

Pal International Ltd Carbon Reduction Plan

Publication date: 5th July 2024

Pal International Ltd is committed to achieving Net Zero emissions by 2050 if not sooner.

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: 2019	
Additional Details relating to the Baseline Emissions calculations.	
Using the GHG Protocol methodology, a full carbon assessment was conducted on scope 1,2 & 3 emissions where practicable.	
Baseline year emissions: 2019	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	135 Gas & Fleet
Scope 2	91 Electricity
Scope 3 (Included Sources)	5883 Cat 1 Purchased goods - materials, packaging, labels, water, wooden pallets (excludes chemicals and factored goods) Cat 3 Transmission & Loss Cat 5 Wastes Cat 7 Employee commute Cat 9 Downstream Transportation & Distribution Cat 11 Use of sold products Cat 12 End of life treatment
Total Emissions	6109

Current Emissions Reporting

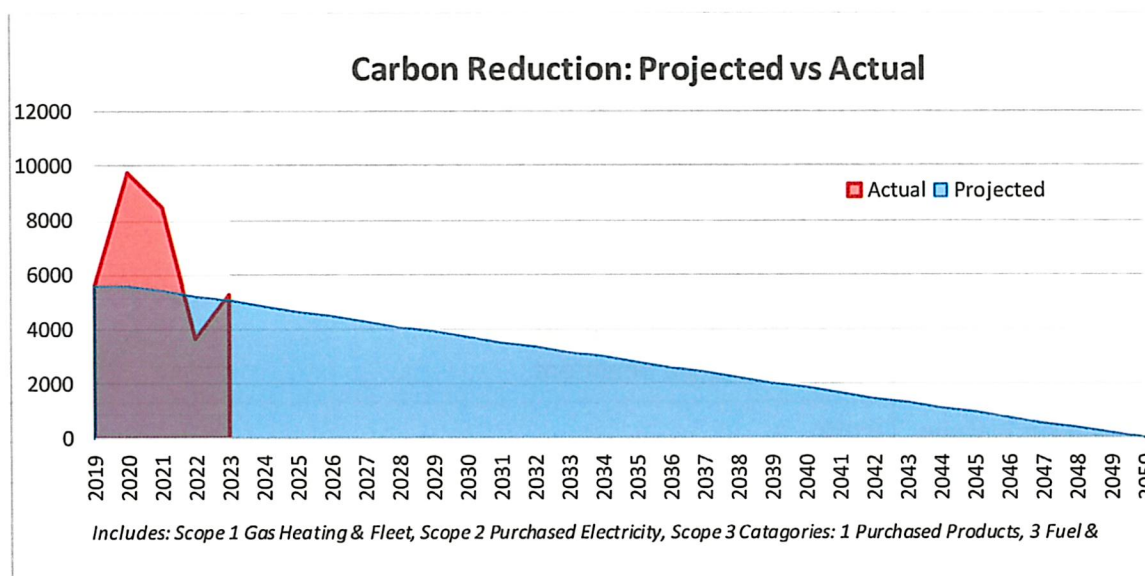
Reporting Year: 2023	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	69 Gas & Fleet
Scope 2	73 Electricity
Scope 3 (Included Sources)	5163 Cat 1 Purchased goods - materials, packaging, labels, water, wooden pallets (excludes chemicals and factored goods as data not available) Cat 3 Transmission & Loss Cat 5 Wastes Cat 6 Business Travel Cat 7 Employee Commute Cat 11 Use of sold products Cat 12 End of life treatment
Total Emissions	5305

Emissions Reduction Targets

To continue our progress towards achieving Net Zero, we have adopted the following carbon reduction targets.

Based on a net zero projection by 2050, we project that carbon emissions will decrease over the next five years to 3912 tCO₂e by 2029. This is a reduction of 22%.

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



Note: Years 2020-2021 data is high due to supporting our customers during COVID

Completed Carbon Reduction Initiatives

Since 2015 we have been certified to ISO14001 Environmental Management System and in 2020, using the GHG Protocol methodology we calculated our scope 1, 2 and 3 emissions across the entire value chain. This confirmed over 95% of emissions are within Scope 3, category 1, Purchased goods and services.

This enabled us to realise our top three priority environmental sustainability and carbon reduction objectives and targets. These are aligned with the UN Global Compact Sustainable Development Goals (SDGs), Science Based Targets initiatives (SBT) and the SME Climate hub commitments that were implemented prior too or since the 2019 baseline detailed below:

Whilst our manufacturing output increased by 149% from the previous year (2022), our overall carbon emission reductions achieved by these initiatives equates to 559 tCO₂e; a 10% reduction against the 2019 baseline.

1 SBT 1.5C pathway - In 2020 we signed up to SBTi as an SME with commitments to reduce scope 1 & 2 emissions by 50% by 2030 from a 2019 baseline using the absolute contraction approach. Operationally, we have upgraded to LED lighting & PIR sensors, upgraded a production compressor. In spring 2024 we replaced the last of our diesel fleet to electric and now have a fully electric fleet. We have six electric vehicle charging points, transformed a reactive maintenance plan to a proactive preventative maintenance plan, and procure 100% renewable electricity.

2 100% Sustainable Materials - We continue to research alternative renewable, recyclable or reusable products so economic activity is decoupled from resource extraction to achieve a zero-waste product model. We are actively working with our suppliers to offer customers sustainable alternatives such as 100% biodegradable flushable patient wipes made from cellulose, purchasing up to 100% recyclable PE packaging where practicable and continually increase the number of suppliers we wish to partner with that hold environmental credentials (currently at 33% for 2023). We continue to invest in development and testing of products to reach all market sectors

3 100% Resource Recovery – We continue to partner with waste contractors to recover, recycle or reuse our waste with 0% to landfill.

Ongoing Carbon Reduction Initiatives

We continue to prioritize the following targets aiming for completion by 2030 if not sooner:

1 SBT 1.5C pathway – During the summer 2024 we will move to a BREEAM facility which is rated outstanding. It will be significantly more energy and water efficient. We shall continue to purchase 100% renewable electricity and harness our onsite renewable PV system for our operations. This eliminates the use of gas and will enable us to reach SBT net zero for scopes 1 and 2. We will have exceeded our initial 50% carbon reduction for scope 1 & 2 by 2030 six years earlier than planned.

2 100% Sustainable materials by 2030 - Where markets allow, manufacture products that are designed to be from recycled content, recyclable or reusable (decouple from resource extraction/virgin materials)

- Collaborate with suppliers to increase recycled content, recyclable/reusable materials, and lighter weight packaging to products

- Compare carbon emissions data for different types of material components e.g. Plastic types. Sustainable product development team to make informed sustainable material choices
- Continue to raise internal awareness and training for scope 3 value chain emission reductions e.g. Sustainable procurement practices
- Improve supplier environmental and sustainable performance – implement environmental weighting to approved supplier assessment list
- Improve environmental / sustainable product awareness to customers and other interested parties through marketing campaigns, website, product labelling

3 100% Resource recovery by 2030 - where markets allow, all materials and products to be recovered, recycled or reused at end of life. Achieve a zero-waste product model and full circular economy

- Collaborate with customers, suppliers and waste contractors to take back and recycle used products from customer

4 Improve visibility of ESG data

- Develop internal ESG dashboard

5 Continue to meet 100% of EMS compliance obligations

- Conduct quarterly compliance updates and annual audits

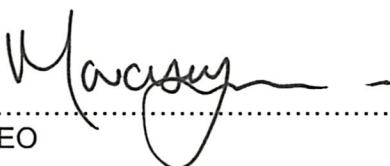
Declaration and Sign Off

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.

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

Signed on behalf of Pal International Ltd


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CEO

Date: *5th July 2024.*

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

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