

# Carbon Reduction Plan

Arvato Ltd. | 2022

# Arvato Ltd. Carbon Reduction Plan

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## DOCUMENT CONTROL

| Version             | Date       | Details of Changes   |
|---------------------|------------|--|
| <b>First Draft</b>  | 29/07/2021 | First quantification of emissions and set of targets.  |
| <b>Second draft</b> | 06/08/2021 | Refined organisational boundaries. More detailed descriptions on how current and future environmental management measures contribute to reduction targets. Added description of specific emission sources and respective levels of emissions. General formatting |
| <b>V.1.0</b>        | 05/10/2021 | Emissions figures updated based on new data. Revised estimates for commuting, remote working energy use, waste, and water. Targets recalculated to reflect revised figures.  |
| <b>V.1.1</b>        | 28/10/2021 | Electricity figures for Swansea updated from recorded usage on bills. Updated figure used to inform average kwh/sq. ft and applied to Warwick and Bootle. More accurate conversion factor applied to emissions from hotel stays. Figures amended within report.  |
| <b>V.2.0</b>        | 04/11/2021 | More details included regarding the estimates and assumptions made when calculating emissions. COVID-19 statement added outlining likely rise in emissions in 2021.  |
| <b>V.3.0</b>        | 18/11/2021 | 2019 established as base year due to be being a better representation of BAU before COVID-19. New figures added and targets adjusted accordingly. CRP now 2019 – 2025. 2020 data reviewed to enable consistent comparisons between years.                        |
| <b>V.3.1</b>        | 30/11/2021 | Document updated to reflect newly available data for 2019 hotel stays. General formatting and addition of updated graphs.  |
| <b>V.4.1</b>        | 11/03/2022 | Document updated with figures based on 2021 data. WFH and commuting emissions reviewed and revised. WFH energy investigated further, new figure of 200W per hour, per person used as this has been shown to be more accurate.                                    |
| <b>V.4.2</b>        | 07/04/2022 | Document updated with revised figures and targets. Organisational and reporting boundaries reworded for better clarity. Estimates for upstream transportation of purchased goods made and integrated to report   |
| <b>V.4.3</b>        | 21/04/2022 | Additional company vehicle and grey fleet mileage has been discovered and added to 2021 figures. Incorrect factor used for 2021 commuting by car. Figures and report updated accordingly. No significant change to overall results                               |
| <b>V.5.0</b>        | 27/03/2023 | Document updated with 2022 GHG figures. Organisational boundaries updated to reflect operational sites. Formatting updates. Electricity target increased.  |
| <b>V.5.1</b>        | 13/04/2023 | Formatting updates   |
| <b>V.5.2</b>        | 01/09/2023 | Minor updates and publication of the 2022 Carbon Reduction Plan  |

Supplier name: **Arvato Ltd.**

Publication date: 1 September 2023

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## Executive Summary

This Carbon Reduction Plan (CRP) has been produced in response to Procurement Policy Note (PPN) 06/21 which specifies how Arvato should have a plan to manage greenhouse gas (GHG) emissions and have a commitment to Carbon Neutral emissions by 2050 in order to bid for Government contracts. To meet this overarching requirement, Arvato are committed to achieving Carbon Neutral by the end of 2050 at the latest and have set the ambitious goal of becoming carbon neutral by 2030 in alignment with PAS 2060.

This Carbon Reduction Plan covers the reporting periods 2019 to 2022 (1<sup>st</sup> January – 31<sup>st</sup> December) Emissions were quantified using ISO14064-1: 2019 methodology and UK GHG Conversion Factors. 100% of Scope 1, 2 and relevant Scope 3 emissions as defined in the GHG protocol were included. 2019 acts as the base year. Total location and market-based emissions are summarised below:

| <b>Emissions Summary – tCO<sub>2</sub>e</b>      |                 |                 |                 |               |
|--|-----------------|-----------------|-----------------|---------------|
|  | <b>2019</b>     | <b>2020</b>     | <b>2021</b>     | <b>2022</b>   |
| <b>Scope 1</b>                                   | 173.83          | 65.51           | 70.31           | 94.70         |
| <b>Scope 2 (Location)</b>                        | 559.94          | 381.24          | 312.39          | 238.16        |
| <b>Scope 2 (Market)</b>                          | 559.94          | 381.24          | 286.36          | 0.00          |
| <b>Scope 3</b>                                   | 1,545.85        | 621.89          | 916.90          | 419.48        |
| <b><u>Total (Location)</u></b>                   | <b>2,279.62</b> | <b>1,068.63</b> | <b>1,299.61</b> | <b>752.35</b> |
| <b><u>Total (Market)</u></b>                     | <b>2,279.62</b> | <b>1,068.63</b> | <b>1,273.58</b> | <b>514.18</b> |
| <b><u>Reduction From Baseline (Location)</u></b> |                 | <b>53.12%</b>   | <b>42.99%</b>   | <b>67.00%</b> |
| <b><u>Reduction From Baseline (Market)</u></b>   |                 | <b>53.12%</b>   | <b>44.13%</b>   | <b>77.44%</b> |

We have set the following annual reduction targets. 2019 acts as the base year.

- Achieve zero leaks from HVAC systems
- Reduce emissions from gas by 10% and phase out gas across the business by 2030
- Reduce emissions from company vehicles by 8%, with all vehicles EV by 2033
- Reduce emissions from electricity consumption by 12%
- Reduce emissions from grey fleet business travel by 8%, with all grey fleet EV by 2036
- Reduce emissions from air travel by 10%
- Reduce emissions from commuting by 8%
- Reduce emissions from water supply and treatment by 5%

For electricity, we had originally aimed for 10% annual reduction. As we have exceeded targets, this has been updated to 12%. An additional target has been added for water consumption and air travel. Dual reporting for Scope 2 emissions as a renewable energy tariff came into effect from December 2021. Reduction targets set against location-based emissions.

Arvato has implemented a series of environmental management measures to reduce its carbon footprint during and prior to the reporting periods. These measures focus on energy reduction and efficiency improvements such as the installation of PIR LEDs. Measures to reduce emissions from travel include supporting employee's ability to work remotely, car sharing schemes and cycling

schemes. We have also developed a Low Emissions Vehicle Policy for business travel. Remote working and meetings are embraced to reduce the need for commuting and business travel.

