

# CARBON REPORT 2024



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**CLdN is one of Europe's leading providers  
of integrated transport solutions,  
connecting the region's major economic  
hubs by sea, rail and road.**





# Introduction

Moving goods over long distances creates a significant carbon footprint. Freight transportation accounts for around 8% of global greenhouse gas (GHG) emissions, rising to as much as 11% if ports and warehouses are included<sup>1</sup>.

Around 90% of the world's freight is moved by sea, which is why shipping – whilst the most energy-efficient form of freight transport – accounts for between 2-3% of global GHG emissions.

In 2023 the International Maritime Organization (IMO) launched an enhanced set of targets to reduce the sector's carbon footprint. These include an ambition to reach net-zero GHG emissions from international shipping by around 2050, and a commitment to ensure an uptake of alternative zero and near-zero GHG fuels by 2030. From a regulatory perspective, the extension of the EU Emissions Trading System to include maritime transport from 2024 is designed to incentivise improvements in energy efficiency and low-carbon solutions, and to reduce the cost of lower-carbon shipping fuels.

At CLdN, we have been preparing for the introduction of more stringent emissions norms for close to a decade. Through the approach outlined on the following pages, CLdN is also contributing to three of the United Nations' Sustainable Development Goals (SDGs). Investment in initiatives to further improve the energy efficiency of our shipping fleet and ports will continue to support **SDG 13: Climate Action, together with SDG 7: Affordable & Clean Energy, and SDG 9: Industry, Innovation & Infrastructure.**



In this, our first Carbon Report, we outline how CLdN is contributing to the IMO and EU goals. As well as the benefits our strategy is delivering for the planet, our continuous drive for greener transport solutions is helping customers gain a competitive advantage through lower carbon supply chain solutions.

<sup>1</sup>: <https://climate.mit.edu/explainers/freight-transportation>



# Our Ambition

Care for the environment is a central pillar of CLdN's vision. We strive to reduce our environmental footprint through scale, technology and operational excellence.





## Greenhouse gas (GHG) emissions



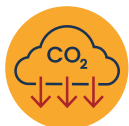
We seek to actively contribute to the goals set out in the International Maritime Organization's (IMO) 2023 GHG Strategy. This envisages a reduction in carbon intensity of international shipping and a reduction in CO<sub>2</sub> emissions per transport work by at least 40% by 2030.

CLdN's contribution to the IMO goals also supports the EU's Green Deal targets for 2030 and 2050.

Our contribution is focused on:



Decarbonising CLdN's operations through analysis of available energy saving devices and investments in efficient and competitive lower-carbon technologies.



Reducing our daily GHG emissions and being recognised as an excellent and competitive operator in our industry.



Being transparent about our GHG footprint and measuring and reporting using recognised frameworks and clear monitoring.



Promoting competitive and carbon-efficient intermodal transport solutions that balance transport by ferry, rail, barge and truck and that have a lower overall GHG emission profile than road-only transport.

## Energy Consumption



To reduce energy consumption and related emissions across CLdN's operations, we focus on:



Reducing the gross energy consumption of our activities by promoting a responsible energy consumption culture.



Studying, exploring and introducing the competitive use of renewable energy resources in our operations.



# Our Footprint Today

In this chapter we provide an insight into the overall emissions profile of CLdN covering Scope 1 and Scope 2 emissions as defined in the Greenhouse Gas Protocol.

In the subsequent chapters we provide a more detailed view of CLdN's emissions and approach to emission reduction in the three pillars of our business – Shipping, Ports and Multimodal.



## About emission scopes

Greenhouse gas emission ‘scopes’ first appeared in the Green House Gas Protocol of 2001 and today these Scopes are the basis for GHG reporting around the world. There are three scopes of emissions:

### Scope 1 emissions

This covers the emissions that CLdN makes **directly** — in our case this is primarily linked to the fuel used to power our ships and our shore-based vehicles in our terminals.

### Scope 2 emissions

These are the emissions CLdN makes **indirectly** — specifically electricity that we purchase and use for the operation of some terminal equipment, port lighting and for powering our office buildings.

### Scope 3 emissions

In this category go all the emissions up and down the **value chain** — in our case this includes transport work carried out by suppliers in our multimodal business and work done by third parties in loading and unloading our vessels in ports we do not own.

For detailed information on the operational scope of the emissions reporting please see the notes on page 23.

## Scope 1 emissions

In 2023 CLdN's total Scope 1 emissions were 781,098 tonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>e). The most significant proportion of these emissions (753,033 tonnes CO<sub>2</sub>e) are related to the burning of fuel used to power CLdN's ships. Scope 1 emissions attributed to CLdN's port operations amounted to 28,065 tonnes of CO<sub>2</sub>e. This is related to fossil fuel powered port equipment at CLdN's terminals in Zeebrugge, Rotterdam, Vlissingen, London and Killingholme as well as any CLdN-owned equipment at the terminals used by Seatruck Ferries (now CLdN RoRo Ltd.) in the ports of Heysham,

Liverpool, Warrenpoint and Dublin. See Figure 1 for the evolution of scope 1 emissions for Shipping and Ports.

