# Carbon Reduction Plan

Supplier name: 2D Building Contractors Ltd

Publication date: 07/01/2024

## Commitment to achieving Net Zero

2D Building Contractors Ltd is committed to achieving Net Zero emissions by 2050.

## 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.

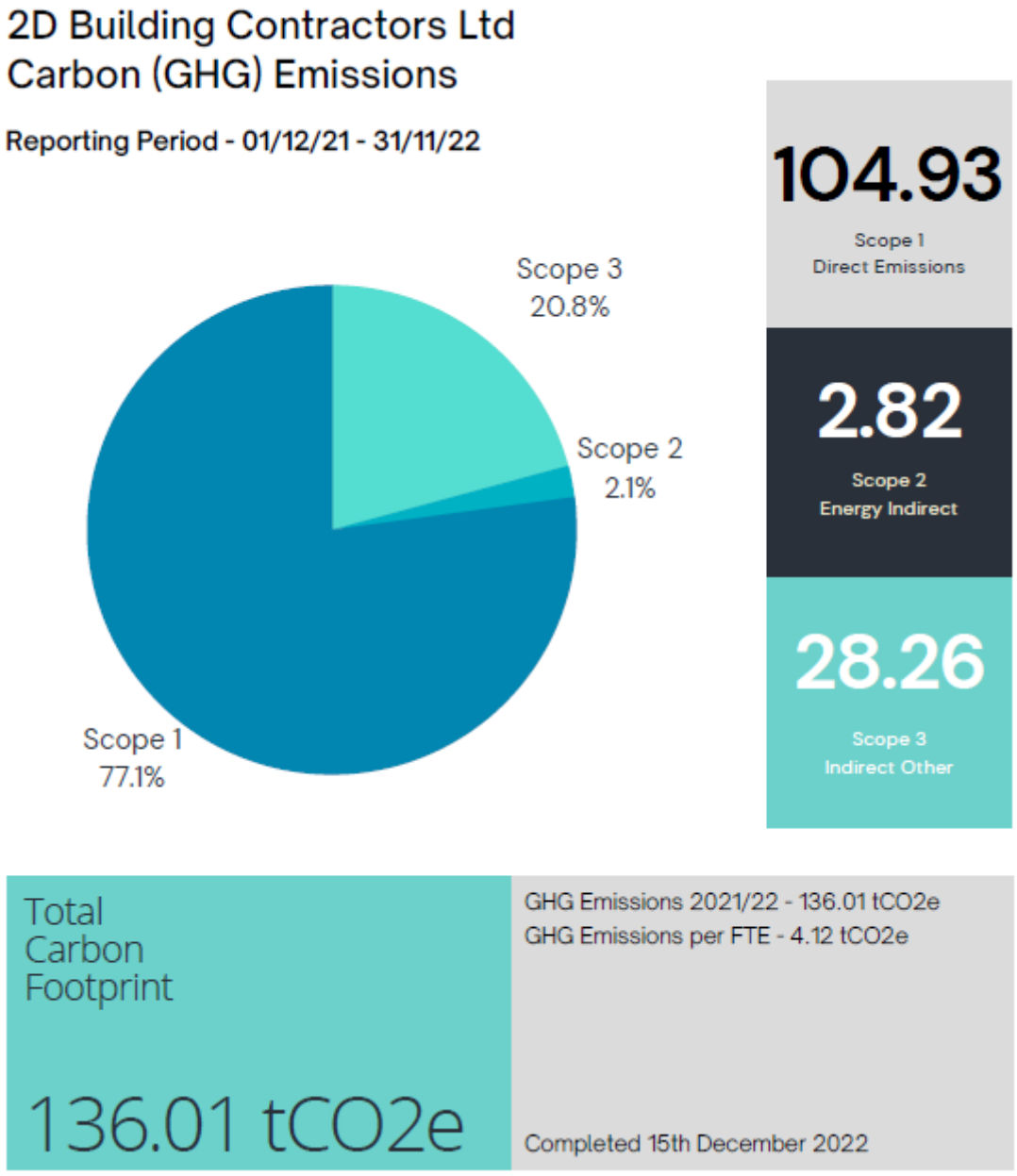
Carbon Neutral Britain was engaged by 2D Building Contractors Ltd in order to measure and calculate the organisation's total carbon footprint for 2021/22. With this being the first year of calculations, this year constitutes our baseline year.

| | |
|---|---|
| **Baseline Year: 01/12/21 – 31/11/22** | |
| **Additional Details relating to the Baseline Emissions calculations.** | |
| As building contractors, it was identified that the main emissions were to occur from company owned/leased vehicles and the mileage completed within the reporting period. Using the operational control consolidation approach was determined as the best method for 2D Building Contractors Ltd, due to the standard business structure and business practices. As a result, the following scope of data was collected. | |
| **Baseline year emissions:** | |
| **EMISSIONS** | **TOTAL ($tCO_2e$)** |
| **Scope 1** | **104.93** |
| **Scope 2** | **2.82** |
| **Scope 3**<br>**(Included Sources)** | **28.26**<br>Mainly from waste, with other emissions from business travel, staff commuting, business hotel stays and water usage. |
| **Total Emissions** | **136.01** |

**Scope 1** - Stationary and Mobile Source Emissions (equipment and quantity combusted), Company Owned and Leased Vehicles (vehicle type and distance travelled), Refrigerant Gas Losses (refrigerant type and new/disposed units) for the organisation only.

**Scope 2** - Energy (electricity, imported heat, steam in kwh) from the office and vehicles, using the location based method.

**Scope 3** - Homeworking Energy (Days), Water (consumption and waste volume), Waste (landfill, recycled and composted weight), Business Travel (type and distance), Staff Commuting (average distance and type), Hotel Stays (UK, Europe or Worldwide days).



## Emission by Scope

**104.93**
Scope 1
Direct Emissions

The main Scope 1 emissions occurred from the company owned/leased vehicles, and the mileage completed within the reporting period. Other emissions occurred from combustion sources.

**2.82**
Scope 2
Energy Indirect

All Scope 2 emissions occurred from electricity consumption within the reporting period.

**28.26**
Scope 3
Indirect Other

The main Scope 3 emissions occurred from waste. Other emissions occurred from business travel, staff commuting, business hotel stays and water usage.

# Current Emissions Reporting

| Reporting Year: 2023 | |
|---|---|
| **EMISSIONS** | **TOTAL ($tCO_2e$)** |
| **Scope 1** | **107.57** |
| **Scope 2** | **2.69** |
| **Scope 3**<br>**(Included Sources)** | **35.17**<br>Mainly from a new measure called 'Well to Tank', which was not calculated in the baseline year. |
| **Total Emissions** | **145.43** |

The additional emissions source within Scope 3 is due to changes in the guidance notes for the ISO 14064 and GHG Emissions Protocol Standard, where an additional emissions source has been recommended to be included. This is called 'Well to Tank' emissions, which is a Scope 3 emission not included last year.

'Well to Tank' is the carbon footprint of the production, processing and delivery of fuel and gas, before being combusted by an organisation. In the case of 2D, this is the carbon footprint from our vehicle fuel (company cars, business travel and commuting vehicles), before being combusted. Rather than just the emissions of fuel being burnt, there is also a wider carbon footprint from the production, processing, and delivery to the petrol station, which we now include in our report.

Scope 1 - Stationary and Mobile Source Emissions (equipment and quantity combusted), Company Owned and Leased Vehicles (vehicle type and distance travelled), Refrigerant Gas Losses (refrigerant type and new/disposed units) for the organisation only.

Scope 2 - Energy (electricity, imported heat, steam in kwh) from the office and vehicles, using the location based method.

Scope 3 - Homeworking Energy (Days), Water (consumption and waste volume), Waste (landfill, recycled and composted weight), Business Travel (type and distance), Staff Commuting (average distance and type), Hotel Stays (UK, Europe or Worldwide days), Transmission and Distribution losses associated with electricity usage (kwh) and Well To Tank emissions from combustion fuels (volume combusted).