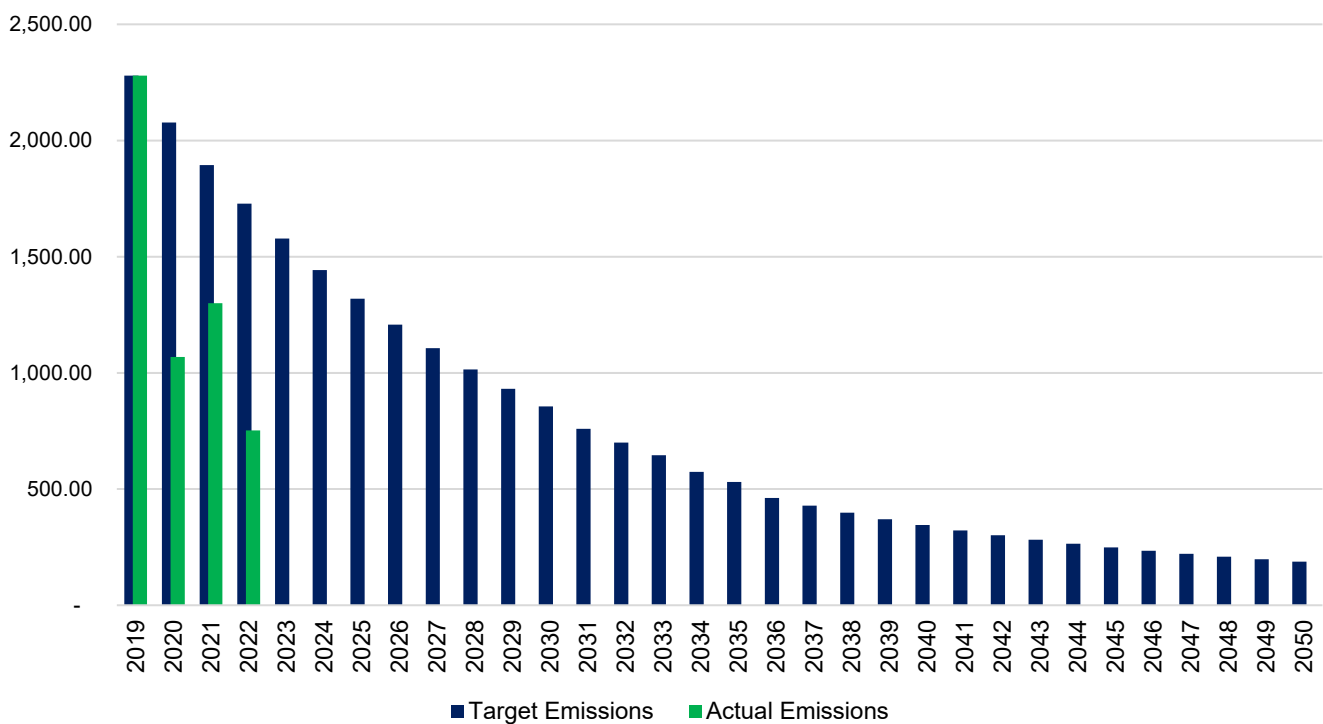
To further reduce its carbon footprint Arvato has committed to implementing additional environmental management measures in the future. These focus on behaviour and technological changes to avoid leaving electrical items on stand-by and efficiency measures to reduce water consumption and waste production. Emissions associated with commuting and business travel will be reduced by increasing the EV charging capacity at company premises to support employee’s switch to EVs over the next decade. We will also continue to embrace technological solutions that support remote working and eliminate the need for unnecessary business travel. We are aiming for all company vehicles to be EV by 2030 and are continually reviewing the practicalities of this.

A large proportion of employees can now work from home as part of contracts. This flexible approach has significantly reduced our commuting emissions.

**We project that carbon emissions will decrease over the five years to 1,106.41 tCO<sub>2</sub>e, this is a reduction of 51.47% against the 2019 base year.**

Results of quantification for 2019 – 2022 show we are exceeding reduction targets, with 2022 emissions 67.00% lower than the 2019 base year.

Actual vs Target Emissions - tCO<sub>2</sub>e



## Introduction

This Carbon Reduction Plan has been prepared in line with Procurement Policy Note (PPN) 06/21 guidance in order to support the UK Government's commitment to a 100% reduction of GHG emissions (compared to 1990 levels) in the UK by 2050. Also referred to as the 'Net Zero' target.

In line with PPN 06/21 guidance, Arvato has taken steps to understand its environmental impact and carbon footprint relevant to the delivery of relevant contracts as specified in the Public Contracts Regulations 2015.

Arvato is committed to the following initiatives:

- Making an organisational commitment to reducing emissions over time to achieve Carbon Neutral before 2050, and to achieve carbon neutrality with PAS 2060 by 2030
- A commitment to annually quantifying and declaring emissions of GHGs defined within the Kyoto protocol; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>).
- Developing a Carbon Reduction Plan in line with PPN 06/21 Technical Standard for Completion of Carbon Reduction Plans, outlining environmental management measures that will be applied in the performance of relevant contracts and wider business operations.
- The Carbon Reduction Plan will be supported and signed off by top management (or equivalent) within the organisation.

This Carbon Reduction Plan has been prepared by [Carbonology® Ltd](#) in collaboration with Arvato and is based on the [UK Government Template](#). This Carbon Reduction Plan was first published in 2021. Arvato will review this Carbon Reduction Plan, including consistently re-quantifying its emissions, every 12 months in order to meet Government requirements of the reporting period of a Carbon Reduction Plan being less than 12 months from the date of commencement of the procurement of a contract. If the reporting period is more than 12 months from date of commencement of the procurement, Arvato will provide a justifiable reason why this has occurred.

Full details of how this Carbon Reduction Plan meets the requirements specified in [Guidance on adopting and applying the PPN 06/21 – Selection Criteria](#) can be found in the Annex.

Emissions will be quantified each year using consistent methodologies. Arvato is working to continually collect activity data to enable a true and fair representation of its total emissions.

## Background to Arvato

Arvato is a trusted partner to both the private and public sectors, with expertise in delivering award-winning customer services, business process outsourcing (BPO) and public sector and citizen services. With more than 50 years of experience, Arvato designs and delivers innovative, individual solutions for some of the world's most respected consumer brands and UK public sector

organisations, through long-term partnerships. Employees are also able to support organisations across 11 countries due to their multi-lingual capabilities.

Arvato Ltd had 6 operational UK sites in 2022 and 1386 employees in total, some of which operated from within client’s premises. Approximately 80% of employees are now hybrid or entirely homeworking. The head office was located in Slough where the majority of the leadership team were based at the time of writing, we are transitioning to a new site in Windsor that is expected to become fully operational in Q2 2023.

## Organisational Boundaries

This Carbon Reduction Plan is intended to cover all emissions associated with activities key to Arvato’s success as a business. In line with ISO 14064-1:2019, the control approach has been taken. This covers all facilities and activities that Arvato has financial or operational control over and aims to include all significant sources. No attempts have been made to intentionally exclude significant sources of emissions but where exclusions have been made details of this can be found in the Annex.

Emissions shall be categorised at the facility level and subdivided where data allows. Below are the specific sites covered by this Carbon Reduction Plan, and for what periods they were operational. No sites have been intentionally excluded and proxy calculations have been performed for sites where possible where data are missing/incomplete.

The table below details sites that are currently operational:

| Site:              | Address:  |
|--------------------|---|
| <b>Farnborough</b> | Summit ONE, Summit Avenue, Farnborough, Hampshire, GU14 0FB   |
| <b>Newcastle</b>   | Stockbridge House, Trinity Gardens, Newcastle, NE1 2HJ        |
| <b>Slough</b>      | Phoenix One, 59-63 Farnham Road, SL13TN                       |
| <b>Swansea</b>     | Sandringham Park, Swansea Vale, SA7 0EA                       |
| <b>Warwick</b>     | Iceni Centre, Warwick technology park, Warwickshire, CV34 6DA |
| <b>Willerby</b>    | The Boathouse, Albion Mills, Albion Lane, Willerby, HU10 6DN  |

The table below shows which sites are included within organisational boundaries for each reporting period, with blue cells indicating an operational site.

|              | 2019 | 2020 | 2021                    | 2022                   | 2023                    |
|--------------|------|------|-------------------------|------------------------|-------------------------|
| Bootle       |      |      | <i>Closed late 2021</i> |                        |                         |
| Chesterfield |      |      | <i>Closed mid 2021</i>  |                        |                         |
| Farnborough  |      |      |                         |                        | <i>Closing mid 2023</i> |
| Newcastle    |      |      | <i>Opened late 2021</i> |                        |                         |
| Slough       |      |      |                         |                        | <i>Closing mid 2023</i> |
| Swansea      |      |      |                         |                        |                         |
| Warwick      |      |      |                         | <i>Closed mid 2022</i> |                         |
| Willerby     |      |      |                         |                        |                         |
| Datchet      |      |      |                         |                        | <i>Opening mid 2023</i> |

## Reporting Boundaries

100% of direct Scope 1 and indirect Scope 2 emission within organisational boundaries have been quantified and reported on. Indirect Scope 3 inclusions represent a true and fair representation of Arvato’s core operations.

