



INNOVATIVE  
COLLABORATIVE  
SUSTAINABLE



# CARBON REDUCTION PLAN

AUGUST 2023 | PPN 06/21



# COMMITMENT TO ACHIEVING NET ZERO

The Barnes Group Limited is committed to achieving Net Zero carbon emissions by 2045. We have already made substantial investments in solar panels to generate much of our office electricity needs, taken a range of other carbon reduction steps and been regular investors in forest preservation programmes with the World Land Trust to cover our net emissions. We are developing our expertise on how to make buildings consume less carbon.

The Barnes Group is fully committed to supporting the UK Governments ambition of achieving Net Zero Carbon emissions by 2050 with targets to achieve this well ahead of this date. We are working very closely with our supply chain and clients to do the same.



The Barnes Group Limited financial year starts 1st October and ends 30th September, and our carbon reporting has been aligned to this reporting cycle. The Carbon Reduction Plan has been developed to set out the commitment to achieve Net Zero carbon by 2045 or earlier. The plan will be reviewed and updated in line with the business growth and further understanding of the Scope 3 emissions.

# BASELINE EMISSIONS FOOTPRINT (SCOPE 1, 2 & 3)

## SCOPE 1 & 2 EMISSIONS

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. Our aim is to do everything we reasonably can to operationally reduce our carbon footprint. While we reduce emissions we will continue to invest in offsetting through credible, high-quality and certified schemes such as The World Land Trust.

BASELINE YEAR: 2019	
Emissions	Total (tCO2e)
Scope 1	156.1
Scope 2	31.4
Scope 3 (Included Sources)	241.7
<b>Total Emissions</b>	<b>429.2</b>
REPORTING YEAR: 2021	
Emissions	Total (tCO2e)
Scope 1	162.9
Scope 2	33.0
Scope 3 (Included Sources)	205.0
<b>Total Emissions</b>	<b>400.9</b>
REPORTING YEAR: 2022	
Emissions	Total (tCO2e)
Scope 1	136.5
Scope 2	31.0
Scope 3 (Included Sources)	200.6
<b>Total Emissions</b>	<b>368.2</b>

**REGULAR  
INVESTORS  
WITH**



**WORLD  
LAND  
TRUST**

## SCOPE 3 EMISSIONS

Scope 3 emissions are the indirect emissions arising from the companies up- and down-stream impacts. We are currently reviewing and developing our scope 3 measurement against the relevant GHG Protocol scope 3 categories and have a baseline assessment against which our emissions will be measured during 2024. These categories include:

- ◆ Category 1: Purchase Goods and Services
- ◆ Category 2: Capital Goods
- ◆ Category 3: Fuel- and energy-related activities
- ◆ Category 4: Upstream transportation and distribution
- ◆ Category 5: Waste generated in operations
- ◆ Category 6: Business travel
- ◆ Category 7: Employee commuting
- ◆ Category 13: Downstream transport and distribution

Further work is required to define and measure Scope 3 emissions; for the purpose of target setting preliminary estimates of each category has been conducted with more data to be ascertained to create more robust projections for scope 3 emissions in 2024.

