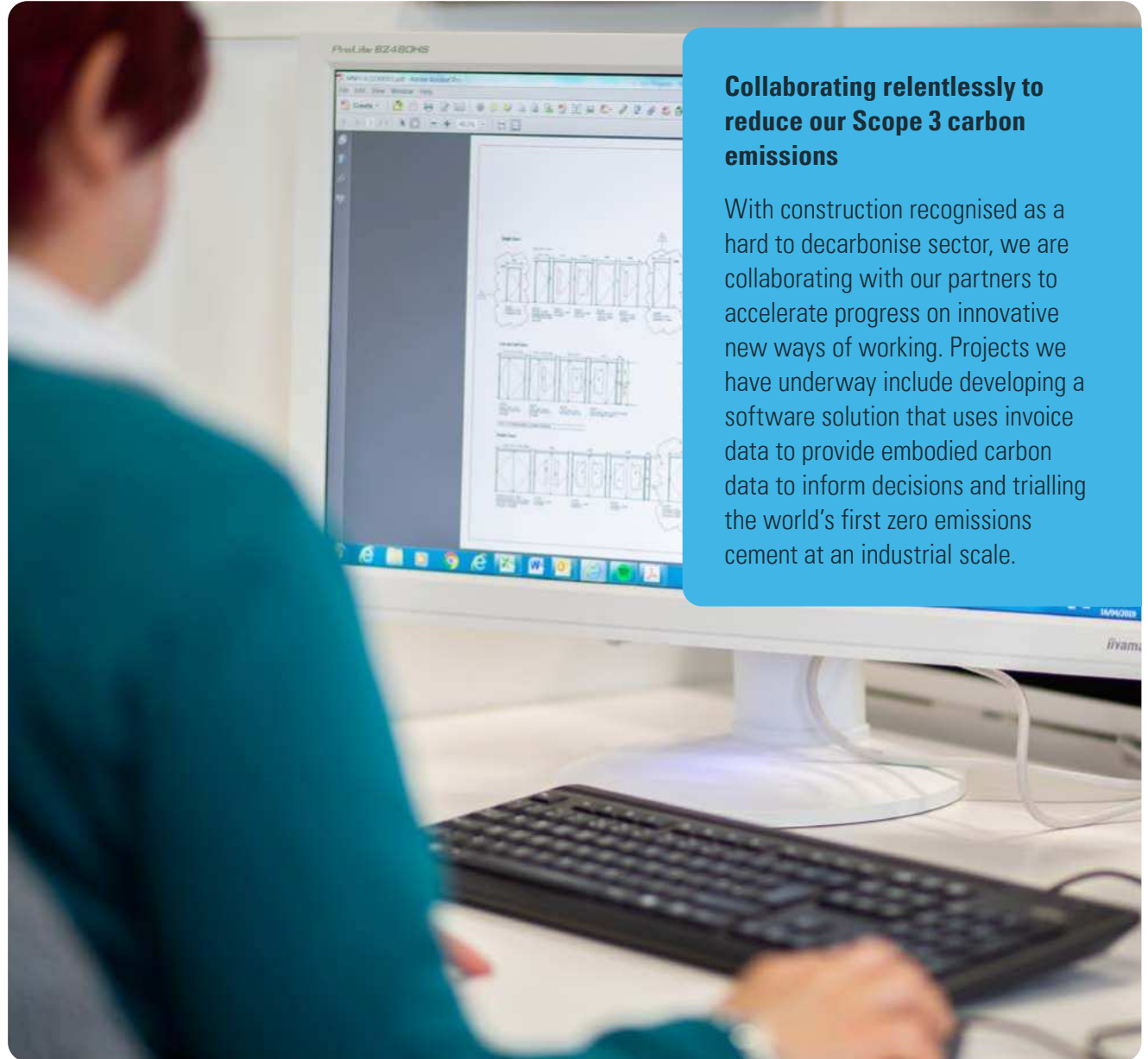
Our approach to reducing our Scope 3 carbon emissions from the goods and services we purchase is focused around three stakeholder groups - our procurement teams, our supply chain partners and our design teams.

Our procurement teams

Responsible for the day-to-day selection of suppliers for the products and services we buy, this group is growing its sustainability knowledge through the roll-out of training that helps them to consider carbon alongside other factors when making decisions.