Where possible, we have quantified emissions separately for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. All emissions reported as tCO<sub>2</sub>e using the latest IPCC GWPs.

We are continually looking for opportunities to increase the scope of our reporting boundaries.

Reporting boundaries are detailed below.



| GHG Scope      | Included Sources  |
|----------------|---|
| <b>Scope 1</b> | <ul style="list-style-type: none"> <li>• Stationary combustion of gas</li> <li>• Mobile combustion in company vehicles</li> </ul> |
|                |   |
| <b>Scope 2</b> | <ul style="list-style-type: none"> <li>• Purchased electricity</li> </ul>   |
|                | <ul style="list-style-type: none"> <li>• Upstream transportation</li> </ul>   |
|                | <ul style="list-style-type: none"> <li>• Waste generated in operations.</li> </ul>  |
|                | <ul style="list-style-type: none"> <li>• Business travel (grey fleet, air, rail)</li> </ul>                                       |
|                | <ul style="list-style-type: none"> <li>• Commuting</li> </ul>   |
| <b>Scope 3</b> | <ul style="list-style-type: none"> <li>• Transmission and distribution losses (T&amp;D)</li> </ul>                                |
|                | <ul style="list-style-type: none"> <li>• Water supply</li> </ul>  |
|                | <ul style="list-style-type: none"> <li>• Water treatment</li> </ul>   |
|                | <ul style="list-style-type: none"> <li>• Material use in purchased goods</li> </ul>   |
|                | <ul style="list-style-type: none"> <li>• Homeworking</li> </ul>   |

Reporting periods for 2019, 2020, 2021 and 2022 follow calendar year format; 1<sup>st</sup> January – 31<sup>st</sup> December.

## Commitment to achieving Carbon Neutral

Arvato is committed to reducing emissions over time to meet the Government Net Zero by 2050 target. Carbon Neutral will be achieved for Scope 1 and 2 emissions via phasing out gas at offices, switching all offices to renewable energy tariffs and implementing a Low Emissions Policy for company vehicles. We are continually looking for ways to reach Carbon Neutral Scope 3 emissions.

Arvato is committed to reviewing its emissions annually and maintaining its commitment to Carbon Neutral. This commitment will be supported by the consistent quantification of Scope 1, Scope 2, and relevant Scope 3 emissions. Following the quantification and reduction of emissions as a result of the implementation of the Carbon Reduction Plan, Arvato will purchase carbon credits from a credible source that has been verified by a third-party to offset remaining emissions. Arvato is aiming to achieve carbon neutrality in line with PAS 2060:2014 by 2030.

## Baseline Emissions Footprint

Baseline emissions are a record of the GHGs 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.

The period 1<sup>st</sup> January 2019 to 31<sup>st</sup> December 2019 will be used as the baseline against future Carbon Reduction Plan reporting periods. 2019 has been chosen as a base year as this is more representative of 'normal' operations prior to the COVID-19 pandemic. Due to the nature of the business, sites are continually opening and closing but overall headcount is increasing.

GHG emissions were calculated in-line with ISO14064-1:2019 methodology and presented in GHG Inventories for each period, displaying specific sources of emissions. [UK Government conversion factors](#) from the Department for Business, Energy and Industrial Strategy were used to convert activity data into kilograms of carbon dioxide equivalent (kgCO<sub>2</sub>e) as well as directly into kg of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, where appropriate. Emissions are reported as tonnes CO<sub>2</sub>e.

Emissions are calculated by multiplying activity data (e.g., kWh or km travelled) by the appropriate conversion factor. Conversion factors are based on the IPCC 100-year global warming potential of these gases.

Details of calculations and assumptions associated with specific emission sources are detailed in the following sections. To maintain a commitment to transparency, all decisions regarding calculations and estimates have been recorded to enable an open and objective review of methods. A conservative approach was taken where estimates were required to avoid under-reporting.

Calculations are subject to continual review as data is collected and methodologies are refined. We are conscious of the fact that 2020 was an abnormal year due to COVID-19 restrictions, hence why this was not chosen as a base year.

| <b>Baseline Year: 2019 (1st January 2019 – 31<sup>st</sup> December 2019)</b>                                       |   |
|---|---|
| 2019 established as baseline year due to being more representative of BAU before COVID-19. Location based reporting |   |
| <b>Emissions</b>  | <b>Total (tCO<sub>2</sub>e)</b>   |
| <b>Scope 1</b>  | 173.83  |
| <b>Scope 2</b>  | 733.77  |
|   | 1,545.85  |
| <b>Scope 3<br/>(Included Sources)</b>   | <ul style="list-style-type: none"> <li>• Upstream transportation</li> <li>• Waste generated in operations.</li> <li>• Business travel (grey fleet, air, rail)</li> <li>• Employee Commuting</li> <li>• Transmission and distribution losses (T&amp;D)</li> <li>• Water supply</li> <li>• Water treatment</li> <li>• Material use in purchased goods</li> <li>• Homeworking</li> </ul> |
| <b>Total Emissions</b>  | <b><u>2,279.62 tCO<sub>2</sub>e</u></b>   |

## Previous Reporting Years

| Year: 2020 (1st January 2020 – 31 <sup>st</sup> December 2020)                       |   |
|--|---|
| Significant deviation in trends due to impact of COVID-19. Location based reporting. |   |
| Emissions  | Total (tCO <sub>2</sub> e)  |
| Scope 1  | 65.51   |
| Scope 2  | 381.24  |
|  | 621.89  |
| Scope 3<br>(Included Sources)  | <ul style="list-style-type: none"> <li>• Upstream transportation</li> <li>• Waste generated in operations.</li> <li>• Business travel (grey fleet, air, rail)</li> <li>• Employee Commuting</li> <li>• Transmission and distribution losses (T&amp;D)</li> <li>• Water supply</li> <li>• Water treatment</li> <li>• Material use in purchased goods</li> <li>• Homeworking</li> </ul> |
| <b>Total Emissions</b>   | <b><u>1,068.63 tCO<sub>2</sub>e</u></b>   |

**Year: 2021 (1st January 2021 – 31<sup>st</sup> December 2021)**

Operations retuning to BAU post peak of COVID-19 restrictions. Location and market-based reporting used for Scope 2 due to acquisition of 100% renewable energy tariff from December 2021. Newcastle opened late 2021.

| <b>Emissions</b>                      | <b>Total (tCO<sub>2</sub>e)</b>   |
|---------------------------------------|---|
| <b>Scope 1</b>                        | 70.31   |
| <b>Scope 2</b>                        | Location: 312.39<br>Market: 286.36  |
|                                       | 916.90  |
| <b>Scope 3<br/>(Included Sources)</b> | <ul style="list-style-type: none"> <li>• Upstream transportation</li> <li>• Waste generated in operations.</li> <li>• Business travel (grey fleet, air, rail)</li> <li>• Employee Commuting</li> <li>• Transmission and distribution losses (T&amp;D)</li> <li>• Water supply</li> <li>• Water treatment</li> <li>• Material use in purchased goods</li> <li>• Homeworking</li> </ul> |
| <b>Total Emissions</b>                | <b>Location: <u>1,299.61 tCO<sub>2</sub>e</u></b><br><b>Market: <u>1,273.58 tCO<sub>2</sub>e</u></b>  |

## Current Reporting Year

**Year: 2022 (1st January 2022 – 31<sup>st</sup> December 2022)**

Operations close to BAU post peak of COVID-19 restrictions. Location and market-based reporting used for Scope 2 due to acquisition of 100% renewable energy tariff from December 2021. Warwick closed May 2022.