The reason for the increase in Scope 1 emissions in 2023 is the acquisition of Seatruck Ferries towards the end of 2022, which added a total of 163,542 tonnes of CO<sub>2</sub>e to CLdN's scope of operations in 2023. For more detailed information on CLdN's Scope 1 emissions please see pages 10-15 (Shipping) and pages 16-19 (Ports).

FIG. 1

Scope 1 Emissions (Total) tonnes CO<sub>2</sub>e

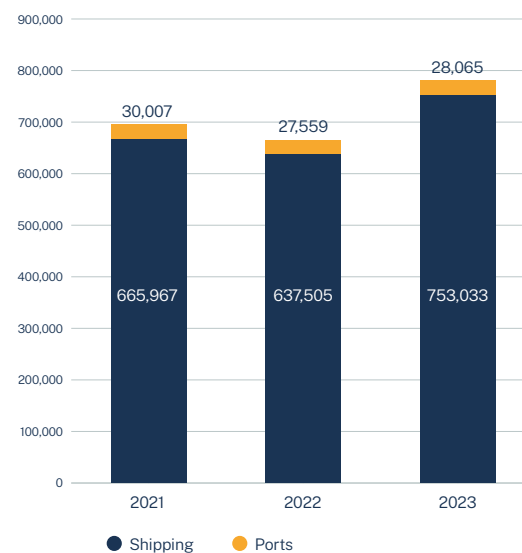
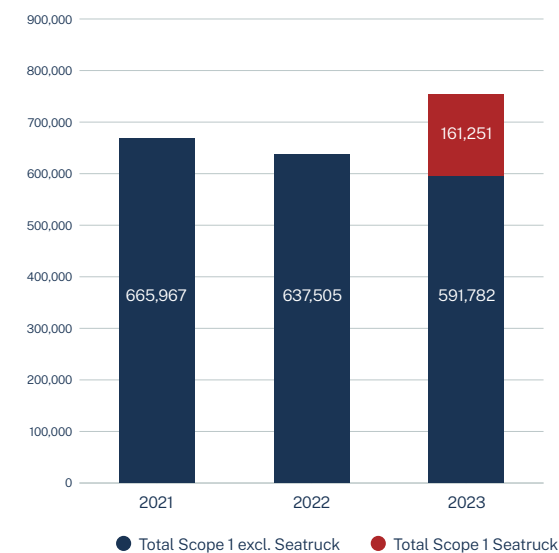


FIG. 2

Scope 1 Emissions (Shipping) tonnes CO<sub>2</sub>e





## Scope 2 emissions

Scope 2 emissions relate to the use of electricity in CLdN's port and office locations. By far the most significant portion of our electricity consumption is currently used for lighting, IT / administrative activities and powering refrigerated units at CLdN's own terminals in Zeebrugge, Rotterdam, Vlissingen, London and Killingholme and the facilities in the ports used by CLdN RoRo Ltd (formerly Seatruck Ferries).

In recent years CLdN has secured green energy contracts for the majority of its port operations. Such contracts accounted for more than 97% of all purchased electricity in 2023. CLdN has also been working with energy providers to install renewable energy infrastructure in its ports (see case study on page 19). These on-site installations<sup>1</sup> can provide renewable electricity directly to our operations. In total, of our electricity consumption in 2023, 14% came from these on-site renewables – up from 9% in 2022.

Figure 4 combines the CO<sub>2</sub>e emissions and the emissions reduced by entering into renewable electricity supply contracts. This shows the emissions that would have been part of CLdN's Scope 2 if the electricity had been sourced from the grid and applying standard CO<sub>2</sub> conversion factors for each country or region where the electricity was consumed. The chart shows that CLdN's procurement of electricity from renewable sources has reduced its Scope 2 emissions by 4,568 tonnes (97.5%) in 2023.

<sup>1</sup> <https://ghgprotocol.org/sites/default/files/2023-03/Scope%20%20Guidance.pdf> pages 37-38

FIG. 3  
Electricity consumption in MWh

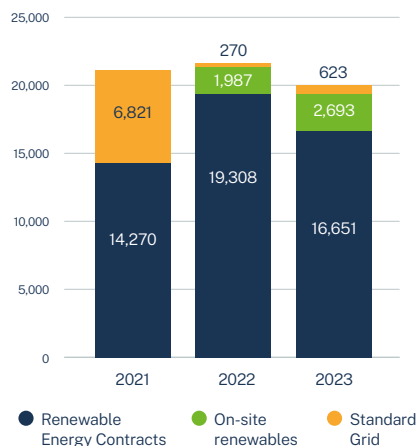
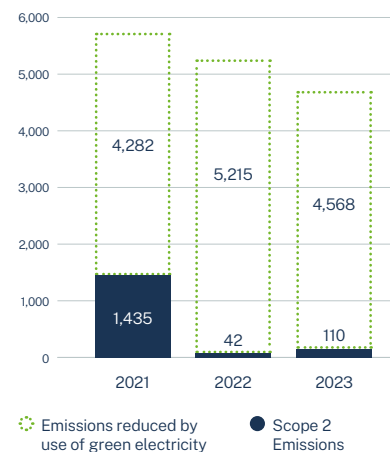


FIG. 4  
Scope 2 Emissions (tonnes CO<sub>2</sub>e)



## Scope 3 emissions

Scope 3 relates to emissions generated in CLdN's supply chain and therefore outside CLdN's operational scope and control. Such emissions can include – but are not limited to – the following activities:

- Transport work carried out by suppliers of CLdN Cargo (mainly hauliers and rail operators). CLdN Cargo primarily uses CLdN's own shipping lines for its short-sea connections and these are already accounted for as part of CLdN's Scope 1 emissions.
- The construction of CLdN ships.
- Loading and unloading CLdN ships by vehicles not owned or operated by CLdN. This is primarily linked to stevedoring activities in ports not owned or operated by CLdN.
- Fuel consumption of company cars on lease from a third party.