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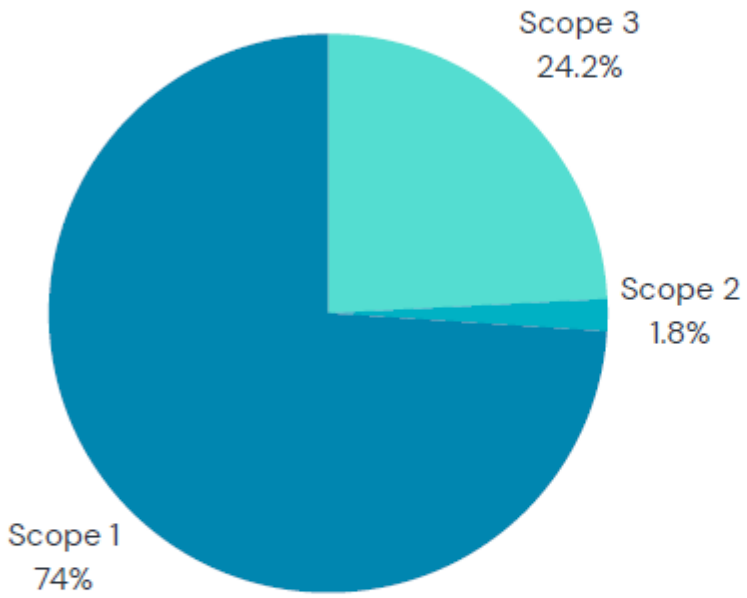
# 2D Building Contractors Ltd Carbon (GHG) Emissions

**Reporting Period - 01/11/22 - 31/10/23**




**107.57**
Scope 1
Direct Emissions

**2.69**
Scope 2
Energy Indirect

**35.17**
Scope 3
Indirect Other

## Total Carbon Footprint

**145.43 tCO2e**

GHG Emissions 2022/23 - 145.43 $tCO_2e$
GHG Emissions per FTE - 4.16 $tCO_2e$

Completed December 2023

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British Assessment Bureau UKAS MANAGEMENT SYSTEMS 8289 ISO 9001 QUALITY MANAGEMENT
British Assessment Bureau UKAS MANAGEMENT SYSTEMS 8289 ISO 14001 ENVIRONMENTAL MANAGEMENT
British Assessment Bureau UKAS MANAGEMENT SYSTEMS 8289 ISO 45001 HEALTH & SAFETY MANAGEMENT
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## Emissions by Scope

**107.57**
Scope 1
Direct Emissions

The main Scope 1 emissions occurred from the company owned/leased vehicles, and the mileage completed within the reporting period. Other emissions occurred from petrol and diesel fuel combustion.

**2.69**
Scope 2
Energy Indirect

All Scope 2 emissions occurred from electricity consumption within the reporting period.

**35.17**
Scope 3
Indirect Other

The main Scope 3 emissions occurred from well to tank emissions. Other emissions occurred from waste, business travel, staff commuting, business hotel stays, water usage and transmission and distribution losses.

## Emissions reduction targets

We have seen a reduction in scope 2 emissions, with a slight increase in scope 1 emissions due to more vehicles being purchased during this year. We are confident that the new vehicles purchased will provide a better miler per gallon and will, over time, reduce our carbon emissions compared to our baseline year. Scope 3 emissions have increased due to the new changes in the guidance notes for the ISO 14064 and GHG Emissions Protocol Standard, where an additional emissions source has been recommended to be included. This is called 'Well to Tank' emissions, which is a Scope 3 emission not included last year. It will be interesting to see how we compare next year's emissions report for this scope.
In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

- We have achieved out ISO 14001 through a UKAS accredited body, through which we are measured on our implementation of our environmental policy and the improvement cycle that goes hand in hand with this.
- We promote the sharing of lifts to and from jobs to reduce emissions.
- We are in the process of acquiring hybrid vans to have an even bigger impact on the reduction of our emissions. We would look to eventually replace all our fleet vehicles with hybrid vehicles in the next 8 years.

