

Carbon Reduction Plan

Supplier name: PW Commercial Company Ltd t/a Printwaste Recycling & Shredding.

Publication date: 31st July 2023.

Introduction

This Carbon Reduction Plan captures carbon emissions and reduction commitments from our business, which covers the services our company deliver to our customers and the processing of recycling materials whilst within our operational control.

The phrase “carbon emissions” will refer to all greenhouse gas (GHG) emissions (CO₂ equivalent/CO₂e) raised throughout this document.

As an ISO 14001 certified organisation, environmental management and energy management are integrated into our management systems and business processes which are utilised in our quality control and service delivery. Printwaste Recycling & Shredding will use its aim to achieve Net Zero to continuously improve the standards set in their ISO 14001 framework. Our certificate can be found on their website [Printwaste Accreditations](#)

Printwaste were awarded a Silver EcoVadis rating in 2022. The award is an independent endorsement putting Printwaste in the top twenty-five percent of companies assessed by EcoVadis. It demonstrates our commitment to sustainability management and gives confidence to our current and future customers that Printwaste continues to lead the way in sustainability management and has the expertise and experience to add value to our customers' own sustainability performance.

Commitment to achieving Net Zero

Our company is committed to achieving Net Zero emissions by 2045 and in playing its part in the wider global efforts to protect the natural environment. Our company 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. This is consistent with the Government commitment to achieve net zero by 2050 under the Climate Change Act.

Printwaste is committed to the waste management and recycling sector's journey towards Net Zero and have for a long time recognised that working together with our customers to develop effective waste prevention, alongside a functioning circular economy where more materials are reused and recycled, will be essential to support the UK's climate objectives.

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.

Our business unit emissions are calculated in tonnes of carbon dioxide equivalent (CO₂e) using the appropriate conversion factors published by BEIS².

Our Carbon Baseline includes our greenhouse gas (GHG) emissions from the seven GHG's named by the Kyoto Protocol.

Baseline Year: 2022 (period 01st January 2022 to 31st December 2022)

Additional Details relating to the Baseline Emissions calculations.

Printwaste has selected 2022 as a baseline year.

Scope 1 emissions, from sources that are owned or controlled by the company, have been calculated based on recorded business data of our fuel consumption and vehicle mileage for the calendar year.

Scope 2 emissions, arising from the generation of electricity purchased by the company, are determined from recorded business data regarding our electricity consumption.

For both Scopes 1 and 2, our company have reviewed all available consumption data and cross-referenced these figures with relevant invoices to ensure data accuracy. The organisational boundary has been determined as financial control; our method of data collection is limited to reporting on sources of carbon emissions where our company have financial and operational control.

Scope 3 emissions categories have been included within our baseline year reporting where they are relevant in assisting with achievement of our business goals and there are potential emissions reductions that could be influenced by our company. These have been undertaken as detailed below:

Upstream transportation and distribution.

Upstream emissions of purchased fuels and electricity and T&D losses have been calculated from the GHG to amount to 294.39 tCO₂e in 2022. This is based on the usage of fuel in our own vehicles and plant together with the electricity used in our own offices and waste management facilities.

Transportation and distribution of products purchased: As a waste management company, the material we collect is other people's waste. Whilst these materials will have been produced and previously have been transported, at present our company do not have data available from our suppliers and supply customers that would enable calculation of emissions associated with upstream transportation and distribution.

Transportation and distribution services purchased: Our company do not purchase transportation services using vehicles not owned or controlled by us for inbound or outbound logistics in relation to materials and products being transported to or from our own operational depots

Waste generated in operations:

Our operational waste is the waste that is produced from our own office buildings and from our staff engaged in operational activities. This includes waste destined for incineration via a waste-to-energy facility, recycling of paper, metal, plastics and glass from our own offices and staff. For the base year our company estimated our waste based on the number of staff and have a total of 0.133 tCO₂e for 2022. In future years the waste produced by our staff will be weighed as it is collected. The emissions generated from the processing and transportation of this waste is included within our own Scope 1 and Scope 2 emissions as our company are the waste carrier and waste management supplier and therefore to avoid double counting, our company have not added this to our Scope 3 total. Our water supply and use are measured; this created emissions of 0.136 tCO₂e in 2022.