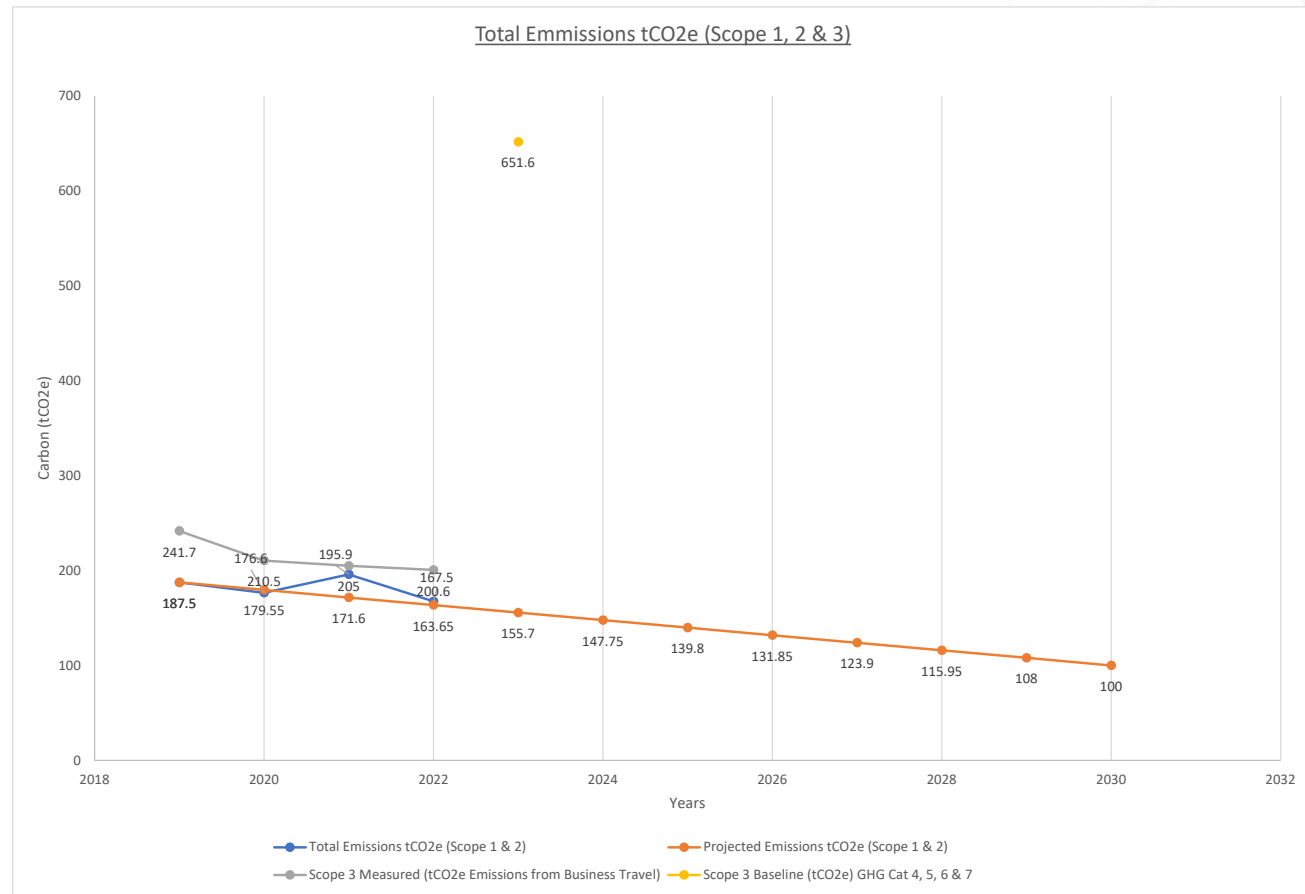
SCOPE 3 CATEGORY REQUIRED:	tCO <sub>2</sub> e	COMMENTS
Category 1 & 2 Purchase goods and services and capital goods	TBC	Based on spend-based method. High level categorisation with conservative assumptions. Further works required to understand spend categories and conversion factors.
Category 4: Upstream Transport and Distribution	155	Based on emissions from another construction company (and based on 5% of the emissions of cat 1 & 2)
Category 5: Waste generated in operations	175	Estimate based on waste spend. 50% of waste to landfill with the other half recycled or to energy plant (per Ashe construction)
Category 6: Business travel	200.6	Business travel not included in scope 1 & 2 (i.e. train)- this is assumed to be 200 train journeys of 100km
Category 7: Employee Commuting	121	Assumed to be office based staff only- 200 people travelling 40 miles per day
Category 13: Downstream transport and distribution	TBC	Still to be determined, to include carbon measurements of our leased assets that are not included in the reporting protocols of our tenants.

