

Carbon Reduction Plan

Supplier name: Barhale Holdings plc

Publication date: 01 June 2023

Commitment to achieving Net Zero

Barhale Holdings plc is committed to achieving Net Zero emissions by 2040.

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.

Baseline Year: 2018/19	
Additional Details relating to the Baseline Emissions calculations.	
The 2019 baseline detailed below was calculated using established datasets for Scope 01 and 02 and both category 05 waste generated in operations, category 06 business travel and category 09 downstream distribution and transportation. For financial years 2018/19 & 2019/20 Scope 03 emissions reporting was only part complete due to lack of information, for year 2020/21 Scope 03 emissions reporting was completed in full and as approved under our ISO 14064 Part 01 2006 & Part 3 2006 accreditations. The 2018/19 baseline and subsequent years have been approved under the ISO 14064 accreditation.	
Baseline year emissions: 2018/19	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	8,748.53
Scope 2	215.08
Scope 3 (Included Sources)	205.46
Total Emissions	9,169.07

Current Emissions Reporting

Reporting Year: 2021/22	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	4185.26
Scope 2	145.83
Scope 3 (Included Sources)	617.26
Total Emissions	4948.35

Emissions reduction targets

The below table identifies our carbon reduction results previous to our baseline year of 2018/19. Barhale has long been committed to carbon reduction and these results demonstrate our commitment through the reduction of gas oil and diesel on our projects and introducing energy efficient lighting and power on our premises.

GHG Inventory Results	2018/19 Base Line	2019/20	2020/21	2021/22
Scope 1 - Category 1: Direct Emissions	8,748.53	6,536.11	4,619.87	4,185.26
Scope 2 - Category 2: Indirect emissions from imported energy	215.08	156.55	171.51	145.83
Scope 3 - Category 3: Indirect emissions from transportation	317.12	49.79	543.12	593.04
Scope 3 - Category 4: Indirect emissions from products used by organisation	165.98	95.55	26.65	24.22
Scope 3 - Category 5: Indirect emissions associated with the use of products from the organisation	0	0	0	0
Scope 3 - Category 6: Indirect emissions from other sources	0	0	0	0
Total Gross Emissions	9,169.07	6,838.00	5,361.15	4,948.35

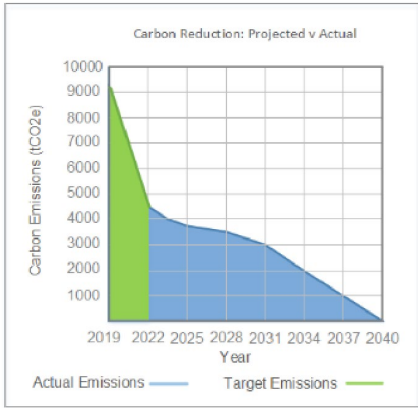
Note – Years indicated above represent our financial year-ends at the end of June.

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

We project that carbon emissions will decrease over the next five years to **3,527 tCO₂e** by **2026**. This is a reduction of **51.55%**

Future targets and progress can be seen in the table and graph below:

GHG Carbon Reduction Targets	2022	2023	2024	2025	2026
Scope 01	4000	3800	3600	3400	3200
Scope 02	150	130	110	100	95
Scope 03 Mandatory	220	215	210	205	200
Scope 03 Additional	40	38	36	34	32
Total Gross Emissions	4410	4183	3956	3739	3527



Carbon Reduction Projects

Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2018/19 baseline to year 2021/22. The carbon emission reduction achieved by these schemes equate to 4,220.72 tCO₂e, a 46.03% reduction against the 2019 baseline.

Certification Schemes:

- ISO 14001 Environmental Management
- ISO 9001 Quality Management
- ISO 14064 Part 01 2006
- ISO 14064 Part 02 2006

Carbon Reduction Projects:

- Electricity waste reduction, 90% of all of our premises are now fitted with LED lighting and PIR lighting controls;
- Reduction in gas oil, 80% of our projects/sites are now powered by mains electricity, solar power or hybrid generators;
- Introduction of Hybrid and Electric vehicles to our company car list, whereby 80% of our fleet are now low emission vehicles.

In 2021 the Barhale Doosan JV was contacted to design and construct the integrated wetland project at the Yorkshire Water Clifton wastewater treatment works. The project created almost 4,000 sq. m of interconnected ponds planted with a natural slope, using the local impermeable clay geology with wetland plant species to remove phosphorus from the treated water before it is returned to the environment. Millions of litres of water will now be treated naturally by the 25 different plant species. Totalling over 20,000 plants across the site.



In the future we hope to implement further measures such as:

- 100% of our projects/sites accommodation will be powered from mains electricity, solar power or hybrid generators;
- All diesel and petrol cars and vans will be removed from our company car list.
- Our internal plant business will introduce full electric powered plant on our sites whereby technology and the right equipment for the task in hand is permitted / selected.
- Further assist our customers in designing and constructing more environmentally friendly/ responsible and carbon reducing projects such as the Clifton Wetlands project.

Declaration 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 standard¹³ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting¹⁴.

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) Standard¹⁵.

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:



Martin Brown, CEO

Date: 1st June 2023

¹³ <https://ghgprotocol.org/corporate-standard>

¹⁴ <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

¹⁵ <https://ghgprotocol.org/corporate-value-chain-scope-3-standard>