

NAVIGATING TOWARDS A SUSTAINABLE FUTURE

HIGHLIGHTS ANNUAL REPORT 2024



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1. INTRODUCTION

1.1 Milestones 2024



Secure Chain successfully commissioned

The Secure Chain is a collaboration between industry and government agencies with the goal of making port logistics more digitally resilient. This system makes the release and collection of import containers more secure by removing fraud-prone PINs and allowing authorization through a neutral logistics platform.



Construction of Porthos begins

Construction of Porthos, the first major CO₂ transport and storage system in the Netherlands, began in the spring of 2024 on the Maasvlakte. This project of EBN, Gasunie and the Port of Rotterdam Authority is expected to be operational in 2026. Annual CO₂ reductions by Porthos will increase in phases to 2.5 Mton per year, thus contributing to the achievement of climate goals.



Symbolic exchange of keys for Portlantis port experience centre

On 6 June, 2024, we received the keys to the port experience centre Portlantis. This interactive experience tells the port's story – not just what the port is, but also what it does and what it means to our daily lives. Portlantis will open its doors to visitors on Saturday, 22 March 2025.



The Port of Rotterdam Authority opens 'port consultation hour' in Municipality of Rotterdam district hubs

On 16 October, Rotterdam Councillor Robert Simons and CEO Boudewijn Siemons opened the port consultation hour. This district hubs pilot is intended by the Municipality of Rotterdam and the Port of Rotterdam Authority to introduce residents to the port and employment opportunities.



Reduction of tariffs for climate targets

We cannot meet climate targets without the cooperation of our clients. To encourage this, we have had a sustainability discount on rent and ground leases for our land lease clients since 1 January, 2024. From 1 January, 2025, we will also apply a similar discount on sea port dues and inland port dues



Dutch seaports and FERM launch nationwide cybersecurity platform

The Cyber Strategy for Dutch Seaports developed on behalf of the Seaports Trade Organisation (BOZ) was ratified in December with a cooperative agreement between the seaports.



More and more terminals are opting for shore power

Last year, several container terminals decided to switch to shore power over the short to medium term. Additionally, at the Waalhaven, the renovated Pier 3 received higher capacity shore power units. The switch to shore power by various parties makes a positive contribution to the environment.



Port of Rotterdam Authority partner of Theater Zuidplein

On 27 November, the Port of Rotterdam Authority and Theater Zuidplein signed a three-year cooperative agreement. The Port of Rotterdam Authority considers it important to also have a meaningful social presence. A diverse range of culture enriches the city of Rotterdam and its residents. Theater Zuidplein totally fits that bill.

1.2 Foreword from the Executive Board



Navigating towards a sustainable future

In 2024, we took further important steps toward a more sustainable future. Our purpose – ‘Connecting the world. Building tomorrow’s sustainable port’ – is the driving force here. We carried out projects within the resource and energy transition, increased our social efforts, and focused more closely on nature, biodiversity, resilience and security. Important themes that receive additional attention in this report according to the Corporate Sustainability Reporting Directive (CSRD).

Financially strong and client centric

We achieved strong financial results, allowing us to continue investing in infrastructure and innovative projects for the port. A sound financial position is essential to continue developing the port of Rotterdam as a strategic hub for global trade and solving future issues. The solid result also allows us to put our clients at the centre of our services. We help them become more sustainable wherever possible and make the supply chain more transparent and energy efficient through digitalisation. Along with combating grid congestion, we help keep our clients competitive and attract new business.

Energy transition experiences headwinds

We encourage and facilitate our clients to reduce their CO₂ emissions by adapting their operations and vessels, making the port and industrial complex more sustainable in the process. In 2024, we introduced initiatives such as sustainability discounts on rents and sea port dues. We also invested heavily in joint projects, such as Porthos (carbon storage and transport), hydrogen pipelines, residual heat and shore power. Despite these efforts, the energy transition is proceeding slower than desired. High connection costs, electricity prices and restrictive regulations are also contributing to the headwinds. Accelerating the transition is crucial for sustainability and the competitive position of Dutch industry within Europe and in the world.

Social role grows

Our social role grew over the past year. We want to connect the port even more closely with the locality, ensure a balanced and inclusive labour market and maintain our strong position for a sustainable future. Together with the Municipality of Rotterdam, the port consultation hour, for example, enables us to introduce local residents to the port and its employment opportunities. Our long-term goal is 'net positive'. We are focusing on issues such as air quality and conservation of nature and biodiversity. We are also supporting social initiatives that improve liveability. Our involvement in community projects underscores our commitment to the city of Rotterdam and its locality.

Safe, secure and resilient

Safety and security for us relates to nautical, physical, social, water and occupational safety and cybersecurity. We are committed through various services and projects to making the port as safe as possible for everyone. The expansion of camera surveillance in 2024, for example, helps combat subversive crime. We also support making supply chains more digitally resilient against crime and theft within the 'Secure Chain' public-private partnership. All parties involved share information in a secure system so that only approved carriers can pick up containers.

Just the right balance

Our goal is to keep the port of Rotterdam attractive for (inter)national companies and reduce dependence on fossil fuels, while ensuring Europe's security of supply and strategic autonomy. This requires international cooperation, constant adjustment and maintaining just the right balance. We will continue to work hard on this in 2025, together with our employees, to whom we owe a debt of gratitude for their dedication, professionalism and passion for our clients and the port. We would also like to thank our clients and stakeholders for their support and cooperation. Together, we are navigating towards a sustainable future.

Together, we are the port

In the 2024 Annual Report, we highlight the collective strength of everyone involved in the port of Rotterdam. Under the heading 'Together, we are the port', we use stories to provide you with greater insight into our motives and initiatives: from sustainability and innovation to safety and community involvement. You will recognize these by the Port of Rotterdam Authority logo.

The Executive Board

Boudewijn Siemons, Vivienne de Leeuw and Berte Simons



2. THE PORT OF ROTTERDAM AUTHORITY

2.1 Profile of the Port of Rotterdam Authority

Purpose

'Connecting the world. Building tomorrow's sustainable port'

Our purpose is twofold:

1. **Connecting the world:** As an international port, we connect the world every day – it's in our blood. We have been doing this for years and will continue to do so for generations to come.
2. **Building tomorrow's sustainable port:** Together we are building a future-proof and sustainable port. We take responsibility for contributing to a better living and working environment for everyone. We are working towards a climate-neutral port, enabling smart and 'green' supply chains, boosting renewable energy and facilitating circular industry.

Core tasks

The Port of Rotterdam Authority manages, operates and develops the Rotterdam port and industrial area and is responsible for:

1. developing, constructing, managing and operating the port and industrial zone in Rotterdam;
2. promoting effective, safe and efficient shipping operations in the port and coastal approach area.

We are global player and local partner at the same time. We serve public interests and also pursue commercial goals. We take our social responsibility seriously and ensure financially sound operations. We cannot achieve this in isolation, acting together with governmental authorities, partners and local residents. We believe in finding solutions, both here and now and over the longer term.

Corporate Strategy 2020 - 2024

As a developer of a leading, safe, efficient and sustainable port where our clients can do business successfully, we focus on three key points:

Smart partner in supply chains

By making good quality infrastructure, information and data available, we are able to organize the handling of cargo in the supply chain as efficiently and optimally as possible. This helps to ensure that 'cargo' chooses Rotterdam.

Accelerator of sustainability in the port

As an accelerator of sustainability in the port, we are working towards the Dutch CO₂ reduction target of 55% by 2030 compared to 1990. This helps contribute to our social responsibility: this objective encourages our partners in the port to become more sustainable. With a broad portfolio of energy transition projects, we are investing in sustainability, moving toward a carbon-neutral port by 2050 and attracting future-proof cargo flows and activities.

Enterprising and impactful organisation

We set high standards for the effectiveness and client orientation of our organization. Strong internal and external cooperation and a clear definition of roles ensure that we deliver on this. The immediate effects of this are seen in increasing organizational agility, greater control of operating costs and capital expenditures and a more intense client focus.

Corporate Strategy 2025-2029

In 2024, we were still operating under the banner of the Corporate Strategy 2020–2024. During the past year, we have also worked intensively to develop the new 2025–2029 strategy. A strategy that is better suited to the changing world around us and the demands it brings. The material sustainability themes in our 2024 Sustainability Report reflect this shift. Our Supervisory Board and shareholders were closely involved in the realisation of the new corporate strategy.

We prioritise four key points:

Key Point 1: In balance with society

We want to keep the port in balance with society. The Port of Rotterdam Authority is committed to improving the living environment, safety, nature and biodiversity in and around the port. Our ambition is to connect the port to its locality and promote a balanced and inclusive labour market. By balancing our port even more closely with the society and its environment, we guarantee a future with broad-based support.

Internally, we focus on increasing diversity and inclusiveness, and social and physical safety for all the Port of Rotterdam Authority’s own and temporary employees.

The material themes underlying this Key Point are explained in the table below:

CSR D	Material topic	Description
Biodiversity and ecosystems (ESRS E4)	Impact on nature and biodiversity	Land development, infrastructure expansion and shipping result in damage to ecosystems, invasive exotics and other negative environmental impacts. Risks lie in costs due to mitigation and compensation measures, delayed or abandoned projects, and lost revenues due to a deteriorating investment climate. By securing permits and implementing measures, we further reinforce a future with broad-based support and seize opportunities for increased stakeholder satisfaction and new partnerships.
Own workforce (ESRS S1)	Health and Safety	Unsafe occupational environments result in work-related accidents and occupational diseases and compromise employee well-being and satisfaction. Risks lie in costs due to absenteeism, reduced productivity and employer image. By complying with safety standards and regulations and taking measures, we strengthen our reputation as a reliable employer and communicate our positive safety culture to our supply chain partners.
Workers in the value chain (ESRS S2)	Working at the port	Working environments in the HIC affect the occupational and human rights of employees at the port. Risks lie in irresponsible terms of employment and a mismatch between talent and work, which can lead to costs, image damage and reduced support. A labour shortage lowers the efficiency and growth of the port and our revenues. By promoting a safe and inclusive port and taking action, we help protect occupational and human rights and ensure the port’s future sustainability.
	Health and Safety	Unsafe occupational environments result in work-related accidents and occupational diseases and compromise employee well-being and satisfaction in the HIC. Risks lie in diminished support for working at the port. By complying with safety standards and regulations and taking measures, we strengthen our reputation as a reliable business partner and seize opportunities to increase our competitive advantage and propagate our positive safety culture to our supply chain partners.
Company-specific	Nuisance from odor and noise	Nuisance from odors and noises reduces the quality of life for nearby residents.

Key Point 2: Climate neutral & circular

The Port of Rotterdam Authority seeks to play a leading role in the energy and resource transition. We do this by creating the right conditions for our partners in logistics, energy and production. Our ultimate goal is climate neutrality, which we aim to achieve by transforming the port and industrial complex into one that produces clean energy carriers and uses sustainable, circular raw materials.

The material themes underlying this Key Point are explained in the table below:

CSRD	Material topic	Description
Climate change (ESRS E1)	Port of Rotterdam Authority greenhouse gas emissions	PoR activities emit greenhouse gas emissions, which contribute to climate change.
	Port greenhouse gas emissions	Clients with operations in the HIC emit greenhouse gas emissions, contributing to climate change. Risks lie in image damage, increased costs and more stringent requirements, which are related to the port's support base and competitive position. Through our climate ambitions and actions, we are committed to future-proof sustainable value chains.
	Port net energy consumption	Energy demand in the HIC puts pressure on the power grid. Risks lie in competition with other energy consumers which is associated with reduced availability and high energy prices for clients. By helping meet the energy needs of Dutch households and the economy and taking measures, we are strengthening energy security and seizing opportunities to be a pioneer in the energy transition.
Pollution (ESRS E2)	Pollution of air	Air pollution due to client emissions in the HIC affects biodiversity and (public) health. Risks lie in permitting and a deteriorating living environment and thus support. By preventing and regulating air pollution and taking measures, we seize opportunities to strengthen a sustainable and competitive port environment.
	Pollution of water	Water pollution in the HIC due to client emissions or water transported downstream by rivers result in damage to ecological water quality. Risks lie in permitting and a deteriorated living environment. By preventing and regulating water pollution and taking measures, we seize opportunities to strengthen a sustainable and competitive port environment.
Circular economy (ESRS E5)	Use of materials Port of Rotterdam Authority	Material use for our own infrastructure affects the volume and handling of raw material flows. Risks lie in increased costs for raw materials and materials and reduction in client satisfaction. By using more sustainable alternative materials and taking measures, we are seizing opportunities and strengthening our future broad-based support.

Key Point 3: Resilience, security of supply & strategic autonomy

The Port of Rotterdam Authority aims for a resilient and flexible port that can cope with economic fluctuations, disruptions in supply chains and unexpected climate events. Additionally, we aim to contribute to the security of supply of energy, food and other essential materials in Europe, and ensure that the industry in the port remains competitive, so that Europe maintains its strategic autonomy.

The material themes underlying this Key Point are explained in the table below:

CSRD	Material topic	Description
Pollution (ESRS E2)	Environmental incident	Operations in the HIC have risks for environmental incidents that contaminate the environment and result in negative impacts on the safety of people and animals. Risks lie in high repair costs and damage to the image of and support for the port of Rotterdam. By focusing on preventing environmental incidents and taking measures, we strengthen our future broad-based support.
Company-specific	Subversive crime	The occurrence of crime results in a reduced sense of security and affects occupational and human rights. Risks lie in a deteriorated image and reduced support for the port of Rotterdam in society and as a place of work and business. By cooperating with chain partners and taking measures, we combat crime and promote the attractiveness of Rotterdam as a transit port.
	Port disruptions	Physical risks from climate change, cybercrime or geopolitical tensions can shut down PoR operations. Risks lie in increased investment and maintenance costs, reduced throughput, reduced client satisfaction and a deteriorating investment climate. By collaborating with stakeholders and taking measures, we increase our resilience.

Key Point 4. Future-proof earning power

The Port of Rotterdam Authority aims to promote the business climate in the Netherlands and Europe. We want to achieve this by providing excellent port infrastructure and maritime access, contributing to the availability of affordable (renewable) energy and optimizing operational performance within the port itself.

The material themes underlying this Key Point are explained in the table below:

CSRD	Material topic	Description
Own workforce (ESRS S1)	Health and safety	Unsafe occupational environments result in work-related accidents and occupational diseases and compromise employee well-being and satisfaction. Risks lie in costs due to absenteeism, reduced productivity and employer image. By complying with safety standards and regulations and taking measures, we strengthen our reputation as a reliable employer and seize opportunities to increase our competitive advantage and propagate our positive safety culture to our supply chain partners.
Workers in the value chain (ESRS S2)	Working at the port	Working environments in the HIC affect the occupational and human rights of employees at the port. Risks lie in irresponsible terms of employment and a mismatch between talent and work, which can lead to costs, image damage and reduced support. A labour shortage lowers the efficiency and growth of the port and our revenues. By promoting a safe and inclusive port and taking action, we help protect occupational and human rights and ensure the port's future sustainability.
	Health and safety	Unsafe occupational environments result in work-related accidents and occupational diseases and compromise employee well-being and satisfaction in the HIC. Risks lie in diminished support for working at the port. By complying with safety standards and regulations and taking measures, we strengthen our reputation as a reliable business partner and seize opportunities to increase our competitive advantage and propagate our positive safety culture to our supply chain partners.

2.2 How we create value

As developer of the port of Rotterdam, we are actively working to increase our positive impact and, by extension, increase economic and social value for our stakeholders. The value creation model below shows how we deploy our resources to achieve our strategic priorities and thereby create value. The correlation table provides an overview of relevant impacts, risks, SDGs and resources for each material theme.



CONNECTING THE WORLD. BUILDING TOMORROW'S SUSTAINABLE PORT.

OUR RESOURCES



OUR PEOPLE

In 2024, 1,392 internal employees and 185 external employees contributed to a leading, safe, efficient and sustainable port.



FINANCIAL INFORMATION

Equity (€4.7 billion) and debt (€1.6 billion) form a solid foundation for executing our core tasks and investing in the port's transition.



