



Carbon Reduction Plan 2023

Net Zero Commitment

Arrow Group Global Ltd recognises the importance of making a full and lasting commitment to reducing the greenhouse gas emissions from our activities, in support of the wider commitment of the world to limit global temperature increases and the impact on the planet.

We commit to the following:

- 1** For our company to achieve Net Zero in line with the Science Based targets set out by the UNFCCC i.e., to achieve Net Zero no later than 2050 and target a 50% reduction in emissions by 2030.
- 2** To set realistic short and long-term targets that are designed to achieve our Net Zero commitments.
- 3** To report the total Greenhouse Gas emissions of our business, at a minimum, on an annual basis.

COMMITMENT TO BE NET ZERO: **2050**

50% EMISSIONS REDUCTION: **2030**

Overview

January 2022 – December 2022

Benchmark year

YEAR	January 2022 – December 2022
Industry	Manufacturing
No. of Staff	38
No. of Offices – Owned	0
No. of Offices – Leased	3
No. of Company Vehicles - Owned	2
No. of Company Vehicles - Leased	15

This report has been constructed using the Operational Control Approach.

Emissions from Scope 1 & 2 have been measured along with certain Scope 3 emissions. The Scope 3 emissions that have been included are those that have been practical to measure with available data, which are as follows:

- Business Travel
- Employee Commuting
- Transmission and Distribution of electricity
- Waste Disposal
- Material Used
- Water Treatment

Carbon Emissions Overview

TOTAL CARBON EMISSIONS

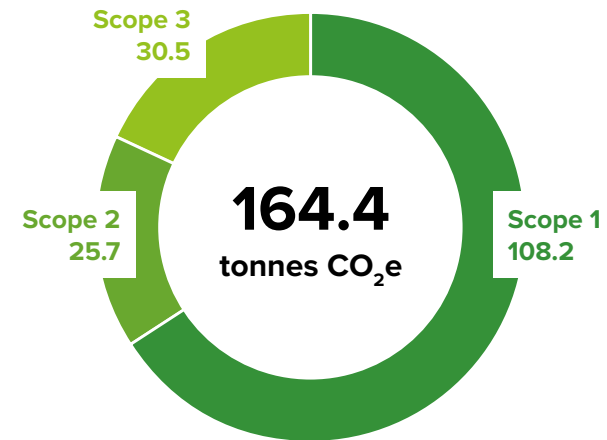
164.4
tonnes CO₂e

The total calculated emissions for the business for the period January 2022 – December 2022 are 164.4 tCO₂e. This is the first year the company has measured its carbon emissions. As such this is the benchmark year of the company with the breakdown of emissions analysed throughout this report.

The Company will aim to measure an increasing amount of Scope 3 emissions and is committed to reducing their emissions across all scopes.

Analysis by Scope

2022



Scope 1 emissions amount to 108.2 tCO₂e, representing 66% of the company's emissions. Scope 1 emissions includes fuel from company vehicles and gas used in the office.

Scope 2 emissions accounts for 16% of calculated emissions. This is the electricity used at the company's office. Scope 2 emissions were 25.7 tCO₂e in this period. The office is not on a renewable tariff.

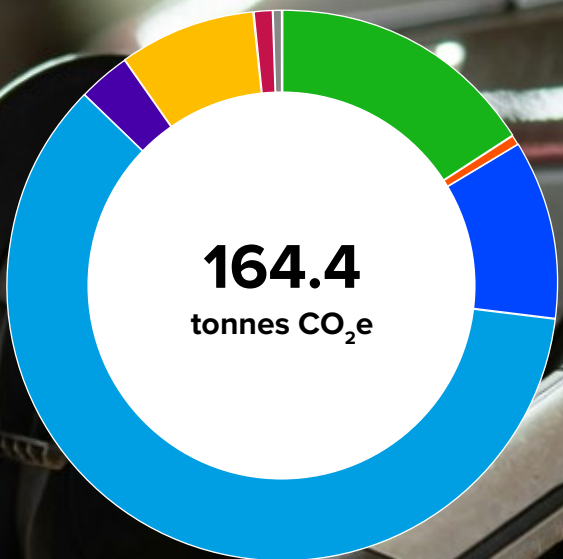
Scope 3 emissions accounts for 18% of calculated emissions and includes:

- Business Travel
- Employee Commuting
- Transmission and Distribution of electricity
- Waste Disposal
- Material Used
- Water Treatment

Scope 3 emissions were 30.5 tCO₂e in this period.

