



Polystar Plastics Limited – Carbon Footprint Statement and Net Zero Carbon Reduction Plan, In-line with PPN 06/21

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About Us

Polystar Plastics Limited is a UK-based manufacturer specialising in the production of polythene packaging solutions for a broad range of industrial and commercial sectors. With over 20 years of experience, the company has built a strong reputation for innovation, reliability, and product quality. Operating from its Southampton-based facility, Polystar provides high-performance films and bags, including recycled and biodegradable options, reflecting its commitment to sustainability and responsible manufacturing. The company supports clients across industries such as retail, healthcare, agriculture, and construction, offering tailored solutions designed to meet diverse packaging and environmental needs.

Commitment to Achieving Net Zero

Polystar Plastics Limited is committed to achieving Net Zero emissions by 2050, by implementing our Carbon Reduction Plan.

Scope 2 emissions (indirect emissions from purchased electricity used within our operations) represent 70.7% of our total in-scope emissions. Achieving the 2050 target will mostly require us to conduct an in-depth onsite energy audit and implement energy saving recommendations from this audit, such as installing onsite renewable energy sources (example: solar PV cells) and staff awareness training to promote environmentally friendly behaviours. Further improvements across the three emission scopes will come about as a matter of course (via UK Gov targets and requirements, evolution of industries, new regulations etc.) and will require active engagement by us with our suppliers and staff as well as development of supply chain and operational policy.

As 1st August 2023 to 31st July 2024 is our baseline and current year, we will strive to implement and develop various carbon reduction activities in the future, and we are confident that we can achieve business growth without the same subsequent increase in our emissions.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 1st August 2023 to 31st July 2024	
Additional Details relating to the Baseline Emissions calculations.	
We have made a comprehensive audit of the included scope emissions from this baseline year in order to get a full impression of business as usual emissions. Our projections are based on growth of the business which are reflected in our Business As Usual CO ₂ e emissions. We have made these calculations based on Operational Control of our emissions. There is no previous reporting and therefore our baseline emissions and reporting year emissions are equivalent.	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	174.27
Scope 2	2,194.79
Scope 3 (Included Sources)	735.65 This includes the emissions from the following required sources of Scope 3: <ul style="list-style-type: none">• Upstream Transportation and Distribution• Waste Generated in Operations• Business Travel• Employee Commuting• Downstream Transportation and Distribution
Total Emissions	3,104.71 (tCO₂e)

Current Emissions Reporting

Reporting Year: 1 st August 2023 to 31 st July 2024	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	174.27
Scope 2	2,194.79
Scope 3 (Included Sources)	735.65 This includes the emissions from the following required sources of Scope 3: <ul style="list-style-type: none">• Upstream Transportation and Distribution• Waste Generated in Operations• Business Travel• Employee Commuting• Downstream Transportation and Distribution
Total Emissions	3,104.71 (tCO₂e)

Emissions Reduction Targets

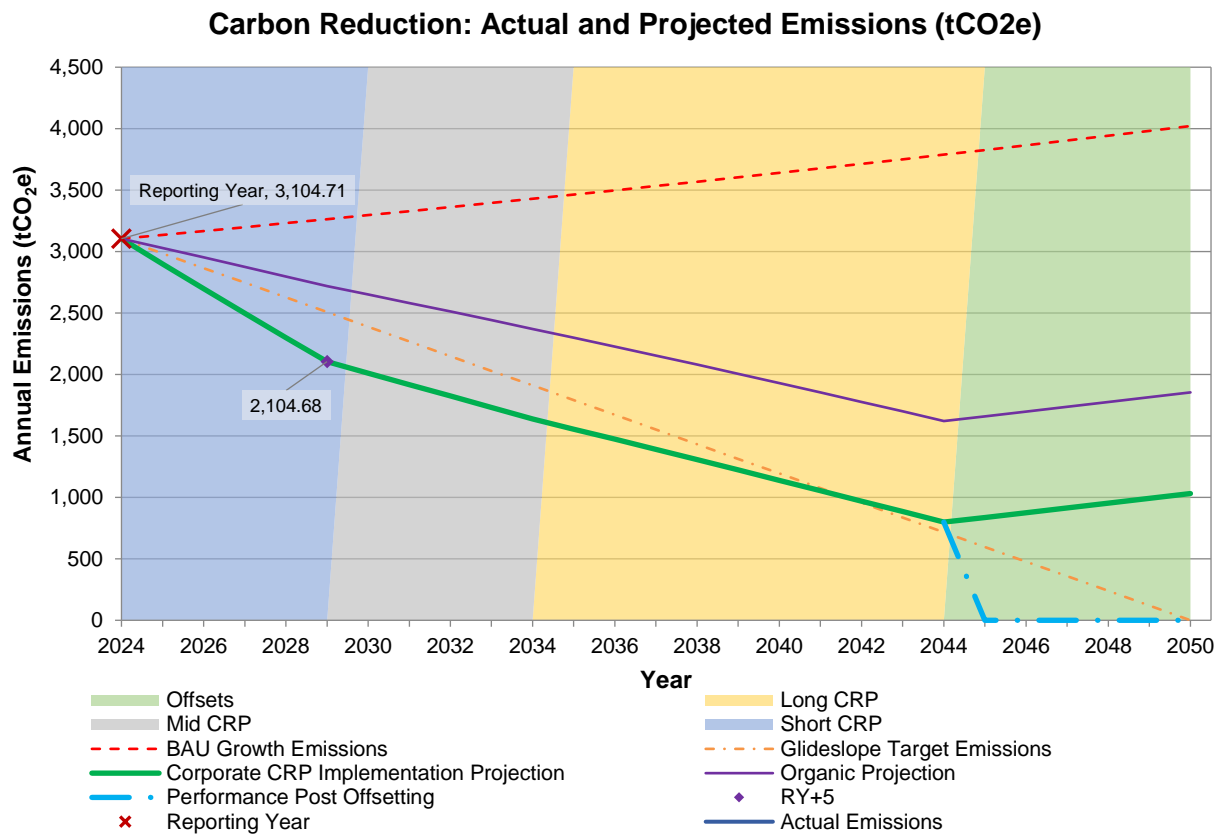
In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

We project that our Business As Usual (BAU) carbon emissions will increase over the next five years to 3,263.08 tCO₂e by RY 28/29. This is a 5.10% increase in our BAU emissions due to the growth of our business.

However, our current strategy is to make emissions reductions via a three-stage CRP and concluding with zero emissions by 2045 at the latest. It is our current intention to practicably minimise all emissions by 2044. From that point we aim to offset all residual emissions such that our carbon footprint defined by this PPN 06/21-aligned disclosure is zero from 2045 and beyond.

Therefore, with taking our reduction actions into consideration, we project that carbon equivalent emissions will decrease over the next 5 years to 2,104.68 tCO₂e. This is a reduction of 35.50% against BAU.

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 during the August 2023 to July 2024 reporting period.

- We installed low energy lighting where possible.
- We have invested over £2 million in more energy efficient extrusion lines.
- The chillers system has been upgraded to also be more energy efficient. This is estimated to reduce energy consumption within the cooling process by 30-40%.

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

- **Develop a green commuting policy including car share programmes, working from home, awareness training etc., short-term**

We aim to develop a green commuting policy in the short term to raise awareness and support more sustainable travel among staff. This will include initiatives such as car share programmes, flexible working arrangements including working from home, and staff training to promote low-carbon commuting options such as utilising public transport.

- **Energy audit and implementation of efficiency measures, short-term**

We are aiming to carry out a comprehensive energy audit across our operations in the short term and implement the energy saving opportunities identified. This could include actions such as installing onsite renewables, upgrading equipment and behavioural change policies. This action will help reduce both our electricity and natural gas consumption, contributing to lower Scope 1 and Scope 2 emissions while improving overall energy performance.

- **Reduction of business travel through e-meetings and other collaborative solutions, short and mid-term**

We aim to reduce emissions from business travel by prioritising online meetings, where feasible. This approach will help us reduce emissions while also saving time and money.

- **Carry out delivery consolidation actions on all items delivered to site, mid-term**

We aim to carry out delivery consolidation actions on all items delivered to site as a mid-term initiative. This will involve streamlining inbound logistics by reducing the frequency of deliveries and maximising load efficiency. The approach will help reduce upstream transport emissions and support improved supply chain coordination.

- **Work with upstream and downstream logistics providers with green credentials, mid-term**

We aim to prioritise environmental considerations in our mid-term logistics strategy by selecting upstream and downstream providers with strong green credentials. This includes working with partners who utilise lower-carbon transport modes and sustainable fuels, thereby reducing the environmental impact of our distribution and supply chain operations.

- **Replacement of 50% of onsite fuel usage with HVO, mid-term**

We aim to replace 50% of our onsite fuel consumption with hydrotreated vegetable oil (HVO) as a medium-term action. This switch will reduce our use of conventional fossil fuels and support our broader efforts to decarbonise site operations without requiring significant changes to existing equipment or infrastructure.

- **Conversion of 50% company forklifts to electric forklifts, mid-term**

We aim to replace 50% of our forklift fleet with electric models as part of our medium-term decarbonisation strategy. This transition will reduce our reliance on onsite fuels; despite increasing electricity consumption, net emissions will reduce as the additional electricity demand is expected to be modest.

- **Continue conversion of company fleet to EV, long-term**

We currently utilise electric vehicles within our company fleet and plan to gradually increase the proportion of plug-in hybrid (PHEVs) and battery electric vehicles (BEVs) over the long term. This transition will contribute to a reduction in our Scope 1 emissions. Electricity usage under Scope 2 is expected to rise, however not to the same extent.

- **Implement a salary sacrifice scheme to encourage employees to use electric vehicles, long-term**

We could potentially implement a salary sacrifice car scheme over the long term to encourage employees to transition to electric vehicles for commuting. This initiative will support our efforts to reduce Scope 3 emissions from employee travel while providing staff with an accessible and cost-effective route to lower-carbon transport.

We also anticipate some changes in UK industry and infrastructure which will help us to reduce our carbon footprint further:

- Sustainability improvements in public transport (affecting business travel and commuting emissions).
- Increasing availability and market share of electric vehicles (affecting business travel and commuting emissions).
- Sustainability improvements in third-party delivery vehicles (e.g. switching to electric vehicles), both upstream and downstream.
- Sustainability improvements in municipal waste management.
- Increased biofuel proportions in average biofuel blends of diesel and petrol used in vehicles.
- Reduction in the carbon content of National Grid electricity

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 standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

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) Standard³.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).



Signed.....

Rebecca Benbow
Name.....

Director
Position.....

15/04/2025
Date:

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>