INFRASTRUCTURE & SPACE

In 2024, we invested €320.6 million in the port and industrial complex.



DIALOGUE WITH STAKEHOLDERS

We continuously engage with our stakeholders to sustain our social and economic value.

STRATEGY AND MATERIAL THEMES



OUR STAKEHOLDERS



Shareholders



Employees



Clients



Local residents



Suppliers



NGOs

ENVIRONMENTAL



Greenhouse gas emissions in the port



Energy consumption in the port



Air and water pollution



Impact on nature & biodiversity



Greenhouse gas emissions PoR



Material use PoR

SOCIAL



Work in the port



Occupational safety (port & PoR)

COMPANY-SPECIFIC



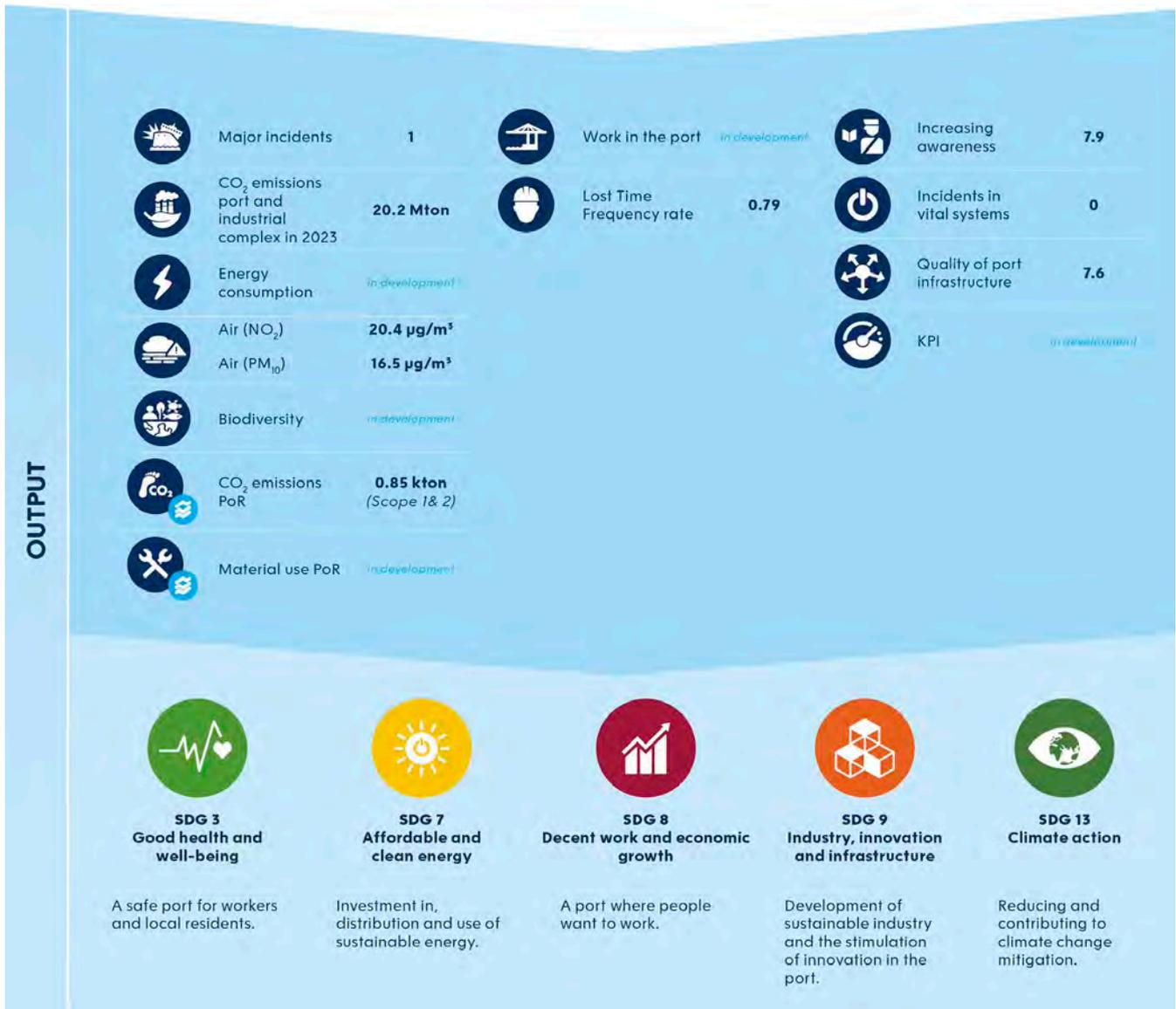
Subversive crime



Port disruptions



Noise and odor nuisance



Our resources

Four resources make up the input of our value creation: our employees (human capital), our assets (financial capital), our infrastructure including space (produced capital) and the continuous dialogue with stakeholders (social and relationships).

2.2.1 Employees and organization

Headcount	Male	Female	X	Total
Employees with a permanent contract	850	342		1,192
Employees with a fixed-term contract	120	80		200
Employees with a zero hours contract				
Total as per 31-12-2024	970	422	0	1,392

At the Port of Rotterdam Authority, we work with 1,392 employees and 185 external employees (as of 31 December, 2024) in a variety of positions in commercial, nautical and infrastructure areas, among others. The Harbour Master's Division employs 442 employees (public duties) and the Port of Rotterdam Authority employs 950 employees (private duties). We achieve results in an often complex environment through intensive cooperation, both internally and externally. We are proud of our port and the impact we make.

In 2024, we invested 2.2 million euros in the growth of our employees with various training programmes and at our Port Academy.

Satisfied employees

We use an employee survey (ES), we measure the (occupational) experiences of our employees. Among other things, we measure the eNPS (Employee Net Promoter Score). This is an internationally applied method of measuring employees' enthusiasm about the company. We carried out this survey once in 2024. Our score was +28 (+26 in September 2023). The national average is +7. We are proud of this score. In addition to the eNPS, we also survey satisfaction, pride and commitment, safety, workload and occupational happiness. Areas of concern remain workload and efficiency in decision-making. Initiatives are underway on both topics to improve them.

New Collective Bargaining Agreement (CBA)

In 2024, a new Collective Bargaining Agreement (CBA) was negotiated, running from 1 July, 2024, to 1 July, 2026. What is new is that annual salary increases are no longer based on an appraisal score, but only on Relative Salary Position (RSP). Additionally, the standard salaries of the scales in the CBA were increased by 3%. As part of sustainable employability, employees age 55 or older who voluntarily transfer to a lower salary scale no longer need to reduce their salary. The spending targets in the Personal Choice Budget (PCB) have been expanded to include the possibility of paying off study debt with DUO in a tax-friendly manner. This is a two-year pilot.

Diversity and inclusion

We value diversity and inclusion (D&I). D&I plays an important role in recruiting and retaining people, and it has a positive impact on the quality of decision-making and innovation, such as by bringing together different perspectives. As such, we continue to work towards a safer and more open culture where everyone can be themselves and have equal opportunities to develop to their fullest potential. Our [supplier code of conduct](#) states that we expect the same from our suppliers.

New D&I initiatives

New initiatives relating to D&I:

- the launch of PORTRAIT (Port of Rotterdam Rainbow Team) community, our employee network for the LGBTQ+ community within the Port of Rotterdam Authority;
- 'Kom-erbij' lunches: during these lunches, a random group of colleagues receives an invitation to have lunch with the D&I committee at a location in the port to discuss various propositions around D&I.

Employment for people alienated from the labour market

Providing workplaces for people alienated from the labour market is also part of our D&I policy. We therefore structurally make five places available for refugees, people covered by the Netherlands Participation Act or people who have been ill for a long time, for example. We comfortably achieved this in 2024. Eleven people alienated from the labour market have found a place with us, up from six in 2023.

Male-female ratio

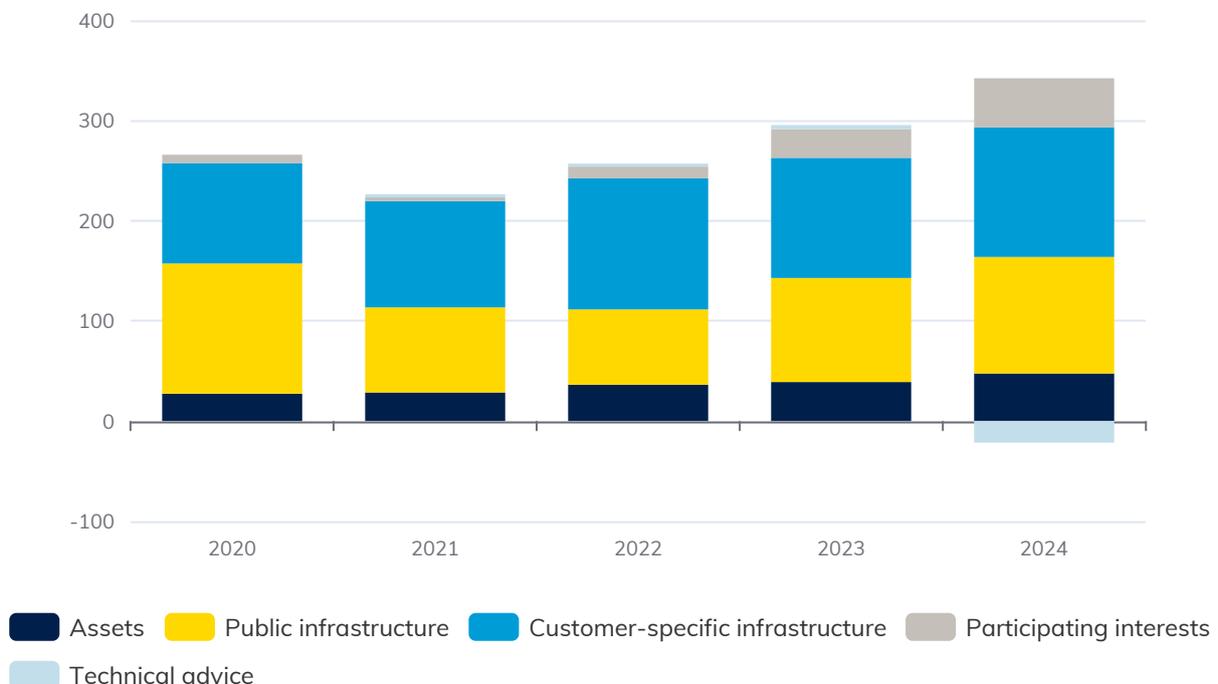
Increasing gender diversity in our management teams is a key focus. As of year-end (2024), the percentage of women in management positions was 29%. We are aiming for 45% female staffing by 2029. Our Executive Team consisted of two women and five men at the end of 2024, but here, too, we are aiming for more proportional staffing. The Executive Board in 2024 consisted of one woman and one man (and one vacancy). This meant the male-female ratio was even. As of 1 January, 2025, Berte Simons joined the Executive Board, making the Executive Board one man and two women. The Supervisory Board had two female members out of four as of year-end 2024, so was also evenly divided. The overall percentage of women employed by the Port of Rotterdam Authority came to 30.3%.

2.2.2 Throughput and financial results

Our financial results are solid. Revenue, consisting of port dues and rental and leasehold income, grew 4.8% to €882.0 million (2023: 841.5 million euros). Rental and ground lease revenues increased mainly due to indexations, new contracts, price revisions and extension of existing contracts. These are long-term contracts. Sea port dues decreased slightly by 1.0%. The decline was mainly caused by lower throughput.

Our operating expenses increased by 25.6 million euros to 318.5 million euros. This occurred mainly due to further rising automation costs for major projects and continued cybersecurity activities. Additionally, the effect of the CBA increase is visible in wages, salaries and social security charges. Earnings before taxes, interest, depreciation and amortization increased by 14.9 million euros to 563.5 million euros. Net income rose by 40.2 million euros to 273.7 million euros.

Gross investments in 2024 came to 320.6 million euros, including capital contributions to participations. The main 2024 investments were the Amaliahaven (€42.5 million) and the widening of the Yangtze Canal (€22.5 million). Of the capital contributions, 39.4 million euros related to Porthos. The chart below shows our investments over the past 5 years.



Throughput in the port of Rotterdam

The volume of total cargo throughput at the port of Rotterdam in 2024 was 435.8 million tonnes. Throughput decreased slightly compared to 2023 (438.8 million tonnes). The decline was mainly due to less throughput of coal, crude oil and other liquid bulk. In contrast, throughput of iron ore and scrap metal, other dry bulk and containers increased.

(Gross weight x 1,000 tonnes)	2024	2023	Difference (number)	Difference (%)
Dry bulk cargo	71,190	70,642	548	0.8%
Liquid bulk cargo	200,027	205,627	-5,600	-2.7%
Total bulk cargo	271,217	276,269	-5,052	-1.8%
Containers	133,400	130,162	3,238	2.5%
Break bulk	31,182	32,371	-1,188	-3.7%
Total general cargo	164,582	162,533	2,049	1.3%
Total cargo throughput	435,799	438,802	-3,003	-0.7%
Total numbers of containers	7,962,299	7,816,755	145,544	1.9%
Total TEUs	13,819,761	13,446,709	373,052	2.8%

Our market share in the Hamburg – Le Havre range in 2024 (through Q3) was 37.1%. Relative to 2023 (37.8% through Q3), our market share decreased.

Throughput of dry bulk

Dry bulk throughput increased by 0.8% compared to 2023. This was mainly due to higher throughput of iron ore and scrap as a result of slightly increased steel production in Germany, restocking in the first half of the year and increased re-exports of iron ore. Coal throughput decreased due to low demand for energy coal for power generation. Solar and wind are increasingly used as renewable sources for electricity production. Agribulk throughput declined due in part to low demand for soybeans as a result of moving certain processes to the United States.

Throughput of wet bulk

By 2024, 2.7% less liquid bulk was transshipped. Crude oil throughput declined due to maintenance at refineries in Rotterdam and the hinterland. Throughput of mineral oil products increased due to more trade in fuel oil and higher demand for kerosene. LNG throughput declined because, as in the rest of Europe, less was imported due to high stock levels.

Throughput of containers and breakbulk

Container throughput in 2024 increased by 2.5% to 133.4 million tonnes compared to 2023 and in TEUs by 2.8% to 13.8 million TEUs. This was due to an increase in demand for consumer goods. There was also an early peak season as importers ordered their products earlier than usual due to longer shipping times and fluctuating shipping schedules.

Roll-on Roll-off traffic decreased 2.2% to 25.3 million tonnes due to the weak British economy. Other breakbulk decreased 10.0% to 5.8 million tonnes due to containerization of breakbulk and shifting of various cargo packages to other ports.

2.2.3 Quality port infrastructure

The quality of the infrastructure in the port and also the transport axes to the hinterland are important for maintaining and strengthening the position of the port of Rotterdam as a major European logistics hub. This quality is also crucial to securing resilient and robust supply chains. This ensures good access by roads, rail, cables and pipelines, and coastal and inland waterways. In addition to significant investments in physical infrastructure, we leverage digitalisation and innovation to make chains more transparent and resilient and exchange data efficiently between partners. Digitizing our assets gives us insight into construction, use and maintenance. This should lead to more efficient cargo handling, lower costs and reduced emissions.

We want to offer our clients in the port and towards the hinterland excellent multi-modal accessibility and sustainable logistics options. Our vision includes optimizing the Rotterdam hub, strengthening freight corridors and making transport modalities more sustainable. We are pursuing these goals in cooperation with state and provincial authorities and industry, specifically within the MIRT programmes for the east, south-east and south freight transport corridors. MIRT means Multi-Year Infrastructure Space and Transport Programme.

Innovation and sustainability

With our Infra Innovation programme, we are improving maritime structures, aiming for lower costs and reduced emissions. For example, we use sensors, data analytics and advanced computational tools to extend the life of infrastructure. We are also optimising maritime infrastructure and controlling costs with innovations such as smart dredging, underwater anchors, smart bollards and steel tube piles.

Targeted digitization with Port Reference Architecture

We are working closely with various partners within the supply chain to improve efficiency and sustainability. Digitalisation plays an important role here, with systems, such as Portbase's Port Community System, facilitating data sharing between market participants. This helps optimize the planning of road, rail and barge shipments.