Business travel:

This is made up of national travel by staff to internal and external meetings using vehicles or other transport not owned or controlled by the company. As a waste management and recycling company, visits to customer sites in order to undertake waste audits is vital to encourage customers to recycle more of their waste material. Our sales teams travel by car where necessary to conduct site visits and collect samples. Our company collect mileage data from these employees which has been used to calculate emissions. In 2022, there was no international or air travel and only a small number of hotel use. Business travel gave rise to emissions of 5.58 tCO₂e in 2022.

Employee commuting:

For the 2022 base year our company have surveyed employees in respect of mode of transport and estimated the milage travelled each day worked between home and workplace by using the average data method as published in GGP: Technical Guidance for Calculating Scope 3 Emissions. The survey enabled us to encourage employees to consider car sharing, riding push-bikes and walking where possible. In addition, a number of staff split working time between home (working remotely) and office. The number of hours homeworking has been calculated. From the data collected on our employee commuting and homeworking our company have calculated emissions of 66.54 tCO₂e for 2022.

Upstream leased assets:

All emissions for leased assets are included in Scope 1 and Scope 2.

Downstream transportation and distribution:

The number of emissions reported in this category, 1561.45 tCO₂e, is in part estimated as some data for the base year, 2022, was incomplete. The company recognises that downstream emissions will be a significant proportion of Scope 3 emissions and that the current year may need to be adjusted following assessment of relevant value chain suppliers. These emissions result from hauliers and shipping companies collecting outbound materials sold to Printwaste's customers on an ex-works basis that are, therefore, not owned or controlled by the company during transit. A proportion of the processed waste and recyclable materials leaving our depots is delivered to end destination re-processors on company owed vehicles.

The emissions, when using our own vehicles. are accounted for within our own Scope 1 emissions. In the base line year, 2022, data relating to the final destinations of processed material leaving our depots has been assessed and estimated by referring to the available records of end-destination. These will include material that is exported and whilst end destination is known, the exact method of transport and route may not be known as this is controlled by the customer. In 2023 Printwaste will develop the recording of data to enable the calculation of the carbon footprint of individual customer vehicle movements when collecting materials from our depots. This will enable an accurate calculation of the Scope 3 emissions for the 2023 reporting period.

Baseline year (2022) emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	1268
Scope 2	67
Scope 3 (Included Sources)	1928.10 Scope 3 emissions include: Upstream factors including fuel, energy, transport and distribution = 294.39 Disposal of own waste = 0.14 Business travel = 5.58 Employee commuting = 66.54 Downstream transportation and distribution = 1561.45
Total Emissions	3263.10 tCO ₂ e

Current Emissions Reporting

Reporting Year: 01st January 2022 to 31st December 2022	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	1268
Scope 2	67
Scope 3 (Included Sources)	1928.10 Upstream factors including fuel, energy, transport and distribution 294.39 Disposal of own waste 0.14 Business travel.5.58 Employee commuting 66.54 Downstream transportation and distribution 1561.45
Total Emissions	3263.10 tCO ₂ e

Emissions reduction targets

This is Printwaste's first reporting year of our carbon reduction plan and therefore the report for 2022 is our baseline year and this document contains our first statement of targets to reduce our future emissions.

In commencing our journey towards achieving Net Zero, our company have adopted the following carbon reduction targets.