While we already have data on some of these Scope 3 emissions, it will require a detailed exercise to determine the scope of these emissions and to estimate them with any degree of accuracy. We will embark on this exercise in 2024 and will provide updates as and when we have adequate data available.



# Shipping

Shipping makes up the bulk of CLdN's activities and therefore accounts for the majority of the company's Scope 1 greenhouse gas emissions.

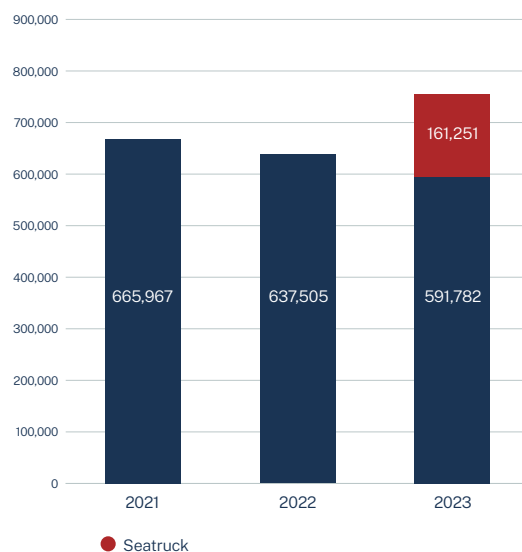




In 2023, Scope 1 emissions from CLdN's fleet were 753,033 tonnes of CO<sub>2</sub> equivalent (see Figure 5). This is compared to 637,505 tonnes of CO<sub>2</sub>e emitted in 2022. The reason for the year-on-year increase in emissions was the acquisition of Seatruck Ferries<sup>2</sup> towards the end of 2022. This acquisition led to the inclusion of seven additional vessels in CLdN's fleet, operating routes across the Irish Sea. Excluding the impact of this acquisition, CLdN's Scope 1 emissions from shipping decreased by 7% between 2022 and 2023.

FIG. 5

### Scope 1 Shipping Emissions (tonnes CO<sub>2</sub>e)



<sup>2</sup> Now operating as CLdN RoRo Ltd. The acquisition was finalised in November but for ease of reference we have only included Seatruck Ferries emissions from the beginning of 2023.

## Investing in our fleet

To reduce fuel consumption and emissions CLdN has been investing in new, larger, more fuel-efficient RoRo ships and in eco-upgrades of its existing vessels. CLdN has invested some EUR 750 million in these ships over the past decade. The result is that CLdN operates more than 30 technologically advanced ships with an average vessel age in 2023 of only 11.5 years compared to a peer group<sup>3</sup> average fleet age of 16.5 years.

The investments, combined with a daily focus on fuel consumption reduction in its operations, have led to consistent improvement in the carbon efficiency performance of CLdN's fleet as reported in the European Commission's Monitoring, Reporting and Verification (EU-MRV) platform. This enables

a comparison of the Energy Efficiency Operational Indicator (EEOI)<sup>4</sup> of each ship as calculated in CO<sub>2</sub> emissions for the transport work done in tonne-kilometres.

CLdN's results from its own fleet in 2023 showed weighted average emissions of 39g CO<sub>2</sub>/tonne-km. This was higher than the 33g CO<sub>2</sub>/tonne-km recorded in 2022 due to the inclusion of the seven former Seatruck vessels in the fleet in 2023. These vessels are smaller – and therefore somewhat less efficient – than other vessels in the CLdN fleet. Three of these vessels have subsequently been sold. The 2023 CO<sub>2</sub> efficiency performance was some 19% better than the next-best performing short sea competitor<sup>5</sup>.



<sup>3</sup> RoRo freight operators in Northwest Europe: DFDS, Stena Line, Finnlines. Efficiency data for P&O Ferries and Irish Ferries was not available at the time of publication of this report.

<sup>4</sup> EEOI is a metric used to assess a vessel's fuel efficiency during its operations, in turn providing the best measure of how effectively a ship converts fuel into propulsion and transport

<sup>5</sup> DFDS (based on fleet as disclosed in Annual Report and via MRV data submissions).



## Carbon Intensity Indicator: CLdN ahead of the curve

The 2023 Greenhouse Gas Strategy of the International Maritime Organization called for carbon intensity of international shipping to decline by at least 40% by 2030, compared to 2008. In 2023 it became mandatory for owners to calculate the Energy Efficiency Existing Ship Index (EEXI) for their ships and to initiate the collection of data for the reporting of an annual Carbon Intensity Indicator (CII) rating in 2024.

### What is a Carbon Intensity Indicator rating?

The CII determines the annual reduction factor needed to ensure continuous improvement of a ship's operational carbon intensity within a specific rating level. The actual annual operational CII achieved must be documented and verified against the required annual operational CII. This enables the operational carbon intensity rating to be determined.