Our Port Reference Architecture (PRA) integrates and optimizes the port's digital and physical infrastructure. The PRA acts as a digital blueprint, where we distinguish between the layers relating to space, infrastructure, transportation and logistics and digitally map their mutual relationship. Digitalisation initiatives must fit within the PRA. The value we can bring to the port guides our digital ambitions. One of the most important tasks is to provide easy access to data for our clients in the port and industrial complex.

Strong data position of Harbour Master's Division

The Harbour Master's Division (DHMR) ensures order and safety in the port of Rotterdam 24 hours a day. To this end, the division performs a number of tasks regulated by public law. The powers have been transferred to the Harbour Master by the State, and the Rotterdam, Schiedam, Vlaardingen, Dordrecht, Zwijndrecht and Papendrecht municipalities. DHMR plays an important role in ship handling and occupies a strong data position within this domain. The organization is responsible for guiding shipping safely and efficiently. This expanded data position allows DHMR to further improve shipping planning and Port Call Optimization. Close cooperation and data sharing with nautical service providers are essential here. DHMR enables data exchange by collaborating with other port managers and standardizing data, while respecting data protection guidelines. For example, the Port of Rotterdam Authority and the Port of Amsterdam jointly use the Harbour Master Management Information System (HaMIS).

Camera surveillance is a permanent part of DHMR. The use of camera footage is playing an increasing role in handling processes. By 2024, the number of cameras in the port and industrial complex grew from 300 to over 330. We are exploring how camera surveillance can contribute to themed actions such as lashing while underway and monitoring repair exemptions. Again, we work with the Municipality of Rotterdam, Customs and the Seaport Police.

Accessible by water, road, rail and pipeline

Water

The port's water infrastructure is essential for handling both seagoing and inland waterways. The port has a maximum water depth of 24 meters, making it accessible to the world's largest deep-draught vessels. In 2024, 27,617 seagoing vessels and 91,356 inland vessels called at the port.



Expansion and improvement of berths

For inland vessels, there are times when, for example, a terminal wharf is not yet available. Then it is convenient to be able to wait in port. We facilitate this by providing public berths. In 2024, we renovated and modernized a number of berths at one of the piers in the Waalhaven. In addition to shore power units with increased capacity, they are now also equipped with so-called 'piano stairs' that ensure safe disembarkation. In 2024, we also completed the first phase of the renovation of the Rozenburg Lock.

Vessels processed faster

Nextlogic is the integrated planning for inland container vessel handling in the port of Rotterdam. This system optimizes scheduling, providing greater peace of mind, higher reliability, shorter port stay times and lower emissions. Terminals make the best use of their quays and cranes, while inland vessel operators spend less time planning. Partly due to the integrated planning, participating inland vessels are processed faster.

Robust waterway corridors

As inland shipping is a big part of the hinterland transport to and from Rotterdam, reliable waterways are absolutely essential. In consultations within the MIRT programmes for the east, south-east and south freight transport corridors, it was decided that, among other things, the locks in Brabant and Limburg would continue to operate on weekends through 2029. Together, we are also exploring how to shift more cargo from road to water through zero emission shuttle services.

Road

Road infrastructure plays a vital role in the transit of freight to and from the port. The growth of e-commerce and distribution centres makes port and hinterland accessibility increasingly important.

The port's accessibility is under pressure due to the increasing population of the southern periphery and a large number of sizeable maintenance projects by major highway authorities in the region. We are partnering with the Zuid-Holland Bereikbaar collaborative regional infrastructure partnership to reduce disruption where possible and encourage a mobility transition in commuting. After we took the initiative to establish a bus connection through the new Maas Delta Tunnel, the regional parties together decided to establish a new bus service directly after its opening (late 2024).

In early 2024, we opened a charging station at the Anthonie Bodaanweg truck park in the Waalhaven. This reflects our strategy to encourage the transition to zero-emission freight transport.

Rail

The rail network is an essential part of the port's multi-modal transportation strategy. The rail modality is especially of important strategic value for longer distances and service areas that are less accessible to inland shipping. It provides a sustainable alternative to road transportation and helps reduce road congestion.

More sustainable rail transportation

We strive for optimal connectivity via all modalities and encourage more transport via inland waterways and rail rather than road (modal shift). Reducing CO₂ emissions plays an important role in this. Together with authorities and businesses in the port, we want to further increase the share of rail in European freight transport. The 2023–2026 subsidy scheme stimulating modal shifts from road to water or from road to rail represents an important contribution to this.

The port authorities of Amsterdam and Rotterdam use the commercial Dam2Dam shuttle and added it to the Joint Corridors Off-Road network. This new train service offers an efficient and sustainable solution for container transport between the two ports. With the slogan 'Skip the lane, ship by train', both port authorities are calling on the logistics sector to be part of this movement.

In 2024, our Supervisory Board and shareholders approved the investment in the construction of the first bundle of six tracks of the new Maasvlakte-Zuid rail yard. This expansion of train siding capacity at the Maasvlakte is necessary to accommodate the expected growth in rail volume at the Maasvlakte.

Cables and pipelines

The infrastructure of cables and pipelines is the backbone of the port's energy and industrial sectors. This modality provides safe and efficient transportation of electricity, data, liquids and gases. In the past year, we invested significantly in the expansion and maintenance of this infrastructure.

2.2.4 Room for transition

Together with stakeholders, the Port of Rotterdam Authority is committed to creating an optimal investment climate with room for transition for businesses, employees and local residents.

Space is a major challenge for (re)development. Freehold land is limited to 517 hectares, and most of the sites are long-lease. It is also difficult to find suitable space for all expected activities. Much of the transition will have to take place in close cooperation with existing businesses.

We are working on plans to further develop the port and industrial complex. We are tackling this together with the state, the province of South Holland and the Municipality of Rotterdam in the 'Development Perspective NOVEX Area Rotterdam Port'. This involves making tough choices and partnering in the implementation and financing of the necessary changes. Upcoming steps include developing an implementation and investment agenda.

NOVEX identifies three pressing issues:

- Dealing with lack of space.
- Environmental safety in relation to spatial developments.
- Synergy between port and city in relation to port transition.

2.2.5 Stakeholder dialogue

We are in close contact with various stakeholder groups: employees, clients, strategic stakeholders, local residents, the public and suppliers. Strategic stakeholders represent a group and speak from that position. This group includes our shareholders, governmental authorities (political and bureaucratic) and NGOs (non-governmental organizations), as well as industry and business organizations, such as Deltalinq (representing port businesses) and resident groups.

It is important for our stakeholders to be informed and involved in decision-making at an early stage, such as when developing strategy. This requires the Port of Rotterdam Authority to engage in a great deal of dialogue and listening. We are trying to do this more structurally and not just on a project-by-project basis. One example is that we are affiliated with district hubs.

For contact with our strategic stakeholders, the methodologies we apply include Strategic Stakeholder Management (SSE). Through our early interest in stakeholder interests and the search for as much mutual gain as possible, SSE aims to prevent problems and, when they do emerge, to solve them effectively. We talk to our stakeholders about our long-term strategy, policies, goals and priorities.

In 2024, we conducted a client survey and a stakeholder survey. Our stakeholders rated us with a 7.7 (7.2 in 2020). The study provides insight into how strategic stakeholders perceive engagement with the Port of Rotterdam Authority and the port.

In the Client Satisfaction Survey (CSS) conducted in 2024, we received a 7.4 (2023: 7.6). Our clients feel that cooperation with the Port of Rotterdam Authority is going well and the service is also evaluated positively.

Dialogue with civil society stakeholders

The Port of Rotterdam Authority is a relevant social player. That is why we consider it so important to be in conversation with our locality. This keeps us abreast of what is going on and helps us to explain through dialogue who we are and what we do. In 2024, for example, we held talks with several climate activist groups, including Extinction Rebellion (XR) and Advocates for the Future. One of the main topics of conversation was the speed of the port's transition to a sustainable, climate-neutral and fossil-free industry.

As an organization, the Port of Rotterdam Authority is committed to the Paris Climate Accords commitments and is determined to work with our clients and partners to create a carbon-neutral port by 2050. This involves doing what is reasonably within our power to enable the transition globally and maintain Europe's security of supply and strategic autonomy.

Our social impact

Our activities affect society, such as the economy and employment, the living environment, energy transition, climate and safety. In our sustainability report, we share our social impact and social value. We aim for sustainable long-term value creation and consider economic, environmental, social and governance impacts. We distinguish between the impact we have directly as a company and the impact of our clients in the port and industrial complex over which we have less direct influence.

Economic impact

The economic significance of the Rotterdam port and industrial complex is huge. The 2024 Havenmonitor report shows that the direct added value of the port of Rotterdam is 18.6 billion euros. If we include indirect value added, the port of Rotterdam contributes 29.6 billion euros, which is 2.9% of Netherlands Gross Domestic Product (GDP). The port of Rotterdam provides direct and indirect employment to 192,364 workers.

We try to reduce the negative impact of port activities as much as possible, but the port and industrial complex does have an impact on the living environment and nature. (Cyber)security risks also persist.

Conditions and dependencies

To operate successfully, the right preconditions must be in place. Scarcity of physical space and environmental space mean that we must make sound trade-offs. Additionally, our future broad-based support depends on reputation among local residents and the public of the Netherlands.

The Sustainable Development Goals

Our efforts for a healthy and attractive environment and a safe working and living environment contribute to SDG 3 and SDG 13. Our energy transition efforts contribute to SDG 7 and SDG 13. At the same time, the theme relates to SDG 9. After all, we provide space for future-proof business activity by investing in physical and digital infrastructure. A vital port is inclusive insofar as it provides direct and indirect employment for all walks of life. This represents our contribution to SDG 8 and SDG 9.



SDG 3
Good health
and well-being



SDG 7
Affordable and
clean energy



SDG 8
Decent work
and economic
growth



SDG 9
Industry,
innovation and
infrastructure



SDG 13
Climate action

2.3 Scenarios provide direction

By developing four future scenarios, the Port of Rotterdam Authority is fleshing out possible world-views for 2050. The central question is how changes in geopolitics, economics, society and technology affect the port and industrial complex and the size and composition of cargo flows through Northwest Europe. Each 2050 scenario gives the port and industrial complex a different fingerprint than it has today.

- **Connected deep green:** Global cooperation on accelerating digital transparency in supply chains and commitments to global climate change targets should result in global carbon neutrality by 2050, high economic growth and a maximum temperature rise of 1.5 degrees this century.
- **Regional well-being:** From a shared commitment to transition, it is projected that the lack of sufficient global trust will lead to a tilt towards a regional focus on a clean and healthy environment, privacy and well-being by early 2030. This will result in a deterioration in the investment climate for basic industry in Northwest Europe and subdued economic growth. This is supposed to result in global carbon neutrality by 2070.
- **Wake-up call:** After a decade of stable global geopolitics and a focus on efficiency and financial prosperity, growing concerns are emerging about the extreme negative impacts of climate change. This provides a wake-up call, leading to a fast and late transition to renewable energy, strategically strong EU policies and moderate economic growth. This is supposed to result in global carbon neutrality by 2070.
- **Protective markets:** A world with distrust between power blocs, global geopolitical tensions and suboptimal integration in supply chains. There are competing economic interests in a fragmented world with a focus on self-sufficiency, financial prosperity, resilience and defence. No global carbon neutrality before 2100 and low economic growth.

Transition risks and opportunities

As a result of the transition to a low-emission economy, transition risks may affect emission-intensive or emission-dependent activities at the port for the long term. In particular: More stringent policies may make certain land or fuels scarce or prohibited. Support for businesses in the Rotterdam port and industrial complex may be affected by changing consumer preferences.

To gain greater insight into this, an outside firm calculated the financial impact of transition risks on our 2030 business model. This study took the two extreme scenarios, 'Connected Deep Green' and 'Protective Markets', with assumptions of 'maximum 1.5°C policy' (more transition risks) and 'minimum 2.5°C policy' (less transition risks), respectively.

The main conclusion of the study is that our business model remains resilient to transition risks through 2030. Transition risks include risks relating to policy, technology, market and reputation. Where throughput in fossil cargo streams may decline, our revenues remain stable due to ground lease contracts with long remaining terms and price elasticity. Opportunities also arise for the throughput of new cargo streams, such as hydrogen.

It is therefore essential for 2050 that the Rotterdam port and industrial complex scale down the supply and transit of fossil fuels and increase that of renewable energy carriers. The Port of Rotterdam Authority wants to bring the port in line with the goals of the Paris Climate Accords. The transition to a new, more sustainable economy is creating new raw materials, fuels and energy carriers, including new cargo flows. We therefore also see this transition as an opportunity for the Rotterdam port and industrial complex.

We identify the failure to succeed in the energy transition as a major risk, and mitigate these risks by keeping a close eye on outside expectations. The Executive Board systematically monitors a variety of laws and regulations. We also keep a close eye on the opinions of stakeholders, essential for a future with broad-based support for companies in the Rotterdam port and industrial complex. This enables us to design the Rotterdam port and industrial complex in a future-proof way. This also involves focusing on the availability of physical space and environmental space.

The topic of energy transition is part of our portfolio management, through which we decide on the intake of new opportunities, prioritization within the opportunity portfolio and allocation of necessary people and resources. Within our investment projects, we include the project's climate impact as a factor in decision-making. Our project management approach allows us to ensure that we execute the selected projects according to plan. Portfolio-wide, the Executive Team monitors the realisation of our corporate strategy and the making of future-proof choices. An important tool here is the strategy KPI 'CO₂ in the port and industrial complex', which is reported annually.



3. ESG

3.1 Explanatory notes to the annual report

Scope of the annual report

Our annual report gives account to our stakeholders of our activities from 1 January, 2024, to 31 December, 2024. We published our annual report on 13 March, 2025. The reporting period of the sustainability report is the same as the financial reporting period, except for the figures on air quality and CO₂ emissions from the port and industrial complex. These figures are one year behind. Market share figures are a quarter behind.

Through dialogue and cooperation with our local, national and international stakeholders, we create short-term and long-term value. We share insights on internal and external developments, progress on our goals, situations from which we draw lessons for the future and dilemmas we face. Stakeholders also shine a light on topics important to the Port of Rotterdam Authority. With our annual report, we aim to give greater transparency to how the Port of Rotterdam Authority contributed to achieving a safe, efficient and sustainable port in 2024. We are pursuing this ambition together with our partners.

Own company, port area and chain

The Port of Rotterdam Authority manages and develops the Rotterdam port area in the Netherlands and aims to maintain and strengthen its position as a world-class port. The Port of Rotterdam Authority exerts influence in three areas: in its own company, in the port area and in the chain. Our chain is highlighted in the image below. The degree of influence and effect on our locality and the environment varies by area. The impact of our own operations on the locality and the environment is limited. The effects of our investments in the port area and on transportation to and from the area are much larger. We exercise our influence on the port area and the (transport) chain through cooperation and dialogue with stakeholders. This is also covered in this annual report. The focus is on the performance and results of the Port of Rotterdam Authority. But the scope and reach are broader. The materiality analysis makes this clear.



3.2 Double materiality analysis

The Port of Rotterdam Authority is committed to sustainable long-term value creation. This is reflected in our approach to carefully evaluate and report both financial and non-financial performance.

Impacts ('inside-out' perspective)

The 'inside-out' perspective within the double materiality analysis focuses on how the activities of the Port of Rotterdam Authority and its chain have real and potential impact on the environment, people and society. This includes both positive and negative effects. The 'inside-out' perspective helps us determine which sustainability themes are material to our reporting and decision-making in terms of impact. This includes potential disruption to ecosystems from infrastructure construction or greenhouse gas emissions from our operations.

Risks and opportunities ('outside-in' perspective)

The 'outside-in' perspective within the double materiality analysis focuses on how sustainability issues affect our operations, business model and strategy. The 'outside-in' perspective helps us determine which sustainability themes are financially material to our reporting and decision-making. These can be both real and potential financial risks and opportunities. And include the impact of more stringent environmental legislation or developments in labour markets.