Supporting our procurement teams, our Responsible Sourcing team has developed our sustainability heatmap tool to guide procurement decision making. Considering 13 areas of sustainability risk and opportunity across the goods and services we buy and the works we subcontract, the heatmap is used to focus our attention on the supply chain partners that can have the biggest impact in meeting our sustainability commitments and targets.

Putting this training into action alongside the insights gained from our sustainability heatmap tool, our procurement teams in the UK have identified the suppliers that can have the biggest impact on reducing our Scope 3 carbon emissions and, with support from experts across our business, are working closely with supply chain partners on carbon reduction projects including Cement 2 Zero - a trial of the world's first zero-emissions cement at an industrial scale.



Collaborating relentlessly to reduce our Scope 3 carbon emissions

With construction recognised as a hard to decarbonise sector, we are collaborating with our partners to accelerate progress on innovative new ways of working. Projects we have underway include developing a software solution that uses invoice data to provide embodied carbon data to inform decisions and trialling the world's first zero emissions cement at an industrial scale.

Reducing our Scope 3 carbon emissions (continued)

Our supply chain partners

To achieve our Scope 3 carbon emissions reduction targets, we are supporting our supply chain partners to decarbonise by:

- Improving data collection – we are developing our data capture processes to move towards collecting physical data from suppliers e.g. volume / weight of purchased material, to provide a more accurate and granular picture of our Scope 3 carbon emissions. As part of this work, we are collaborating with our industry peers, academics and supply chain partners to develop a software solution that uses invoice data to provide embodied carbon data. This data can be used to benchmark the carbon footprint of different products and services, giving both Balfour Beatty and its supply chain partners the data they need to consider carbon alongside other factors when making purchasing decisions.
- Sustainability training – through our work with the Supply Chain Sustainability School, we provide a range of sustainability resources that help upskill our supply chain partners and the wider industry.
- Including sustainability in our decision making – we have developed a sustainability question set which is adjusted depending on the sustainability risks and relative size of a tender. With robust evaluation and scoring criteria, it ensures that sustainability is fully assessed within a tender and the responses can be used as part of contractual terms and/or supply chain partner KPIs. Where applicable, sustainability has a minimum of 10% weighting, with the flexibility to increase this depending on the sustainability risk of the goods or services.

Did you know?

In 2023, 34% of carbon emissions from our Scope 3 category were produced by suppliers who have either set, or committed to set, a science-based target to reduce their carbon emissions.



Supply Chain Sustainability School

The Supply Chain Sustainability School is a valuable resource that provides learning opportunities for individuals and organisations seeking to deepen their understanding of sustainability in the built environment.

As a long standing partner to the Supply Chain Sustainability School, we recognise how the School helps to drive change and share best practice by upskilling our employees and supply chain partners on a range of key topics such as carbon management and modern slavery.

Throughout 2023 our employees and supply chain partners made extensive use of the School, participating in over 4,000 workshops and completing over 12,500 e-learning modules across 17 sustainability-linked topics.

Reflecting our commitment to working with suppliers who are committed to sustainability, in 2023 80% of our UK supply chain spend was with members of the School.

You can find out more about the Supply Chain Sustainability School at supplychainschool.co.uk

Reducing our Scope 3 carbon emissions (continued)

Our design teams

We are working with our design teams, including our Strategic Design Partners Mott MacDonald, AtkinsRéalis and Jacobs, to incorporate carbon, and sustainability more broadly, into early decision making.

This includes, as part of our Highways businesses PAS 2080:2023 certification, implementing method led construction principles that integrate design and construction decisions to reduce carbon emissions from the products and services we buy. Implementing these principles also increases the use of modern methods of construction including off-site manufacturing and modern delivery techniques which help deliver efficiencies including using less material and producing less carbon emissions. To help other business units progress towards using a PAS 2080:2023 approach to carbon management, we are embedding its principles in our UK-wide Business Management System.

As we implement modern methods of construction and method led construction, to help us track the success of the decisions made to reduce carbon emissions during the design stages, our Strategic Design Partnership has developed a sustainability reporting methodology that will be used on all of the projects we work on together.

