Carbon Reduction Plan

Pearl Scan Solutions Ltd.

Supplier name: Pearl Scan Solutions Ltd.
Publication date: April 2025

Commitment to achieving Net Zero

Pearl Scan Solutions Ltd. is committed to achieving Net Zero emissions by 2050 for our UK operations. As a small business specialising in document scanning and digital transformation services, we recognise our responsibility to contribute to the national effort to combat climate change. We have made substantial investments in environmental management, achieved ISO 14001 certification, and are actively working towards Net Zero targets, demonstrating our commitment to sustainable business practices and supporting government initiatives.

Baseline Emissions Footprint

Baseline Year: 2023 - 2024
The 2023 - 2024 baseline year represents our comprehensive carbon footprint assessment undertaken as part of our ISO 14001 Environmental Management System certification. This baseline was established before implementing our complete LED lighting upgrade programme and vehicle electrification initiatives. This baseline includes comprehensive Scope 3 emissions accounting including employee commuting, business travel, waste disposal, water supply and treatment, purchased goods, and logistics services.

The baseline has been calculated in accordance with the GHG Protocol Corporate Standard and uses the appropriate UK Government emission conversion factors for greenhouse gas company reporting. All emissions have been reported in tCO2e (tonnes of carbon dioxide equivalent).

Baseline year emissions:

EMISSIONS	TOTAL (tCO2e)
Scope 1	52.0
Scope 2	65.0
Scope 3 (Included Sources)	53.0 Category 1 - Purchased Goods & Services 11.0 Category 3 - Fuel & Energy Related Activities 1.0 Category 4 - Upstream Transportation & Distribution 1.5 Category 5 - Waste Generated in Operations 3 Category 6 - Business Travel 2.0 Category 7 - Employee Commuting 25.0 Category 9 - Downstream Transportation & Distribution 9.5

EMISSIONS	TOTAL (tCO2e)
Total Emissions	**170.0**

Scope 3 emissions sources include: Electricity transmission & distribution losses, water supply and treatment, employee commuting, business travel (private vehicles), waste disposal (landfill, recycling, energy from waste), purchased goods (paper, IT equipment upstream embodied emissions), third-party courier services.

Current Emissions Reporting

Reporting Year: 2025

EMISSIONS	TOTAL (tCO2e)
Scope 1	42.0
Scope 2	55.0
Scope 3 (Included Sources)	53.0 Category 1 - Purchased Goods & Services 12.0 Category 3 - Fuel & Energy Related Activities 1.0 Category 4 - Upstream Transportation & Distribution 1.5 Category 5 - Waste Generated in Operations 3 Category 6 - Business Travel 4.0 Category 7 - Employee Commuting 25.0 Category 9 - Downstream Transportation & Distribution 6.5
Total Emissions	**150.0**

Scope 3 emissions sources include: Electricity transmission & distribution losses, water supply and treatment, employee commuting, business travel (private vehicles), waste disposal (landfill, recycling, energy from waste), purchased goods (paper, IT equipment upstream embodied emissions), third-party courier services.

Emissions reduction targets

In order to continue our progress to achieving Net Zero by 2050, Pearl Scan Solutions Ltd. has adopted the following carbon reduction targets. As a small business with significant IT and scanning infrastructure essential to our operations, we are committed to ambitious but achievable targets that reflect our operational realities while supporting the UK government's climate objectives.

In 2025 we reduced our total emissions by 11.8% from the baseline year. This was achieved through implementation of our ISO 14001 Environmental Management System, comprehensive LED lighting upgrades, strategic vehicle electrification, and enhanced energy management across all operations.

We project that carbon emissions will decrease over the next five years to **74.8 tCO2e by 2029**. This represents a reduction of **56.0%** against our 2023 baseline, placing us on a credible pathway to Net Zero by 2050 and aligning with the UK government's ambitious decarbonisation trajectory.

Our emissions reduction trajectory from baseline to Net Zero:

2023 (Baseline): 170.0 tCO2e
2024 (Current): 150.0 tCO2e (11.8% reduction achieved)
2029 (Target): 74.8 tCO2e (56.0% reduction)
2035 (Milestone): 37.4 tCO2e (78.0% reduction)
2050 (Net Zero): 0 tCO2e (100% reduction or offset)

Carbon Reduction Projects

Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2023 - 2024 baseline. The carbon emission reduction achieved by these schemes equates to 20.0 tCO2e, representing an 11.8% reduction against the 2023 - 2024 baseline. These measures will remain in effect when performing any contract.

- **ISO 14001:2015 Environmental Management System Certification:** We have made substantial investment in achieving and maintaining ISO 14001:2015 certification, implementing a comprehensive environmental management system that systematically identifies, controls, and reduces our environmental impact across all operations. This certification demonstrates our commitment to continual environmental improvement, regulatory compliance, and structured environmental governance. The EMS framework ensures ongoing measurement, monitoring, and optimization of environmental performance including comprehensive Scope 1, 2, and 3 emissions accounting, and has been instrumental in achieving our 11.8% emissions reduction in the first year.

