



Carbon reduction plan

Octavius Infrastructure Limited

Financial Year 2022-2023

Carbon reduction – PPN06/21 requirements

Version 1.0

1. Executive Summary

Octavius Infrastructure Limited (Octavius) is committed to achieving net zero Emissions as soon as we possibly can and ideally by 2035. Since 2022 we have been carbon neutral Scope 1 and 2 emissions.

We are aware that reducing our Greenhouse Gas (GHG) Emissions represents significant benefits for us, our customers, suppliers and the wider community.

Our Carbon Reduction Plan (CRP) covers the strategies for Octavius's ongoing commitment to the management and reduction of our business-related carbon emissions. It includes Octavius's baseline year information, sets clear targets for reducing GHG emissions over key timeframes and lists our planned projects to achieve carbon net zero by 2035.

While some of these achievements will be realised by direct reduction in emissions from the energy, materials and fuels we use, some change will be reliant on clear leadership direction and behavioural change. In addition, the implementation of carbon reduction will require funding, reliance on research and development and by working in collaboration with our customers and supply chain partners.

As a civil engineering business, we are very aware of our carbon footprint and the impact we have from our direct and indirect emissions.

The points below show the journey we are taking:

- Octavius aims to reduce its GHG emissions to net zero by 2035 based on its 19/20 baseline
- Octavius GHG baseline emissions were 4233 tonnes in 2019/20
- Octavius GHG emissions were 3987 tonnes in 2020/21
- Octavius GHG emissions were 3945 in 2021/22
- This year, our Octavius GHG emissions are **3018 in 2022/23**
- Since 2022, we have improved our reporting on Scope 3 emissions for business travel, commuting, waste generation and transportation of goods and materials that were not measured in the baseline year.
- On our journey to net zero we have identified various carbon reduction opportunities, low carbon technologies and staff training and behaviour change projects that will support us in reducing our emissions overall.

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2. Meeting the reporting requirements

Octavius Infrastructure Limited are an UK incorporated business. Under the SECR legislation we are mandated to include energy consumption, emissions, intensity metrics and all energy efficiency improvements implemented in our most recent financial year. Octavius Infrastructure Ltd separated from Osborne Group Holdings Limited in September 2021 and have not acquired any organisations since then.

This report summarises the energy usage, associated emissions, energy efficiency actions and energy performance for Octavius Infrastructure Limited, under the government policy Streamlined Energy & Carbon Reporting (SECR), as implemented by the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. It also summarises, in the appendix, the methodologies utilised for all calculations related to the elements reported under Energy & Carbon

This Carbon Reduction Plan (CRP) is completed in compliance with [PPN06/21 as published by the Cabinet Office June 2021](#). This document will be reviewed and updated annually in line with the Octavius's Annual Report and Accounts. It will reflect any changes in organisational structure and take account of the efforts made to reduce our emissions over time to achieve the UK target of becoming net zero by 2050.

This document provides transparency and demonstrates progress towards building a robust carbon reduction programme. We consider this CRP to still be in development and we will continue to work with experts to undertake a review of our Scope 3 Inventory and collect data to help inform and improve the accuracy of our carbon emissions and reduction targets. These will meet both our Net Zero aspirations and continue to meet the requirements set out in Procurement Policy Note (PPN) 06/21. We have also pledged to use science-based targets (SBT) with full development of those targets in 2023.

2.1 Our low carbon vision

As an organisation, Octavius is committed to integrating sustainable development into everyday practice by minimising environmental impact wherever possible. Our strategic business plan sets out our ambitions for the business and our sustainable legacy commitments for the next five years.

During the process of developing this CRP, key areas have been selected that will allow us to demonstrate reductions in the carbon emissions generated by our activities.

3. Reporting Methodology

In accordance with the GHG protocol's corporate standard, the reported emissions should be reported against an operational boundary using one of three types of reporting methodology:

- equity share
- financial control
- operational control

Octavius reports on all sources of carbon emissions using the operational control methodology as we have operational control and provide a civil engineering service for our customers and have full authority to introduce and implement operating policies. We also have premises that are owned or leased or temporarily controlled by us during our operations.