| <b>Emissions</b>                      | <b>Total (tCO<sub>2</sub>e)</b>   |
|---------------------------------------|---|
| <b>Scope 1</b>                        | 94.70   |
| <b>Scope 2</b>                        | Location: 238.16<br>Market: 0.00  |
|                                       | 419.48  |
| <b>Scope 3<br/>(Included Sources)</b> | <ul style="list-style-type: none"> <li>• Upstream transportation</li> <li>• Waste generated in operations.</li> <li>• Business travel (grey fleet, air, rail)</li> <li>• Employee Commuting</li> <li>• Transmission and distribution losses (T&amp;D)</li> <li>• Water supply</li> <li>• Water treatment</li> <li>• Material use in purchased goods</li> <li>• Homeworking</li> </ul> |
| <b>Total Emissions</b>                | <b>Location: <u>752.35 tCO<sub>2</sub>e</u></b><br><b>Market: <u>514.18 tCO<sub>2</sub>e</u></b>  |

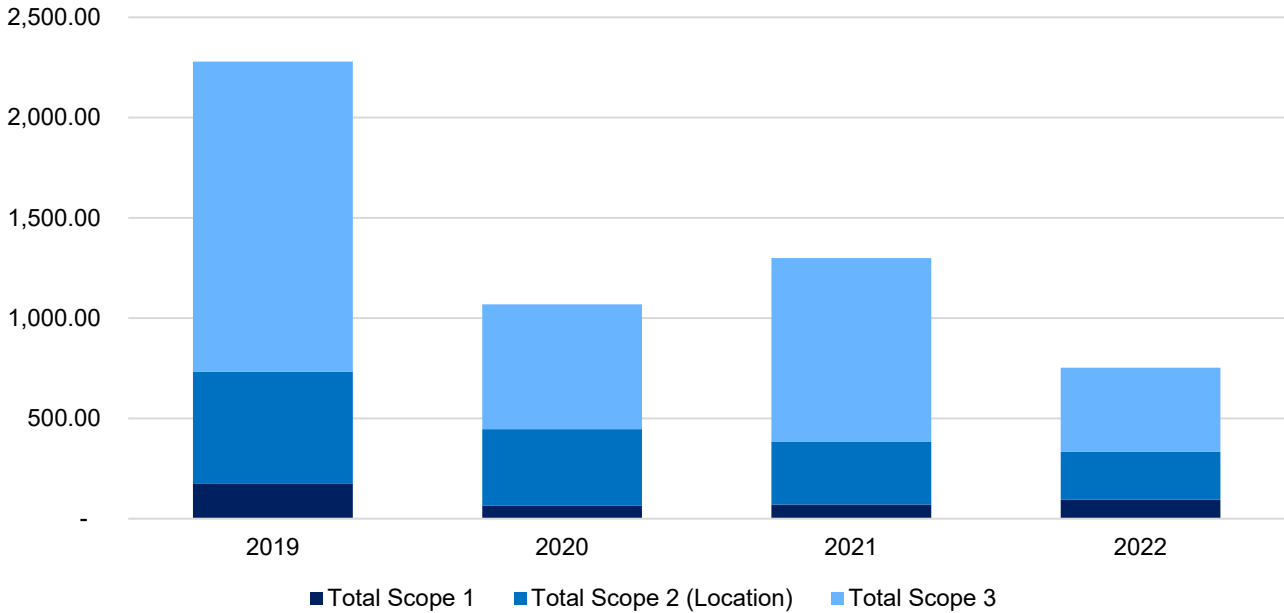
Below is a summary of emissions from 2019 – 2022 by source and Scope.

| <b>Emissions Summary – tCO<sub>2</sub>e</b> |                              |                 |                 |                 |               |
|---|------------------------------|-----------------|-----------------|-----------------|---------------|
| <b>Scope</b>                                | <b>Source</b>                | <b>2019</b>     | <b>2020</b>     | <b>2021</b>     | <b>2022</b>   |
| <b>Scope 1</b>                              | Gas                          | 96.51           | 63.60           | 68.42           | 42.79         |
|   | Company Vehicles             | 77.32           | 1.90            | 1.89            | 1.38          |
|   | Fugitive Emissions           | -               | -               | -               | 50.53         |
| <b>Total Scope 1</b>                        |                              | <b>173.83</b>   | <b>65.51</b>    | <b>70.31</b>    | <b>94.70</b>  |
| <b>Scope 2 (location)</b>                   | Electricity Generation       | 559.94          | 381.24          | 312.39          | 238.16        |
| <b>Scope 2 (market)</b>                     | Electricity Generation       | 559.94          | 381.24          | 286.36          | -             |
| <b>Total Scope 1 &amp; 2 (location)</b>     |                              | <b>733.77</b>   | <b>446.75</b>   | <b>382.71</b>   | <b>332.86</b> |
| <b>Total Scope 1 &amp; 2 (market)</b>       |                              | <b>733.77</b>   | <b>446.75</b>   | <b>356.67</b>   | <b>94.70</b>  |
| <b>Scope 3</b>                              | Electricity T&D              | 47.54           | 32.79           | 27.65           | 21.79         |
|   | Staff Homeworking            | 2.30            | 22.53           | 15.04           | 40.59         |
|   | Business Travel - Grey Fleet | 120.92          | -               | 15.29           | 27.80         |
|   | Business Travel - Rail       | 11.40           | 0.14            | 1.33            | 3.96          |
|   | Business Travel - Air        | 12.37           | 0.42            | 1.22            | 32.78         |
|   | Business Travel - Hotels     | 41.92           | 9.18            | 2.46            | 7.83          |
|   | Commuting                    | 1,282.43        | 551.68          | 808.05          | 237.96        |
|   | Upstream Transportation      | 1.90            | 0.30            | 0.30            | 0.29          |
|   | Purchased Materials          | 19.12           | 3.19            | 42.16           | 42.16         |
|   | Water Supply                 | 1.50            | 0.43            | 1.21            | 1.28          |
|   | Water Treatment              | 2.74            | 0.79            | 2.09            | 2.21          |
|   | Waste                        | 1.72            | 0.44            | 0.10            | 0.83          |
| <b>Total Scope 3</b>                        |                              | <b>1,545.85</b> | <b>621.89</b>   | <b>916.90</b>   | <b>419.48</b> |
| <b>Total Emissions (location)</b>           |                              | <b>2,279.62</b> | <b>1,068.63</b> | <b>1,299.61</b> | <b>752.35</b> |
| <b>Total Emissions (market)</b>             |                              | <b>2,279.62</b> | <b>1,068.63</b> | <b>1,273.58</b> | <b>514.18</b> |

Renewable energy tariff came into effect 1<sup>st</sup> December 2021 across the business.