Embedding sustainability

Supporting our work across these three key stakeholder groups, our entire supply chain works to our Sustainable Procurement Policy which outlines a number of priorities including minimising carbon emissions over the lifecycle of a product or service and enabling the reporting of Scope 3 carbon emissions. We are also constantly considering new partnerships with innovative companies who offer lower carbon alternatives and new ways of working.

Developing our modern methods of construction expertise

Our modern methods of construction steering group is increasing our capability in this area through developing our people and ensuring our processes and ways of working enable the benefits of modern methods of construction, including reducing carbon emissions, to be realised. On the ElecLink Interconnector project which increases energy transmission capacity between the UK and France, we realised the benefits of modern methods of construction through our bespoke engineering train which automated the installation of 10,000 galvanised steel brackets and 40,000 bolts.

Reducing our Investments category emissions

Focusing on the assets our Infrastructure Investments business invests in, develops and operates, we are collaborating with our customers to incorporate low-carbon requirements at the design stage and to retrofit low-carbon solutions to existing assets.

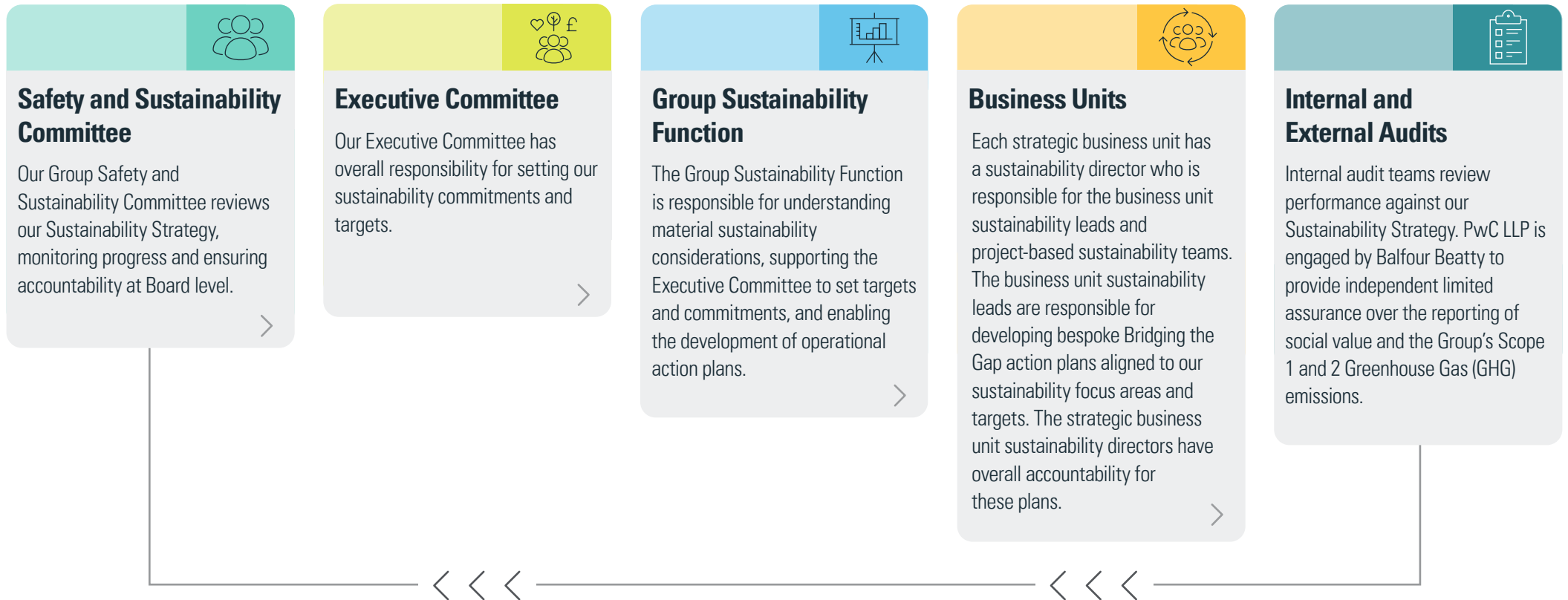
Our selected joint ventures and operations where we do not have direct operational control are also included in our Investments category emissions. To support and learn from these operations, we are collaborating with them to share best practice and drive the adoption of low carbon innovations.