Emissions by Activity

2022



ELECTRICITY

GAS

BUSINESS TRAVEL - CARS

BUSINESS TRAVEL - VANS & HGVS

BUSINESS TRAVEL - OTHER

EMPLOYEE COMMUTING - CARS

TRANSMISSION AND DISTRIBUTION

OTHER

CARBON REDUCTION PLAN

EMISSION TYPE	SCOPE	2022 tCO ₂ e	DATA SOURCE	DATA CONFIDENCE
Energy				
Gas	1	0.9	Gas Bill	High
Electricity	2	25.7	Electricity Bills	High
Business Travel (Scope 1)				
Electric Car	1	6.9	Travel Records	High
Hybrid Car	1	1.4	Travel Records	High
Van	1	47.4	Travel Records	High
HGV	1	51.6	Travel Records	High
Business Travel (Scope 3)				
Diesel Car	3	9.0	Travel Records	High
Petrol Car	3	0.2	Travel Records	High
Plane	3	4.4	Travel Records	High
Rail	3	0.1	Travel Records	High
Taxis	3	0.1	Travel Records	High
Employee Commuting				
Diesel Car	3	6.6	Employee Survey	Medium
Hybrid Car	3	0.3	Employee Survey	Medium
Petrol Car	3	6.3	Employee Survey	Medium
Other				
Transmission and Distribution of Electricity	3	2.4	Electricity Bills	High
Waste Disposal	3	0.8	Waste Collection Data	Medium
Material Used	3	0.2	Office Supplies	Medium
Water Treatment	3	0.1	Water Bills	High
TOTAL		164.4		

Intensity Metric Analysis

2022

SCOPES 1, 2 & 3

4.31 tonnes CO₂e
PER EMPLOYEE

The chosen intensity metrics shows a carbon emissions value of 4.31 tCO₂e per employee with the business headcount averaging 38 people during the benchmark period.



Emissions Reductions Targets

Baseline year - 2022



Carbon Reduction Projects

Arrow Group Global Ltd will develop the following initiatives that will support the company's strategies to meet Science Based Targets:

Employee Engagement

To share this plan with colleagues through normal engagement channels.

Staff Commuting

To encourage car sharing and using lower carbon options for travel to the office. The office has 8 electric car charging points for staff to use across 2 locations as they transition to electric and hybrid vehicles.

Vehicle Strategy

A large proportion of calculated emissions are from the vehicle fleet, and a strategy will be developed to transition to low carbon when viable to do so. To develop a driver awareness session to encourage improved driving standards and reduced fuel usage where practical.

Management Reporting

To update carbon emissions monthly and to ensure that it is on the Board agenda on a quarterly basis.

Product Near-shoring / Reshoring

To look to procure more products from factories closer to the UK (i.e. from far east to Europe) to reduce delivery mileage and transport emissions.

Solar Energy

Solar Panels will be installed in 2023 at the Suffolk Head Quarters, and this will reduce electricity emissions, as well as transmission and distribution emissions.

Supply Chain Strategy

To create a plan to liaise with suppliers regarding their carbon reporting and to ensure to work with businesses committed to reducing their carbon



Signed on behalf of Arrow Group
Delwin Pallister, Managing Director
30 November 2023



