# Our journey towards zero-emission land-based logistics

### Our equipment at terminals and processing centres



By 2023 all equipment purchased for our logistics activities will be zero emission. This is part of our clean fleet initiative for equipment at our terminals and processing centres.

> Electric equipment will be phased in whenever existing equipment meets its end-of-life.

We're currently testing electric forklifts to check their performance with heavy breakbulk.



"Individual case studies are being performed at each of our sites before purchasing new equipment to test the operating hours and specifications of each location."

### **Andrew Prior**

senior manager, safety, quality and sustainability Wallenius Wilhelmsen

The majority of our direct greenhouse gas emissions are related to fossil fuel powered equipment used at our facilities for our inland logistics, such as on-site vehicles and forklifts. 0

Having the right infrastructure in place is important, including grid upgrades to accommodate charging for our site equipment.

## Our trucks and inland distribution

...by providing fleet managers with the visibility they need to offer guidance on efficient driver scheduling and routing, as well as the ability to consolidate orders into the fewest moves possible. Optimisation tools and intelligent traffic management systems are improving operational efficiency across our trucking fleet...



Technology also helps us to optimise our back-haul efficiency, so that trucks do not return empty. Eliminating the need for additional trips reduces fuel waste.

Within the next 12 months, we expect our first heavy-duty all-electric truck to enter service as part of our local operations in the US.



We're leveraging cleaner diesel engine technology to reduce nitrogen oxides in our truck exhausts. Diesel exhaust fluid is used to convert these oxides into nitrogen and water, reducing pollutants.

Looking to the future, Keen Transport is considering alternatives such as hydrogen fuel cell electric trucks that offer both high-power output and long range.





### Our processing centres and terminals

5 wind turbines installed at our terminal and processing centres in Zeebrugge, Belgium will produce approximately 50 GWh of electricity per year, enough to cover the facility's energy needs, excluding shore power for vessels. Excess power will be connected to the grid. We're starting to generate renewable energy at some of our facilities through wind turbines and solar panels

> A 200KvA system at our MIRRAT terminal in Australia provides 100% of the administration building's energy requirements during daylight operations. The terminal also sources 100%

renewable energy for its main power consumption.

In Annacis Island, Canada, our VPC is powered by hydro-electric energy.



Digital dashboards at our sites measure, monitor and access our performance across multiple ESG parameters every month, helping us to build a culture around sustainability across all our operations.

We're also in the process of upgrading our lighting, heating, ventilation and air conditioning systems at all our land-based facilities to reduce the amount of energy we consume.