The double materiality analysis is carried out using a number of steps:

Step 1: Analysis to select ESG themes

We began by analysing the results from internal documents (e.g., impact studies, risk studies, due diligence process, projects and programmes) and analysing the ESG topics covered in annual reports and/or on our partners' websites. Based on these analyses, we compiled a list of topics. This list consists of a selection of relevant sustainability themes based on the European Sustainability Reporting Standards as an elaboration of CSRD legislation, supplemented with themes specific to the Port of Rotterdam Authority (e.g. subversive crime). To arrive at a shorter list of relevant themes, we gave a score to the sustainability themes that came out of the internal and external analysis. Sustainability themes that scored above the threshold of two were included in further follow-up. In addition to that, we did a qualitative test on the sustainability themes that fell just below the threshold, but that we still felt were worthy of further analysis.

The focus of the double materiality is the Port of Rotterdam Authority and the port and industrial complex. The analysis showed that in addition to the CSRD themes, about three 'proprietary' themes, such as subversive crime, emerged as important. We also included these in our list. The Strategy and Finance departments were kept informed during the double materiality analysis.

Step 2: Stakeholder engagement

The CSRD expects sound stakeholder engagement. In the context of the objectives of the Port Vision and Corporate Strategy and our 'license to operate & develop', among other things, we invest in prudent [environmental management](#), our External Affairs Department is in daily contact with stakeholders. The Port Vision paints a picture of the port of Rotterdam's strategy towards 2030 and beyond. We developed these together with stakeholders such as the Municipality of Rotterdam, the Ministry of Climate Policy and Green Growth, the Ministry of Infrastructure and Water Management, DCMR and the Province of South Holland.

External Affairs informs the Executive Board semi-annually on key issues and developments affecting stakeholders. Understanding the views and interests of our stakeholders is important to the Port of Rotterdam Authority. This includes deploying a 'Pilot Light Programme' for this purpose. The scope of the pilot light programme is local, regional and national strategic stakeholders with whom the Port of Rotterdam Authority maintains a structural, strategic and long-term dialogue at the corporate level and who affect, or may affect, our immediate projects/initiatives. That leads us to the conclusion that we have a robust stakeholder engagement programme and are well informed about what our stakeholders care about. This ongoing stakeholder consultation forms the basis for the double materiality analysis. As an extension of this stakeholder consultation, we consulted representatives from our own organization representing the total group of stakeholders. We conduct regular surveys of all our stakeholders, such as employee surveys, client surveys and reputation surveys (local residents and general public). We asked 'internal representatives' to suggest three environmental topics and three social topics that are most important to their stakeholder. This did not result in changes to the aforementioned list.

Step 3: Assessment

After describing the themes in terms of risks, opportunities and impacts, we ranked the themes. We assessed impact materiality by scale, scope, recoverability and likelihood of impact. Financial materiality involves the magnitude of potential financial impacts and probability. The significance of an impact is determined in relation to the other impacts. For scale, scope, non-recoverability and probability, we developed a 5-point scale, with 5 as the highest score.

These are all themes important to the Port of Rotterdam Authority, but to focus on the number of material themes to be reported, we have set the threshold at higher than 3.1 on a scale of 5. The figure below shows impact materiality on the y-axis and financial materiality on the x-axis. Topics where the Port of Rotterdam Authority has a high impact on people and the environment are on top, with topics subject to a high financial impact on us on the right. By Port of Rotterdam Authority, we mean our own business operations, including our procurement chain. 'Port' refers to the level of the port and industrial complex (including Dordrecht) and 'Chain' refers to the supply chain.



On the topics in the impact materiality, double materiality and financial materiality boxes – the material themes – our reporting complies with CSRD guidelines. We do this both qualitatively (for example, on policies, targets and actions) and quantitatively (KPIs). Several topics are closely related. One example is energy and climate. When further elaborating these topics, we combine them in the annual report. Additionally, the vast majority of themes are at a level of the port and industrial complex or at the chain level. This means that we act on themes where the potential impact is high, but our influence is reasonable to limited. We also therefore include information about what we are doing with stakeholders within the port and industrial complex and in the chain.

Step 4: Validation

During the double materiality analysis, we kept the members of the ‘annual report steering committee’ informed and incorporated their comments. The executive team discussed and validated the double materiality.

The table below shows the subtopics and definition for each material theme:

CSRD		CSRD Subtopics	Material topic	Definition	Scope
Environment	ESRS E1	Climate mitigation	<i>PoR greenhouse gas emissions</i>	Greenhouse gas emissions from PoR activities.	PoR
		Climate mitigation	<i>Port greenhouse gas emissions</i>	Facilitating clients in the HIC who emit greenhouse gas emissions from their operations.	Port
		Energy	<i>Port net energy consumption</i>	Rising electricity needs in the HIC due to the advancing energy transition.	Port
	ESRS E2	Pollution of air	<i>Pollution of air</i>	The presence of excessive pollutants such as nitrogen dioxide, particulate matter, volatile organic compounds (VOCs), or ozone (smog) in the air due to operations in the HIC, primarily shipping and industry.	Port
		Pollution of water	<i>Pollution of water</i>	Operations in the HIC can release contaminants into the water. Additionally, the waters in the HIC face contaminated water carried downstream by rivers. Water pollution occurs when there are too many hazardous substances in the water.	Port
			<i>Environmental incident</i>	Operaties in het HIC kennen risico's voor milieu-incidenten van grote omvang zoals lekkages, branden en overige rampen.	Port
	ESRS E4	Direct pressure factors biodiversity loss, impact on species state, impact on extent and condition of ecosystems	<i>Impact on nature and biodiversity</i>	Taking care of the wide range of nature in the port of Rotterdam.	Port
ESRS E5	Material inflows, including use of materials	<i>PoR material use</i>	The use of raw materials and materials such as concrete, steel, asphalt, aggregate, soil and sand by PoR in building and maintaining infrastructure in the HIC.	PoR	
Social	ESRS S1 ESRS S2	Health and safety	<i>Health and safety</i>	Ensuring occupational safety within the PoR and on our projects.	PoR & contractors

CSRD	CSRD Subtopics	Material topic	Definition	Scope
ESRS S2	Job security, working hours, living wage, social dialogue, freedom of association, collective bargaining, work-life balance, child labour, forced labour, adequate housing, clean water and sanitation, privacy, gender equality and equal pay for work of equal value, training and skills development, employment and inclusion of people with disabilities, measures against violence and harassment in the workplace, diversity	<i>Working and working conditions in the port</i>	Ensuring human and labour rights and countering human rights violations, a safe and inclusive work environment and sufficient relevant work in the HIC and a healthy port that contributes to an economically and socially healthy city.	Port
Company-specific		<i>Port disruptions</i>	Sea level rise and extreme weather can affect PoR's and our clients' port infrastructure and assets. Downtime of operations in the HIC due to geopolitical tensions, such as a trade war or terrorist attacks, and cybercrime on the port process.	Port
		<i>Nuisance odor and noise</i>	Minimizing nuisance to local residents from odour and noise from the HIC.	Port
		<i>Subversive crime</i>	Combating illegal activities in the HIC.	Port

3.3 Climate mitigation

The energy transition plays an important role in climate mitigation. Within our Energy Transition programme, we are working on numerous projects aimed at increasing sustainability. We are doing this together with companies, organizations and governments. We are focusing on transforming the port area into an industrial complex that produces clean energy carriers and uses sustainable, circular raw materials, with climate neutrality as the ultimate goal.

As part of the EU benchmarks aligned in the Paris Agreement, we feel strongly motivated to assume our social responsibility and contribute to the goals of the Paris Agreement. We have therefore set CO₂ reduction targets in line with a maximum global warming of 1.5°C. We are doing this both for the port of Rotterdam and for the Port of Rotterdam Authority itself.

This section addresses the following material themes: greenhouse gas emissions of the port, greenhouse gas emissions of the Port of Rotterdam Authority and net energy consumption of the port. The policies and activities described are derived from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Port greenhouse gas emissions	Facilitating clients in the HIC who emit greenhouse gas emissions from their operations.	Greenhouse gas emissions contribute to climate change. In the long run, the changing climate leads to irreversible consequences for humans and the environment.	The climate targets set and the measures taken to meet them may lead to clients leaving due to higher environmental costs and a worsened competitive position due to demands we make on clients. Society is looking more and more critically at the port, which is detrimental to our future broad-based support and may lead to higher costs for compensatory measures.	Setting climate-related requirements for new and existing clients through contract negotiations gives us the opportunity to directly influence greenhouse gas emissions at the port. This enables us to make progressive efforts to create new sustainable value chains that strengthen the competitive position of the port of Rotterdam.
PoR greenhouse gas emissions	Greenhouse gas emissions from PoR activities.	Greenhouse gas emissions contribute to climate change. In the long run, the changing climate leads to irreversible consequences for humans and the environment.	PoR has no material risks in terms of PoR's greenhouse gas emissions.	PoR has no material opportunities in terms of greenhouse gas emissions from the PoR.

Topic	Definition	Impact	Risks	Opportunities
Port net energy consumption	Increasing electricity demand in the HIC due to the progressing energy transition.	PoR has no material impact in terms of energy consumption	With rising electricity demand in the HIC, we are competing with other energy consumers. High energy demand can lead to higher energy costs and reduced availability of electricity for other users. This higher demand can lead to reduced availability of electricity and, in the current situation where network costs in the Netherlands are higher than in surrounding countries, also lead to reduced contract revenues as clients choose to locate outside Rotterdam.	The port of Rotterdam supplies the energy needs of Dutch households and industry and is committed to energy security. The importance of the port of Rotterdam in energy supply opens up opportunities for it to be a pioneer in energy transition, contributing to the stability and reliability of energy supply in the Netherlands and North-West Europe.

Policy

We have specific policies for climate adaptation and climate mitigation in addition to policies for a sustainable port (read more about Climate Adaptation [here](#)). Among other things, this policy focuses on managing flood risks in different areas of the port so that we are prepared for increased sea levels due to climate change. As manager and developer of the port and industrial complex, we are very involved in the conceptualisation and planning relating to the use of renewable energy.

With our company's purpose in mind, we want to develop our port sustainably. This can only be done together with our clients at the port. We have therefore developed policies to better embed the port's CO₂ reduction goals (55% reduction from 1990 levels by 2030 and CO₂-neutral by 2050) in our site issuance policy. We do this through three tracks:

1. In principle, new clients must operate their sites in a carbon-neutral manner from the outset;
2. With existing clients, we make sustainability agreements at logical (contract review) moments;
3. For the top 20 largest emitters, we are pursuing a customized action plan.

From 2024 we are giving companies in the Rotterdam port area a 2.5% discount (3.5% for net-zero operations) on land leases (rent and ground lease) if they invest that amount annually in sustainability. Participation is voluntary. Large emitters were required to submit a reduction plan, with other clients required to invest at least the same amount in sustainability as they receive in rebates. We are assessing this in 2025 based on a representative sample. In 2025, we are going to set carbon reduction agreements in new contracts and amend existing contracts. We will be monitoring progress based on reporting agreements. If a company does not achieve the agreed reductions, for example, we may reclaim previously granted rebates. This is a significant change in our issuance policy: CO₂ reduction targets are becoming a hard requirement.

In 2024, almost all companies took advantage of the discount. For the large companies, we monitored and evaluated their plans. Some companies had to repay their rebate because they did not submit a plan. Most investments focus on electrification, the use of carbon capture (CCS), solar panels and making fleets more sustainable.

Carbon pricing

In our portfolio we are realising different types of investments in the port. At decision-making, the financial impact often prevails. We want to take social responsibility and therefore broaden the assessment of investment proposals by including non-financial impact. Indeed, greening is a crucial pillar for the port's future resilience.

We make CO₂ emissions an explicit part of the assessment framework for different types of investments in the port and our own infrastructure. We have had a single uniform calculation methodology drawn up for this purpose. For investments in projects related to our own operations that result in our own scope 1 and 2 CO₂ emissions, we use an internal price of €100 per tonne. In 2024, there were no projects to which we could apply the internal price. Although the average European market price in 2024 was about 65 euros per tonne, we assign a higher monetary value to our CO₂ emissions. For client and public infrastructure investments, we include CO₂ volumes without a monetary translation in our consideration.

Activities

We divide our climate mitigation activities into four pillars. The pillars focus on greenhouse gas emission reduction in the port and at the Port of Rotterdam Authority.

Pillar 1 Efficiency en infrastructure

In the first pillar, together with partners, we are taking efficiency measures and building infrastructure. We use residual heat to heat homes, commercial buildings and greenhouses. We are capturing CO₂ and storing it under the North Sea. These developments require a lot of additional infrastructure, such as pipelines and cables. The Port of Rotterdam Authority often acts as project developer, investor, promoter and director. The latter two roles also apply to addressing grid congestion. We explain the projects and activities associated with this pillar by material theme.

Port greenhouse gas emissions		
WarmtelinQ Gasunie is laying a transport pipeline for heat from the port of Rotterdam to households, offices and greenhouse horticulture in the region. Commissioning of the underground heat pipeline varies by region. The goal is to run on heat through WarmtelinQ in The Hague from heating season 2026/2027 at the latest.	Delta Rhine Corridor The Port of Rotterdam Authority and several industry partners endorse the importance for the construction of the Delta Rhine Corridor, a bundle of pipelines between the port of Rotterdam, Moerdijk, Chemelot and the German Rhineland.	Porthos The Port of Rotterdam Authority, together with partners, is investing in the infrastructure of the Porthos project. Porthos is the first major Carbon Capture & Storage project in the Netherlands. Read more about the project below.

Progress of Porthos



Porthos began construction of the CO₂ transport and storage project in 2024. In April, a work crew drilled the first hole under the Maasvlakte seawall. Porthos transports captured CO₂ via a compressor station in the port of Rotterdam to a platform 20 kilometres offshore. There, the CO₂ is permanently stored in empty gas fields under the North Sea floor. Construction of the project is progressing steadily. In the first construction phase, we are focusing on land-based activities, such as the construction of the onshore pipeline. Construction of the coolant pump building and compressor station has also begun. Cooperation with Aramis, a CCS initiative of Shell, Total, Gasunie and EBN, has entered a new phase. Aramis and its clients may start using Porthos infrastructure, including the capacity available in Porthos' land pipeline.

Visiting one of the construction sites, CEO Boudewijn Siemons of the Port of Rotterdam Authority said the following:

"This project makes a significant contribution to the goal of reducing CO₂ emissions in the Rotterdam port area by 55% by 2030 and being a CO₂ neutral port by 2050. As a European energy port, we are facilitating the development of CO₂ infrastructure and connections with neighbouring countries for CO₂ reduction of European industry. This is the beginning of a CO₂ infrastructure at the port that will enable future storage projects for CO₂ reduction, as well as projects using CO₂ as a feedstock."



Delta Rhine Corridor focuses on hydrogen and CO₂



In December 2024, the government announced that the Delta Rhine Corridor (DRC) will focus on hydrogen and CO₂. The DRC is laying pipelines between Rotterdam, Chemelot and North Rhine-Westphalia. We welcome this decision because these pipelines are important for the sustainability of the industry. The hydrogen pipeline is expected to be completed between 2031 and 2032, and the CO₂ pipeline between 2032 and 2033. This is good news for companies looking to invest in hydrogen production, storage and use.

The CO₂ pipeline is important for Rotterdam and other industrial areas in the Netherlands, Germany and north-western Europe, and helps with carbon storage in empty gas fields under the North Sea. Plans for the pipeline bundle began in 2021 with a feasibility study for four new pipelines. Although the hydrogen carrier ammonia is now out of scope, planning continues.

PoR greenhouse gas emissions

Orders to suppliers

New maintenance contracts with contracting company Van Gelder for the road infrastructure and Idverde for the port of Rotterdam’s green spaces require these companies to perform emission-free maintenance from 2025. Here, the Port of Rotterdam Authority acts as a driver of sustainability.

Port energy use

Energy Board for the Port and Industrial Complex

Grid operators TenneT and Stedin announced in October 2023 that the power grid will remain tight in the coming years and there is a waiting list for new connections in Europoort, Botlek and Pernis. Capacity on the Maasvlakte and the Waal and Eemhaven is also declining. To address congestion and free up grid space for further sustainability, the Port of Rotterdam Authority, TenneT and Stedin established a joint Energy Board for the Port and Industrial Complex. An independent cluster director leads this board, supported by the Rotterdam-Moerdijk Programme Office.