### How do the ratings work?

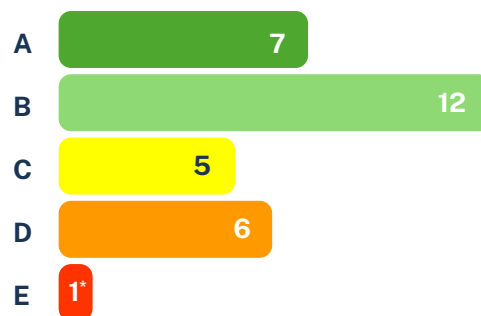
Based on a ship's CII, its carbon intensity is rated A, B, C, D or E (where A is the best). A ship rated D for three consecutive years, or E for one year, must submit a corrective action plan to show how the required index of C or above will be achieved. Administrations, port authorities and other stakeholders as appropriate, are encouraged by the IMO to provide incentives to ships rated as A or B.

### CLdN's ratings

Our investment in new, more energy-efficient ships means that of our fleet of 31 CLdN-owned vessels, over 60% were already rated A or B in 2023, accounting for 52% of our carbon emissions for the year. This demonstrates the significant strides that CLdN has already made in ensuring a high level of carbon efficiency for its fleet.

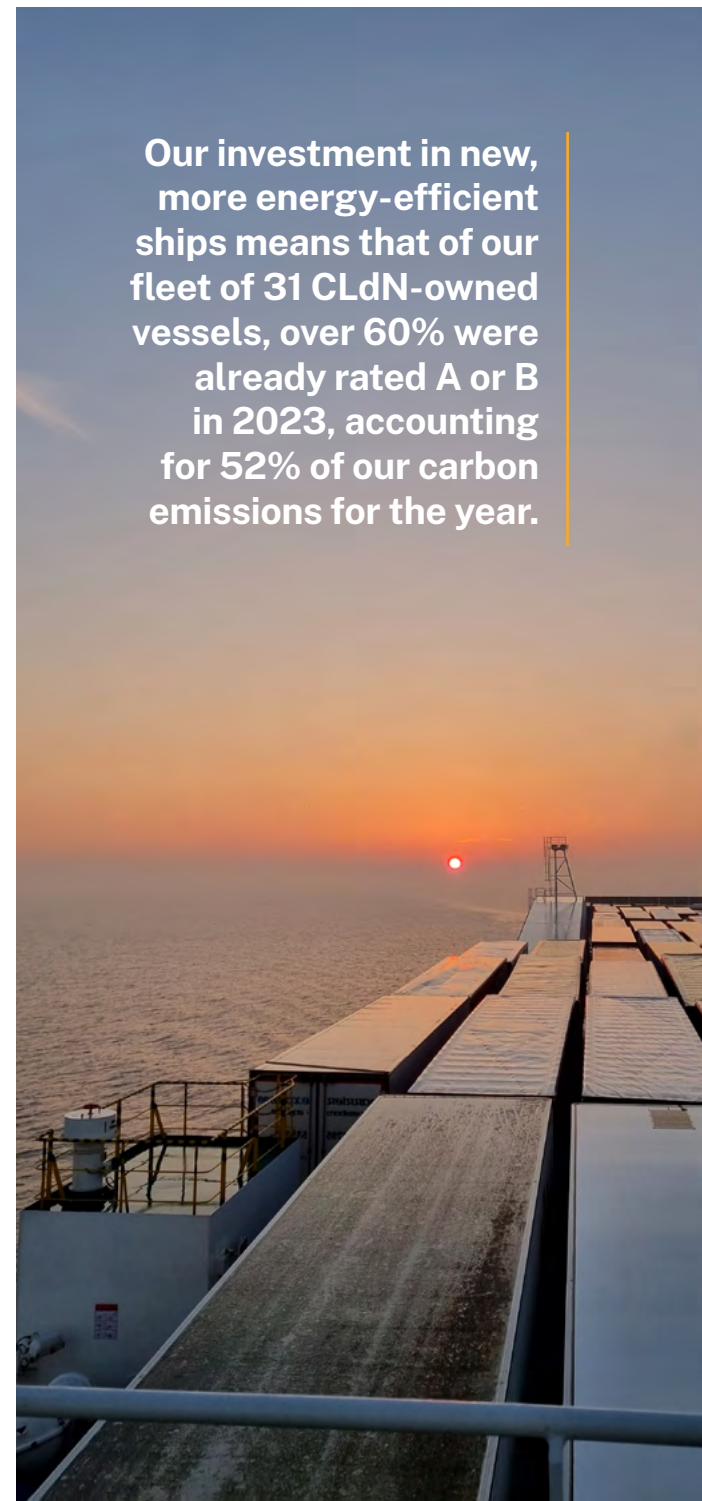
FIG. 6

#### CII Vessel Ratings 2023



\*One E-rated vessel sold in early 2024. All E-rated vessels to leave CLdN fleet by mid-2025.

Our investment in new, more energy-efficient ships means that of our fleet of 31 CLdN-owned vessels, over 60% were already rated A or B in 2023, accounting for 52% of our carbon emissions for the year.