- **Complete LED Lighting Upgrade Programme:** Successfully replaced 100% of fluorescent lighting with energy-efficient LED fixtures across one of our facility. Implemented motion sensors in common areas including corridors and toilets with optimised timers that are regularly reviewed to ensure lights operate only when needed. This initiative has reduced lighting electricity consumption by 11.0 tCO2e per annum, representing a 37% reduction in lighting-related emissions. Operating hours of 8:00am-5:30pm Monday-Friday ensure focused energy use during business hours only, contributing significantly to our overall emissions reduction.

- **Strategic Vehicle Electrification Programme:** We are strategically monitoring extended-range electric van technology development (targeting 500+ mile range) before converting our primary workhorse van, planned for 2030, ensuring operational continuity while planning for complete fleet decarbonization.

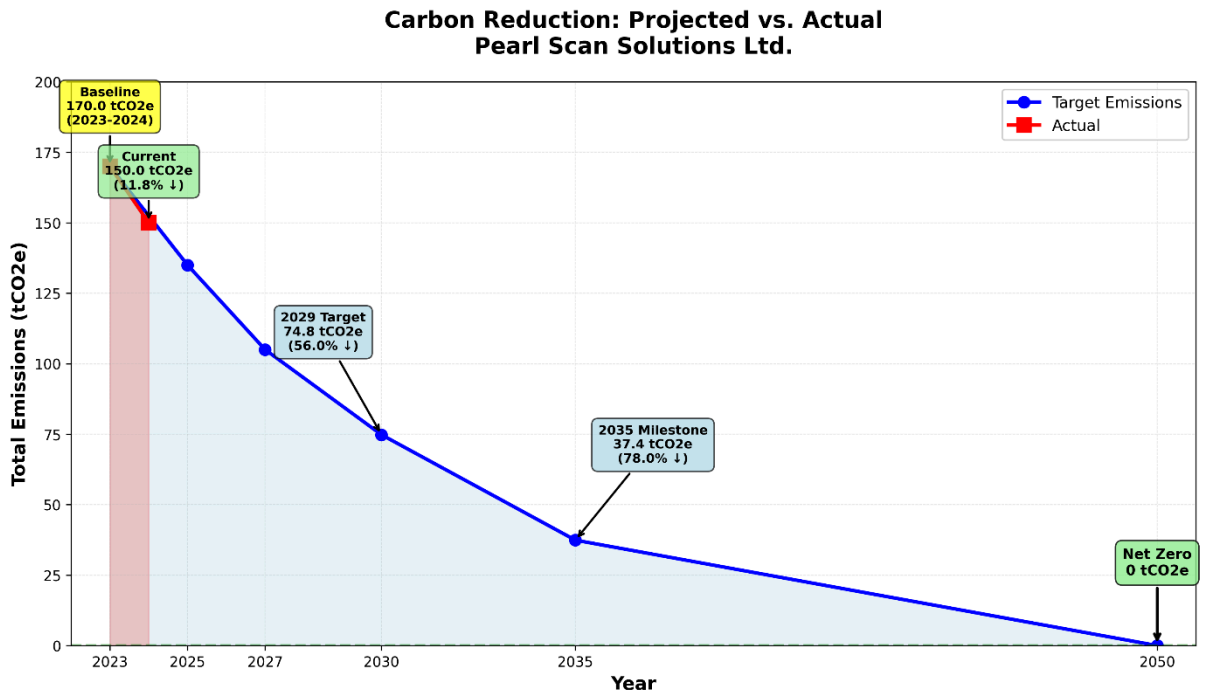
- **Highly Efficient Heating Strategy and Building Thermal Performance:** Heavy wool insulation and suspended ceiling in converted warehouse-to-office space provides excellent thermal retention. Staff provided with appropriate protective clothing for short-duration warehouse work. This focused heating approach, combined with building improvements, represents industry-leading efficiency and achieved exceptional performance during the mild 2023-2024 winter, contributing 8.5 tCO2e savings.

- **Third-Party Courier Partnership and Logistics Optimization:** Established strategic partnership with third-party courier services for low-volume logistics,

significantly reducing our carbon footprint by eliminating inefficient dedicated vehicle trips and leveraging consolidated delivery routes. Implemented route optimization software for our own fleet, reducing total mileage by 12% while maintaining service levels. This integrated approach reduces both operational costs and Scope 3 emissions while improving service quality for document collection and delivery.

- **Comprehensive Scope 3 Emissions Measurement and Management:** Established comprehensive Scope 3 emissions accounting framework covering electricity transmission and distribution losses, water supply and treatment, employee commuting, business travel in private vehicles, waste disposal (landfill, recycling, energy from waste), purchased goods (paper and IT equipment upstream embodied emissions), and third-party courier services. This systematic measurement enables targeted interventions and supplier engagement to drive value chain emissions reductions. Annual reporting ensures transparency and continuous improvement in indirect emissions management.

- **Staff Environmental Engagement and Training:** Created an intuitive and energy-conscious working environment through comprehensive staff engagement, equipment optimization training, and process refinement. Implemented energy-saving protocols across operations including equipment standby modes, efficient workflow scheduling to optimize scanner usage, and regular energy consumption reviews to identify further savings opportunities. Developed a culture where all staff actively contribute to emissions reduction through day-to-day operational decisions, supported by quarterly environmental performance updates and annual training refreshers.



Future carbon reduction initiatives

Pearl Scan Solutions Ltd. is committed to continuous improvement in carbon reduction. The following initiatives are planned for implementation over the next 1-26 years to achieve our 2029 target, 2035 milestone, and ultimate Net Zero by 2050:

- **Complete Fleet Electrification (Target: 2030):** Replace primary diesel vans with extended-range electric vehicle when technology achieves 500+ mile range capability, eliminating our largest single emission source and contributing an estimated 29.0 tCO2e reduction from Scope 1. Remaining diesel cars to be replaced with electric vehicle by 2028. Combined, these transitions will eliminate approximately 39.0 tCO2e from Scope 1 while adding approximately 10.0 tCO2e to Scope 2 for EV charging, delivering net reduction of 29.0 tCO2e considering UK grid decarbonization trajectory.

- **Renewable Energy Transition (2025-2026):** Transition to renewable electricity tariff backed by Renewable Energy Guarantees of Origin (REGOs) by 2050, eliminating all Scope 2 location-based emissions under market-based accounting methodology (approximately 52.3 tCO2e reduction for reporting purposes) while supporting renewable energy generation. Evaluate feasibility of solar PV installation on warehouse roofs (estimated 25-30kW capacity) to generate on-site renewable energy by 2030, subject to structural survey and return on investment analysis. Solar installation could provide 35-45% of annual electricity requirements, generating genuine renewable energy for our scanning operations and further reducing dependency on grid electricity.

- **Low-Carbon Heating Solution (2027-2028):** Evaluate and implement transition from gas central heating to low-carbon alternative such as air source heat pump system for office spaces by 2028. Heat pump installation would complement our existing thermal efficiency measures and complete decarbonization of our direct emissions.

- **Sustainable Business Travel and Commuting Policy (2025):** Formalize comprehensive sustainable travel policy encouraging public transport use for client meetings, implement cycle-to-work scheme with secure bicycle storage and changing facilities, optimize route planning to minimize mileage for document collection, and expand video conferencing capabilities. Implement comprehensive mileage tracking and carbon reporting for all business travel and employee commuting. Employee commuting accounts for approximately 25.0 tCO2e; target 25% reduction by 2027 through policy implementation, infrastructure improvements, and behavioural change, delivering 6.0+ tCO2e savings.

- **Waste Reduction and Circular Economy Principles (2025-2027):** Enhance waste segregation systems to achieve 85%+ diversion from landfill by 2027, reducing waste-related Scope 3 emissions. Implement comprehensive document lifecycle management practices prioritizing digital-first approaches, reducing paper consumption in our operations while continuing to provide essential document scanning services helping clients digitize and reduce their paper usage. Partner with certified WEEE recyclers for responsible disposal of end-of-life IT and scanning equipment, ensuring maximum material recovery and minimal environmental impact. Target 40% reduction in waste-related emissions (approximately 1.0 tCO2e) through improved waste management practices.

- **Water Conservation and Efficiency Measures (2025-2026):** Install water-efficient fixtures across all facilities including low-flow taps, dual-flush toilets, and sensor-activated faucets. Implement water monitoring system to identify leaks and inefficiencies promptly. Although water-related emissions represent a small proportion of total footprint (approximately 2.0 tCO2e), commitment to resource efficiency aligns with our ISO 14001 Environmental Management System and

demonstrates holistic environmental stewardship. Target 30% reduction in water consumption and associated treatment emissions by 2026.

- **Annual Environmental Training and Continuous Improvement (Ongoing):** Foster culture of environmental responsibility empowering team members to identify and implement energy-saving opportunities within their areas of work. Maintain ISO 14001 certification through continuous improvement, regular internal audits, management review of environmental performance, and systematic response to opportunities for enhancement. Annual recertification audits ensure ongoing compliance and drive continuous improvement in environmental management.

- **Carbon Offsetting Strategy for Residual Emissions (2030 onwards):** For emissions that cannot be eliminated through reduction measures by 2030, establish carbon offsetting programme investing in high-quality, verified offset projects. Priority given to UK-based nature-based solutions such as woodland creation, peatland restoration, and soil carbon sequestration, supporting biodiversity alongside carbon removal.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 006 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 board of directors (or equivalent management body).

Signed on behalf of Pearl Scan Solutions Ltd.:

M N Ashraf
Director

Date: 17/12/2025