Emissions Data

2022

CARBON REDUCTION PLAN

2022

Energy consumption used to calculate emissions Electricity Scope 2 - UK & Offshore (kWh)	132,783
Energy consumption used to calculate emissions – Global, excluding UK & Offshore (kWh)	N/A
Basis of Energy reporting (Location or Market)	Location
% of total energy sourced from certified renewable sources	0%
Emissions associated with energy consumption - UK, Offshore & Global (tCO ₂ e)	25.7
Emissions from activities for which the company is responsible including combustion of fuel & operation of facilities - Scope 1 (tCO ₂ e)	108.2
Emissions from purchase of electricity, heat, steam and cooling purchased for own use - Scope 2 (tCO ₂ e)	25.7
Total Scope 1 & 2 Emissions (tCO₂e)	133.9
Emissions from upstream activities out of operational control - Scope 3 (tCO ₂ e)	30.5
Emissions from use of sold products and services out of operational control - Scope 3 (tCO ₂ e)	<i>None included</i>
Total Gross Scope 3 Emissions (tCO₂e)	30.5
Total Scope 1, 2 & 3 Emissions (tCO₂e)	164.4
Intensity ratio tCO ₂ e (gross Scope 1, 2 & 3) per employee	4.31
Carbon offsets (tCO ₂ e)	0.0
Total Annual Net Emissions (tCO₂e)	164.4

The data contained in the table opposite represents total emissions calculated and is consistent with SECR requirements. All sources of emissions that have been measured are included in the totals opposite. Emissions from key activities are summarised in the previous sections.

Standard and Methodology Used

Arrow Group Global Ltd categorises its Greenhouse Gas (GHG) Emissions as Scope 1, 2 or 3 as referred to in the WBCSD – WRI Greenhouse Gas Protocol (revised edition, dated March 2014). Emissions in Carbon Dioxide equivalent (CO₂e) for all scopes are calculated using the conversion factors listed in DESNZ Greenhouse Gas Conversion Factors for the relevant 12 month period over which the Carbon Footprint is calculated. Procured renewable electricity and gas is calculated in accordance with the WBCSD – WSI Scope 2 Guidance on procured renewable energy (2015).

Data Quality / Confidence

The data used to generate this report has been collected from various sources from both within the company and using assumptions gathered by Net Zero International. These emissions have been converted to CO₂e using GHG Protocol and DESNZ frameworks and conversion factors for the relevant period.

Declaration & Sign Off

This Carbon Reduction Plan has been completed in accordance with SECR and associated guidance and reporting standard for Carbon Reduction Plans.

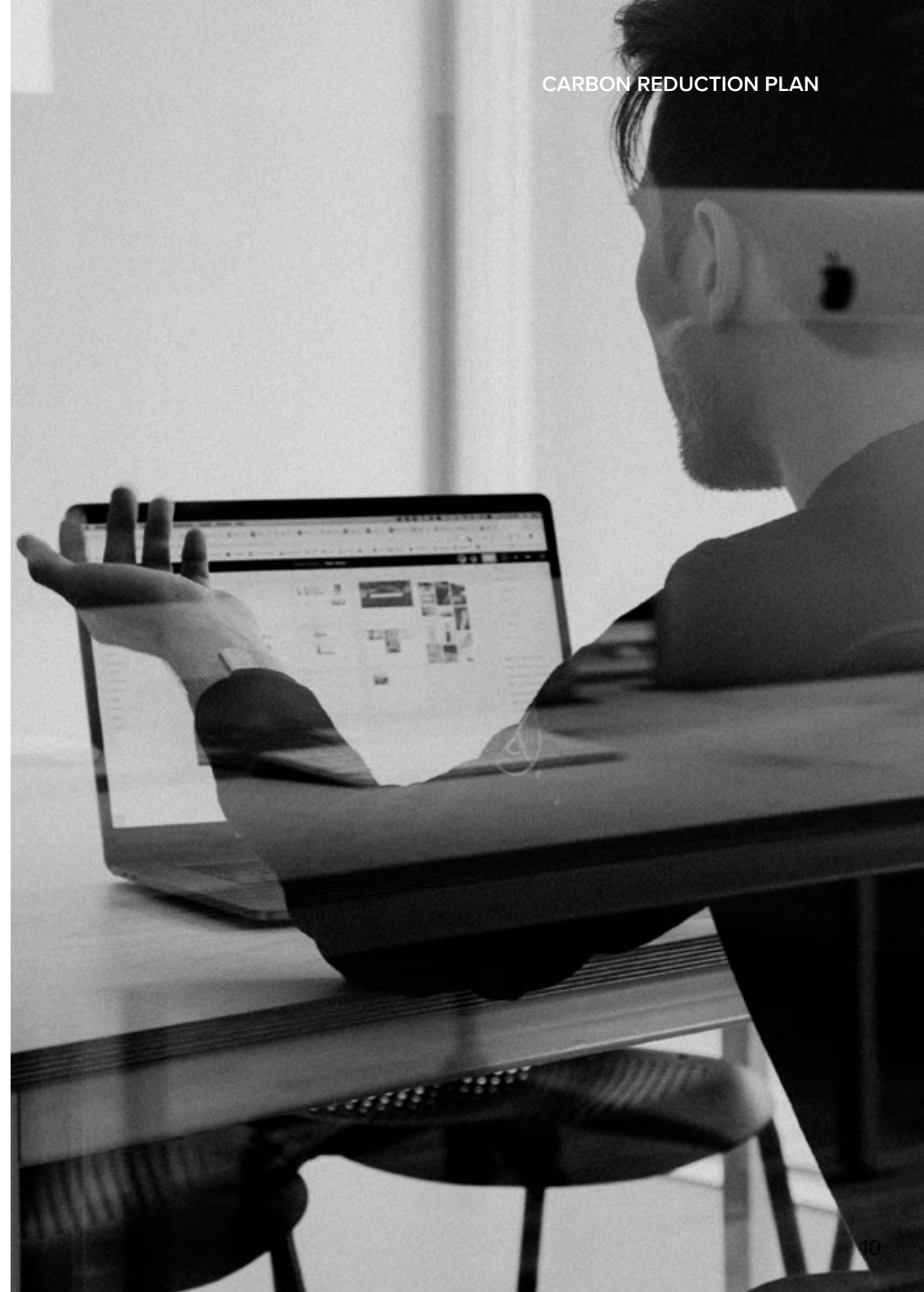
Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