## Driving operational efficiency

We take a range of measures to optimise the fuel and emissions performance of our fleet. This includes:



a systematic programme of propeller and hull inspection and cleaning to reduce drag



the fitting of sensors and utilisation of information systems to continuously monitor the performance of every ship in our fleet (see case study overleaf)



the application of premium hull coatings to reduce drag



providing our captains and crews with data to monitor and optimise sailing speeds (see case study on page 15)

## Piloting rotor sail wind propulsion

To explore the potential of wind power for our fleet, in 2023 CLdN's MV Delphine was fitted with a rotor sail wind propulsion system comprising two 35m x 5m sails.

The ship, which has a cargo capacity of over 8,000 lane metres and operates between the UK, Ireland and Europe, is already one of the most fuel-efficient short sea roll-on/roll-off vessels in the world, emitting just 27g of CO<sub>2</sub> per tonne of cargo shipped per km travelled in 2023. It is expected that the rotor sails will help Delphine to reduce her emissions by up to 10%.

We are working with the Maritime Technology Division at Ghent University in Belgium to study the performance of the newly installed rotor sails. Delphine is our first vessel to be fitted with the system. If successful, rotor sail installations will be considered for other ships in our fleet.





# Gearing up for cleaner fuels

One of the main reasons for the shipping industry’s significant carbon footprint is its heavy reliance on fossil fuels, particularly heavy fuel oil and marine diesel oil. The EU has adopted the FuelEU Maritime regulation to increase the share of renewable and low-carbon fuels in the fuel mix of international maritime transport in the EU.

At CLdN, we fuel some of our newest vessels with liquified natural gas (LNG) - a clear, colourless and non-toxic liquid formed when natural gas is cooled to -162°C. LNG emits 15% less CO<sub>2</sub> than marine diesel.

Two of our largest and newest vessels - the MV Faustine and MV Seraphine - can be powered by LNG and we have set up an LNG supply chain in Zeebrugge and in Rotterdam.

We currently have two new G9e vessels scheduled for delivery in 2025. These will be equipped with two conventional main engines as well as two large shaft generators of 6 MW each, which can be used for generating power or for electric propulsion. In full electric mode, a cruising speed of 16-17 knots can be achieved. The vessels have a high degree of flexibility allowing for a seamless integration of new fuels, fuel cells and/or battery technology in the future. Compared with our largest vessels currently in operation (the G9 class Celine and Delphine), the new ships will further reduce CO<sub>2</sub> emissions by 40% while having the same cargo capacity.



# EU Emissions Trading System

The EU Emissions Trading System (ETS) is a cornerstone of the EU’s policy to combat climate change and a key tool for reducing GHG emissions. As part of the European Commission’s ‘Fit for 55’ package, the shipping industry was included in the ETS from January 2024.

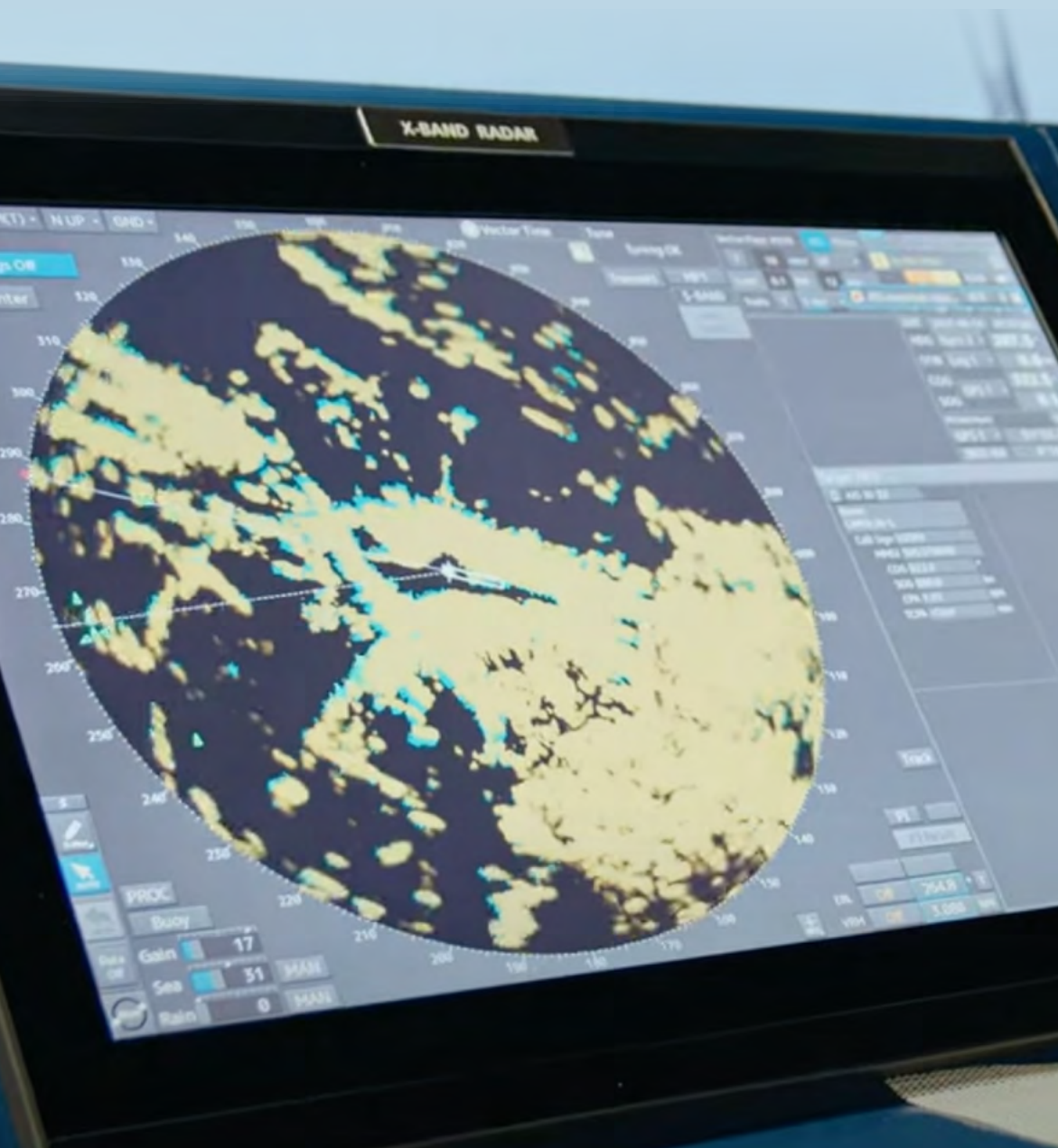
The introduction of this compliance-based carbon cost will be phased over three years as follows:

FIG. 7

Carbon Cost		
<b>40%</b> from 1 January 2024	<b>70%</b> from 1 January 2025	<b>100%</b> from January 2026

Sailings between EU and non-EU countries are liable for the purchase of emission rights for 50% of the distance between the two ports. Hence, on CLdN’s EU-UK routes, ETS is initially only applied on 50% of the voyage. However, the UK is developing its own version of the ETS which will likely be implemented in the coming years.

We communicated with our customers during 2023 to carefully explain how the ETS would become a component of our ‘Energy Surcharge’ mechanism. This combines the typical fuel bunkering charge (fuel component) with a carbon component and is based on market prices for low sulphur marine gas oil (LSMGO) and CO<sub>2</sub>.



## CASE STUDY

# Data-driven energy efficiency

Technology is playing an increasingly important role in the fight against climate change, and at CLdN we are harnessing the power of data to help optimise our ships' energy efficiency.

A vessel's energy performance is influenced by a range of factors, many of which vary significantly between voyages. Over the past several years our operations team has been developing an innovative digital tool that helps crews manage these variables, and in doing so reduce the carbon footprint of our fleet.

The tool monitors a ship's performance via more than 30 sensors that continuously measure factors such as wind, waves and depth along the route, whilst providing real-time data on the vessel's fuel consumption and carbon intensity indicator rating. This information allows the crew to adjust speeds to ensure optimal fuel consumption throughout the voyage.

The tool also alerts the crew to any performance issues a ship may be experiencing. This ensures that problems can be addressed immediately, rather than being identified as part of the vessel's routine maintenance schedule.

"The tool helps us make better decisions both before and during a voyage," explains Dr Britta Schmitt, CLdN Fleet Performance Engineer. "Based on the weather forecast the software can recommend the most efficient route. With the data gathered from multiple voyages, we are able to build an accurate picture of our fleet's performance and share best practices amongst crews. The tool is being continuously refined, helping us gain even deeper insights and achieve new levels of optimisation."

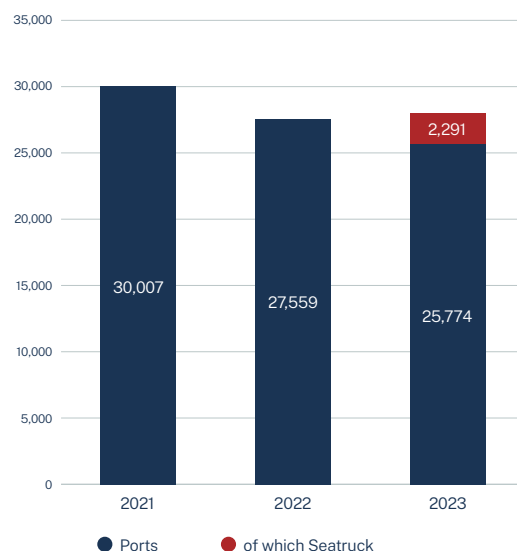


# Ports

CLdN owns and operates 5 ports in Belgium, The Netherlands and United Kingdom.

Scope 1 CO<sub>2</sub>e emissions from CLdN's port activities amounted to 28,065 tonnes in 2023 (See Figure 8). The increase from 2022 to 2023 can be explained by the inclusion of the Scope 1 emissions of CLdN vehicles operating at ports served by Seatruck Ferries (now CLdN RoRo Ltd). Scope 1 port emissions tend to follow a similar trend to activity levels in CLdN's shipping activities. This is because the majority of freight that we handle in our ports is carried on CLdN ships.

FIG. 8

**Scope 1 Port Emissions** (tonnes CO<sub>2</sub>e)

Ports have an important role to play in the maritime industry's decarbonisation agenda. At CLdN, we are exploring ways to reduce the footprint of our port operations.





## Greener Fuel

Reach stackers and terminal tractors are a central feature of any port, but these powerful machines consume significant volumes of diesel.

During the first quarter of 2024, we piloted the use of hydrogenated vegetable oil (HVO) to power four heavy vehicles at one of our Zeebrugge terminals. Replacing fossil fuels with HVO has several potential environmental benefits including reduced GHG emissions and lower particulate matter emissions.

During the two-week trial at Zeebrugge, emissions and engine efficiency data from the HVO-powered vehicles was gathered along with feedback from drivers. If the results prove successful, we will explore the business case for a wider rollout.

## Exploring shore power

A project is underway to assess the potential for a new shore power system at our Distriport terminal in Rotterdam.

The system will allow docked ships to turn off their engines and instead power essential functions via electricity from a shoreside power source. Shore power can reduce emissions from ships at berth by as much as 95%.

## Electrification of vehicles

In summer 2024 we tested two proof-of-concept 4x4 electric tugmasters in our Zeebrugge operations. A tugmaster is a powerful and manoeuvrable tractor for towing and shunting cargo in a port and onto and off RoRo ships. The results of the tests were positive. We are in contact with the suppliers and await further communication about the next steps in developing the vehicles commercially.

In the autumn of 2024 CLdN will begin trialling the world's first fully-electric reachstacker (a vehicle used for lifting and moving containers). Our team at Zeebrugge will be testing the vehicle over a twelve-month period to determine

its capabilities. Six additional fast charging points will be installed to support the trial.

It is our policy to progressively replace light vehicles (cars and small vans) used at our terminals with electric versions whenever feasible. We have also adapted our wider company car policy so that all new company cars ordered since mid-2023 are fully electric.





## CASE STUDY

# Increasing our use of renewables

In 2021, five wind turbines were installed at CLdN's facilities in Zeebrugge. The development was part of the clean port strategy of the Port of Antwerp-Brugge and was carried out by energy producer Eneco.

Standing 150 metres high, the turbines have a combined capacity of 18 megawatts, producing up to 50 gigawatt hours of green electricity per year. Some of that energy is used locally for lighting and to charge CLdN electric terminal vehicles and cars. We are also exploring the potential to use electricity from the turbines for shore-to-ship power for our ships when docked.

In 2022-23 a similar wind farm was installed at CLdN's Vlissingen terminal at North Sea Port. The development comprises five turbines with a combined capacity of 25 megawatts. The turbines contribute to the 280 megawatts of green electricity generated each year by around 100 wind turbines located across North Sea Port's 60-kilometre-long cross-border footprint. That's enough electricity to power 180,000 houses for a whole year.

In addition to wind energy, work will shortly begin on a new photovoltaic (PV) installation at Zeebrugge. Scheduled for completion in October 2024, the installation will have a maximum output potential of 3.7 megawatts, adding to the 1.5 megawatt solar installation already in place at our Distriport terminal in Rotterdam (acquired in 2024).

We are currently conducting feasibility studies for new solar installations at our Killingholme and Purfleet terminals in the UK.



# Multimodal

CLdN's door-to-door activity, CLdN Cargo, promotes the shift to more sustainable modes of transport.



# CLdN

# Multimodal

CLdN's multimodal activities (CLdN Cargo) operate a fleet of some 4,000 trailers and 45ft containers which are provided to customers for the transport of their cargo. CLdN Cargo uses CLdN's extensive shipping network complemented by a broad network of rail connections and road hauliers to move this cargo between destinations in Europe.

To reduce the environmental impact of our logistics solutions, we strive for a workable balance between ferry / barge, truck and train. In 2023 the split in kilometres travelled by our trailer / container fleet can be seen in Figure 9.

Between 2021 and 2023, total rail transport in our multimodal network increased by 28% while road transport decreased by 12% in terms of distance travelled. This shows a degree of success in moving cargo towards a significantly more carbon efficient mode of transport. In April 2023, CLdN further expanded its rail connections into Eastern Europe via a partner operating direct services from CLdN's terminal in Rotterdam (Rozenburg) to Warsaw.

FIG. 9

## Modal split in km



# Promoting the modal shift

By limiting truck transport to the first and last mile of a journey, CLdN helps relieve highly congested roads and reduce GHG (greenhouse gas) emissions. Using a combination of road and rail transport, instead of road-only, can achieve significant CO<sub>2</sub> savings – here are some examples:

FIG. 10

Route	CO <sub>2</sub> Saving
Lisbon - Poznan	60% (2.8 tonnes)
Verona – Northampton	57% (1.2 tonnes)
Kolding - Salamanca	47% (1.7 tonnes)

Calculations based on a container / trailer of approx. 17 tonnes, and a rail ratio of approx. 75% electric and 25% diesel.

CLdN has developed a calculation tool that enables the estimation of GHG emissions between departure and arrival points in its network, and to continuously map and minimise the number of empty kilometres travelled.

To cut emissions in the road part of CLdN's supply chain, we actively engage with road hauliers with regard to vehicle efficiency and driver training.



# Notes



The notes below provide information on how CLdN calculates reported carbon emission metrics and their scope.

## General

### Conversion factors

When calculating emissions we use official conversion factors to translate fuel consumption and electricity use into emissions.

For the Shipping operations we use the conversion factors as published in October 2023 as annexes amending Regulation (EU) 2015/757 of the European Parliament and of the Council as regards the rules for monitoring greenhouse gas emissions and other relevant information from maritime transport.

For the Port operations we use the official conversion factors available on the official platforms of the Belgian, Dutch and UK authorities (2023 versions). These are:

**Belgium:** [www.co2emissiefactoren.be](http://www.co2emissiefactoren.be)

**The Netherlands:** [www.co2emissiefactoren.nl](http://www.co2emissiefactoren.nl)

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

The UK grid factors are also applied for the operations in Dublin.

### Acquisition of Seatruck Ferries

While the acquisition of Seatruck Ferries (from 2024 operating as CLdN RoRo Ltd) was finalised in November 2022 we have opted not to include related CO<sub>2</sub> data from Seatruck for the final weeks of 2022. This enables readers a clearer insight into the impact of the acquisition on a year-to-year basis.

## Scope 1 emissions

### Shipping

These emissions are calculated using detailed voyage and fuel consumption data as entered in the IMO's Data Collection System (IMO-DCS) for all voyages and in the EU's Monitoring Verification and Reporting platform (MRV) for voyages using EU ports.

These emissions are 'tank to wake' i.e. they consider the emissions used in the burning of the fuel by the ship and not the emissions in the upstream refining process.

To accurately reflect the scope of our activities we include in this report the emissions from vessels that we charter in but do not own. We do not include the emissions of CLdN vessels that are chartered out to third parties.

### Ports and offices

Scope 1 emissions are mainly linked to the burning of diesel and other fuels to power port vehicles such as reach stackers, tugmasters and light port vehicles, port machinery etc. The Ports included in scope are the ones where CLdN has operational control i.e. Zeebrugge, Rotterdam, Vlissingen, London (Purfleet), Killingholme. It also includes emissions from CLdN-owned port vehicles in Heysham, Warrenpoint, Liverpool and Dublin. The emissions do not include activities carried out by third parties to load / unload CLdN vessels in other destination ports not owned or controlled by CLdN (Esbjerg, Gothenburg, Santander, Leixoes, Cork, Teesport).

Emissions linked to joint ventures where CLdN has operational control are included at 100% as per the ESRS guidance.

Port Scope 1 emissions are 'tank to wheel' i.e. they consider the emissions used in the burning of the fuel by the vehicle and not the emissions in the upstream refining process.

### Fleet efficiency data

Fleet efficiency data (expressed as gCO<sub>2</sub> per tonne-kilometre) as well as vessel age data is based on the information submitted to IMO-DCS. Data submitted to MRV / IMO-DCS has been reported in CO<sub>2</sub> and not CO<sub>2</sub> equivalent (CO<sub>2e</sub>) until 2023. As from 2025, ship owners will need to submit data based on CO<sub>2e</sub>. CLdN has opted to submit this CO<sub>2e</sub> data one year ahead of the required date.

### Company cars

No emissions from company cars (cars that are used for business travel) are yet reported in the emissions data. The majority of the 180 company cars are owned by CLdN and their emissions would therefore be considered as part of Scope 1. Emissions related to leased vehicles would fall under Scope 3 emissions. We will calculate these emissions in 2024 and include them in our reporting as from 2025 but they will not make any material difference to our overall emission profile. Since mid-2023 all company cars ordered by CLdN are fully electric.

## Scope 2 emissions

Scope 2 emissions reporting covers electricity consumed at CLdN's own port operations (including offices) as well as office buildings in other locations with 10 employees or more. This includes CLdN's headquarters in Luxembourg, offices in the ports of Heysham, Liverpool (UK), Dublin (Ireland) and offices in Valetta (Malta), and Ipswich (UK). Electricity consumed as part of lease agreements and where no specific meter-based data is available

(eg offices in Antwerp, Warrenpoint) is not currently included in Scope 2 emissions reporting.

CLdN consumes the majority of its electricity in Belgium (Flanders), The Netherlands and the United Kingdom where we have our port operations. Each country has a different energy mix and methodology for determining the conversion factor from electricity use to location based CO<sub>2e</sub> emissions (see General note on 'conversion factors' above). Most of the company's electricity consumption is linked to contracts with suppliers that provide a contractual guarantee of provenance and can prove that the energy supplied was produced from renewable sources with zero associated emissions.

As per the Greenhouse Gas Protocol, CLdN reports its Scope 2 emissions using both the location-based and market-based view (see table below).

	2021	2022	2023
Location-based CO <sub>2e</sub> emissions (tonnes)	3,756	3,660	2,924
Market-based CO <sub>2e</sub> emissions (tonnes)	1,467	80	240

## External verification

CLdN has engaged the services of a third-party consultant to support our efforts to improve data collection and reporting processes and to ensure that all data presented in this report is accurate and representative.





Founded in 1929, CLdN is a leading provider of integrated quay-to-quay and door-to-door logistics solutions.

With 30 purpose-built ships, over 200 sailings per week and terminal handling services at 15 ports, we are one of Europe's leading providers of short sea shipping solutions.

Our comprehensive network, which incorporates our own terminals, enables reliable, cost-effective connections between Europe's major economic hubs, delivered by an experienced team of over 2,500 people.

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