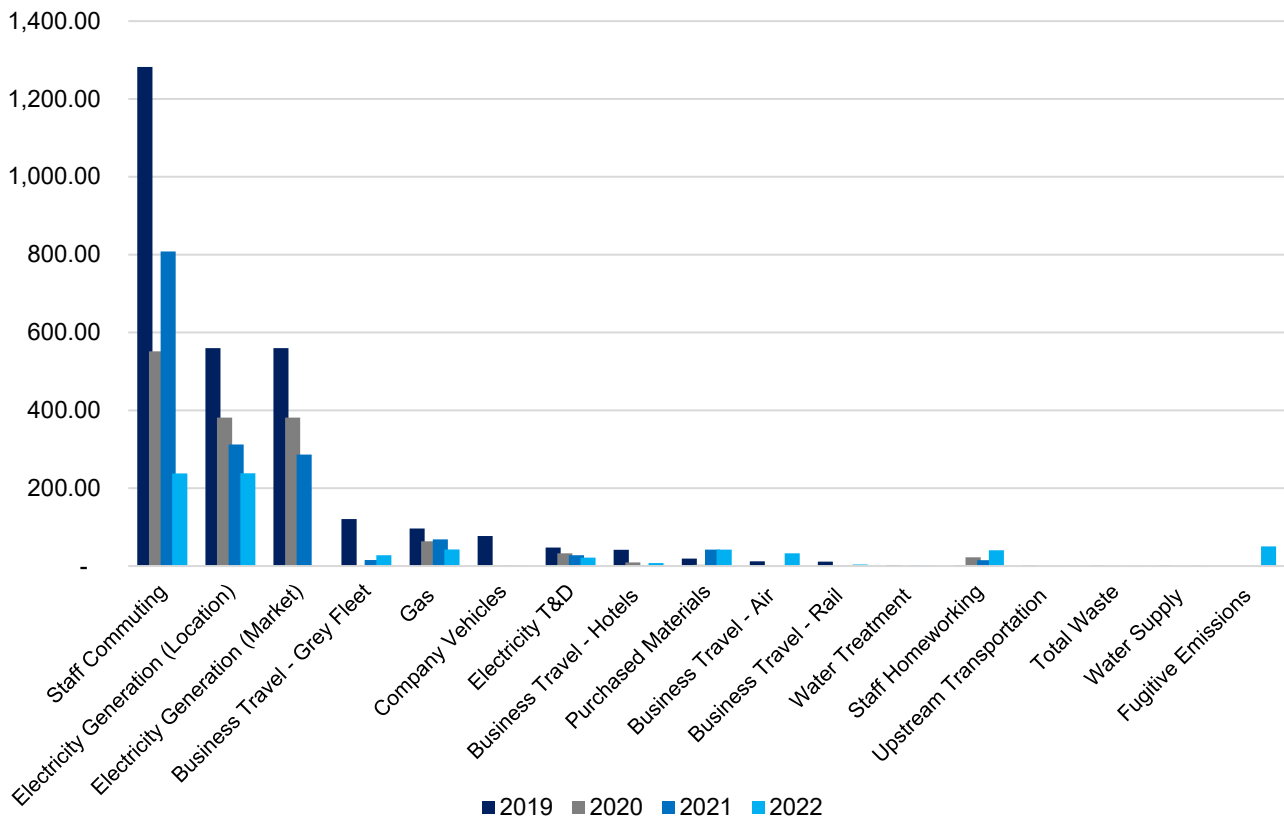
The graph below shows total annual emissions by Scope. Overall, we are happy to say that emissions are reducing across the organisation. As with all businesses, 2020 was an anomalous year where operations were significantly impacted by COVID-19 restrictions.

### Annual Location Based Emissions by Scope - tCO<sub>2</sub>e



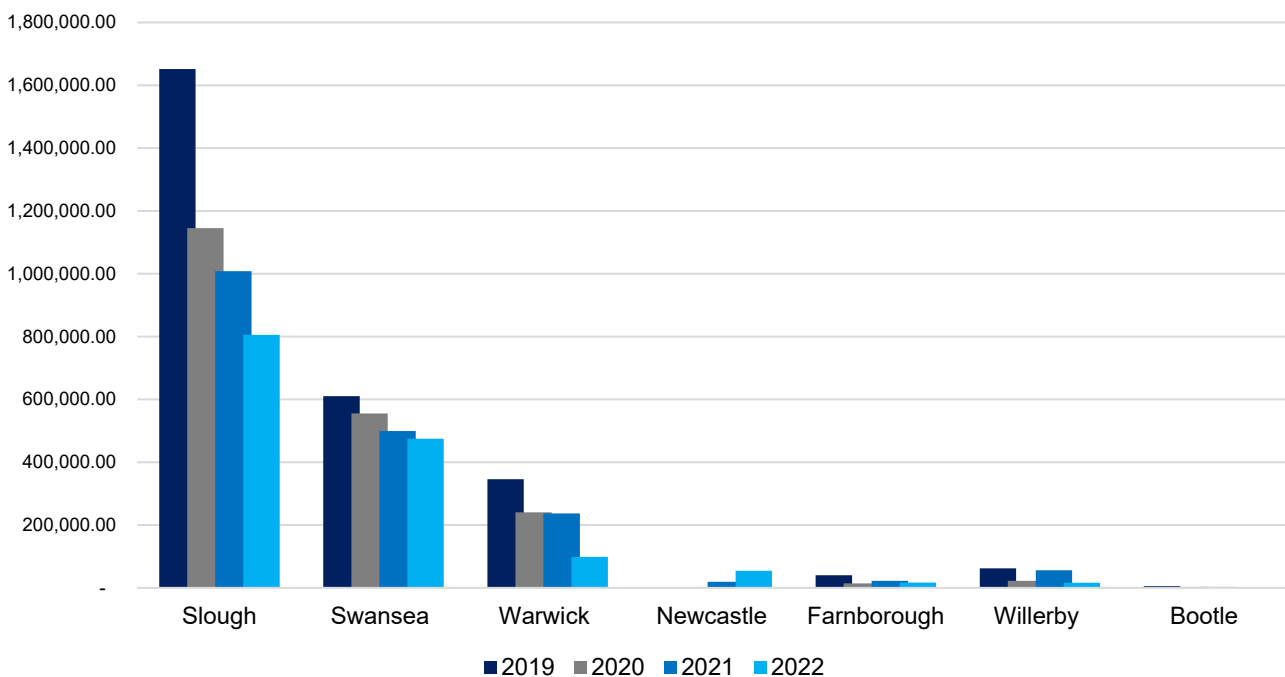
Overall, each emission source is decreasing year-on-year. Thanks to increased remote working, energy use and commuting have significantly decreased since the base year.

### Annual Emissions by Source - tCO<sub>2</sub>e



Due to the nature of our business, we are continually opening and closing sites which can of course impact overall emissions. The graph below shows that overall, energy consumption (gas and electricity) has decreased year-on-year at all sites. Newcastle opening late 2021 but, in that time, gas has been phased out. No historic data was available for Chesterfield and Maple Cross. Slough is closing Q2 2023, with employees being relocated to a new site in Windsor. Estimates were required for calculate Bootle energy consumption, but this accounts for less than 1% of kWh across the business each year. Estimates were also required for Farnborough as no energy data was available.

### Site Energy Consumption - kWh



Emissions for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O have been quantified individually where emission factors allow.

### Updates in Methodology

In line with ISO 14064-1, if new data or methods arise that yield more accurate and reliable results, we will quantify emissions. The following updates have occurred since CRP V.4.3.

In previous reporting periods, we had manually calculated homeworking emissions assuming that employees consume 200W per hour while working from home. As new emissions factors for homeworking were released in 2022, these have been retrospectively applied based on the total estimated homeworking hours across the business. This has resulted in slightly lower homeworking emissions, but this has not had a significant impact on overall emissions.

An out of data conversion factor had been incorrectly applied to 2021 commuting via car. This has been rectified and has reduced 2021 commuting emissions by approximately 6% for the period.



New methodology for Farnborough energy consumption has been used based on estimated energy consumption per workstation.

## Assumptions and Estimates

Relevant UK Government emission conversion factors have been used for all reporting periods. kgCO<sub>2</sub>e divided by 1000 to calculate tCO<sub>2</sub>e.

As per the requirements of ISO 14064-1, quantification has been completed to minimise uncertainty, and yield accurate, consistent, and replicable results. Estimates have been made in a manner that precludes underestimations.

We are committed to gathering more detailed data where required to enable accurate estimations and reduce uncertainty. No emission sources have been intentionally excluded. All available data has been utilised, either to report directly or to support proxy calculations and estimates.

## Utilities

Where direct electricity usage data was not available from invoices or meter readings, proxy calculations have used the floor space of offices and the average kWh per square foot at offices where electricity was recorded. Floor space is not known for every office. A lack of operational control has prohibited data collection at offices where no electricity has been reported.

Farnborough energy consumption estimated based on estimated energy per workstation, per year. Calculations assumed 0.2kWh per workstation (i.e., staff) per hour. This is based on typical electronic items staff use (laptop, monitor, phone, etc) plus intermittent use of a kettle. Conservative approach taken but overall emissions were less than 1%.