# PATHWAY TO EMISSIONS REDUCTION COMMITMENT 2030

**SCOPE 1** - Direct Emissions from Site (Head Office)

**SCOPE 2** - Indirect Emissions from Energy/Utilities

**SCOPE 3** - Upstream and Down Stream emissions



\*Our reduction targets will be reviewed and adjusted accordingly to suit the growth and investment of the business.  
 \*\*Scope 3 baseline emissions calculated during 2023 and therefore recalibrated from our baseline calculation in 2019.

# NET ZERO STRATEGY

To continue our progress to achieving NetZero, we have adopted the following Carbon Reduction Targets subject to the development of suitable technological advancements. We project that carbon emissions for Scope 1 & Scope 2 will decrease over the next eight years to 100 tCO<sub>2</sub>e by 2030. This is a reduction of 47%.

Our Scope 3 emissions will be captured over the coming years, and it is our intention to ensure that the recording of this is as accurate as it can be. To date, these requirements have been defined by our clients' requirements. We intend to solidify our net zero commitment by joining The Climate Pledge, part of the UN's Race to Zero Campaign. Our long-term target will be supplemented by near-term Science-based target (SBT)s that align our reduction trajectory with that necessary to limit global warming to 1.5oC. We will define our reduction targets in accordance with the parameters of the Science Based Target Initiative (SBTi) once our

scope 3 data has been collated. Currently this is estimated as a 38% reduction in scope 1 and 2 emissions by 2030, and a 20% reduction in scope 3 emissions by the same year. We intend to focus on delivering a net-zero emissions target for our head office in Ipswich by 2030- the parameters of this target are being discussed at board level.

We will seek formal accreditation of our near-term targets by the appropriate organisation such as the Science-Based Target Initiative (SBTi) during 2024.

Net zero strategy  
We will publish our net zero strategy detailing group-wide initiatives to deliver carbon reduction to our operations across scope 1, 2 and 3 in line with our ambitions and the targets set by government.

**PROCURE 100% RENEWABLE ELECTRICITY ACROSS OWNED OFFICES AND SITES WHERE WE ARE PRINCIPAL CONTRACTOR BY 2035**



**REDUCE WASTE WITHIN THE BUSINESS**  
**REDUCTION OF PAPER USAGE BY 50% BY 2030**



**REDUCE ELECTRICITY AND WATER USAGE**

**INVESTMENT IN FURTHER PV ARRAYS TO FURTHER REDUCE OUR REQUIREMENT TO IMPORT ELECTRICITY**



**DEVELOP SUSTAINABILITY POLICIES FOR THE BUSINESS**





# CARBON REDUCTION PROJECTS

We formed our Sustainability Task Group within the business at the start of 2021 and we have set out and achieved the following objectives:

- ◆ Annual update of our Carbon Reduction Plan.
- ◆ Undertake thorough literature review and attend CPD events to increase knowledge.
- ◆ Undertake electric and water usage monitoring on building sites when we are principal contractor to gain baseline data.
- ◆ Undertake evidence gathering relating to our social responsibilities, waste recycling and use of local supply chain with information collated on our new Social Value Database.
- ◆ Put together the Barnes Group Sustainability Action Plan and update annually.
- ◆ Investment in external training for all employees.
- ◆ Collection of staff ideas around reducing our carbon footprint, reviewed and implementation programme produced.
- ◆ School engagement around the topic of sustainability.
- ◆ Commencement of Research & Development project.

NEW CHILDREN'S HOSPICE, ST  
AUGUSTINE'S GARDENS, IPSWICH,  
SUFFOLK



# DECLARATION AND SIGN OFF

We have completed our Carbon Reduction Plan in accordance with PPN 06/21 and associated guidance.

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.

Our Carbon Reduction Plan has been reviewed and signed off by our Chairman and Board of Directors.

**NAME:** William Barnes

**SIGNED:** 

**POSITION:** Chairman

**DATE:** August 2023



**WILLIAM BARNES**

CHAIRMAN

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