

How to deliver audit-grade emissions data to shippers



Seoul-based LX Pantos, part of the LX Group, is one of the top 15 freight forwarders globally, moving 1.6M TEU of ocean freight annually. Working with Searoutes, they deliver vessel-level, fuel-specific CO₂e data that supports both their shippers' Scope 3 reporting and their own 2030 and 2050 climate commitments.

1.6M TEU

Ocean freight annual volume

34,631

 tCO₂e baseline (2022), verified

-25%

GHG target by 2030, vs BAU

Net zero

by 2050

Source: LX Pantos, Our Action on Climate Change (public disclosure, lxpantos.com). Volume figure per LX Pantos, 2026.

WHY SEAROUTES

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As a freight forwarding company handling large-scale ocean cargoes, we chose Searoutes because emissions are calculated by fuel type for each vessel.

Hee Su Kim

Forwarding IT Team, LX Pantos

Challenges

LX Pantos's shippers need audit-grade Scope 3 emissions data for their corporate carbon footprint calculations and ESG disclosures. Industry averages and lane-based estimates no longer hold up when investors, regulators and CSRD requirements demand precision. Their own 2030 and 2050 commitments require the same precision on the same shipments, so one measurement chain has to serve both sides, at the scale of a top 15 forwarder.

Solutions

Searoutes calculates emissions per vessel, per fuel type and per specific route travelled. Delivered on-demand via API, the data plugs directly into LX Pantos's reporting workflow. Shippers get the emissions of each shipment when they need them, and the same per-shipment calculation supports LX Pantos' own trajectory against their 2030 and 2050 targets.

Benefits



Audit-grade accuracy

Per-vessel, per-fuel and per-route calculations that survive investor and regulator scrutiny, giving shippers the precision needed for CSRD-compliant reporting.



On-demand visibility

API integration delivers emissions data whenever shippers request it, so carbon can be embedded into decision-making rather than reconstructed after the fact.



One source, two trajectories

The same per-shipment figure supports the shipper's disclosure and aligns with LX Pantos' own 25% GHG reduction target by 2030 and net zero commitment by 2050.

SEAROUTES PRODUCTS USED

 CO₂e emissions

API integration

Global coverage

A trajectory measured, not stated

LX PANTOS × SEAROUTES

Their climate trajectory

LX Pantos have published a numbered, time-bound path to net zero. Not a statement of intent, a plan against measured targets, verified annually by a government-designated agency and disclosed to the CDP each year.

2022 BASELINE

34,631
tCO₂e, verified

2030 TARGET

29,936
tCO₂e · -25% vs BAU 39,915

2050 ENDPOINT

Net zero

100% reduction vs BAU · aligned with Korea NDC

Source: LX Pantos, Our Action on Climate Change, 2026. Emissions verified annually by a Korean government-designated third party.

Their commitment, in their words

Both public commitments below sit inside their Scope 3 roadmap. Searoutes is one of the operational tools that make them measurable.

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Enhance transport efficiency in line with clients' carbon reduction needs.

LX PANTOS, SCOPE 3 TARGET 2030

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Provide tailored reduction solutions for customers. Establish net zero-based transport services.

LX PANTOS, SCOPE 3 TARGET 2050

Third-party credentials

The data LX Pantos hand their shippers travels through an audit chain that already meets external scrutiny. Searoutes plugs into that chain, not on top of it.

B-

CDP disclosure

Member since July 2022. B- rating in 2023, their first year of evaluation.

ISO

ISO 14001 certified

Environmental management system aligned with the international standard.

MRV

Third-party verification

Dedicated MRV team. Annual GHG verification by a Korean government-designated agency.

KOR

Excellent Green Logistics

Korean national certification for eco-friendly logistics practices, awarded to LX Pantos.

Why this partnership matters

LX Pantos have committed to a 25% GHG reduction by 2030 and to net zero by 2050. Their Scope 3 roadmap, where transport emissions belong, calls for enhancing transport efficiency in line with clients' carbon reduction needs. Searoutes is the operational layer that turns those public commitments into per-shipment numbers their shippers can audit today.