Plan of action

The Energy Board is developing a programme plan with three tracks: building faster, better programming through data insights, and increasing flexible capacity. Because the Energy Board’s programme plan is also relevant to Pillar 2 (new energy system), you will read more about the development of the three tracks there.

New Energy Task Force

In support of the Energy Board, the Port of Rotterdam Authority launched the New Energy Taskforce, which examines, for each bottleneck in the port area, how new solutions can create grid space as early as the short term. These include energy storage, deployment of reserve capacity or establishment of ‘Energy Hubs’ in which companies can exchange and optimize capacity among themselves. The Task Force began in January 2024 and held discussions with companies to support them with solutions to congestion.

Pillar 2 New energy system

This pillar focuses on changing the energy system, often with partners. Instead of using oil and gas for heating, the industry is switching to electricity and (green) hydrogen. This requires sufficient and affordable electricity from sources such as wind and solar. The Port of Rotterdam Authority is driving and developing the necessary change. The projects and activities associated with this pillar are explained below by material theme.

PoR greenhouse gas emissions

World Port Center

The World Port Center (WPC) has energy label A and has sustainability certifications WELL Gold and BREEAM Excellent. The building is heated with residual heat from industry and cooled with water from the Maas.

Buildings and electricity

Our own property meets the BREEAM-Outstanding standard. Additionally, emissions from our purchased electricity have been significantly reduced in recent years thanks to the use of 100% green electricity.

Port energy use

Electricity Infrastructure Programme Plan for the Port and Industrial Complex

The Port and Industrial Complex Electricity Infrastructure Programme Plan (TenneT, Stedin, Deltalinqs and the Port of Rotterdam Authority) focuses on accelerating congestion resolution. The plan consists of three tracks, in accordance with the National Grid Congestion Action Programme. The first track focuses on building faster by better identifying the dependencies of various grid investments and subsurface uses, including options for acceleration. The second track aims to better match future capacity demand from industry with grid expansion. The third track focuses on increasing flexible capacity for congestion management.

Industrial flexibility

Actions to be implemented as part of Track 3 include:

- Exploring opportunities for flexibility from industry as part of the 'Port and Industrial Complex Electricity Infrastructure Programme Plan'.
- Study of large-scale flexibility at single locations versus flexibility 'behind the meter' at multiple clients.
- Explore temporary bespoke solutions for industrial electrification despite congestion.

Mandatory congestion management

Recent developments within laws and regulations:

- Large consumers with contracted transmission capacity greater than 1 MW may be required to contribute to congestion management.
- Producers and consumers must offer all contracted transmission capacity for congestion management, with exceptions for vital processes of high public interest.
- Possible use of measures through grid operators to combat grid congestion if other actions do not yield sufficient results.

Pillar 3 New raw-material and fuel system

This pillar focuses on providing sustainable alternatives to fossil fuels and raw materials. This can be done through the use of biomass, recycled materials, green hydrogen and CO₂. The Port of Rotterdam Authority is actively looking for companies that contribute to a circular economy. The projects and activities associated with this pillar are explained below by material theme.

Port greenhouse gas emissions

Biorefineries

Neste is building a new biofuel plant on the Maasvlakte, aimed at producing sustainable fuel for aviation. The new plant will be built near Neste's existing biofuels plant. There is room in Pernis for a Shell biofuels plant. Its construction has been temporarily halted since 2024. Shell's goal is to open the biofuel plant by 2030.

Hydrogen

Gasunie and the Port of Rotterdam Authority jointly initiated a new hydrogen pipeline that will form the backbone of the future hydrogen infrastructure in the port of Rotterdam. At the conversion park on the Maasvlakte, Shell is building Europe's largest hydrogen plant to produce green hydrogen using offshore wind energy. The 200 MW electrolyser is expected to be able to produce 60,000 kilograms of renewable hydrogen daily. Energy-intensive industries, including some of the chemical and refining industries, need hydrogen as a renewable substitute for natural gas. Therefore, clients in north-western Europe expect high demand for hydrogen.

PoR greenhouse gas emissions

Materials

Within our Circularity Programme, we are working on 100% circular building materials. We encourage circularity of concrete by requiring contractors to have 25% of concrete aggregate derived from recycled aggregate. We have also developed roadmaps for the footprint reduction of materials such as steel, concrete and asphalt, and are testing geopolymers with a lower carbon footprint. Read more in [Material use PoR](#).

PRISMA and Infra Innovation

Within the PRISMA Programme, we are working to reduce and green our dredging activities, for example by testing hydrogen dredging. Our Infra Innovation Programme focuses on extending the life of our assets and reducing material use, with projects such as pilot piles on the Maasvlakte and pilot dolphins in the Calandkanaal.

Emission-free construction site

We strive for zero-emission construction sites and provide them with construction power. We subscribe to the Clean & Emission Free Building (SEB) Covenant and often take a leading position in it.

Pillar 4 Sustainable transportation

As Europe's major logistics hub, the Port of Rotterdam Authority, together with chain parties, is taking the lead in making transport more sustainable based on efficiency, the construction of shore power, new sustainable fuels and international collaborations for CO₂-neutral transport. The projects and activities associated with this pillar are explained below by material theme.

Port greenhouse gas emissions		
<p>Shore power</p> <p>Shore power is a system that provides docked vessels with electricity from the quay, allowing vessels to turn off their diesel generators and reduce emissions. Shore power is a crucial pillar of the sustainability strategy for the port of Rotterdam. Additionally, shore power results in vessels making less noise. Currently, almost all inland vessels waiting areas have shore power connections.</p>	<p>Realisation</p> <p>Several years ago, the Port of Rotterdam Authority and Eneco established the joint venture Rotterdam Shore Power (RSP) to realise shore power projects. After studies and pilot projects, the first major project was the shore power installation for Heerema's offshore ships in the Calandkanaal near Rozenburg. The consortium also installed shore power at Boskalis in the Waalhaven. In 2024, DFDS commissioned the shore power installation in Vlaardingen. Through Cruise Port Rotterdam, the shore power installation for the cruise terminal is expected to be completed in 2025.</p>	<p>Future</p> <p>Starting in 2030, it will be mandatory to provide shore power to 90% of container, cruise, ferry and passenger vessels. The Port of Rotterdam Authority and other major north-western European ports aim to have large container ships on shore power by 2028. To that end, we made agreements with ECT, APMT and RWG in 2024. Shore power reduces carbon emissions and improves air quality.</p>

PoR greenhouse gas emissions		
<p>Own vessels</p> <p>Our vessels run on the clean fuel HVO100. We are preparing for the purchase of new RPA vessels, with the ambition to have them emission-free wherever possible.</p>	<p>Our mobility initiatives</p> <p>Our goal is to reduce the carbon footprint of mobility by 60% by 2030 compared to 2019. We encourage employees to travel by bicycle or public transportation and largely have an electric vehicle fleet. Our goal is a zero-emission passenger car fleet from 2026.</p>	<p>Mobility Networks</p> <p>We are affiliated with national and regional mobility networks such as Anders Reizen and the Rotterdam Sustainable Mobility Climate Alliance.</p>

Financial impacts of activities

We carefully weigh each activity in terms of what financial resources are needed to accomplish the project. In 2024, we invested a total of 17.5 million euros in projects primarily concerned with energy transition. We also invested in participations, such as Rotterdam Shore Power and Distro Energy, which are committed to energy transition. These investments are included in the balance sheet under financial fixed assets. In 2024, we gave 5.6 million euros in rebates through the Green Award and the Environmental Shipping Index. This enables us to reward vessels that have invested in improving environmental performance. These discounts are recorded in the income statement under revenues from sea port dues.

Target and results

Port greenhouse gas emissions

The role of the Port of Rotterdam Authority is primarily to create the right conditions for companies to switch to sustainable modes of production, or rather choose our port to invest in rather than elsewhere. Consequently the Port of Rotterdam Authority is accelerating transitions and getting closer to the goals to be achieved.

CO₂ emissions in our port and industrial complex

Material topic	(Critical) Performance Indicators	Target 2023	Realisation 2023	Realisation 2022	Realisation 2021
Port greenhouse gas emissions	CO ₂ emissions of HIC (Mton)	21,8 Mton	20,2 Mton	22,6 Mton	23,5 Mton

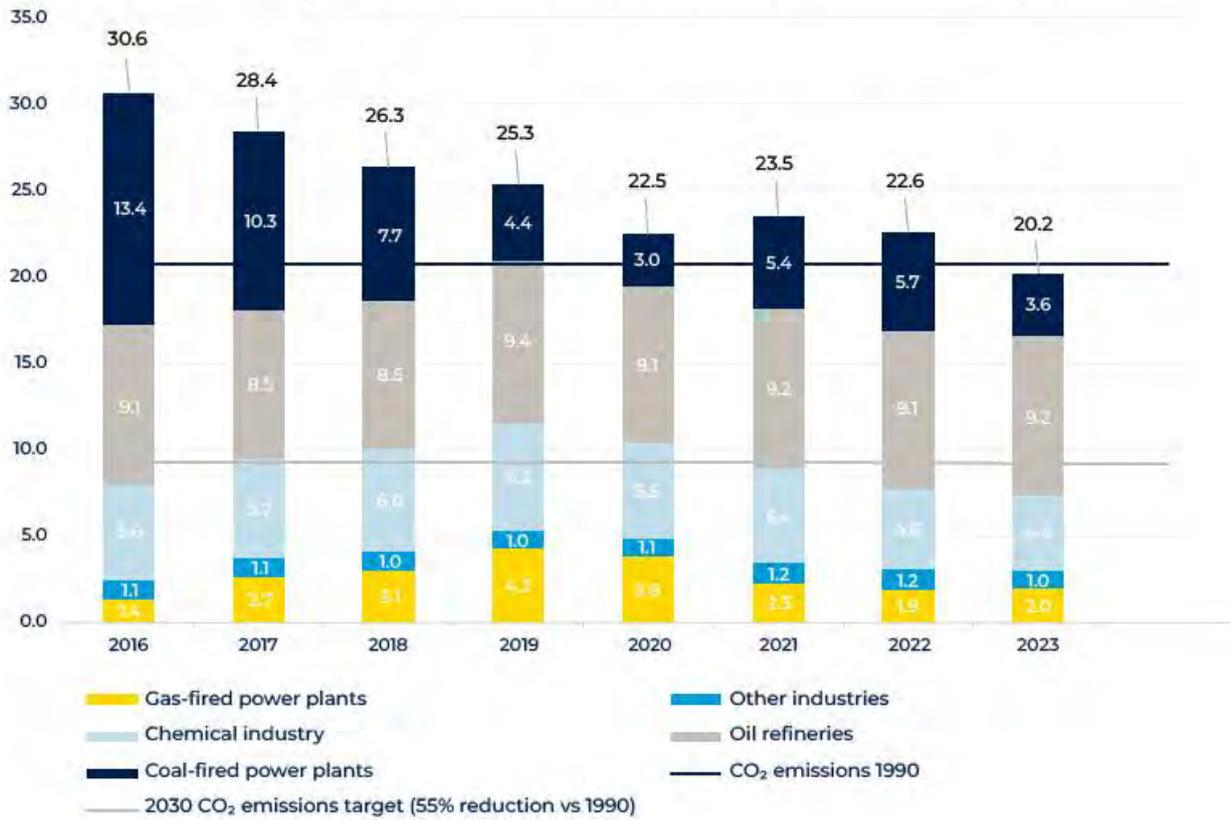
Emission data from our sources will not be available until after the first quarter of 2025. The reported figure therefore lags one year behind, so the 2023 figure was reported in 2024. The Port of Rotterdam Authority calculates the CO₂ emissions of established companies in the port based on registered emissions in the national emissions registration system of the Netherlands Emissions Authority (NEa) and registered emissions through electronic Environmental Annual Reports. The Port of Rotterdam Authority is working continuously to map greenhouse gas emissions in the port as accurately as possible. On our [website](#), we explain more about how we calculate the port's CO₂ emissions and what sources we currently use to do this. Additional emissions were recorded for 2023 compared to the 2022 report for two companies. These additions are not material to the total. In the total emissions figure for the port and industrial complex, we include companies that are registered with their emissions in the Emission Trade System, at www.emissieregistratie.nl or registered in the DCMR assessment.

The CO₂ reduction target of 55% by 2030 and climate neutrality by 2050 are based in part on IPCC climate studies and the Paris Agreement goal of limiting global warming to no more than 1.5°C. Since this goal includes the port and industrial complex, it represents a further step in corporate social responsibility for the Port of Rotterdam Authority.

- The 2023 target of absolute CO₂ emissions in the port and industrial complex was 21.8 Mton.
- The realised CO₂ emissions of the port and industrial complex in 2023 came to 20.2 Mton, thus achieving our target.
- Realised emissions of 20.2 Mton are below 1990 levels (20.7 Mton). The 1990 baseline is modified by Dordrecht's emissions (0.1 Mton).

The figure below shows CO₂ emissions over the past few years in the port and industrial complex:

CO₂ emissions in the port and industrial complex (in Mton)



Port of Rotterdam Authority greenhouse gas emissions

Material topic	(Critical) Performance Indicators	Target 2030	Realisation 2024	Realisation 2023	Realisation 2022
PoR greenhouse	CO ₂ -emissions of PoR	Scope 1 & 2: -90% Scope 3: Contractor jobs 45%, Business travel and commuting -60% and shipping -20%	Scope 1 & 2: 853 ton Scope 3: contractor jobs 22.658 ton, business travel 390 ton, commuting 942 ton and shipping 2.157.000 ton		

In accordance with the Greenhouse Gas Protocol, a distinction is made between three types of emissions: scopes 1, 2 and 3. These three types of emissions and their translation into assessed emission sources at the Port of Rotterdam Authority are summarized in the following diagram:

Emission category	Scope 1	Scope 2	Scope 3
Emission sources Port of Rotterdam Authority	Own vessels and vehicles, and onw real estate	Purchased electricity and districs heating	Contractor jobs (category 1), business travel (category 6), commuting (category 7) and shipping in the port area up to 60km offshore (category 11)
Responsibility	'Control' Results reporting requirement	'Influence' Effort obligation	'Influence' Effort obligation
Emissions target for 2030 (compared to 2019)	Scope 1) + Scope 2) -90%		Category 1: -45%, categories 6 and 7: -60% and category 11: -20%

In line with our strategy, we have set ambitious CO₂ reduction targets for 2030 with respect to scopes 1, 2 and 3. These targets have been validated by the Science Based Targets Initiative (SBTi) and are thus scientifically based. The CO₂ reduction target with respect to scopes 1 and 2 is in line with the Paris Climate Accords.

The SBTi expects the CO₂ reduction target to have as recent a base year as possible. We were validated in 2022 and emissions for the years 2020 and 2021 were not representative, owing to COVID-19, given our business activities. We therefore chose 2019: this is the most recent representative base year.

Scope 3 emissions are divided into 15 categories based on the type of activity causing the emissions. The SBTi expects the scope 3 emission reduction target to cover at least 67% of total scope 3 emissions. With the target on category 11 ('port area shipping'), which represents more than 95% of the emissions within scope 3 in 2019, we more than meet this. We chose to set SBTi targets on our four largest scope 3 categories: contractor jobs (scope 3, category 1), business travel (scope 3, category 6), commuting (scope 3, category 7) and port area shipping (scope 3, category 11). Other scope 3 categories are not part of our SBTi target because they are either not applicable or have a relatively small share in total scope 3 emissions. We therefore report only on our four largest categories within scope 3.

Scope 1

Scope 1 emissions are direct emissions generated from sources owned by us. This concerns the heating of our buildings and vessels and vehicles.

Our vessels account for the largest share of our scope 1 emissions. By 2024, we achieved a 79% emission reduction on our scope 1 emissions. We achieved this reduction largely because virtually all of our vessels now run on the renewable fuel HVO100. We are also working to procure new vessels. Our ambition is to eventually have them run emission-free.