- All vehicles are regularly maintained, and repairs carried out to ensure they run to their maximum efficiency.
- All purchases are done in bulk where appropriate to reduce the amounts of carriage and emissions and also procurement of materials would be done using local companies to reduce any emissions created from delivery vehicles.
- We always try and use only the most efficient and up to date equipment, regularly maintaining our tools and when appropriate replacing them. We have bought into the Hilti On Track 3 system which notifies us when a tool or piece of equipment requires its annual service. Again, this takes the form of an app that staff access on their mobile devices. This ensures equipment is working at their most energy efficient levels.
- Our environmental policy states that lights are to be turned off when not in use and also power sockets are switched off at the source to reduce any wasted energy.

## Carbon Offsetting Projects

Although we acknowledge that offsetting isn't the best answer to achieving Net Zero, we have concluded that it is a factor that demonstrates our commitment in the interim period to acting on our emissions in a way that is practical and realistic to our company. Our plan over the next few years is to lower our emissions, so having to offset less, and be that but closer to achieving Net Zero.

Through the Carbon Neutral Britain Climate Fund™, we have offset our total carbon emission through internationally certified carbon offsetting projects. Certified via the Verra – Verified Carbon Standard (VCS), the Gold Standard – Voluntary Emission Reductions (VER) or the United Nations – Certified Emission Reduction (CER) programmes, the projects have also been selected based on their direct and indirect impact around the world – not just in offsetting, but also in supporting education, employment and clean water, as well as having net positive impact on the local wildlife and ecology.

As the three largest, and most regulated voluntary offsetting standards used by organisations and even countries in their emissions reductions – all measurements and tonnes of $CO_2e$ offset are accurate and verified. An example of project supported include:

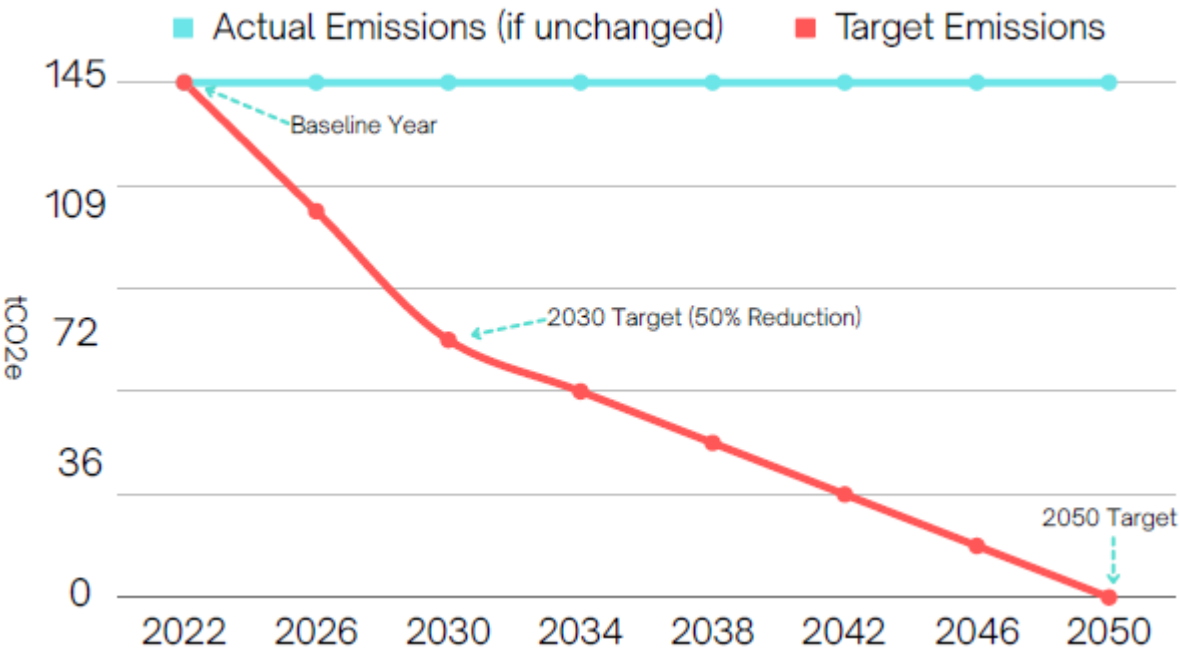

Project 1088: Hydroelectric Power in Chile


Project 1163: Cook Stove Project in Malawi


Project 1162: Energy Efficient Lighting in India


Project 1165: Salkhit Wind Farm in Mongolia

## Reduction Target Plan




In order to achieve a 50% reduction in emissions by 2030, 2D Building Contractors Ltd is required to reduce its emissions by 72.72 $tCO_2e$ over the next 7 years.