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3.1 Scope reporting

Direct emissions

Scope 1 carbon emissions are those produced from our operations that are under our direct control. Typically, this includes all types of fuel used on site to power owned vehicles, plant, and onsite generators as well as that for heating and air conditioning.

Octavius own vehicles and purchase fuel to run our vehicles and therefore we report these emissions under scope 1.

Scope 2 carbon emissions are those produced indirectly from the purchase of electricity used to power offices, sites and battery-powered tools, electric plant, and vehicles. Procuring electricity from a 'green' energy supplier can significantly reduce or even eliminate these carbon emissions.

Octavius do not purchase energy for the buildings we lease as this is covered by the landlord. Where we have a direct connection to the national grid at our construction sites and offices or have specific clauses to pay for electricity separately, we will report these emissions.

Indirect emissions

Scope 3 emissions are those we produce indirectly by our operations from sources out of our immediate control. These are typically where most of an organisation's emissions are and can make up to 70-80% of the carbon footprint. Scope 3 emissions can include those from business travel, employees commuting, upstream and downstream transport, and distribution, purchased goods and services, waste and water. Identifying and measuring Scope 3 emissions can be a challenge.

- In the baseline year 2019 / 2020 our scope 3 emissions were limited to business travel.
- In 2020/21 our scope 3 emissions included Business travel and some upstream transportation and distribution linked to the movement of waste as part of our business.
- In 2021/22 we extended our scope 3 emissions to include Business travel, employee commuting and waste transportation and distribution.

In 2022/23 our scope 3 emissions include;

Business travel

Business travel includes grey fleet but excludes air travel (in line with our SECR reporting obligations). Please refer to the supporting notes in the Appendix.

The requirement to report on emissions above those set out in SECR includes business travel and this is measured and reported in the organisation's Annual Report and Accounts each year.

We have reported on business travel since our baseline year.

Employee commuting

As part of our Scope 3 Inventory, we collect information to determine the emissions from employee commuting to and from their places of work. These figures have been included in the total GHG emissions reporting since 2021/22 and for this reporting year 2022/2023 but were not included in the baseline year. Since the onset of lockdown in March 2020 and our introduction of hybrid working, our employees have not travelled as much as they did, and their movements are more variable. Our data on commuting takes account of how frequently our employees travelled into the office.

We have calculated a worst-case scenario and assumed that as a maximum employees commuted to their place of work on average 3 days per week. We then calculated the associated emissions by taking the distance between their home to their office / worksite location and applying the carbon factors associated with that distance and the average vehicle or train journey.

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Upstream distribution and transportation

We already actively record waste data from our own operations. As part of our Scope 3 Inventory, we shall collect further information to support the monitoring and targeting of waste generated in operations (in facilities not owned or controlled by ourselves). We have started using a tool to support us with the data collection to report GHG emissions.

At Octavius we both purchase and use goods and materials as part of our business and therefore we are planning to start reporting on materials purchased in 2023/24. This shall be confirmed as part of our Scope 3 Inventory, since we acknowledge under PPN that a non-materiality clause is not accepted.

Downstream transportation and distribution

By their nature our products are not typically transported or distributed to the end customer, this aspect is therefore not considered relevant to our emissions reporting. This shall be confirmed as part of our Scope 3 Inventory, since we acknowledge under PPN that a non-materiality clause is not accepted.

Home working

This year we have included in our scope 3 emissions details on the number of hours that individuals in our business are working from home. We have used the Defra combined value of both office equipment and heating. This is confirmed as part of our Scope 3 Inventory, since we acknowledge under PPN that a non-materiality clause is not accepted.

Hotel stays

This year we have included in our scope 3 emissions details on the nights individuals in our business spent in hotel stays. We have used the Defra combined value of London and the UK values. This is confirmed as part of our Scope 3 Inventory, since we acknowledge under PPN that a non-materiality clause is not accepted.

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3.2 Baseline year FY 2019/2020

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 reductions can be measured.