Scope 2

Scope 2 emissions are indirect emissions that arise from the generation of energy that is purchased. At the Port of Rotterdam Authority, these are emissions from purchased electricity and district heating. These emissions do not come from our own assets, but are well within our control because we are the user of the purchased energy. We buy green electricity. Only our lease and company cars and the Cruise Port Terminal (a 100% participation of the Port of Rotterdam Authority) consume electricity generated from fossil sources. Purchased district heating is used to heat the World Port Center. This is a low-emission way to heat a building. In 2024, we achieved a 39% emission reduction compared to 2019.

Scope 3

Our scope 3 footprint covers emissions in our value chain (both upstream and downstream) for which we are partly responsible because of our business activities. We explain our four largest categories.

Category 1 - Contractors jobs (fuel)

Category 1 concerns the fuel consumption of contractors for (maintenance) dredging and earthmoving works in our projects and port infrastructure management. The figures show that CO₂ emissions vary over the years and depend mainly on the number of cubic meters dredged and the number of projects.

Emissions decreased by more than 30% from 2019 to 2024. Emission reduction agreements have been made in contracts with contractors for this purpose.

Category 6 - Business travel

Category 6 concerns our business air travel. The number of flight kilometres decreased substantially and with it emissions: the emission reduction is about 56% in 2024 compared to 2019.

Category 7 - Commuting

Category 7 concerns the commuting of our staff. Hybrid working led to a substantial reduction in the footprint: the reduction in 2024 compared to 2019 is about 58%.

Category 11 - Shipping

Category 11 concerns seagoing and inland shipping in the Port of Rotterdam Authority's management area. In 2024, we achieved a reduction of about 5% compared to 2019 due to shorter vessel waiting times.

CO₂ emissions

Our CO₂ emissions are shown in the table below. The footprint is calculated for Port of Rotterdam Authority, including one relevant 100% participating interest: Cruise Port Terminal (electricity use; scope 2). For other participations, we either have little influence or the emissions are negligible.

Additional emissions were recorded for two emitters over 2023. These additional emissions were not material. Due to a fire at AVR Rozenburg in 2023 and the consequent decommissioning of the waste treatment plant, the figures for this emitter have been adjusted.

The recorded value of category 1 (contractor jobs) in 2019 is an average of 2018 and 2019 emissions because 2019 was not a representative calibration year for project dredging. This affects fuel consumption and thus CO₂ emissions.

Greenhouse gas intensity is a division between our total scope 1, 2 and 3 emissions and our sales (in millions of €) according to the financial statements.

In gross ton CO ₂ eq	2024	2023	2022	2021	2020	2019	Realisation Δ 2019-2023	Science based target Δ 2019-2030
Scope 1								
Own vessels and vehicles, and own real estate	692	1,582	2,600	2,645	2,992	3,242	-79%	-90%
Scope 2								
Purchased energy (location-based)	1,878	2,100	3,400	2,270	1,838	2,950	-36%	
Purchased energy (Market-based)	43	50	50	50	50	70	-39%	-90%
Scope 3								
Category 1: jobs contractors	22,658	27,040	27,090	28,630	26,070	34,230	-34%	-45%
Category 6: Business travel	390	420				890	-56%	-60%
Category 7: commuter traffic	942	1,010	1,390	900	1,380	2,230	-58%	-60%
Category 11: Shipping in the port area up to 60km offshore	2,157,000	2,162,000	2,428,000	2,564,000	2,494,000	2,277,000	-5%	-20%
Total								
Scope 1+2+3 (Location based)	2,183,560	2,194,152	2,462,480	2,598,445	2,526,280	2,320,542	-6%	
Scope 1+2+3 (Market based)	2,181,725	2,192,102	2,459,130	2,596,225	2,524,492	2,317,662	-6%	
Greenhouse gas intensity								
Emission intensity (Location-based)	2,476	2,607	2,982	3,363	3,354	3,284	-25%	
Emission intensity (Market-based)	2,474	2,605	2,978	3,360	3,351	3,280	-25%	

Net energy consumption

The Port of Rotterdam Authority wants to promote the use of renewable energy by making space for it in the port and industrial complex.

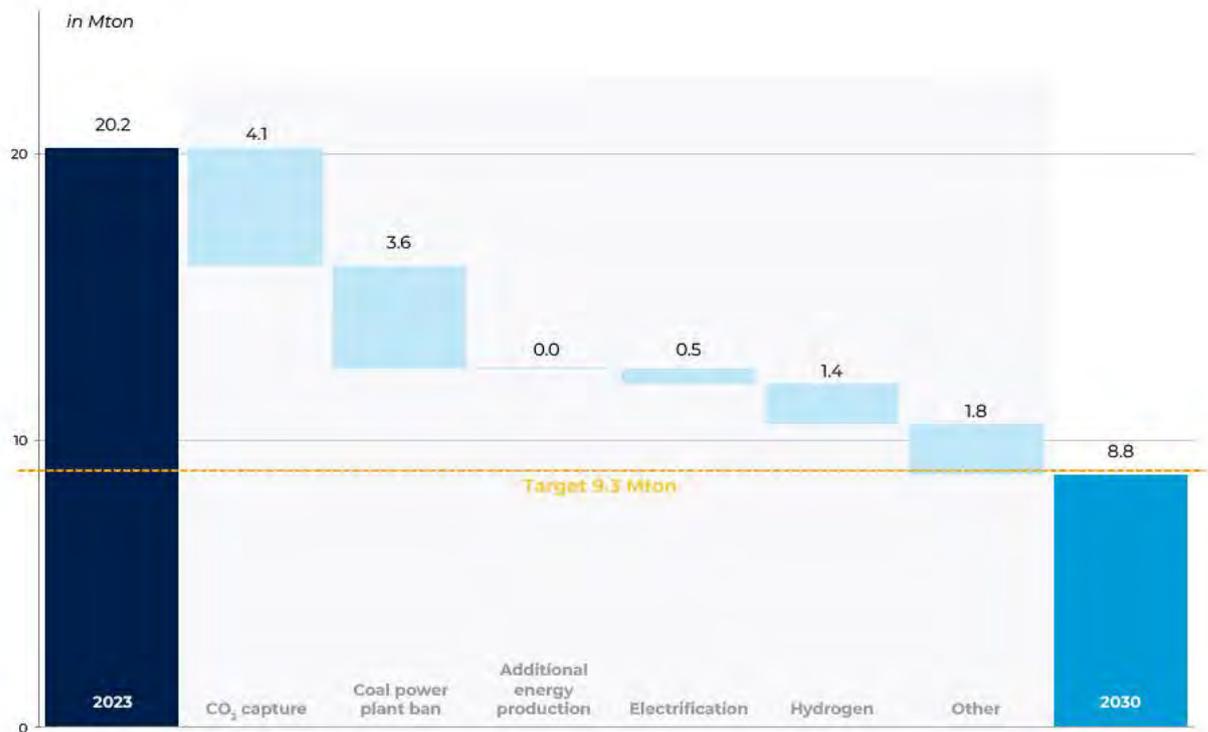
In addition to using our influence and making a social contribution by promoting the energy transition in the port, we believe it is important to be transparent. We therefore report on our own energy consumption (see table below). The energy intensity of the Port of Rotterdam Authority is a division between our purchased electricity and our turnover (in millions of €) according to the financial statements.

Energy consumption Port of Rotterdam Authority

Energy consumption in MWh	2024	2023	2022	2021	2020	2019
Scope 1						
<i>Fuel consumption from crude oil and petroleum products</i>						
Vehicles - diesel	244	307	298	330	512	967
Vehicles -gasoline	576	477	561	471	839	1,427
Buildings - heating oil	0	151	231	226	196	202
Buildings - propane	328	293	306	550	366	449
<i>Fuel consumption from natural gas</i>						
Vehicles - CNG	2.7	1.0	5.5	3.8	8.6	25.8
Buildings - natural gas	830	891	870	999	777	862
<i>Consumption of purchased or acquired electricity, heat, steam and cooling from fossil sources</i>						
Vehicles - electricity	436	422	500	380	253	281
<i>Fuel consumption from renewable sources, incl. biomass</i>						
Vehicles - Hydrogen	0	0	0.4	1.0	0.5	0
Vessels - HVO100, HVO30 of EN590	14,538	15,559	16,306	15,649	18,305	19,351
Scope 2						
<i>Purchased or acquired electricity, heat, steam and cooling from fossil sources</i>						
District heating	14,940	14,900	17,186	21,031	19,145	20,160
Electricity Cruise Port Terminal	40	40	46	17	25	75
<i>Purchased or acquired electricity, heat, steam and cooling from renewable sources</i>						
Electricity Port of Rotterdam Authority	6,234	7,660	8,436	8,010	6,060	9,785
Energy intensity	7.1	9.1	10.2	10.4	8.0	13.8
Total						
Total energy consumption	38,169	40,702	44,746	47,668	46,488	53,585
Total fossil energy consumption	17,397	17,483	20,006	24,014	22,125	24,449
Total renewable energy consumption	20,772	23,219	24,741	23,655	24,363	29,136
Total consumption of renewable fuels	14,538	15,559	16,306	15,649	18,305	19,351
Total consumption of purchased renewable energy	6,234	7,660	8,436	8,010	6,060	9,785
Share of fossil energy in total energy consumption	46%	43%	45%	50%	48%	46%
Share of renewable energy in total energy consumption	54%	57%	55%	50%	52%	54%

Outlook for 2030

The Port of Rotterdam Authority is actively committed to accelerating the transition to a carbon-neutral future. As manager, operator and developer of the port and industrial area, we encourage companies to invest in factory conversions and the development of new, low-carbon production facilities. We do this by jointly investing in the necessary infrastructure, such as CO₂ and hydrogen networks, that help reduce CO₂ emissions at the port. To achieve the 2030 target, the following steps are needed:



Survey date: 1 November, 2024 - making figures different from those presented in the 2023 Annual Report.

Assumptions regarding the calculation

We base the data in the cascade on the following calculations. For its own opportunities and projects, the Port of Rotterdam Authority uses a CO₂ model that calculates the change between the baseline situation and the target situation, based on the CO₂ levy register where companies must register and report their CO₂ emissions. The Netherlands Emissions Authority (NEa) manages this register. For client projects, we determine the CO₂ impact based on the specifications provided to us by the client. The calculation assumes that the underlying projects are realised in time for 2030, with full impact. The calculated CO₂ impact therefore contains a degree of uncertainty. The Port of Rotterdam Authority will have this methodology of emission calculation externally validated in 2025, which will include other greenhouse gas emissions in addition to CO₂ emissions.

Assumptions regarding realisation

The actual successful realisation of the outlined impact depends heavily on a favourable economic and investment climate. Investment in new infrastructure and getting new chains up and running depends on developments in energy prices, grid congestion, availability of infrastructure (supply of capacity to meet demand) and related laws, regulations and permitting. There must be solutions to these dependencies before alternative energy sources become available and can be fully deployed. This requires dedicated cooperation between many parties. The Port of Rotterdam Authority’s new strategy is designed to contribute to this.

3.4 Pollution of air and water

The Port of Rotterdam plays a role in preventing air and water pollution. Stakeholder expectations are increasing, and local support is essential for future broad-based support and the continued development of the port. Improving the living environment therefore remains a priority. Within the broader sustainability and environmental issues, matters that require attention include air and water quality and environmental incidents. The policies and activities described are derived from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Pollution of air	The presence of excessive pollutants such as nitrogen dioxide, particulate matter, volatile organic compounds (VOCs), or ozone (smog) in the air due to operations in the HIC, primarily shipping and industry.	Air pollution has a structural impact on air quality and can therefore harm biodiversity and (public) health.	If legal standards are not met, new permits cannot be issued and existing permits can be sanctioned and, in extreme cases, revoked. This could negatively affect the port's investment climate.	Preventing and regulating air pollution offers prospects for PoR to strengthen its sustainable and competitive port environment.
Pollution of water	Operations in the HIC can release contaminants into the water. Additionally, the waters in the HIC face contaminated water carried downstream by rivers. Water pollution occurs when there are too many hazardous substances in the water.	Water pollution can damage ecological water quality, resulting in negative impacts on people, animals and plants that come into contact with the water.	When legal standards are not met, permits may come under pressure or new permits may become subject to more stringent criteria. This can then negatively affect the port's investment climate.	Preventing and regulating water pollution offers prospects for PoR to strengthen its sustainable and competitive port environment.
Environmental incident	Operations in the HIC have risks for large-scale environmental incidents such as spills, fires and other disasters.	Environmental incidents can pollute and damage habitats and the environment and result in negative effects on human and animal safety.	Environmental incidents in the port of Rotterdam can cause high repair costs. This may affect the image of the port of Rotterdam, which is related to PoR's support and turnover.	Preventing environmental incidents helps PoR to ensure future broad-based support.

Policy

We are committed to minimizing impacts on biodiversity and human health, working at least in line with European laws and regulations (such as the European Air Quality Directive and the European Water Framework Directive).

DCMR monitors air quality and Rijkswaterstaat monitors the achievement of surface water quality goals. The Port of Rotterdam Authority is in close contact with both to monitor important developments around pollution within the port and industrial complex.

Air policy

European air quality legislation sets standards for air pollutants. For the port of Rotterdam and its locality, nitrogen dioxide (NO₂) and particulate matter (PM10 and PM2.5) are important. The social value of the port and industrial complex is related to the living environment, especially safety and air quality. Thanks to new technologies, air quality in the Rhine Estuary area has improved significantly over the past two decades and meets legal standards.

With the enactment of the Environment Act, the number of projects we review for air quality regulations has been reduced and the focus is increasingly on local measures. All this is aimed at meeting applicable air quality standards, now and going forward.

The Living and Working Environment (Quality) Decree contains national ambient values (these are equivalent to European air quality standards) and WHO advisory values for particulate matter and nitrogen. The decree provides the basis for our approach to the impacts and risks of air pollution. We map the impacts of our projects and test them against legal limits.

The Rhine Estuary region meets current European standards. The tightened European Air Quality Directive halves limit values for nitrogen dioxide and particulate matter by 1 January, 2030. This increases pressure and reduces usable environmental space in the Rhine Estuary. This tightening is expected to be included in the national approach of the Clean Air Agreement (SLA) and in the Municipality of Rotterdam's new air-quality plan.

The Port of Rotterdam Authority aims to meet the European Directive's more stringent limits. Currently, the annual average concentration in the Rotterdam region (city background) of:

- nitrogen dioxide (NO₂) 20,4 µg/m³;
- particulate matter (PM10 en PM2,5) 16,5 en 8,8 µg/m³.

These concentrations are well within the current legal standard of 40 µg/m³. Nitrogen dioxide concentrations do however exceed the new European limit value of 20 µg/m³, which comes into effect on 1 January, 2030. But annual average PM10 and PM2.5 concentrations do meet the more stringent standards of 20 and 10 µg/m³, respectively.

Water policy

The water quality of surface water in the Netherlands is assessed according to the European Water Framework Directive (WFD), which sets goals for the water bodies Nieuwe Waterweg, Nieuwe Maas and Oude Maas. The Ministry of Infrastructure and Water Management is responsible for the realisation of the WFD, while Rijkswaterstaat is responsible for implementation and assessment. The Port of Rotterdam Authority and companies deal with this through permits, but bear no responsibility themselves. We ensure that projects and works within WFD water bodies continue without pollution, according to the principle of non-deterioration. We work together with our stakeholders to this end.

Rijkswaterstaat issues permits to companies that discharge to surface water. By 2027, ground and surface waters must be in 'good condition' according to WFD requirements, which means both chemical (low pollutants) and ecological quality (good conditions for plants and animals). A deterioration in the surface water state is prohibited, posing risks to current discharge permits and new business activities. Companies must demonstrate that they have put everything in place to meet the obligations. If WFD targets are not met by 2027, Rijkswaterstaat may revoke permits or refuse new ones. The European Commission has submitted a proposal for revision of the WFD. By 2025, it will be clear what the tightening of standards and addition of substances such as PFAS means, and what new deadlines shall apply.