Water data was collected from internal Green Screen records. Data on wastewater was not available for all sites so we have assumed that 95% of water supplied to buildings by volume was disposed of via drains.

## Company Vehicles and Business Travel

Company vehicle emission calculated from a mixture of distance and volumetric fuel consumption data. Business travel including flights, rail, grey fleet and hotels calculated from expense claims. Average car factors were used where engine size was not known.

2022 data showed hotel stays in Germany and South Africa. The majority of hotel stays are within the UK. Country specific conversion factors applied for each period.

Air travel calculated on a passenger.km basis with radiative forcing included to account for indirect non-CO<sub>2</sub> impacts.

## Commuting

Emissions from commuting were estimated based on known office attended throughout the year and a survey to identify modes of transport used by each employee. Estimates assume that all employees

work five days a week and travel to and from work via the same mode of transport. An average commute of 18km each way was assumed. Average car, unknown fuel type conversion factor was used where relevant. A small number of employees use the bus, walk or cycle to work. Monthly office attendance was used to inform calculations. Annual leave and bank holidays were taken into account to avoid over-estimating emissions and increase accuracy.

### Homeworking

The total number of home working hours was calculated based on office attendance records, assuming that employees work standard eight-hour days. Methodology has been updated from previous years. 2022 conversion factors for homeworking were applied retrospectively as equivalent ones for do not exist for previous years.

### Purchased Goods and Upstream Transportation

Emissions from purchased goods were calculated using Green Screen data on the type and amounts of goods purchased. Emissions associated with production of these goods were calculated using UK Government conversion factors for primary material production. Emissions from upstream transportation has been estimated based on the weights of purchased goods (I.T. equipment and paper) multiplied by 150km to identify tonne.km. 150km has been used as a conservative estimate to cover a large portion of England. We are collecting information to enable a more accurate estimate. We have used the average diesel van conversion factor for tonne.km. Data for 2022 is still being collected, as a temporary measure we have assumed that purchases are consistent with 2021 and have therefore assumed the same number and type of goods were purchased. 2022 conversion factors were then applied.

## Emissions Reduction Targets

Quantitative targets have only been set for emission sources where there is sufficient data to enable quantification with an acceptable level of uncertainty. Part of Arvato's overall sustainability goal is to collect more data on emission sources to improve the reliability of quantifications and reduction predictions.

Below is a summary of emission reduction targets. Quantitative targets have been set for over 90% of base year emissions. Savings mentioned below are against the 2019 base year.

- **Achieve zero leaks from HVAC systems**
  - Achieved for 2019, 2020 and 2021. Leak detected in 2022 but this has since been rectified
- **Reduce emissions from gas by 10% and phase out gas across the business by 2030**
  - 54.97 tCO<sub>2</sub>e saving by 2027
- **Reduce emission from company vehicles by 8%, with all vehicles EV by 2033**
  - 37.64 tCO<sub>2</sub>e saving by 2027
- **Reduce emissions from electricity consumption by 12%**
  - 389.01 tCO<sub>2</sub>e saving by 2027 (including T&D)
- **Reduce emissions from grey fleet business travel by 8%, with all grey fleet EV by 2036**
  - 58.86 tCO<sub>2</sub>e saving by 2027

- **Reduce emission from air travel by 10%**
  - 7.05 tCO<sub>2</sub>e saving by 2027
- **Reduce emissions from commuting by 8%**
  - 624.26 tCO<sub>2</sub>e saving by 2027
- **Reduce emissions from water supply and treatment by 5%**
  - 1.43 tCO<sub>2</sub>e saving by 2027

**We project that carbon emissions will decrease over the five years to 1,106.41 tCO<sub>2</sub>e, this is a reduction of 51.47% against the 2019 base year.**

Additional to this, we are also aiming to divert 100% of waste from landfill and are reviewing opportunities to increase reduce waste levels and increase recycling. Over 50% of our waste by weight is currently recycled with the majority of the remaining waste sent for energy recovery. Recycling rates will be improved via behavioural changes in offices and evidenced in waste transfer notes from authorised waste management companies.

We recognise that passive reductions in emissions will occur over time but are committed to going beyond this and making pre-active reductions where practical.

Our Environmental Policy can be found [here](#) and is reflective of the following quantifiable targets. Below are some further details on key targets.

- **Achieve zero leaks from HVAC systems**

HVAC systems are regularly maintained by qualified individuals. From 2019 to 2021 we had no recorded leaks but unfortunately due to a malfunction with equipment a leak occurred. This has since been rectified and no leaks have occurred since.

- **Reduce emissions from gas by 10% and phase out gas across the business by 2030**
- **Reduce emission from electricity consumption by 12%**

Gas and electricity consumption, and associated emissions, have reduced significantly at all sites since 2019.

We are gradually phasing gas out across the business and aim to have it completely removed by 2030. We have already achieved this at the Newcastle office and replaced gas with a renewable electricity supply.

Electricity based on the potential savings from Arvato's most recent ESOS report. Originally, we had set a target to reduce emissions from electricity (including T&D) by 10%, but as we have exceeded targets this has been raised to 12%.

Key measures that are being taken to reduce energy consumption include prioritising the purchase of low energy equipment, where possible, and regularly replacing old equipment with more energy

efficient models. Electrical equipment will be turned off when not in use, either by in-built low-energy use settings or behaviour changes from employees.

Analysis of electricity usage at the Swansea office showed consumption remained relatively high despite low attendance to the office after March 2020. It was also identified that approximately 9% of electricity usage was attributed to night-time use when employees are not working. We are investigating the feasibility to install smart meters to track energy usage and identify the source of this use overnight. An energy audit will also be performed to identify the amount of equipment left on overnight and opportunities for behaviour changes that will reduce energy consumption.

- **Reduce emission from company vehicles by 8%, with all vehicles EV by 2033**
- **Reduce emissions from grey fleet business travel by 8%, with all grey fleet EV by 2036**
- **Reduce emissions from commuting by 8%**
- **Reduce emission from air travel by 10%**

As with business travel, commuting is being eliminated/reduced via remote working and virtual meetings. All business travel will be reviewed to identify if it has to take place, or if a virtual meeting can be used as a substitute. In some cases, we have to travel internationally but this only occurred on two occasions in 2022 (Germany and South Africa). Overall, our business travel emissions are relatively low.

Emissions from car travel will be reduced in the long term by increasing the charging capacity at all offices. This enables employees to switch to EVs and plug-in hybrids.

This will be further supported by the introduction of a Low Emissions Vehicle Policy for company vehicles prioritising hybrids and electric vehicles over petrol/diesel where not entailing excessive costs or impracticality. This will apply to all future purchases, hires and leases. This assumes a gradual transition to hybrids/EVs for employee commuting (grey fleet) before 2030.

- **Switch to 100% renewable energy sources for electricity consumed by company premises**

We now have renewable electricity supply for all offices across the business. This means our market-based emissions are zero tCO<sub>2</sub>e.

Another vehicle for success is regular and documented environmental awareness training for all employees across the company hierarchy. This will help influence behavioural changes that contribute towards Arvato reducing its emissions, such as saving energy and a better understanding of waste management. This environmental awareness training is planned to start in September 2021.

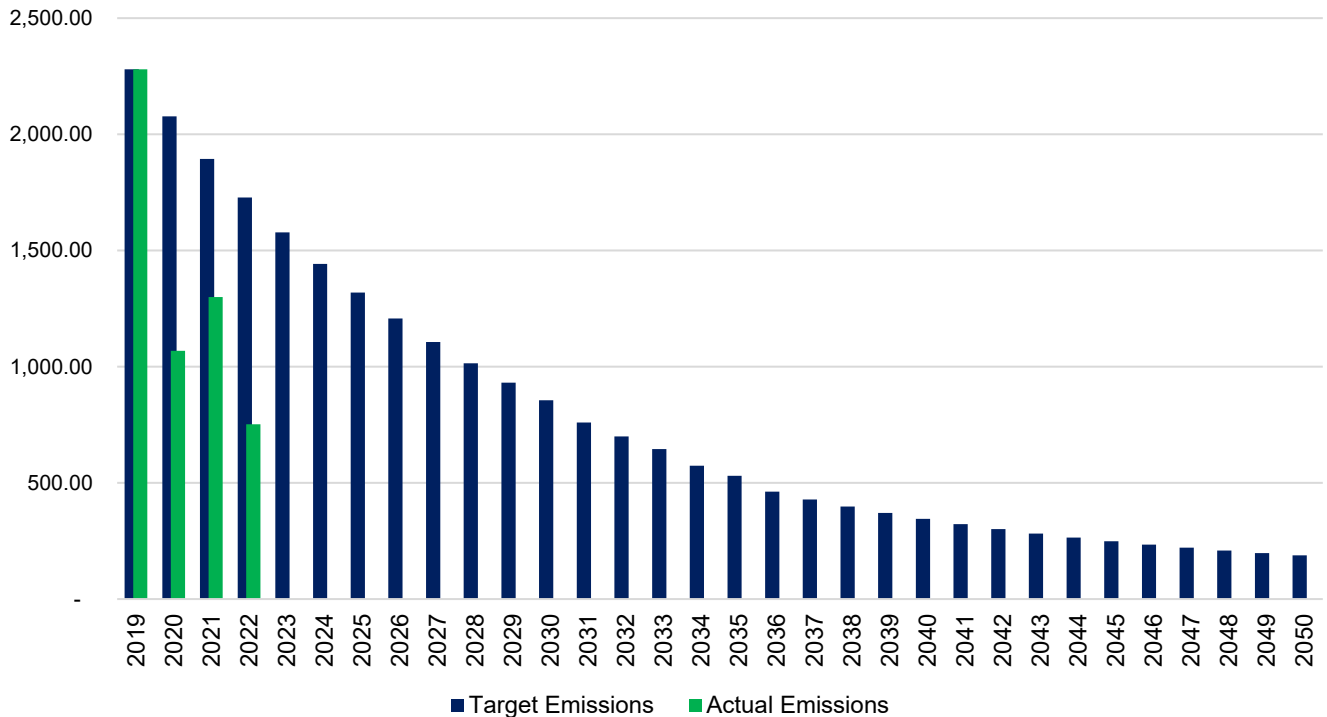
Arvato is committing to quantifying its emissions each year in order to gauge the success of its Carbon Reduction Plan. Remaining emissions will then be offset with credible and third-party verified carbon credits, in order to achieve and maintain carbon neutrality for each reporting period.

Quantifiable reduction targets have not been set for every area as sufficient data is not currently available to enable the creation of an accurate target. Although quantifiable targets have not been set for every area, the following sections outline how Arvato has introduced environmental management measures to reduce emissions associated with areas such as gas, water, and waste.

To further support these targets and Arvato’s commitment to managing its carbon footprint and overall environmental performance, Arvato has produced an Environmental Policy which is available on the company website.

Results of quantification for 2019 – 2022 show we are exceeding reduction targets, with 2022 emissions 67.00% lower than the 2019 base year. Progress against these targets can be seen in the graph below:

Actual vs Target Emissions - tCO<sub>2</sub>e



## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects were implemented before or during the 2019 baseline reporting period.

The following environmental management measures and projects have been completed or implemented since the 2019 baseline. The carbon emission reduction achieved by these schemes equates to 1,527.27 tCO<sub>2</sub>e, a 67.00% reduction against the 2019 baseline and the measures will be in effect when performing the contract.

#### Energy:

- Installation of LED low energy lights with PIR systems
- Eco Hot energy efficient water boilers

- Manual hand dryers
- ESOS 2 – Energy Saving Reports – Phase 3 to commence in 2023
- Up-to-date building energy performance certificates
- Green Energy supply at the new Newcastle office
- 100% of office electricity supply from renewable energy

**Waste:**

- Recycled waste
- Zero waste to landfill at the new Newcastle office
- Waterless urinals at the Swansea office
- Recycle paper and cardboard
- Toner cartridges recycled
- Purchase and use of energy efficient IT equipment
- WEEE Directive waste disposal
- Green waste disposed-off at local recycling centre
- Office furniture recycled and/or re-used

**Travel:**

- Car sharing scheme
- Cycle to work scheme
- Hybrid working; supporting employee's choice to work remotely where possible and using technological solutions to enable this
- Virtual meetings prioritised to eliminate unnecessary business travel
- Engaging with clients remotely to reduce the need for visitors to company premises

**Water:**

- Water based chemicals used internally and externally (grounds maintenance)

To track the success of these environmental management measures Arvato uses an environmental monitoring system provided by our parent company Bertelsmann called Green Screen. This environmental reporting software provided data used to quantify emissions included in this reporting period and will be utilised in future reporting periods.

Direct data from utilities meters at company premises will also be included, along with bills associated with utilities where available.

In line with Arvato's Environmental Policy, Arvato is committed to fulfilling all its compliance obligations including any mandatory reporting of environmental performance and an overall commitment to meeting the Government's Net Zero by 2050 target.

## Future Environmental Initiatives

In the future Arvato plans to implement further environmental management measures to reduce its emissions such as:

**Energy:**

- Replace appliances such as vending machines, photocopies and printers with low energy models
- Voltage optimisation

- LED/low energy lighting surveys at all buildings to ensure all lights in operation (internally and externally) are using the optimum energy efficient lighting
- Ensure all vending machines, photo copiers, hot water boilers, BMW television wall and all other relevant appliances are on timers to ensure they are turned off during the quiet hours of the building
- Behavioural changes to ensure all IT equipment is not left on stand-by – various options available to achieve this objective
- Promote the use of green energy procurement at offices not under operational control
- Liaise with landlords to install metering options including smart meters to enable better data collection

**Waste:**

- All food waste sent to anaerobic digestive plants to create bio gas
- Server room/comms room temperature optimisation
- Battery recycling scheme
- Objective for all sites to achieve zero waste to landfill

**Travel:**

- Develop low emission policy for hire/lease/purchase of vehicles for business travel
- Support employee's ability to switch to EVs by increasing charging capacity at company premises

**Water:**

- Reduce litres of water used to flush toilets
- Water saving options
- Reduced water flow taps/tap aerators
- Rainwater harvesting systems
- Various urinal water reduction systems available

**Other:**

- Employee environmental awareness training and suggestion schemes
- Further efficiency savings available via BMS optimisation
- Thermostatic radiator valves
- Liaise with landlord to review insulation quality of buildings, HVAC pipework and draught proofing where necessary
- Increased tree planting and creation/enhancement of green spaces on company premises where practical
- Develop a procurement policy focusing on sustainable and transparent supply chains that have Carbon Neutral goals aligned with Arvato's

## 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<sup>1</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>2</sup>.

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<sup>3</sup>.

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:



Date: 1 September 2023

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<sup>1</sup> <https://ghgprotocol.org/corporate-standard>

<sup>2</sup> <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

<sup>3</sup> <https://ghgprotocol.org/standards/scope-3-standard>



## Annex

Table 1. Features a Carbon Reduction Plan must contain as specified in [Guidance on adopting and applying the PPN 06/21 – Selection Criteria](#)

|   | Requirement  | Arvato Response   |
|---|--|---|
| 1 | Carbon Reduction Plan submitted which; confirms the supplier's commitment to achieving Net Zero by 2050  | <p>Arvato is committed to achieving Carbon Neutral by 2030 at the latest for Scope 1 and 2 emissions but is aiming to achieve carbon neutrality by 2030 in alignment with PAS 2060, and to maintain this state of carbon neutrality for subsequent reporting periods.</p> <p>Arvato is committed to implementing this CRP as part of its business operations and quantifying emissions annually to gauge its success.</p> <p>In order to meet the Carbon Neutral target Arvato will offset remaining emission with credible and third-party verified carbon credits.</p>  |
| 2 | Carbon Reduction Plan submitted which contains emissions reported for all required Scopes (in accordance with the required methodology),               | <p>Arvato has quantified Scope 1 and Scope 2 emissions as part of its SECR reporting. Where practical estimates have been performed to provide proxy figures of electricity consumption at offices.</p> <p>Scope 3 emissions have also been quantified and included in this Carbon Reduction Plan where data allows. No sources have been intentionally excluded and proxy calculations have taken place where possible. Scope 3 emissions quantified and included are:</p> <ul style="list-style-type: none"> <li>- Upstream transportation</li> <li>- Waste generated in operations.</li> <li>- Business travel (grey fleet, air, rail)</li> <li>- Employee Commuting</li> <li>- Transmission and distribution losses (T&amp;D)</li> <li>- Water supply</li> <li>- Water treatment</li> <li>- Material use in purchased goods</li> <li>- Homeworking</li> </ul> |
| 3 | Carbon Reduction Plan submitted which details environmental management and carbon reduction measures in effect during the delivery of the contract and | <p>This Carbon Reduction Plan outlines numerous environmental management and carbon reduction measures. Quantitative targets have been set. These are realistic and achievable targets and have been assigned expected completion dates. Targets for electricity have been increased since previous version as they have been exceeded.</p> <p>Results show we are on exceeding targets overall but are conscious of the uncertainty COVID-19 still poses and that emissions may unpredictably fluctuate.</p>   |

|    |  |   |
|----|--|---|
| 4  | Reporting period falls no more than 12 months prior to the date of commencement of the procurement   | Emissions have been quantified for 2019 – 2022 (1 <sup>st</sup> January – 31 <sup>st</sup> December) and will be re-quantified using consistent methodologies for following years. Environmental initiatives detailed in this Carbon Reduction Plan will be in effect until stated otherwise.<br><br>This Carbon Reduction Plan will be reviewed annually. Necessary updates will be made prior to it being applied to contracts starting 12 months after the most recent reporting period.   |
| 5  | Carbon Reduction Plan not submitted  | Carbon Reduction Plan will be submitted upon request for relevant contracts. If Carbon Reduction Plan requires updates or amendments as a result of feedback from tendering process, they will be made in time for submission deadlines.<br><br>This Carbon Reduction Plan will be signed off by top management (or equivalent) and published on the Arvato website. A summary version may be made public but no key information will be excluded in attempt to present results in misleading manner. Updates will be made each year to reflect each reporting periods' emissions and the effectiveness of environmental initiatives. |
| 6  | Carbon Reduction Plan fails to confirm supplier's commitment to achieving Net Zero by 2050   | See row 1.  |
| 7  | Emissions in the Carbon Reduction Plan are not reported for any Scopes or only for some Scopes without explanation why                                       | Emissions have been reported for Scope 1, 2 and 3 sources. Data for emissions were from primary sources including utilities bills and invoices, staff commuting survey, and Bertelsmann's Green Screen environmental reporting software.<br><br>The only Scope 3 category that has not been included is downstream transportation. Due to the nature of the business, we do not undertake any downstream transportation.  |
| 8  | Emissions in the Carbon Reduction Plan not reported for any Scopes or only for some Scopes, but supplier provides an acceptable explanation why              | All available data has been quantified. Exclusions are detailed in Table 2 in the Annex. Details of assumptions and estimates can be found within the body of this report.  |
| 9  | Reporting period is more than 12 months from the date of commencement of the procurement   | See row 5   |
| 10 | Reporting period is more than 12 months from the date of commencement of the procurement, <b>but provides an acceptable explanation why</b>                  | See row 5<br><br>If reporting period for contracts exceeds allowable time period, an acceptable explanation will be provided.<br><br>This is a 'live' document. When new data arises, it will be added in as soon as practically possible.<br><br>Quantification of 2023 emissions will begin in early 2024 when relevant data has been collated.   |
| 11 | Supplier <b>fails to detail the environmental management measures in effect</b> , including certification schemes or specific carbon reduction measures that | Environmental management measures are detailed in the main body of this Carbon Reduction Plan. This includes current and future initiatives. Initiatives are realistic and not based on speculative technologies.   |

|  |  |
|--|--|
| will be in effect during the performance of the contract |  |
|--|--|

Table 2. Scope 3 emissions. Table adapted from [Technical standard for Completion of Carbon Reduction Plans](#) . Full details of category descriptions can be found within this link. Scope 3 emissions are defined in the GHG Protocol.

| Scope 3 Category                                   | Minimum Boundary   | Included / Excluded | Justification for Exclusion  |
|--|--|---------------------|--|
| <b>4. Upstream transportation and distribution</b> | The scope 1 and scope 2 emissions of transportation and distribution providers that occur during use of vehicles and facilities (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure | Included            | <p>Primary data on upstream transportation not available but has been estimated based on recorded purchases of paper and I.T equipment for the year.</p> <p>Weights of paper are recorded as primary data but weights of I.T, equipment has been estimated based on information online.</p> <p>tonne.km estimated on a 150km journey for goods. We are working to collect more information on Upstream transportation to enable more accurate calculations. A conservative distance has been used to estimate upstream transportation emissions.</p> |
| <b>5. Waste generated in operations</b>            | The scope 1 and scope 2 emissions of waste management suppliers that occur during disposal or treatment Optional: Emissions from transportation of waste   | Included            | <p>Waste data for recycling, general, confidential and hazardous waste available for Slough, Swansea, Willerby, Warwick, and Newcastle.</p> <p>Waste production was significantly reduced due to low / no attendance to offices over 2020 due to COVID – 19 restrictions.</p> <p>Appropriate conversion factors used for each waste stream.</p>  |
| <b>6. Business travel</b>                          | The scope 1 and scope 2 emissions of transportation carriers that occur during use of vehicles (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing vehicles or infrastructure   | Included            | <p>Included. Data provided from Green Screen and expense reports.</p> <p>Data for grey fleet, flights and rail included and quantified. Scope 1 company vehicles use reported separately.</p>  |
| <b>7. Employee commuting</b>                       | The scope 1 and scope 2 emissions of employees and transportation providers that occur during use of vehicles (e.g., from energy use) Optional: Emissions from employee teleworking  | Included            | <p>Total commuting and homeworking emissions estimated and included based on data collected in staff all operational offices in each period. Estimates factor in the following:</p> <ul style="list-style-type: none"> <li>- Recorded WFH/office split</li> <li>- Estimated method of transport for the organisation based off a staff survey</li> <li>- Number of working days per year, accounting for annual leave and bank holidays</li> <li>- Conservative estimate of 18km per trip</li> </ul>   |

|  |  |          |  |
|--|--|----------|--|
|  |  |          | Since the publication of the previous CRP, the methodology for homeworking emissions has been updated. This has been applied retrospectively to obtain more accurate results but has not made a significant difference.  |
| <b>9. Downstream transportation and distribution</b> | The scope 1 and scope 2 emissions of transportation providers, distributors, and retailers that occur during use of vehicles and facilities (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure | Excluded | Arvato do not produce or distribute any physical products or raw materials.<br><br>Emissions from manufacture of purchased goods included (I.T. equipment, paper)  |
| <b>Other exclusions</b>                              | Scope 3 emission of water use and wastewater treatment   | Included | Scope 3 emissions from water supply and treatment included for Slough, Swansea, and Willerby. Primary data was used for these sites. Data unavailable for other sites due to lack of control. Emissions from water are not significant in relation to the total footprint of each reporting period |