Baseline Year: 2019/20 (Part of Osborne Group Holdings Limited)	
Additional Details relating to the Baseline Emissions calculations.	
<i>The GHG emissions scope boundary, used to establish our 2019/20 baseline, was determined via an operational control model following the GHG protocol. The baseline includes all Scope 1 and 2 emissions in accordance with SECR requirements (excluding operations over which the Group does not have controlling share), this includes subcontractor fuel usage onsite and Scope 3 emissions from grey fleet for business travel only.</i>	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	3,101
Scope 2	613
Scope 3 (Included Sources) Business travel	519.19 519.19
Total Emissions	4,233

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3.3 Financial year 2020/2021

Financial Year: 2020/21 (Part of Osborne Group Holdings Limited)	
Additional Details relating to these FY Emissions calculations.	
<p>The GHG emissions scope boundary, used to establish the GHG emissions for Financial Year 2020/2021, was determined via an operational control model following the GHG protocol. This year includes all Scope 1 and 2 emissions in accordance with SECR requirements. It also includes the following scope 3 emissions Business travel, and upstream transportation and distribution associated with subcontractor fuel usage onsite and from grey fleet.</p> <p>Note also that for 2020/21, the global Covid-19 pandemic meant that all of our office staff worked from home for the entire financial year however operatives and site personnel remained working on site.</p> <p>Intensity metrics have been calculated utilising the 2020/21 reportable figures, and tCO₂e for both individual sources and total emissions were then divided by this figure to determine the tCO₂e per metric:</p>	
Total emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	2,389
Scope 2	381
Scope 3 (Included Sources)	1,244
Business travel	749
Upstream transportation and distribution	468
Total Emissions	3,987
Intensity Metrics	<p>Total number of employees on 01 April 2021 = 359</p> <p>Tonnes carbon per employee = 11.10tCo₂</p>

3.4 Financial year 2021/2022 Current Emissions reporting

Financial Year: 2021/22 (Part of Osborne Group Holdings Limited until 16/09/21)	
Additional Details relating to these FY Emissions calculations.	
<p>The GHG emissions scope boundary, used to establish the GHG emissions for Financial Year 2021/2022, was determined via an operational control model following the GHG protocol. This year includes all Scope 1 and 2 emissions in accordance with SECR requirements. It also includes the following scope 3 emissions.</p> <p>Business travel, and upstream transportation and distribution associated with subcontractor fuel usage onsite and from grey fleet. This year also includes details additional scope 3 emissions relating to employee commuting and the generation of waste transportation and distribution from sites.</p> <p>Note also that for 2021/22 the global Covid-19 pandemic still meant that most of our office staff worked from home for the entire financial year however operatives and site personnel remained working on site.</p> <p>Intensity metrics have been calculated utilising the 2021/22 reportable figures, and tCO₂e for both individual sources and total emissions were then divided by this figure to determine the tCO₂e per metric:</p>	
Total emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	1886
Scope 2	76
Scope 3 (Included Sources) Business travel ¹ Employee commuting ² transportation and distribution ³	1836 556 112 1168
Total Emissions	3798
Intensity metrics	Total number of employees on 01 April 2022 = 393 Tonnes carbon per employee = 10.03tCo ₂

¹Business travel includes grey fleet but excludes air travel (in line with our SECR reporting obligations). Please refer to the supporting notes in the Appendix.

² Fuel used on our sites by contractors

³ Employee commuting to our sites

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3.4 Financial year 2022/2023 Current Emissions reporting

Financial Year: 2022/23	
Additional Details relating to these FY Emissions calculations.	
<p>The GHG emissions scope boundary, used to establish the GHG emissions for Financial Year 2022/2023, was determined via an operational control model following the GHG protocol. This year includes all Scope 1 and 2 emissions in accordance with SECR requirements. It also includes the following scope 3 emissions. Business travel, and upstream transportation and distribution associated with subcontractor fuel usage onsite and from grey fleet, employee commuting and waste transportation and distribution from sites.</p> <p>This year we have also taken into account homeworking and hotel stays.</p> <p>Note also that for 2022/23 the introduction of hybrid and flexible working at Octavius has meant that many of our office staff work from home a minimum of 2 days per week however operatives and site personnel remained working on site.</p> <p>Intensity metrics have been calculated utilising the 2022/23 reportable figures, and tCO₂e for both individual sources and total emissions were then divided by this figure to determine the tCO₂e per metric:</p>	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	1095
Scope 2	34
Scope 3 (Included Sources)	1889
Supplier fuels for distribution and transportation ³	331
Business travel ⁴	622
Employee commuting ⁵	449
transportation and distribution ⁶	249
home working ⁷	201
hotel stays ⁸	37
Total Emissions	3018
Intensity metrics	Total number of employees on 01 April 2022 = 473 Tonnes carbon per employee = 6.38

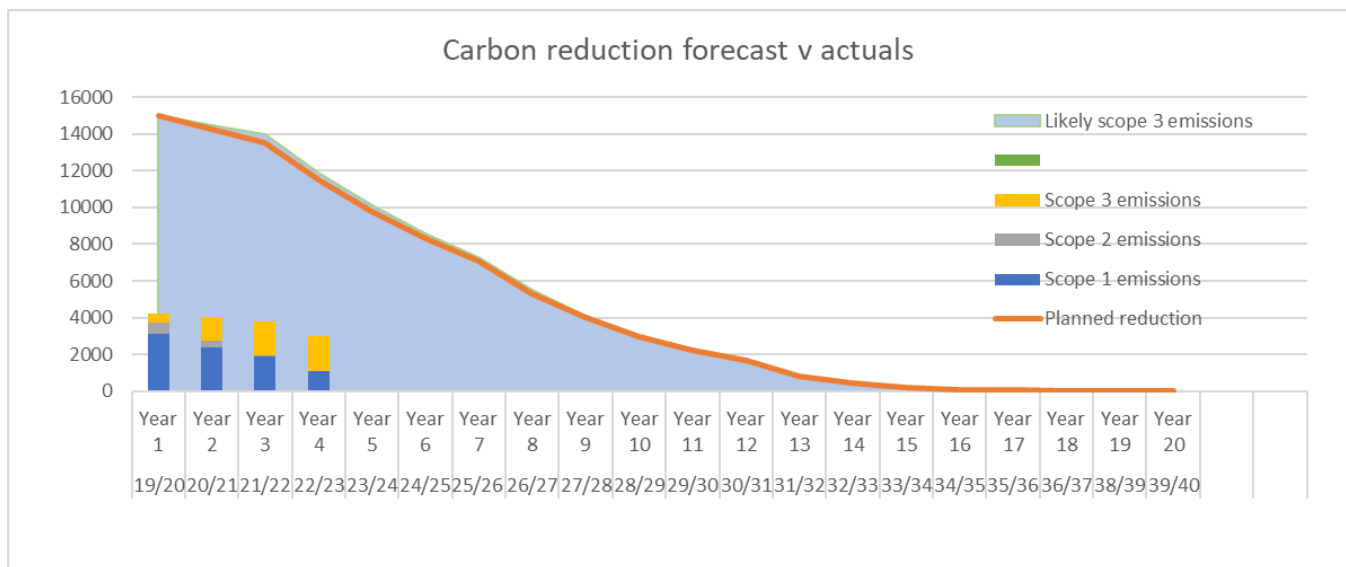
³Supplier fuel for transportation and distribution⁴Business travel includes grey fleet but excludes air travel (in line with our SECR reporting obligations).⁵ Employee commuting to our sites and offices⁶ materials and equipment⁷ Homeworking for heating and office equipment⁸ Hotel stays

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4. Strategies for carbon reduction

The carbon reduction opportunities in this plan, once fully implemented, will reduce Octavius GHG emissions each year in line to achieve our goal to achieve net zero emissions in line by 2035. Please see below our forecast emissions v actuals. To achieve this, we are initiating a step change in implementation to achieve a 15% reduction year on year for the until 2025 and from then an accelerated programme of reduction as more low carbon technologies and materials become available. We know we do not capture all our scope 3 emissions from our supply chain and therefore we have also shown our likely emissions for illustrative purposes. Our reporting and recording of scope 3 indirect emissions is something we will continue to address over the next two years.



4.1 Completed carbon reduction projects

The carbon reduction projects that have been introduced in 2022/23 equate to a total reduction of emissions by 780tCo2e, (a 21% reduction) since last year and a 29% reduction since our baseline year.

The following environmental management measures and projects have been completed or implemented since the 19/20 baseline:

- Actively identifying opportunities focusing on high impact elements of our operations, focused on those which we have the greatest potential influence / control.
- Increase availability of hybrids on company car scheme
- Development of a low carbon options guide
- Increase use of low carbon onsite equipment and lower carbon mobile site accommodation
- Implementation of Action Sustainability, a Sustainability Tool to increase capture of scope 3 emissions
- Electricity procured on a low carbon basis from renewable sources.
- Move to alternative fuels with our supplier Watsons to source and provide fuel for our sites.
- All sites to use hydrogenated vegetable oil (HVO) as an alternative to diesel and petrol for use of generator.

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- Use of eco cabins that use renewable energy for site welfare to avoid the need for diesel generators.
- Introduce an improved car scheme for electric vehicles to encourage our employees to adopt and use.

The carbon reduction projects that have been introduced in 2022/23 equate to a total reduction of emissions by 780tCo_{2e}, (a 21% reduction) since last year and a 29% reduction since our baseline year.

4.2 Reductions in scope 1 emissions

The following initiatives are being implemented in 2023/24 to further reduce our scope 1 emissions for directly purchased fuel.

- installation of EV charging points at our sites.
- Use of low carbon alternatives for plant and equipment.
- Introduce a leasing arrangement for our van fleet so that they convert to electric vehicles electrical vehicles for our van fleet.

4.3 Reductions in scope 2 emissions

The following initiatives are being implemented to reduce our scope 2 emissions for electricity,

- Seeking reduction in electricity use through PIR lighting in offices,
- Using renewable sources of electricity generation on site.

4.4 Reductions in scope 3 emissions

The following initiatives are being implemented to reduce our scope 3 emissions,

Business travel

- Introduce an improved car scheme for electric vehicles to encourage our employees to adopt and use alternative vehicles to those run on petrol or diesel,
- Introduce a leasing arrangement for our van fleet so that they convert to electric vehicles electrical vehicles for our van fleet,
- Encouraging the use of public transport for business related travel.

Employee commuting

- Introduce an improved car scheme for electric vehicles to encourage our employees to adopt and use alternative vehicles to those run-on petrol or diesel,
- Encouraging the use of bicycle through a cycle scheme,
- Encouraging the use of public transport for business related travel,
- Provide driver and staff awareness training,

Upstream transport and distribution

- Actively seek to reuse as much material as we can on our sites to avoid the need for transportation to waste recovery or disposal facilities,
- Develop and implement a supply chain engagement policy and guidance document,
- Use local facilities to our sites to reduce transportation needs,

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- Introduce a better reporting mechanism for recording the use of purchased goods and materials to track all the materials we purchase and where they come from,
- Measure the total amount of materials used on behalf of our clients.

4.4 General carbon reduction activities in our project lifecycle

We're targeting Net Zero carbon in 2035 and are carbon neutral now for our direct emissions. We have a programme for further reducing our direct and indirect emissions in alignment with the carbon hierarchy and wider agenda of natural capital ensuring a holistic approach is adopted:

- Avoiding carbon emissions by scoping out and refining scopes of work
- Minimising emissions using less fuel, fewer materials, and using materials with lower embodied carbon
- Using alternative energy sources such as renewables and fuels sources such as certified and sustainable HVO and biofuels
- Applying best practice principles in the delivery of our projects including innovation, low carbon alternatives, ensuring we have a better understanding of eco-system services, lean management and more efficient ways of working
- Reducing avoidable waste using circular economy principles and targeting single use plastics.

Where we have exhausted the above options and have residual emissions, we have implemented a programme of certified offsetting both in the UK and abroad. This delivers on the UN COP27 ambition to support developing countries with the challenge of climate finance.

Our framework to achieve this is based on the principles of PAS2080 carbon management and ISO20400 responsible procurement accreditation with the aim of achieving this by 2024.

We have a carbon steering group, consisting of enthusiastic volunteers from across the business, helping to shape and prioritise what we can do on our sites. Colleagues are welcome come along and support with ideas and actions.

4.5 Communication

We work with key partners and other stakeholders to achieve a better understanding of our emission contributions in the energy usage and waste emission categories. Even with these categories being out of our direct control, we will work with our customers to support their emission reductions.

We review our CRP in September each year, update it in May each year and publish our plan on our website.

4.6 Employee learning and behaviour change

Our programme of learning and behavioural change will continue to develop over the next 12 months to raise the environmental awareness for all Octavius employees and suppliers.

Working with all employees, we will encourage better energy use, carbon and climate change awareness and improvements in resource efficiency. During the pandemic for example, while many employees were working from home, it highlighted how work could be done from home and as a result we have instigated a hybrid working policy to limit the need for commuting and business travel.

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Since April 2021, Octavius have instigated a programme of engagement and awareness training for site staff, office staff and employees, this has continued in 2023. We have actively engaged with the Supply Chain sustainability school to work with them on modules for learning and development of our people. We have provided Site Environmental Awareness Training (SEATs), carbon and climate change awareness sessions, newsletter articles and publications.

4.7 Leadership

The Executive Board of Octavius has given, and will continue to give, its full support to this carbon reduction programme and the team required to achieve Octavius' net zero ambitions.

The Executive Board will lead by example through Cat Cliffe, our People and Sustainability Director, who has direct accountability in the board and challenge to the board on ensuring carbon reduction is part of our business offering. Our business strategy has been developed with sustainable legacy in mind and particularly focusses on carbon reduction, resource efficiency and biodiversity enhancement in our strategy for tackling climate change. The executive board is also committed to modelling best practice behaviours in carbon reduction wherever possible, by helping to push for and then implementing changes, along with arranging for specific sub-project funding if, and when, needed.

5.0 Declaration and sign-off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standards 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 Octavius Infrastructure Limited

Catriona Cliffe

People and Sustainability Director

May 2023

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Appendix 1: Reporting Methodology

Scope 1 and 2 consumption and CO₂e emission data has been calculated in line with the 2021 UK Government environmental reporting guidance. The following Emission Factor Databases consistent with the 2021 UK Government environmental reporting guidance have been used, utilising the current published kWh gross calorific value (CV) and kgCO₂e emissions factors relevant for reporting year 01/04/2021–31/03/2022: Database 2021, Version 1.0.

Estimations undertaken to cover missing billing periods for properties directly invoiced to Octavius Infrastructure Ltd were calculated on a kWh/day pro-rata basis at meter level. These estimations equated to 3.63% of reported consumption.

For properties where Octavius Infrastructure Ltd is indirectly responsible for utilities (i.e. via a landlord or service charge), either (a) an average consumption for properties with similar operations, was calculated at meter level and applied to the properties with no available data, or (b) a benchmark kWh/m² consumption was used based on the nature and size of operations with no available data. These full year estimations were applied to 2 electricity supplies at Rugby and Reigate offices. Intensity metrics have been calculated utilising the 2021/22 reportable figures for turnover and employees, and tCO₂e for both individual sources and total emissions were then divided by this figure to determine the tCO₂e per metric

Our GHG Reporting – Supporting Notes for PPN

In response to this new requirement for a Carbon Reduction Plan as part of the Procurement Policy Note (PPN) 06/21 we, like much of our sector, are increasing the scope and accuracy of our GHG reporting. This section offers supporting notes to put our reporting into context against the PPN requirements and set out our ambition over the next 12 months so that we can report in full for the first time. While we have been actively reporting and targeting GHG emissions (exceeding the requirements for other schemes such as SECR), we have not had any mandated requirement to report wider Scope 3 emissions as we are not a listed company. We trust these supporting notes provide an acceptable explanation of our current position regards our emissions reporting.

We are undertaking a comprehensive review of our operations and the recently published requirements set out within PPN 06/21 and are implementing actions to close identified gaps in our Scope 3 reporting. The focus of our Scope 3 emissions accounting shall be focused on, but not necessarily limited to, the following GHG categories:

- Upstream transportation and distribution
- Waste generated in operations
- Business travel
- Employee commuting
- Downstream transportation and distribution

The Scope 3 section above outlines our intended actions and demonstrates our commitment to reaching Net Zero.
CRP Review

We review our Carbon Reduction Plan no later than September each year.

CRP Published

This is our preliminary carbon reduction plan, published to meet the need of PPN 06/21. We continue to work on increasing the scope and accuracy of our reporting. Our intention is to have a complete baseline and confirmed target, which we shall publish in 2022 as part of our wider reaching carbon reduction program.