The government wants to lower the standard for surface water temperature in the Netherlands from 28°C to a maximum of 25°C because of the WFD. This plays an important role in companies' coolant intakes and discharges.

Environmental inspections policy

Inspectors from the Harbour Master Division check vessel compliance with environmental and safety regulations. The extent to which an inspected vessel complies with laws and regulations determines the level of the Safety Environmental Index (SEI). If a vessel meets all standards, it scores a 10 on a scale of 0 to 10. The average score of all ships inspected is the SEI. In terms of the average score, the standard is a 7.0. Depending on the severity of the violation, the captain of the vessel will receive a warning or an official report. This is recorded in the Harbour Master Management Information System (HaMIS). For some violations, inspectors return once more before the vessel is allowed to leave the port of Rotterdam

Activities

Air pollution

Inland vessels shore power

Public berths for inland vessels have had shore power facilities since 2020. There is also a generator ban in parts of the port. Meanwhile, a shore power programme (2.0) is underway. The goal is to make the facilities suitable for future use and ease of use based in part on experience gained and anticipated future developments (i.e. the energy transition). All this aims to contribute to emission reductions from inland shipping. We have sufficient human capacity and financial resources available for implementation.

Seagoing vessels shore power

Seagoing vessels cause about 89% of ship emissions in the port. In consultation with clients in the port, we are working on shore power installations for seagoing vessels. We act as developer, investor and operator through Rotterdam Shore Power (RSP), a 50/50% joint venture with Eneco. In consultation with the client, we determine the role of RSP and the corresponding client-specific investment needs. Shore power enables us to minimize nitrogen and particulate emissions from vessels at the dock. We also support Zero Emission Services (ZES) which powers inland vessels with interchangeable energy containers. Ships bunkering renewable fuels receive discounts on port dues through the Zero Emissions Maritime Buyers Alliance (ZEMBA) initiative.

Initiatives within the supply chain

We promote green and digital corridors through international collaborations for renewable fuels on specific routes. Our 'Switch to Zero' campaign with GoodShipping focuses on reducing emissions in the supply chain. Through the World Ports Action Climate Programme (WPACP), we are working with other ports to reduce carbon emissions and improve air quality. Electrification of port equipment is also increasing. One example is landside electrification of the (automated) container terminals at Maasvlakte 2.

Water pollution

WFD assessment framework

Together with Rijkswaterstaat, we developed a WFD assessment framework for the ecological and biological assessment of water quality, based on a systems approach. This framework simplifies the assessment of permit applications and encourages nature-inclusive measures, such as the use of eco-modules at mooring posts. The implementation of this framework is necessary if we want to apply for new permits or renew existing ones. Thus, the goals within the framework are to some extent mandatory for the Port of Rotterdam Authority. When revising the WFD in Europe, we assess its impact on the port and industrial complex and work with European organizations within the Navigation Task Group and the Sediment Network SedNet.

River as Tidal Park

We participate in the River as Tidal Park programme, which aims to restore tidal nature and make the tidal zone more liveable. The Groene Poort project near Rozenburg is an example of this. The WFD assessment framework and the River as Tidal Park programme provide us with a plan of action when it comes to managing impacts, risks and opportunities in the area of water pollution.

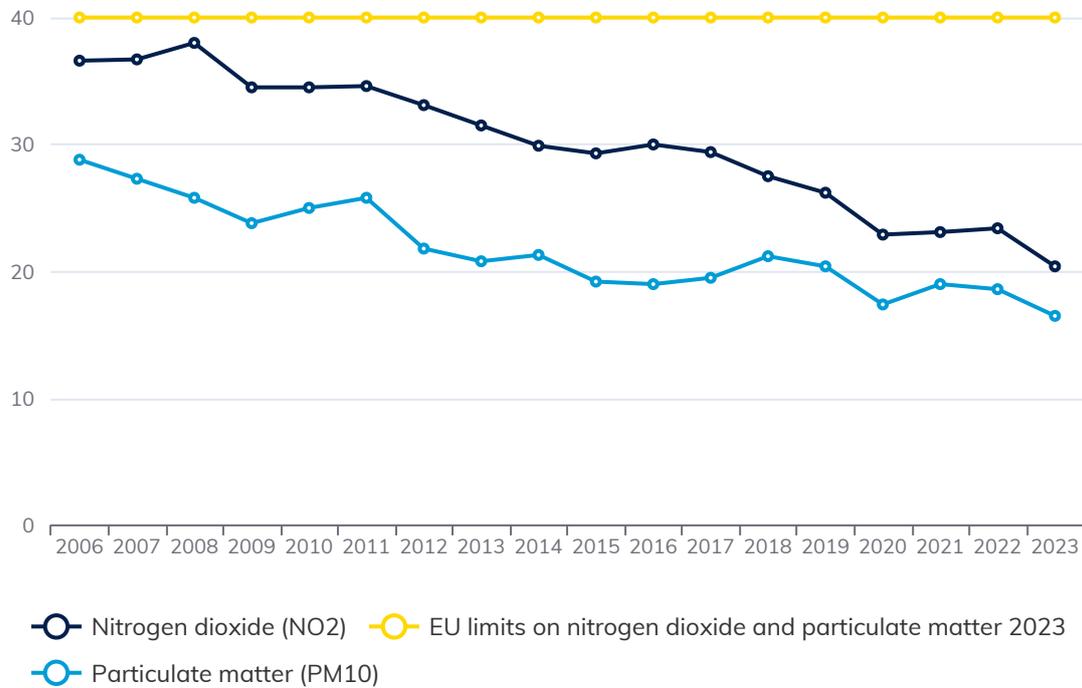
Discharge permits

In 2024, we worked on an action programme to accelerate the updating of discharge permits and determine what (additional) measures are possible to meet the standards. This was carried out together with Rijkswaterstaat and VNO-NCW, among others.

Result

The results of our efforts include that currently annual average concentrations of nitrogen dioxide and particulate matter are well below current legal standards.

Concentration of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) in µg/m³ (annual average)



RIVM and DCMR measure concentrations of air pollutants in the Rhine Estuary region. Both organizations use similar methods and equipment to measure substances such as nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}) and ozone (O₃). The DCMR's monitoring network consists of 12 fixed monitoring stations, while RIVM operates eight monitoring stations in South Holland. At some measurement sites, both RIVM and DCMR conduct measurements to ensure comparability and reliability of data. This helps provide a consistent and accurate picture of air quality in the region. The organizations conduct continuous measurements and analyse and publish results annually.

Target

Material topic	(Critical) Performance Indicators	Target 2024	Realisation 2023	Realisation 2022	Realisation 2021
Pollution of air	Meeting legal standards with the ambition to further improve air quality:				
	Nitrogen dioxide (NO ₂)	40 (µg/m ³) - EU limit	20,4 (µg/m ³)	23,4 (µg/m ³)	23,1 (µg/m ³)
	Particulate matter (PM10)	40 (µg/m ³) - EU limit	16,5 (µg/m ³)	18,6 (µg/m ³)	19 (µg/m ³)
	Particulate matter (PM2,5)	25 (µg/m ³) - EU limit	8,8 (µg/m ³)		
Pollution of water	Under development				
Environmental incident	Major nautical incidents include very serious marine accidents that meet certain predetermined criteria. The aim is always zero major incidents.	0	1	0	1
	Safety & environmental index	> 7,00	7.40	7.63	7.33
	Nautische safety index (NSI)	> 7,00	6.07	7.51	6.39

The reported figures are a year behind. As a target, we use the EU limit values (40 µg/m³). Four monitoring stations were used to determine the KPI values: Hoogvliet, Maassluis, Schiedam and Zwartewaalstraat. We are still developing a target on water quality. We no longer report on sulphur dioxide (SO₂) due to the fact that realisation has been below the applicable standard for years.

The Port of Rotterdam Authority aims for zero major incidents. In 2024, we reported one major incident. One person died after the collision of a crane vessel with an oil rig caused the jetty on which the man was standing to collapse. As a result of three more serious accidents, the Nautical Safety Index (degree of safety) ended at 6.1, below the standard of 7.0. The Safety & Environmental Index ended at 7.4, exceeding the standard of 7.0.

Outlook

We continue to work to improve air and water quality. This means adapting to stricter European directives and continuing to invest in sustainable technologies and processes. The goal is to create a healthy and attractive environment for both companies and residents. In the period 2025 to 2029, we are specifically aiming for a 30% reduction in nitrogen, particulate matter and volatile organic compounds in the port and industrial complex compared to 2019. With respect to water quality, we plan to conduct a study in 2025 to gain a better understanding of water quality relative to the Water Framework Directive.

3.5 Nature and biodiversity

The Port of Rotterdam Authority wants to improve liveability in and around the port by enhancing biodiversity. This is one of the key focal points in the new 2025–2029 Corporate Strategy. We take responsibility for the consequences of our activities and factor in our impact on nature and biodiversity. We care for the diverse nature in the port of Rotterdam, with special attention to land-based flora and fauna. The policies and activities described are derived from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Area of land-based nature in the port

An overview of all major business locations of the Port of Rotterdam Authority where impacts occur or may occur, determined at the end of the year:

- 789 hectares of greenery and aquatic structures: grasses, trees, drainage ditches and bodies of water in the port.
- 376 hectares of pipeline corridors: zones reserved for construction of (underground) pipelines.
- 517 hectares of issuable land, including 483 hectares of vacant land where nature has temporary free rein and 34 hectares of short-term leased land.
- 172 kilometres of sloped land: transitions to the major bodies of water, under the influence of the tide.

Protected areas

In the port we are dealing with a wide range of protected flora and fauna. Around the port are protected nature reserves, the Natura 2000 areas and areas of the National Ecological Network (NEN).

Conservation objectives are defined for each Natura 2000 area (see for example [the fact sheet 'area plan for nitrogen 0.5'](#)). Management plans include measures for each Natura 2000 site that are designed to maintain protected flora and fauna. The occurring nitrogen deposition is one of the factors affecting the nature present in Natura 2000 areas. This is particularly the case for those Natura 2000 areas that are nitrogen sensitive and overloaded with nitrogen.

To obtain a permit, projects in the port must map their impact on Natura 2000 sites within 25 kilometres of the project. The nitrogen-sensitive Natura 2000 sites within this zone are:

- Solleveld & Kapittelduinen
- Westduinpark & Wapendal
- Meijendel & Berkheide (only southern tip)
- Voornes Duin
- Duinen van Goeree & Kwade hoek
- Haringvliet (only terrestrial parts are relevant)
- Grevelingen (only terrestrial parts are relevant)
- Krammer-Volkerak
- Biesbosch

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Nature and biodiversity	Taking care of the wide range of nature in the port of Rotterdam.	Site allocation and infrastructure development lead to habitat loss, disruption or degradation. Emissions from shipping and hinterland infrastructure negatively impact the environment. The introduction of invasive species in the port-industrial complex (HIC) also poses risks.	Regulations on clearing sites of invasive species, such as Japanese knotweed, result in costly mitigation measures for PoR. Additional biodiversity compensation requirements can also be expensive. The nitrogen crisis may delay or halt projects, affecting strategic objectives. PoR incurs direct costs from purchasing nitrogen rights. The nitrogen crisis also impacts the investment climate, potentially leading to lost business revenue in the long term.	By proactively implementing compensation measures and keeping sites free from invasive species, we can secure permits, increase stakeholder satisfaction and strengthen our reputation. This supports our license to operate and develop, resulting in new client agreements.

Policy

Through our Nature Vision, we establish strategic priorities by addressing our impact, dependencies, risks and opportunities regarding nature and biodiversity. We do this by incorporating nature-friendly designs and managing port areas ecologically. Our focus is on the ecological management of public spaces, including green areas, pipeline corridors and undeveloped sites, as well as wetland infrastructure such as shorelines and slopes. The Nature Vision also applies to surrounding nature reserves, where the port has a direct or indirect influence. By integrating nature into our plans and projects, we work to safeguard biodiversity.

The port is home to a wide range of natural habitats, including protected Natura 2000 sites and Netherlands Nature Network (NNN) areas.

During port development, we consider protected plant and animal species, natural values and biodiversity. We implement protection measures when indicated by the Port Scan, particularly for sites covered by a valid Nature Conservation Act (NCA) exemption (Wnb-ontheffing). Spatial developments can cause pollution and disruption, negatively affecting flora and fauna. To protect biodiversity-sensitive areas, we avoid disturbing plants during their flowering season, relocate plants when necessary, work outside breeding seasons and use low-impact equipment to minimise disturbance.

Our approach is based on four key pillars:

1. **Respect for nature:** We design port areas and infrastructure with nature in mind, avoiding damage to protected areas and providing compensation where necessary. We balance plant, human and animal interests by applying an ecosystem-based approach.
2. **Ecological management and monitoring:** We allow nature to take its course on undeveloped sites and apply mowing principles that promote biodiversity. We actively control problematic species and monitor flora and fauna to make informed decisions.
3. **Facilitating migration:** We create ideal habitats for pioneer and coastal species by developing strategic ecological stepping stones and maintaining open connections with the sea. This supports the migration of plants and animals.
4. **Nature-inclusive development:** In infrastructure projects, we account for the ecological environment and promote biodiversity, for example, by installing green roofs and providing habitats for building-dwelling species, such as bats.

Activities

Each sub-area within the port has its own ecosystem and unique species. To manage the effects of site development on ecosystems and species, particularly endangered species and invasive species introduced by ships, we collaborated with Bureau Stadsnatuur Rotterdam to develop nature-inclusive measures for each sub-area.

Nature-inclusive measures			
Nature-inclusive building <ul style="list-style-type: none"> - Creating nesting opportunities for birds - Installing green roofs - Adding green facades - Placing bat boxes or openings - Providing nesting opportunities for house sparrows and common swifts 	Green outdoor spaces <ul style="list-style-type: none"> - Planting shrubs and trees - Establishing woodland plantations - Planting dry or wet dune vegetation - Constructing eco-friendly quay walls - Developing green embankments - Using semi-paved surfaces - Creating natural slopes - Designing natural green pockets - Implementing low-maintenance areas 	Water and nature <ul style="list-style-type: none"> - Opening up water channels - Introducing floating vegetation - Constructing nature-friendly banks - Creating ponds - Developing stormwater retention basins - Installing eco-modules and reef structures 	Bird facilities <ul style="list-style-type: none"> - Providing nesting sites for birds - Establishing nesting grounds for coastal birds - Providing nesting opportunities for house sparrows and common swifts

Results

To monitor and enforce our biodiversity objectives, we use precise reporting processes and evaluations to ensure we meet our goals and make adjustments where necessary. In 2025, these processes will deliver measurable results, clearly demonstrating our progress.

Target

In the 2025-2029 corporate strategy, biodiversity is a core priority. Under the focus area 'In balance with society and environment', we aim to enhance liveability in and around the port. As part of this, we have set a target to improve land biodiversity – specifically on managed sites such as infrastructure, green spaces, and pipeline corridors – by 5% by 2029 compared to 2022. Measurement of this goal will begin in 2025.

Outlook

In the coming years, we will continue our efforts to strengthen biodiversity and identify new opportunities. A new vision and policy for the period 2025-2030 is currently being developed.