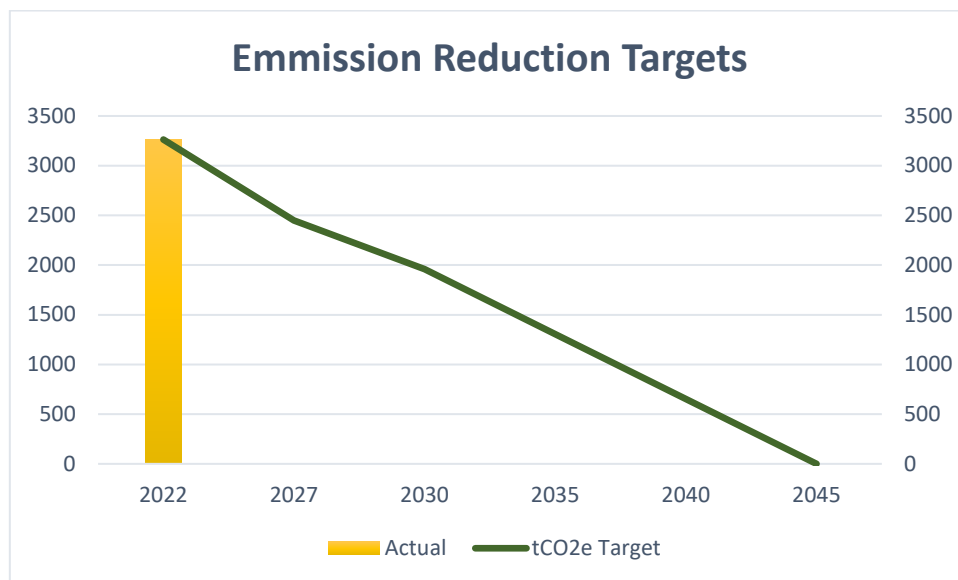
We project that our carbon emissions will decrease over the next five years to 2450 tCO₂e by December 2027. This is a reduction of 25% against our baseline emissions from 2022.

Our commitment includes a near-term target to achieve 40% emissions reduction by December 2030. Our company are committed to measure and reduce our Scope 3 GHG emissions and aim to achieve Net Zero GHG emissions for Scope 1, 2, and 3 by 2045.

In order to achieve these targets, we recognise that key aspects of our strategy for carbon reduction will need to be based on:

- Communication with staff, customers, suppliers and other stakeholders to raise environmental awareness.
- Employee learning to encourage better use of energy and reduced waste.
- Continuous development of carbon reduction initiatives.
- Regular assessment of our performance against these targets.
- Leadership giving support for, and ensuring resources are available for, our carbon reduction programme.

Progress against these targets can be seen in the graph below:



Carbon Reduction Projects

The following environmental management measures and projects have been completed or implemented within the 2022 reporting year which is also our baseline year. As 2023 will be the first year of assessing and reporting carbon emission reduction against the baseline year our company have detailed the environmental management measures and initiatives that our company have put in place in 2022 and listed future measures as those that will be undertaken in 2023 and subsequently. These measures will be in effect when performing all future contracts.

All carbon reduction projects, actions, data collection and reporting functions are overseen by Printwaste's senior management team. They will fully evaluate the impact of implementing these measures on the reduction of our emissions, and comparing to the baseline year, in the next carbon footprint assessment

Printwaste has recognised the lack of data available to determine Scope 3 emissions and will, from 2023, continue to improve methods of data capture and reporting of these emissions as part of our management objectives.

The long-term goal of these activities will be to reduce the overall energy consumption of the business, reduce operational costs and promote an energy efficiency ethos supported by all team members in line with our commitment to achieve Net Zero by 2045.

Electricity management measures

All operational and administration departments must consider how they can optimise efficiency, implementing effective use of resources and power management policies on all machinery, plant and equipment in use. Employees must 'power down' all equipment when not in use and at the end of their working day, thereby reducing the standby consumption of machinery and IT hardware.

We have undertaken a lighting review throughout the company. Lights are being renewed with LED lighting in all key/ high-usage areas with PIR and sensor-controlled functionality where appropriate. In 2022 lights that have been replaced will result in a reduction of 2300 kwh in 2023 and this light replacement project continues in 2023. We have taken measures to minimise lighting usage outside of regular business hours and implemented a 'lights off' ethos, empowering colleagues to turn off redundant lighting and use natural daylight where possible.

