TACKLING THE SCOPE 3 EMISSIONS CHALLENGE HEAD-ON





Piotr Konopka, Group Vice President – Decarbonisation & Energy Programmes, DP World

Businesses today operate in an increasingly complex sustainability landscape, shaped by tighter regulations and expectations from partners and consumers, often wanting to make more informed purchasing decisions.

In this context, it is essential that businesses draw on their full suite of assets to cut not only their Scope 1 and 2 emissions, but emissions in their supply chain too. While Scope 3 emissions are difficult to reduce, they hold significant potential for meaningful progress and automatically entail the support of suppliers who are often equally committed to improving their own sustainability profile, as well as those of their partners.

DP World has gladly recognised that responsibility. We have set some of the most ambitious emissions

targets in the supply chain industry. We are working to reduce Scope 1 and 2 emissions by 42 per cent by 2030 from a 2022 base year, fully aligned with the 1.5-degree trajectory set out by the Paris Agreement. We've also committed to cutting absolute Scope 3 emissions by 28 per cent in the same timeframe. These targets have been validated by the Science Based Targets initiative (SBTi), placing DP World among a select group of operators aligning with the most rigorous global climate standards and making us the first logistics company in the Middle East to have our 2030 target validated by the SBTi.

Our Ports & Terminals business plays a central role in delivering against our ambitions and is working to decarbonise our operations so our customers can do the same.

We're making practical investments in five key focus areas across our global Ports & Terminals network to reduce emissions across the entire cargo journey.

1. ELECTRIFICATION AND CLEAN PORT POWER

Our work with the Zero Emissions Port Alliance (ZEPA) is driving the transition to electric port-side equipment. This is a long-term shift, but one that addresses 50-60 per cent of our sector's Scope 1 and 2 emissions. Meanwhile, in Callao, Peru, we are integrating shore power into our newly expanded quay, which will offer vessels a supply of 100 per cent renewable energy and mean a significant reduction in our CO2 emissions from this year onwards.

BELOWPort of Vancouver



www.porttechnology.org EDITION 150 | 2



LEFTPort of Callao

2. EQUIPMENT UPGRADES AND RETROFITS

We use our reporting and data collection to identify the places in our supply chain, particularly those that contribute most to our Scope 3 emissions and where we can make the most impact. Our well-to-tank emissions of fuel and energy is one example, making our transition away from fossil fuels to electric equipment powered by renewable electricity a key focus.

Rather than wait for total infrastructure overhauls, we're using new technologies to transform existing infrastructure. In Callao and Vancouver, we've retrofitted Rubber-Tyred Gantry (RTG) cranes with cleaner fuel systems. In Peru alone, this has saved 1,860 tonnes of CO2e since 2020. In Southampton, we've installed more than 40 hybrid

straddle carriers, eliminating fossil fuel use across terminal operations since 2023.

3. ALTERNATIVE FUELS

Alongside electrification, we're also integrating lower-carbon fuels across our fleet. Biofuel—in the form of Hydrogenated Vegetable Oil (HVO)—now powers all terminal equipment in Southampton that isn't electrified, delivering immediate reductions without waiting for asset replacement.

In keeping with our ambition to encourage greater use of these fuels, we have launched 'GreenBox', a trial carbon insetting solution to help our customers decarbonise the seaborne sections of their supply chains.

GreenBox tracks our shipments that already rely on lower-carbon fuel and allows our customers

using these services to access tokens for the carbon saved. Customers can purchase the tokens, or 'insets', for use in their sustainability reporting, while DP World uses the proceeds to buy more alternative fuels.

GreenBox is currently in operation on the Northern European network of Unifeeder, a subsidiary of DP World. If 50 per cent of import volume participates in the trial at DP World's UK ports, we estimate that it will replace over 11,000 tonnes of traditional fossil fuel with lower-carbon marine fuels within the global shipping industry, equivalent to the reduction of 10,000 tonnes of carbon dioxide.

4. SMART TOOLS AND EMISSIONS TRANSPARENCY

We're equipping our customers with tools to track and report their emissions reductions. In Southampton, real-time CO2 calculators give cargo owners visibility into the carbon impact of their modal choices, therefore offering them greater control of their total emissions. In Callao, our supplier tendering process now demands decarbonisation plans as a compulsory requirement, too, helping positive change extend further into the world's value chains

At the same time, we are also focusing on our own supply chain. We are working on enhancing our data capture capabilities from all our suppliers, as well as planning an extensive supplier engagement programme, which has been in testing with selected suppliers since 2023.

5. REPOSITIONING INTERMODALITY

Intermodality has long been a logistics staple. But as decarbonisation pressures rise, DP World is exploring the overlooked value that this service can offer. In practice, intermodal networks can do so much more than reduce friction in cargo handovers, increase flexibility, or reduce



LEFTPort of Southampton

3 | EDITION 150 www.porttechnology.org

congestion—they also provide ease of access to lower-emission transport modes like rail or barge.

In Southampton, our Modal Shift Programme incentivises customers to move cargo from road to rail, saving both carbon and cost. In the year since the scheme launched, it has already saved over 25,000 tonnes of CO2e. Meanwhile, in Canada, we're building on that success by collaborating with CN Rail and short-sea shipping partners to reduce long-haul road freight. Our goal: to cut emissions by up to 75 per cent through smarter modal integration.

PARTNERING FOR SUPPLY CHAIN **AND SCOPE 3 PROGRESS**

Today's businesses need more than just capacity in their supply chain partners. They need allies who understand their sustainability

pressures and who are actively working to reduce emissions across the board. From nextgen yard equipment and fuels to smarter modality use, DP World's Ports & Terminals business is investing in the solutions our customers need to be accountable and compliant in the path to decarbonisation.

We know this is ambitious. But going public with such bold targets makes us accountable—and accountability is key to driving measurable progress.

At DP World, we're focused on practical steps that can support our customers and partners in making meaningful progress. The road ahead is long, but by aligning our efforts and investing in scalable solutions, we can work together to accelerate the transition to more sustainable supply chains.

BELOW

Antwerp Gateway Terminal

ABOUT THE AUTHOR

Piotr Konopka is Group Vice President - Decarbonisation & Energy Programmes at DP World, leading its drive toward net-zero carbon operations by 2050. An expert in energy, sustainability, and engineering, he oversees decarbonisation strategy, sustainable fuels, and climate resilience. Piotr also serves as Lead Coordinator at the Mærsk Mc-Kinney Møller Centre.

ABOUT THE COMPANY

Trade powers the global economy, creating opportunities and improving lives. DP World exists to make trade flow better, transforming possibilities for customers and communities. With over 114,000 employees across 78 countries, we're building a smarter, more efficient global supply chain that's ready for the future.