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 agreed by the board of directors (or equivalent management body).



Signed on behalf of Net Zero International
David Hawes, Co-Founder
30 November 2023



Glossary

Benchmark Data

The chosen 12-month period that sets the calculated emissions that need to be mitigated and/or offset.

Carbon Reduction

Reduction in measured CO₂e emissions.

Carbon Reduction Plan

Plan to reduce CO₂e emissions over a period of time, updated annually.

Carbon Emissions (Gross)

CO₂e emissions from Company activities.

Carbon Emissions (Net)

CO₂e emissions from Company activities minus verified carbon offsets the Company purchases.

Carbon Neutral

When emissions are fully offset including those emissions that could be mitigated.

Carbon Offsets

A removal or reduction of carbon emissions through a verified scheme.

CO₂e

All greenhouse gases expressed in terms of Carbon Dioxide equivalent (CO₂e) for consistency of reporting.

DESNZ

Department of Energy Security and Net Zero
[gov.uk/government/collections/government-conversion-factors-for-company-reporting](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)

EEIO

Environmentally Extended Input Output
– Emissions estimated on spend
ghgprotocol.org

GHG Protocol

Greenhouse Gas Protocol
ghgprotocol.org

Greenhouse Gases

Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Chlorofluorocarbons (CFCs and HCFCs), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF₆).

Greenhouse Gas Conversion Factors

Annually published conversion factors normally published by relevant government departments. Converts activity into CO₂e emissions.

Greenhouse Gas Emissions (GHG)

Gases in the atmosphere that absorb and radiate heat.

Intensity Metric/Ratio

A metric that measures carbon emissions per relevant unit of activity in a business.

Market Reporting v Location Reporting

Market is based on actual tariffs. Location is based on UK government emissions factors.

Net Zero

GHG emissions are mitigated and those that cannot be offset.

Renewable Tariff

An energy tariff that is 100% powered by renewable energy and is certified.

SBT

Science Based Targets – reducing emissions by 50% by 2030 and by 90% by 2050 and offsetting the remaining amount.

Scope 1

The fuels that are burnt (gas, transport the company owns, refrigerant gases).

Scope 2

The energy that is bought (electricity from the grid, purchased heat).

Scope 3

Emissions embedded in everything a company buys and emitted as a consequence of everything a company sells.

SECR

Streamlined Energy & Carbon Reporting

tCO₂e

Metric tonnes of CO₂ equivalent emitted.

WBCSD

World Business Council for Sustainable Development
www.wbcsd.org

WRI

World Resource Institute
www.wri.org

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