This will require a reduction of 7.14% (10.38 $tCO_2e$) per year from the 'Baseline' (first year) assessment of the organisation. A further reduction of 2.5% (3.63 $tCO_2e$) each year is then required in order to achieve Net Zero.

Should significant changes to the business size and structure occur in the future - Carbon Neutral Britain will amend the 'baseline' assessment year, as well as look at intensity values ($tCO_2e$ per million turnover, FTE or other metric), to further track and implement reduction strategies.

# Reduction Strategies

Although some emission reductions will require technological and third-party improvements, we feel it is a priority to target the three largest avoidable emissions sources of the organisation, in order to make the most impactful, and quickest reduction in emissions possible. The three largest avoidable emission sources are:
Company Owned/Leased Vehicles - 104.87 $tCO_2e$ (72% of total emissions)
Stationary or Mobile Combustion Sources - 2.69 $tCO_2e$ (1% of total emissions)
Total Organisation Energy Usage on Site - 2.68 $tCO_2e$ (1% of total emissions)

Strategies we will look to action are as follows:

## Company Vehicle Emissions

Immediate reduction in vehicle emissions can occur from improved efficiency in the journeys undertaken. If journeys can be avoided (facilitating meetings via video call), routes can be shortened, and ride sharing can occur - small but incremental improvements can be made over time. Switching vehicles to hybrid and/or electric vehicles will understandably have the most significant impact.

## Fuel Combustion

The combustion of fuel and gas are often the highest carbon emissions source for businesses, and so will be a key area of focus for the organisation. Wherever possible, analysing when equipment is used - and improving efficiency may help limit unnecessary use and subsequent emissions. Where electric alternatives are available (for example, in the case of forklifts and heaters), significant reductions in emissions can be achieved.

## Electricity Consumption

Reducing usage wherever possible through energy efficient machinery, equipment and lighting is best practice to reduce consumption wherever possible. For leased sites (where infrastructure changes are not possible), moving to a more energy efficient site could also be considered. Where hybrid working is possible - limiting the number of staff within the office, and downsizing (therefore lowering energy requirements) could also have a significant impact on the direct energy consumption of the business (working from home staff produce almost half the energy output of the equivalent usage from an office).

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Carbon Neutral Britain™

Carbon Neutral Britain Certification™
IS PRESENTED TO

# 2D Building Contractors Ltd

## Certified Carbon Neutral

**DECEMBER 2023 - NOVEMBER 2024**

This certificate is to verify that 2D Building Contractors Ltd has met all Carbon Neutral Britain Certification™ standards in measuring, calculating and carbon offsetting organisational carbon emissions selected within the Scope 1, 2 and 3 GHG emissions boundary during the period of 1st November 2022 to 31st October 2023.

Certificate No: BCNB - 03462

Calculations made following the ISO 14064-1:2018 and GHG Protocol Emissions Standards.
Credits Issued from one or more of the International Carbon Offsetting standards:

Christina Willoughby
**CHRISTINA WILLOUGHBY**
Credit Officer

James Poynter
**JAMES POYNTER**
Director

United Nations Framework Convention on Climate Change **Verified CER**

Verified Carbon Standard A VERRA STANDARD

Gold Standard for the Global Goals

Certification is awarded based on accurate and assumed full disclosure of all relevant and necessary data by the Company. United Nations Credits issued via the Clean Development Mechanism (CDM). VCS is a certification standard for carbon projects and credits. VCS does not oversee retail markets nor does it certify or endorse any retailer or broker of VCUs, visit verra.org. Gold Standard is a certification standard for carbon projects and a registered trademark.

Carbon Neutral Britain™

Certificate of Credit Retirement
IS PRESENTED TO

# 2D Building Contractors Ltd

## 145.43 Tonnes $CO_2e$ Emissions Offset

via the Climate Fund™ Portfolio of verified carbon offsetting projects around the world

Batch Serial #: 5609-22310-05681884491-VCS-VCU-560-VER-CER-22525665496548549865 8465

**IN THE MONTH OF DECEMBER 2023**

Certificate No: BCNB - 03462

Credits Issued from one or more of the International Carbon Offsetting standards:

Christina Willoughby
**CHRISTINA WILLOUGHBY**
Credit Officer

James Poynter
**JAMES POYNTER**
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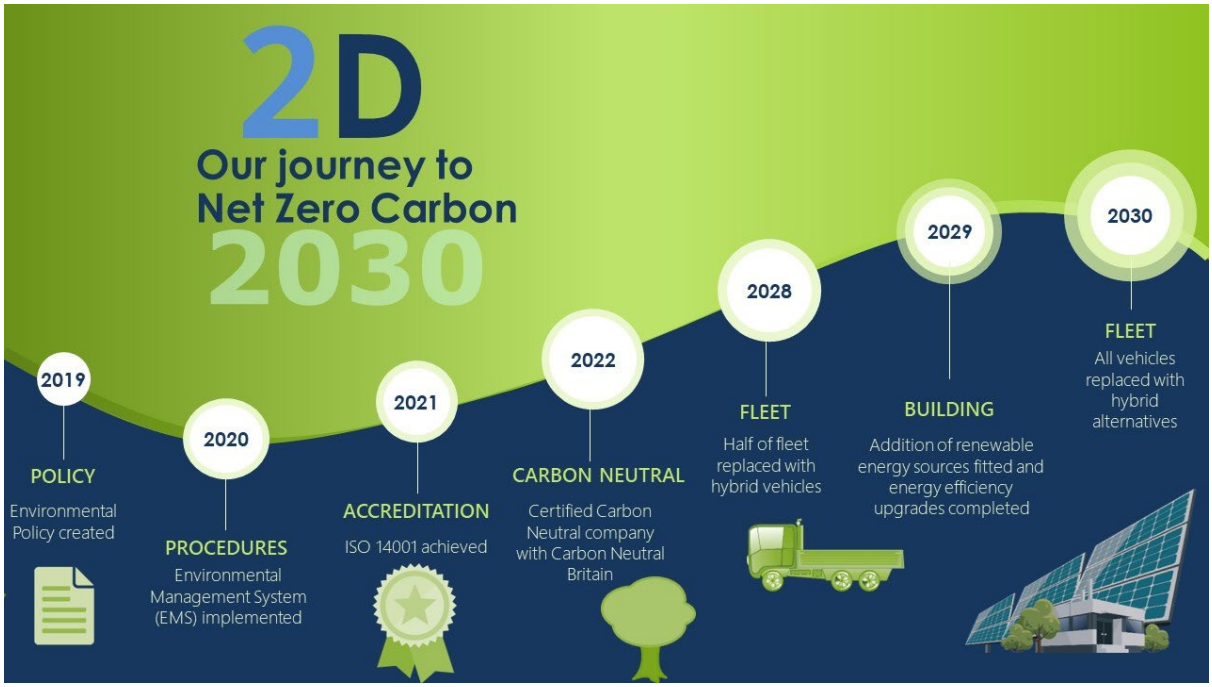
# Journey to Net Zero




2D Building Contractors has put a plan in place to attempt to beat our target of 2050 as becoming a Net Zero company. This is ambitious, but it allows for a degree of mitigation, should the plan suffer some setbacks.

## 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 standard[1] 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 the Supplier:**

Tom Dean – Managing Director

Date: 07/01/2024

[1] https://ghgprotocol.org/corporate-standard
[2] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
[3] https://ghgprotocol.org/standards/scope-3-standard