As an extension of our electricity management measures, Printwaste has invested in solar PV panels on one factory roof. It is planned to investigate the viability of extending the number of PV panels at this location and undertake a project to establish the viability of PV panel installation on other company operational sites. In 2022 the amount of power generated by the solar PV system was 60,507kwh. This generated electricity has helped to reduce the emissions incurred by transmission and distribution losses.



Business transport measures

Our transport managers have been directed to review each fleet vehicle at the point of renewal to determine whether they are still required and if a more sustainable alternative may be found to meet the business requirements.

Printwaste encourages all staff to engage in reducing carbon emissions when using vehicles or mobile plant by self-assessment of their driving behaviour, in particular, their acceleration and braking. Further development of our telematics systems across all commercial vehicles in 2023 will enable management to facilitate and promote safe and fuel-efficient driving, which will lead to a reduction in fuel usage and carbon emissions.

Considering fuel usage and lowest carbon costs for transport is now a requirement when assessing routing and route density of collection rounds. This involves selecting the type and size of vehicles and maximising the use of effectively planned journeys. In 2023 the introduction of new software will improve vehicle routing and produce the most efficient service routes possible, thereby reducing the mileage goods travel, reducing fuel used and decreasing carbon emissions.



Staff are regularly encouraged to adopt low-carbon emitting means of commuting to promote further an ethos of sustainably focused travel throughout the business. For our office staff and sales team, our company have facilitated hybrid home/office working arrangements reducing company travel and commuting.

Printwaste have installed a vehicle charge point in the office car park to facilitate charging of staff and visitors' hybrid and electric vehicles. More are planned and will be introduced when required.

Having hybrid vehicles within our current fleet, our company look forward to introducing electric vehicles to our car and van fleet which will reduce our Scope 1 emissions. We will be conducting trials with HGV EV powered vehicles in 2023 to assess their suitability to the work requirement. We ensure we are kept informed of the development of hydrogen fuelled commercial vehicles by our vehicle suppliers. In respect of Scope 3 emissions, we will investigate the modes of transport and their GHG intensity used by our downstream customers.

Waste management measures and supply chain engagement

As a waste management company, a lot of the materials we process are supplied by our customers who, therefore, are a major part of our supply chain. Printwaste actively promote a 'Zero-to-Landfill' policy with all customers. In 2022, 3,875 tonnes were directed to energy recovery resulting in a significant reduction in CO₂e emissions when compared to landfill.

When considering the waste our company generate or facilitate, we are taking active steps to engage upstream customers on the subject of identifying sustainable and recyclable alternatives to general waste which meet the needs of our downstream customers.

A core purpose of the business is to achieve high quality recycling with an increasing amount of each customers' waste materials. During 2022, we actively promoted this purpose to our customers informing them of the sustainability aspects regarding closed loop recycling and the circular economy

resulting in the reduced use of electricity and water in downstream manufacturing when using recycled material as opposed to that using raw materials.

In 2023 our company will work with more of our customers to support both ours and their environmental objectives to move waste materials up the waste hierarchy, increase recycling and divert waste from landfill. In addition, we will actively seek to increase the opportunity for the refurbishment and recycling of products and equipment returned from customer sites.

Print reduction measures

A new operations software system is to be installed in 2023 which will digitise processes and reduce the need to undertake printing wherever possible. The business will look to identify further digitisation opportunities with all processes reviewed regularly to assess whether a process change is required that would reduce printing requirements further.

Water reduction measures

Within all rest-rooms we have fitted limited flow-time taps to reduce consumption and prevent excessive water use. In 2023 our company will undertake a project to establish whether motion sensors, timers or instant near-boil water system to replace kettles would be beneficial to reducing water usage and assess our current methods for heating water effectively, both for sanitation and personal consumption.

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 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 signed off by the directors and senior management team.

Signed on behalf of the Supplier:

Don Robins, Managing Director.

Date: