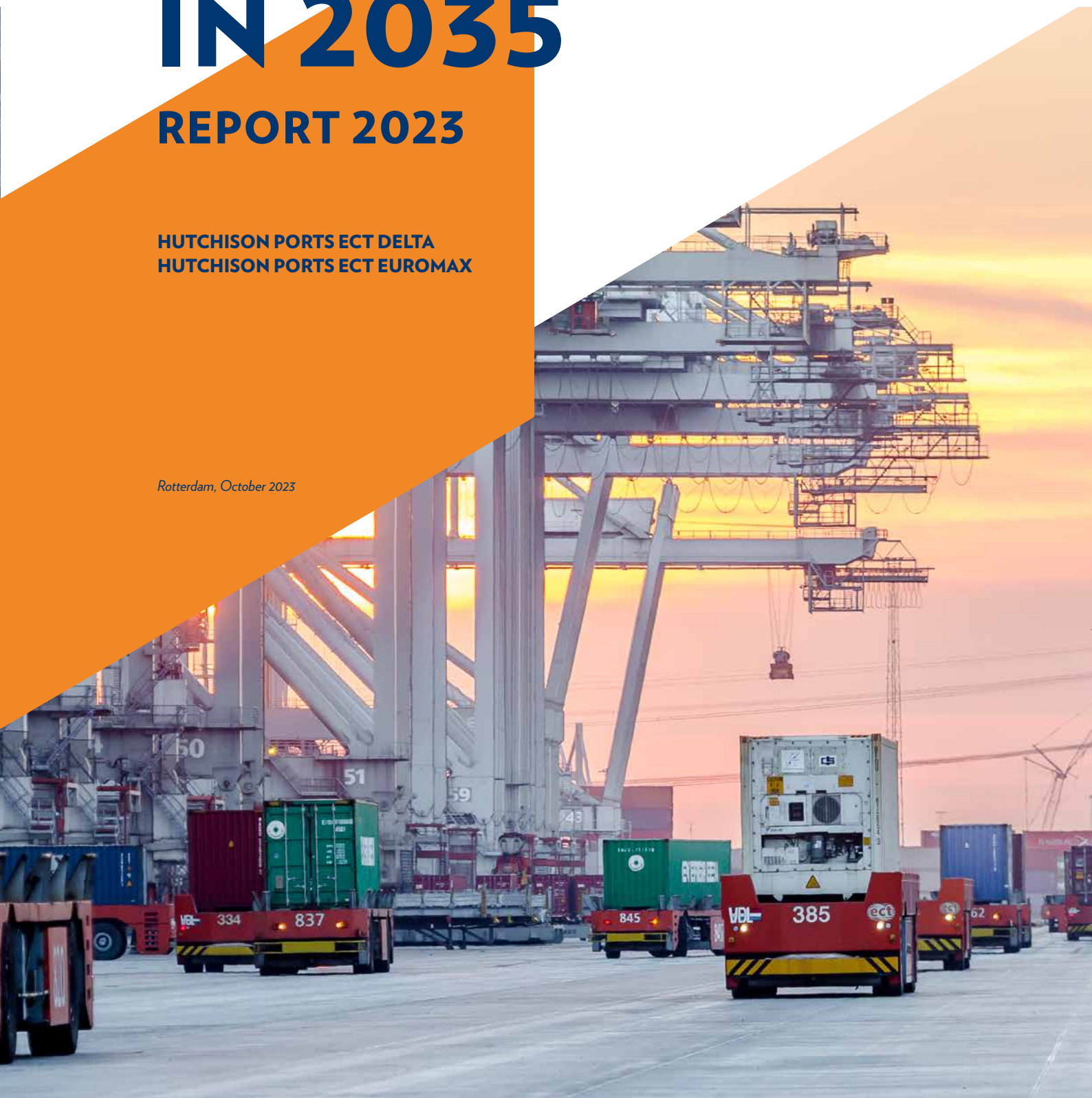
HUTCHISONPORTS
ECT ROTTERDAM

ZERO EMISSION IN 2035

REPORT 2023

HUTCHISON PORTS ECT DELTA
HUTCHISON PORTS ECT EUROMAX

Rotterdam, October 2023



PREFACE

As one of Europe's leading and most advanced container terminal operators, Hutchison Ports ECT Rotterdam (ECT) holds an important economic and social position. ECT is aware of the ecological impact of its activities and is committed to protecting the environment and helping to shape the move towards a more sustainable society. ECT reports annually on its progress.

In word and deed, ECT endorses the ambition of the European and national governments to significantly reduce the carbon footprint of economic activities. ECT has set itself the target of zero-emissions operations at the ECT Delta terminal and the ECT Euromax terminal in 2035.

ECT strives to seamlessly integrate sustainability initiatives and activities into its business processes, taking the investment cycles into account.

This is not new for ECT, in the late 1980s and early 1990s, ECT developed the first automated container terminal in the world. This terminal, the Delta/Sea-Land terminal, combined a completely new concept to efficiently handle containers and container ships energy efficiency, both operationally and with regard to hinterland transport. Starting from 1982, with the commissioning of its rail terminal in Venlo, ECT developed an inland network for multi- and intermodal transport. European Gateway Services was founded in 2010; ECT's own inter- and synchromodal network operator. Since mid-2023, European Gateway Services has continued under the name 'Hutchison Ports Europe Intermodal'. In addition, ECT has been offering collective company transport for its employees since the 1990s.

ECT DELTA AND ECT EUROMAX ON THE WAY TO ZERO EMISSIONS

1. ECT; A MODERN CONTAINER TERMINAL OPERATOR

ECT operates the ECT Delta terminal and the ECT Euromax terminal in Rotterdam. Both located at the Maasvlakte, directly on the North Sea.

From the introduction of commercial container shipping services in the sixties of the previous century, ECT has been a leader in container handling. ECT developed the Maasvlakte into the centre of European container handling. ECT has the ambition to continuously be at the forefront of new developments that further improve service and performance.

The first containership in 1966.

Through Hutchison Ports Europe Intermodal, ECT offers shipping lines, logistics service providers, shippers and operators an extensive network of high-frequency rail and inland shipping services. These connect the deep-sea terminals in Rotterdam directly with a significant number of inland terminals at strategic locations in the European market. A large part of our own train services use sustainable energy. With MyTerminal, ECT is now taking major steps in further providing real-time operational information via an online platform. This service provision for various customer groups ensures more efficient and sustainable logistics.

'ConnECTing Europe' with Hutchison Ports Europe Intermodal.

ECT is part of Hutchison Ports, the ports and related services division of CK Hutchison Holdings Limited in Hong Kong. Hutchison Ports is the world's leading port investor, developer and operator with a network of port operations in 53 ports across 24 countries in Asia, the Middle East, Africa, Europe, the Americas and Australasia. Over the years, Hutchison Ports has expanded its operations into other logistics and transportation related businesses, including cruise ship terminals, distribution centers, rail services and ship repair facilities.

MYTERMINAL

2. HUTCHISON PORTS

Hutchison Ports is officially committed to setting both short-term and zero-emission targets in line with the Science Based Targets Initiative (SBTi) net-zero standard. Hutchison Ports aims to set ambitious emissions reduction targets in line with the latest climate science according to SBTi and reach net-zero greenhouse gas (GHG) emissions by 2050.

Hutchison Ports recognizes the risks and opportunities associated with climate change and is committed to developing a decarbonisation strategy across the Group. A net-zero strategic roadmap has been developed which takes into account the past emission pattern, future plan on electrification of fleet, adoption of renewable energy and alternative fuel.

Through this commitment, Hutchison Ports also becomes part of the Business Ambition for 1.5°C and Race to Zero campaigns.

3. GOVERNMENT POLICY

Almost continuously, the world is confronted with the major consequences of global warming. Climate change appears to be occurring at an increasingly rapid pace. ECT therefore supports the ambitions of the European Union and the Dutch government to achieve a more sustainable society and to reduce CO2 and NOx emissions and to even reduce these to zero.

ECT is, directly and through its trade organizations, involved in national and European policies with regard to these ambitions and their realisation. In the past years, the attention has been strongly focused on the European plans for the further sustainability of shipping with an emphasis on onshore power supply and on the national policies regarding nitrogen emissions.

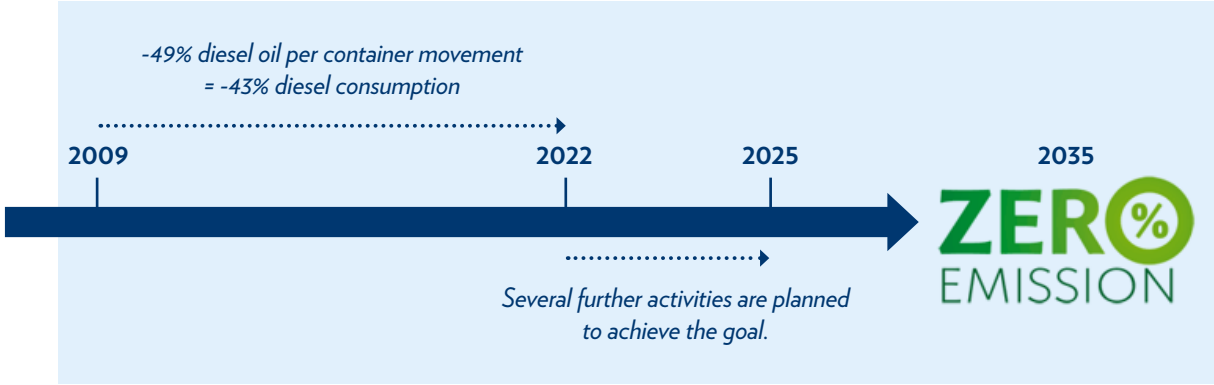
Topics that are important for ECT include:

- onshore power supply;
- investing in more energy-efficient and sustainable equipment;
- energy efficiency of the buildings;
- work-related personal mobility, and
- sustainable hinterland transport via Hutchison Ports Europe Intermodal.

ECT is committed to achieve the set goals and preferably achieve them sooner. ECT does ask governments for logical and feasible measures with a minimum of administrative obligations and the opportunity to continue to expand sustainably.

4. ECT'S ROADMAP

ECT's commitment to sustainability goals is not a new phenomenon. The objectives and projects and goals already achieved, are listed in the report "Emission-free in 2035, sustainability ambition and activities" (see our website). For example, between 2009 and 2022, ECT achieved a 49% reduction in the use of diesel fuel per container movement. In absolute terms, this meant a 43% reduction in diesel consumption. In recent years, the focus has mainly been on further optimizing the existing processes and investments in energy efficient equipment, such as hybrid automated guided vehicles (AGVs), hybrid straddle carriers, charging stations and new electric commercial vehicles. In addition, full efforts are made to further prepare for the energy transition, such as energy studies, engineering of electrical infrastructure and the application for the necessary increase of the capacity of the grid connection.



The following activities are planned for the period 2023 – 2026:

- the number of EV charging stations at the various ECT locations will be further expanded;
- taking into operation of fully electric terminal trucks;
- taking into operation of electric straddle carriers;
- investments in the electrical infrastructure necessary for the energy transition;
- further enlargement of the electric fleet;
- terminal processes are further optimized;
- an energy measurement system is introduced at the ECT Euromax terminal. Such a system is already operational at the ECT Delta terminal;
- replacing the high-pressure sodium bulbs in the high lampposts with LED panels;
- the introduction of onshore power supply will be further developed together with the Port of Rotterdam Authority and others;
- taking into operation of 77 new AGVs from 2023. These are diesel hybrid and modularly built, with the option for interim adjustment to zero emissions. The new AGVs replace diesel-powered AGVs. The transition to fully electric will have to take place gradually, because this transition must be integrated into the existing terminals;
- the transition to 100% electricity generated by European wind is in preparation;
- office buildings will be adapted to at least energy label C before or in 2023 (national regulations / EPN).

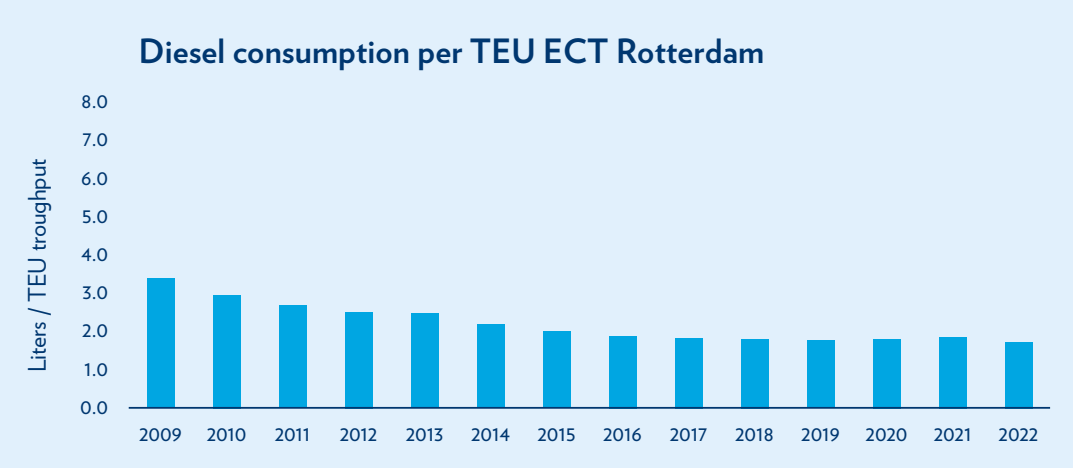
The list above is not exhaustive; promising projects can be added.

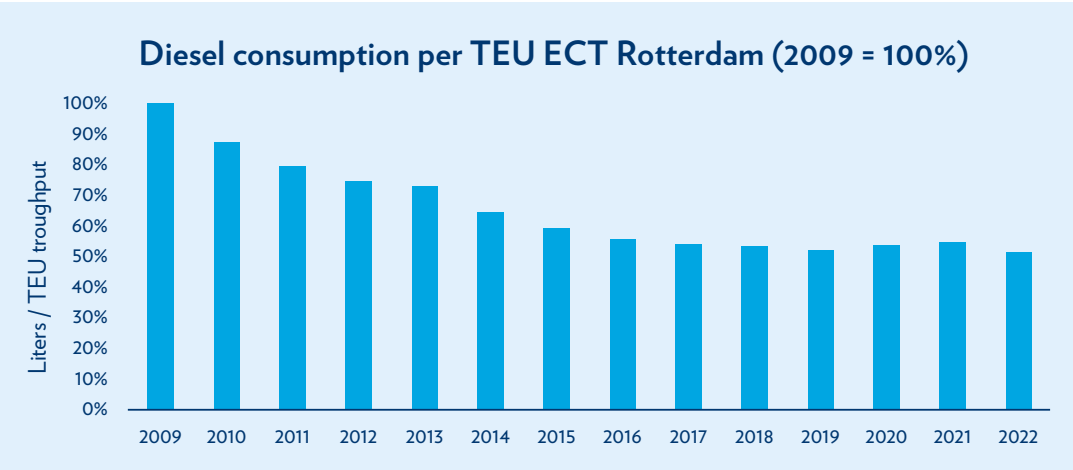
5. PERFORMANCE 2022

Below is a number of data that provide insight into ECT's sustainability performance.

5.1 DIESEL

Compared to 2009, ECT has achieved a saving of 49% on its diesel consumption per container movement. In total, this meant a 43% reduction in diesel fuel consumption. This trend is expected to continue in the coming years due to, among other things, the introduction of new hybrid AGVs, electrification of equipment and more efficient logistics.

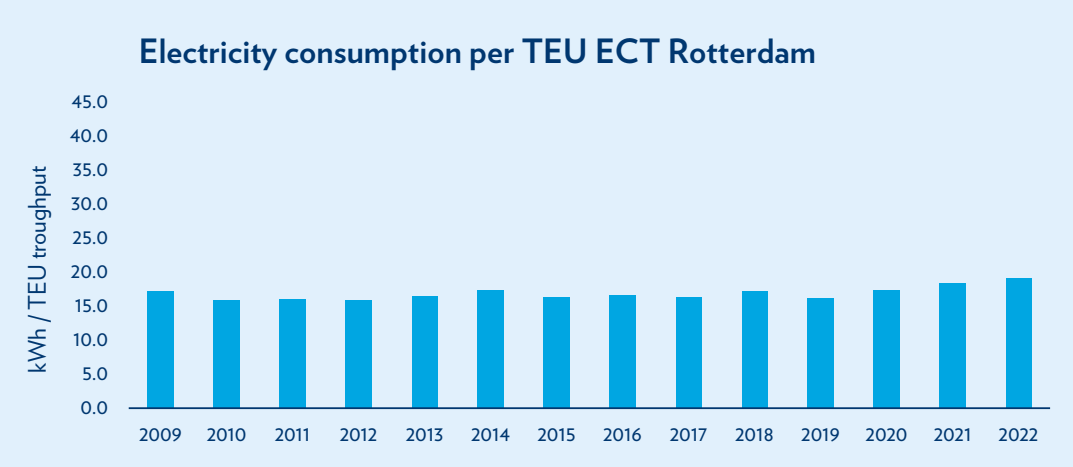


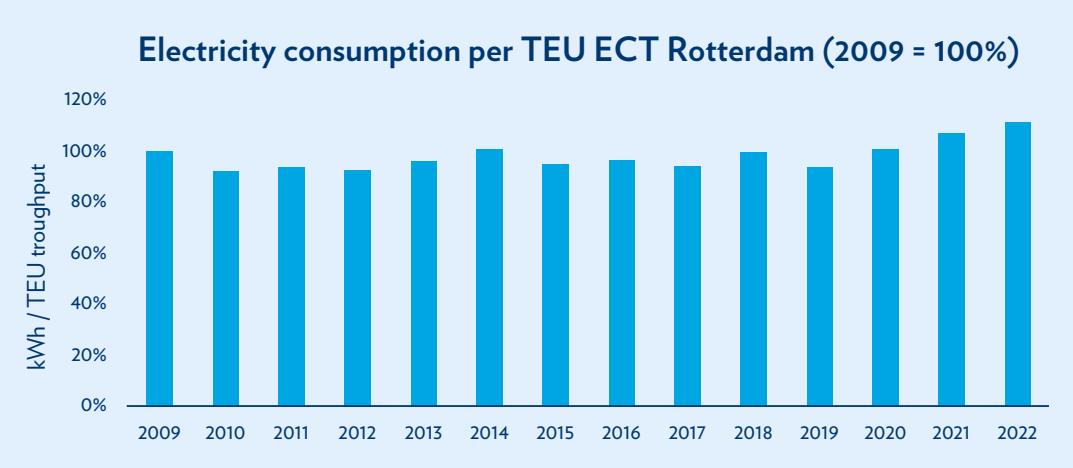


5.2 ELECTRICITY

There is a slightly upward trend in electricity consumption per TEU. This can be explained by the increasing number of reefer containers. This figure is expected to rise further under the influence of further electrification.

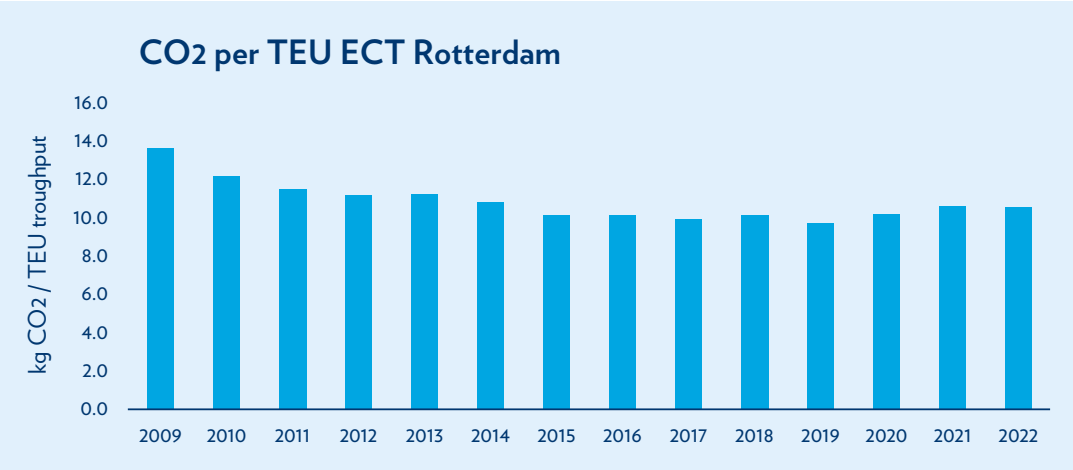
ECT intends to switch to 100% electricity generated by European wind. This will reduce CO2 emissions from the electricity used to zero.





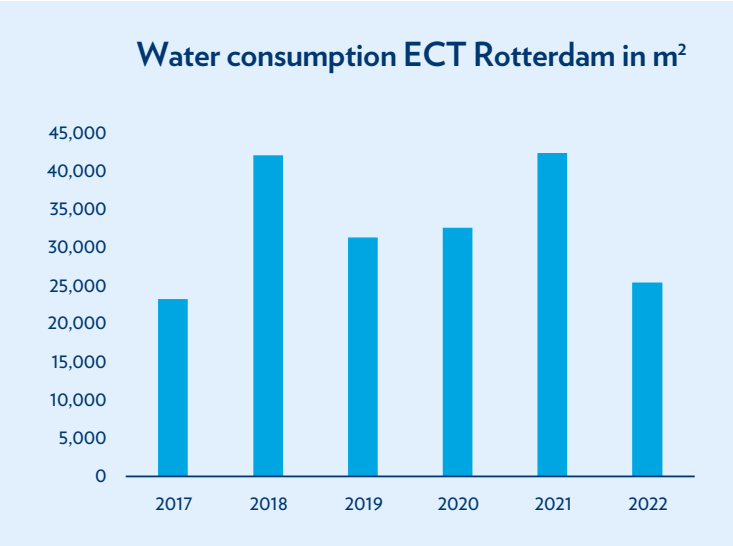
5.3 CARBON FOOTPRINT

It is expected that ECT's CO_2 emissions will be significantly lower from 2024 due to the reasons mentioned in paragraph 5.2.



5.4 WATER

Water consumption within ECT is highly variable and depends on the works carried out at the terminal. Among other things, flushing the fire extinguishing water facilities several times as required in ECT's environmental permits has a major influence on water consumption.



5.5 WASTE AND RECYCLING

ECT has several waste flows, such as sweeping waste, wood, metals, hazardous waste flows and residual waste. In 2022, a total saving in waste of 22% has been achieved compared to 2021. By delivering waste separately, 41% of the total waste flow could be recycled and ultimately used as raw material or converted into (green) energy. This is also an increase of 6% compared to the previous year. The various forms of recycling account for 7,467 kg of avoided CO2 emissions. Waste that cannot be recycled is defined as waste in Figure 1. This waste is dumped.

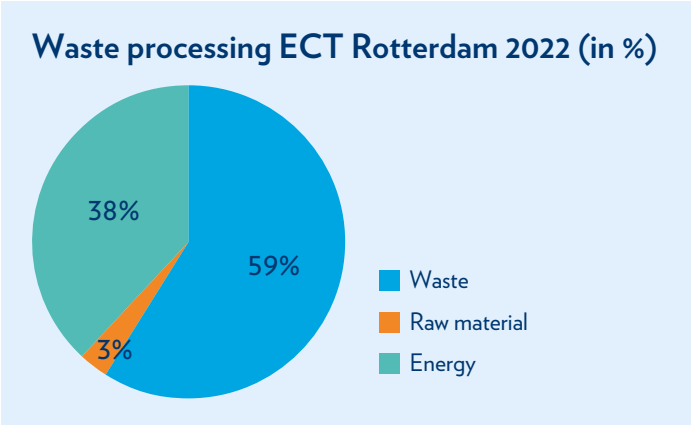


Figure 1 – Forms of waste processing within ECT Rotterdam in 2022.

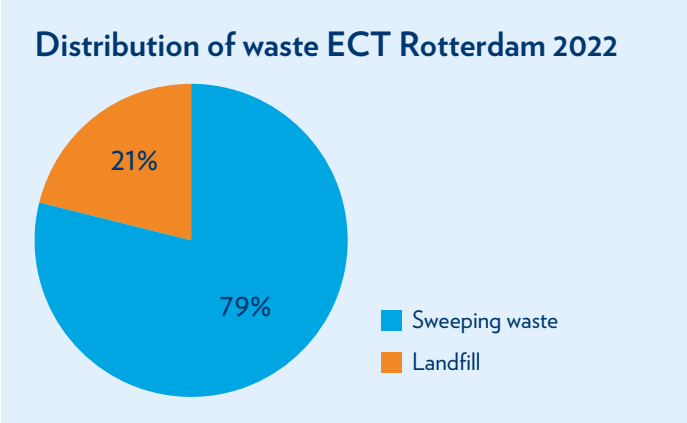


Figure 2 – Distribution of waste within ECT Rotterdam in 2022.

The vast majority (79%) of the waste comes from sweeping activities. The amount of this depends on the weather conditions and activities in the immediate vicinity of the terminals. This waste is currently not suitable for any form of recycling (waste stream is not certified by TNO), which means that the percentage of landfill waste within ECT is relatively high.