The East Slope Residences at the University of Sussex is part of our Infrastructure Investments portfolio

Governance

Our Building New Futures Sustainability Strategy includes the implementation of this Carbon Reduction Plan. With Sustainable as one of our five core values which drives actions and behaviours across Balfour Beatty, we are committed to making the right choices and ensuring sustainability is supported by a robust governance framework.



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 standard⁵ 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.⁶

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

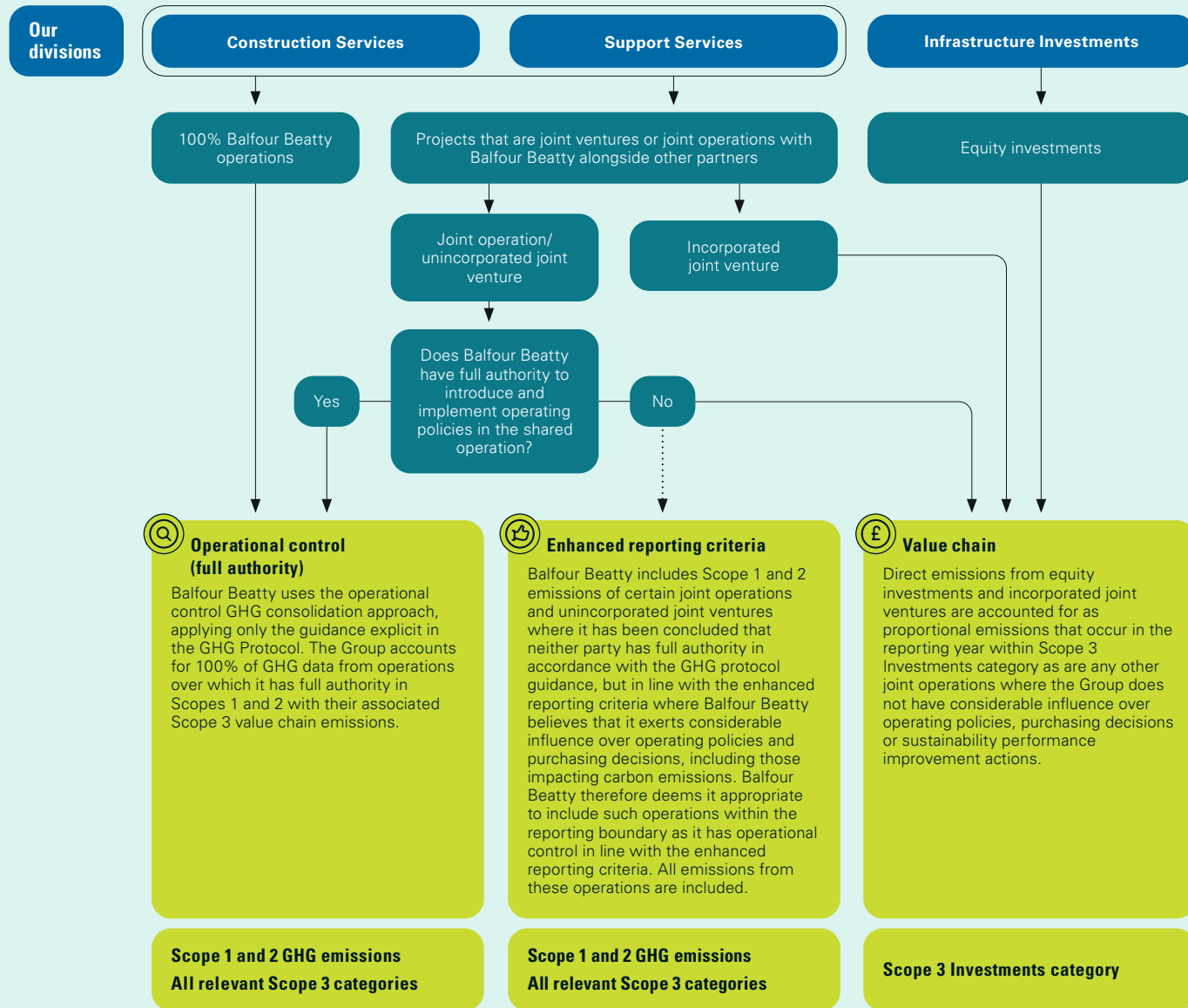
Signed on behalf of Balfour Beatty Group Limited:

Philip Harrison
Chief Financial Officer

⁵ [Corporate Standard | GHG Protocol](#)

⁶ [Corporate Value Chain \(Scope 3\) Standard | GHG Protocol](#)

Appendix 1 – Operational control decision process



Appendix 2 – Scope 3 calculation methodology

We use the Greenhouse Gas Protocol's Scope 3 calculation guidance using the following methodologies:

Purchased goods and services	<p>Hybrid methodology combining supplier specific activity data (where available) and secondary data to fill the gaps. This method involves:</p> <ul style="list-style-type: none"> Collecting allocated Scope 1 and 2 emission data directly from suppliers. Calculating upstream emissions of goods and services from suppliers' activity data on the amount of materials, fuel and electricity used, distance transported, and waste generated from the production of goods and services. Applying appropriate emission factors. Using secondary data to calculate upstream emissions wherever supplier-specific data is not available using an environmentally extended input-output (EEIO) model. 	Upstream transportation and distribution*	Spend-based method which involves determining the amount of money spent on each mode of business travel/transport and applying secondary (EEIO) emission factors based off economic activity (spend) on goods which provisions within the OpenIO factors applied to upstream transportation & distribution spend.
Capital goods	Average spend-based methodology calculates estimated emissions for the capital goods we purchase by collecting data on the financial value of these capital goods and multiplying this by industry average emissions factors. This gives us the average emissions per monetary value of capital goods purchased in the reporting year.	Waste generated in operations*	A combination of waste type-specific method data in geographies where volumes of waste produced, type and treatment method are specified and use the average-data method where data on treatment methods is not available.
Fuel and energy related activities	<p>Average-data method which involves estimating emissions by using secondary e.g. industry average, emission factors for upstream emissions per unit of consumption (e.g. kg CO₂e/kWh).</p> <p>This indicator is calculated automatically via the reporting platform used by Balfour Beatty from complete Scope 1 and 2 data.</p>	Business travel*	Distance-based method is used which involves determining the distance and mode of business trips, then applying the appropriate emission factor for the mode used.
		Employee commuting*	<p>Average-data method is used which involves estimating emissions from employee commuting based on average data on commuting patterns.</p> <p>The Group does not report the optional emissions from home working (defined in the Greenhouse Gas Protocol as "teleworking") however, there are employees in professional services job families where home working is a possibility. Home working is therefore considered when deducing the average number of days commuting occurs based off average levels of occupancy of office desk spaces in the reporting year.</p>
		Downstream transportation and distribution*	This activity is not applicable to our activities

* Scope 3 reporting category which is a specific requirement of PPN06/21

Appendix 2 – Scope 3 calculation methodology (continued)

Use of sold products	<p>Balfour Beatty Homes is the only business in the Group which enacts the role of vendor to the third party for sold goods which have emissions in the direct use-phase (buildings). The remainder of the Group either manufactures inert materials (such as fabricated steel) or provides construction and engineering services across a portfolio of projects on behalf of a client where the tangible asset is never the property of the Group, or “sold” by the Group upon practical completion.</p> <p>This category includes the total expected lifetime emissions from all relevant products sold in the reporting year across the company’s product portfolio.</p> <p>The Group does not report optional indirect use-phase emissions.</p>	Balfour Beatty other joint ventures and joint operations	<p>Using revenue in the reporting year as the basis of the average data, we apply the relevant market sector classification most closely aligned to the activity being undertaken in the joint operation as determined outside the Group’s operational control boundary (see Appendix 1 - Operational control decision process).</p>
End of life treatment of sold products	<p>End of life treatment methods e.g. landfill or recycling, are described in the ‘Waste generated in operations’ category and apply to both that category and ‘End of life treatment of sold products’ category.</p>		
Downstream leased assets	<p>This category includes emissions from the operation of assets that are owned by the Group (acting as lessor) and leased to other entities in the reporting year that are not already included in Scope 1 or Scope 2 emissions.</p>		
Balfour Beatty Investments	<p>Using revenue in the reporting year as the basis of the average data, we apply the relevant market sector classification most closely aligned to the activity being undertaken in the joint venture, concession company or residential investment.</p>		

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You can find our Carbon Reduction Plan online at balfourbeatty.com/carbonreductionplan

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