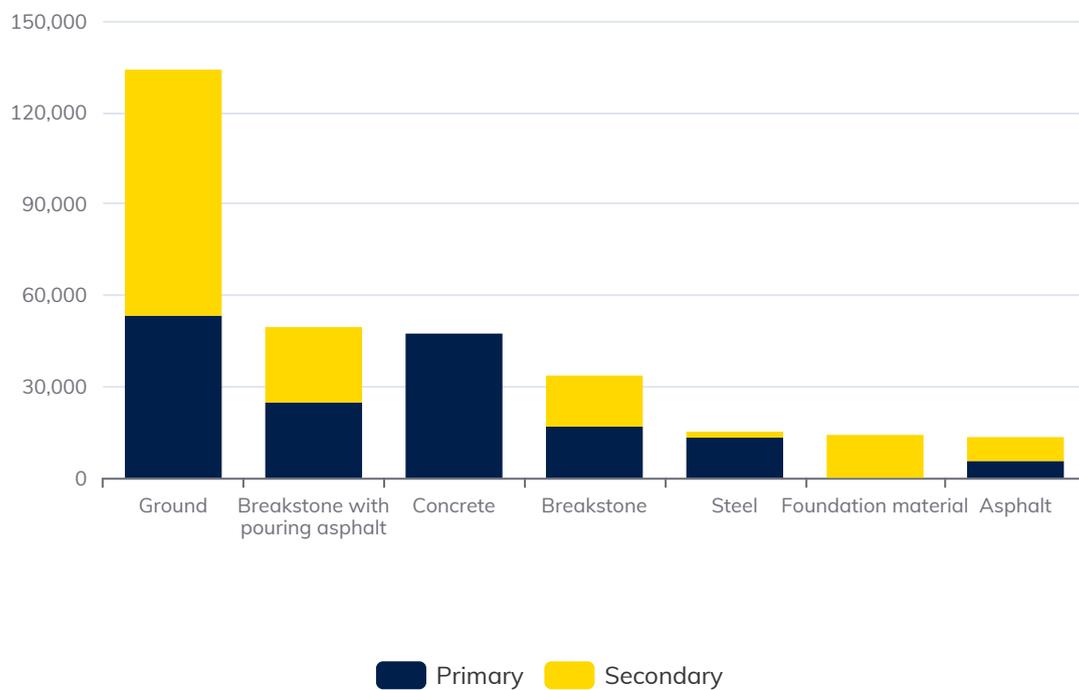
3.6 Material use by Port of Rotterdam Authority

In 2024, we used approximately 300,000 tonnes of materials for infrastructure development. About 52% of these materials came from primary sources, while approximately 48% were derived from secondary sources. Additionally, we made limited use of bio-based materials, such as wood. Materials are used not only for infrastructure projects but also for real estate, vessels and vehicles.

The graph below provides an overview of the building materials (excluding maintenance materials) used in 2024 for infrastructure development in the port of Rotterdam. It displays the quantities of key materials and the proportion of primary and secondary raw materials, as determined by our internal standards, contractor data and market averages (National Environmental Database).

The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Material usage – Infrastructure development 2024
In tonnes



Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Material usage	The use of raw materials and materials such as concrete, steel, asphalt, aggregate, soil and sand by PoR in building and maintaining infrastructure in the HIC.	Choices regarding types of raw materials, their quantity and their management may lead to the depletion of natural resources. Additionally, material consumption is closely linked to environmental impacts and ecosystem degradation.	Our management of material flows affects client perception and our licence to operate from society. Resource scarcity may result in higher costs for building materials.	We see financial potential in using certain sustainable materials by choosing non-scarce resources.

Policy

Our goal is for both our own organisation and our suppliers to be fully circular by 2050. Our circular infrastructure policy focuses on reducing raw material consumption, replacing materials with sustainable alternatives, extending product lifespan and reusing materials. This approach helps reduce CO₂ emissions from our operations and all the services and materials we purchase. We are working on establishing policies based on four key principles:

- Reducing raw material consumption (LESS): We reduce the production and use of primary raw materials through smarter designs and more efficient material use.
- Substituting raw materials (BETTER): We replace primary raw materials with secondary and sustainable bio-based materials.
- Extending lifespan (LONGER): We maximise the lifespan of products and components through reuse, refurbishment and repair.
- High-value processing (REUSE): We recycle materials at an equivalent level, such as reusing steel piles and recycled concrete.

We focus on integrating circular principles across all stages of our construction and maintenance projects. This includes supplier requirements, the use of environmentally friendly materials and encouraging innovation. In major projects, sustainability is a key factor in selection and awarding processes. The Environmental Cost Indicator (MKI) is an important criterion for integrating sustainability into tenders and construction projects.

For concrete products, such as paving stones and tiles used in road infrastructure projects by the Port of Rotterdam Authority, MKI ceiling values and minimum recycling percentages for aggregates have been established. The MKI ceiling values define the maximum allowable environmental costs per cubic metre of concrete, while the minimum recycling percentage specifies how much of the aggregates must come from secondary sources. The Port of Rotterdam Authority has set MKI ceiling values approximately 30 percentage points lower than standard market ceilings, directly reducing the total environmental impact of concrete products used in road infrastructure projects.

Ambition web

The Ambition Web is used in civil engineering projects to define sustainability ambitions at each project phase. This tool includes 12 themes, one of which is 'Materials'. Within this theme, material use is assessed based on circularity, renewability, health and environmental safety, and material production and installation. Each theme has three ambition levels, with level 1 representing the minimum improvement and level 3 representing the highest ambition. The ambition level applied depends on the scope of the project.

- Basic level: The starting point, where minimum sustainability requirements are met. The focus is on reducing the most significant negative environmental impacts and ensuring no regression.
- Significant level: A step further, setting higher targets and actively seeking ways to make a real difference. This level focuses on measurable improvements and the implementation of innovative solutions.
- Ambitious level: The highest level, aiming for the best possible sustainability outcomes. It involves progressive measures and a strong focus on long-term benefits.

Activities

Less, better, longer, reuse	
<p>Civil engineering projects</p> <p>Key activities in 2024 within our own projects included increasing the proportion of recycled asphalt in road construction and reusing concrete granulate.</p>	<p>Circular Infra and Infra Innovation</p> <p>Our Circular Infra and Infra Innovation programmes serve as an umbrella for activities related to the four core principles of our circular infrastructure policy. The objectives of these programmes are lower lifecycle costs of assets, increased throughput per berth, reduced CO₂ emissions, extended lifespan of infrastructure and reduced use of raw materials or alternative material choices.</p>

Results and outlook

Due to the varying volume and types of projects within our project portfolio, material usage fluctuates yearly. As a result, it is difficult to measure progress compared to the previous year. In 2024, we implemented measures such as asphalt with a higher percentage of recycled content and concrete with recycled granulate, with effects expected to be seen partly in 2024 and partly in 2025.

For each asset, material and project, we assess how to further reduce the impact of material usage.

Our new corporate strategy prioritises climate neutrality and circularity, with a targeted 25% reduction in CO₂ emissions from materials used in civil engineering projects by 2030 compared to 2019. Looking ahead to 2025 and beyond, we remain committed to achieving a fully circular infrastructure by 2050.

Target

We are developing a specific target for this theme. In the coming year, our goal is to explore further reductions in the use of primary raw materials and define a clear circularity target. This includes examining where raw materials can be saved, how the share of circular materials can be increased and how to minimise the impacts of material usage.

3.7 Occupational safety

The Port of Rotterdam Authority is committed to creating a working environment where everyone is safe and feels safe. We only accept safe and respectful behaviour from our employees and everyone working for us. Open communication focused on improvement is key to this. Developing and maintaining a proactive safety culture and continuously improving working conditions are the foundations of our policy. Our aim is not only to excel in safety for our own employees but also to serve as a role model for clients, contractors and other stakeholders in the port area. The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

We regard the Working Conditions Act (Arbeidsomstandighedenwet) as the minimum baseline for our obligation to provide employees with a safe and healthy workplace. By focusing on behaviour and awareness and involving employees in risk management, we continuously seek practical solutions aligned with our specific operations. Our approach is supported by the HSE (Health, Safety and Environment) Committee within the Works Council, which plays an advisory and monitoring role.

The impact of workplace accidents can be severe. Beyond the direct consequences for the individual, incidents can lead to delays in operations, loss of expertise, financial implications or reputational damage.

To prevent workplace accidents, it is essential to identify and manage risks. For all employees – both permanent and contracted – risk assessments and evaluations for various activities and locations are essential tools for raising awareness and ensuring compliance with safety agreements. We assess both the working environment (situational factors) and employee behaviour to determine whether physical and organisational control measures are suitable for the identified risks. Additionally, we encourage employees to carry out a 5xYES (last-minute risk analysis) before starting or modifying activities to ensure that work can be performed safely.

Employees engaged in operational tasks, such as shipping masters, inspectors and maintenance personnel, face higher risks than those primarily working in an office setting. Therefore, risk control measures for these roles are more extensive. Examples include intensive training programmes and physical protection equipment.

For contracted work, the primary responsibility for safe execution lies with the contractor. However, the Port of Rotterdam Authority collaborates with contractors to proactively address risks in project risk sessions and contractor health and safety plans. We ensure that contractors comply with the agreed safety measures through supervision and inspections.

Topic	Definition	Impact	Risks	Opportunities
Health and safety	Ensuring workplace safety within PoR and across our projects.	A safe working environment for everyone – including PoR employees and contractors – reduces the number of work-related accidents and occupational illnesses. A strong safety culture also contributes to employee well-being and job satisfaction.	During work activities, employees and contractors may sustain injuries, leading to absenteeism or reduced productivity. An unsafe working environment may also discourage people from wanting to work in the port.	Compliance with safety standards and regulations strengthens our reputation as a reliable and responsible employer and business partner, ultimately enhancing our competitive advantage. This positive safety culture also benefits our contractors and other stakeholders in the Port and Industrial Complex (HIC).

Policy

'Healthy and Safe Home' is the core of our policy. This applies to permanent and temporary employees, as well as externally contracted staff. Given the diversity of activities among office personnel, operational staff and contractors across different departments, we believe it is essential to promote a shared vision of safety. The Port of Rotterdam Authority's Health & Safety Policy Statement outlines our commitments, actions and accountability. This policy is communicated during new employee onboarding, in contracts and via our [website](#).

In our corporate strategy, occupational safety is included as a key performance indicator (KPI).

Activities

Each year, we establish a safety plan based on trends and root cause analyses of observations from our own operations and contractor activities. Changes in laws and regulations may also prompt targeted safety initiatives. In 2024, we addressed several specific areas:

Healthy and safe home	
Together with contractors <ul style="list-style-type: none">- Standardising more ambitious contract provisions related to occupational safety, challenging contractors to further integrate safety into project planning and execution.- Implementing an updated Integrated Safety Plan and Incident Protocol for projects to promote effective risk management among contractors. Design choices now not only prioritise safety during construction but also include innovative solutions for safe maintenance.	For and by PoR employees <ul style="list-style-type: none">- Simplifying safety round reporting by expanding the SafetyNow reporting application with a 'Safety Walk & Talk' module, including changes to the dashboard with project information.- Further integration of business continuity and crisis management plans.- Developing a training video on the use of personal protective equipment.- Creating a comprehensive well-being vision, consolidating various initiatives to support employees' physical and mental health.

Results

We monitor the effectiveness of our safety initiatives using qualitative and quantitative indicators to ensure continuous improvement. Occupational safety was included in the 2024 employee survey, where physical safety received an average score of 8.6 out of 10. Our goal is to reduce workplace accidents to zero while maintaining an open reporting culture.

In 2024, we recorded 2 lost-time incidents (LTIs) among PoR employees, resulting in a Lost Time Injury Frequency Rate (LTIFR) of 0.79. 7 lost-time incidents among contractors. 1 case of an occupational disease, as confirmed by the company doctor in 2024.

Target

Material topic	(Critical) Performance Indicators	Target 2024	Realisation 2024	Realisation 2023	Realisation 2022
Health and safety (PoR + Port)	Lost time injury frequency rate (LTIFR) (PoR employees)	< 0,5	0.79	0,41	0.43
	Work-related incidents PoR requiring medical attention or worse - frequency (TRIFR)	<2	1.59	-	-
	Number of work-related incidents with lost time > 1 day in contracted work	No established norm yet	7	8	-
	Work-related incidents PoR requiring medical attention or worse	< 10	4	-	-
	Number of confirmed occupational diseases among PoR employees	0	1	1	12

Outlook

A key trend in lost-time incidents is the high number of crush injuries (mainly to fingers), often occurring during routine activities. In 2025, we will continue focusing on proper work preparation and raising awareness to prevent such incidents.

To identify these trends, we will encourage employees to report both unsafe situations and positive observations using the SafetyNow application. We will also update our in-house safety training to better align with daily work practices and continue sharing safety information via our internal intranet.

Additionally, we recognise the growing complexity of projects, including: More subcontracting layers, language barriers and labour shortages. These factors impact construction site safety, and we will explore practical measures to manage these risks.

Together with employees, temporary workers, clients and contractors, we will continue to prioritise safety.

3.8 Working and working conditions in the port

Rotterdam is Europe’s largest port, bringing together many different supply chains with links across the world. As the Port of Rotterdam Authority, we are committed to fostering an inclusive, safe and attractive working environment – both for our own employees and for all employees in the port of Rotterdam. Our efforts contribute to the attraction, retention and development of talent, workforce and expertise – while also aiming to prevent, reduce and eliminate human rights violations, poor working conditions, environmental damage and corruption in supply chains. This is crucial for the investment climate, reputation, social support and competitive position of the port of Rotterdam.

We take a proactive approach – addressing these issues head-on and using our influence to contribute to solutions rather than looking away from potential problems. However, our level of influence varies depending on the situation. We have greater influence over our clients and suppliers in our direct value chain than in the value chains of their clients and suppliers. We use our influence by bringing stakeholders together to raise awareness or take action – by sharing our knowledge and network – or by advocating for policies and regulations.

This chapter focuses on employment, learning and working conditions within both the port and industrial complex and the Port of Rotterdam Authority itself. Additionally, we address our broader responsibilities in the value chain. The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Working and working conditions in the port (safe and inclusive port)	Ensuring a safe and inclusive working environment and sufficient relevant employment in the Port and Industrial Complex (HIC).	Promoting equal treatment and opportunities for employees in the HIC – including gender equality, diversity, a safe work environment with measures against undesirable behaviour, and opportunities for development.	A mismatch between talent, education and job availability may reduce interest in working in the port, increasing the risk of labour shortages. A labour shortage affects efficiency and port growth, which directly impacts our business revenue and investment ambitions.	Promoting a safe and inclusive port enhances support for working in the port, improves workforce quality and strengthens the port's future resilience.
Working and working conditions in the port (working conditions)	Ensuring a safe and healthy port that contributes to an economically and socially healthy city.	Advocating for good terms of employment, including freedom of association, fair wages, appropriate working hours and job security for employees in the HIC.	Failing to protect terms of employment and labour rights may result in reputational damage and reduced attractiveness of the port as a workplace.	PoR is challenged to actively ensure that partners in the value chain uphold labour rights and to remain vigilant in combating criminal activities in the port.
Working and working conditions in the port (other labour rights)	Ensuring human and labour rights and preventing human rights violations.	Preventing human rights violations in the HIC and the entire value chain.	Human rights violations in the HIC or our value chain pose a risk of reputational damage and the potential for costly remedial measures, such as fines.	Ensuring human and labour rights in our supply chain through a strict due diligence policy forms the foundation of our licence to operate and the support for working in the port.

Policy

We safeguard labour rights through various policy instruments. A collective labour agreement ensures labour rights for our own employees. Additionally, we have a [privacy policy](#) and a [diversity and inclusion policy](#). In line with international guidelines, such as the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines, our [human rights policy](#) is embedded in our [code of conduct](#) - which includes our grievance and whistleblower procedures. For new international activities, we conduct a due diligence check before engaging in the activity. In 2024, this applied to three new hydrogen projects. If the assessment identifies risks, we develop mitigation measures to address them. For certain procurement categories, we have established specific requirements, such as for the procurement of IT and infrastructure. As port manager, we influence various companies and stakeholders, particularly contractual partners such as tendering partners and clients. We impose human and labour rights requirements on our clients and suppliers and conduct regular audits and assessments to ensure and improve compliance. The extent of our influence over the value chains is illustrated in the figure below, followed by a detailed explanation of our policy.



Our suppliers

When selecting contractors, we expect them to respect labour rights and human rights. Through our Human Rights Due Diligence process, we identify the key risks of human rights violations in our procurement activities. The risk of corruption or human rights violations in procurement is explicitly included in our top risk landscape. We have a [Supplier Code of Conduct](#) to ensure good working conditions, and reserve the right to conduct audits.

Our clients

Employees in the port must be able to work in a safe, inclusive and healthy environment. Safety within the port of Rotterdam and industrial complex is a key priority. Our business code states that we only do business with socially responsible parties that do not engage in wrongdoing such as corruption, environmental or safety violations, child labour or human rights abuses.

Clients' clients

The port of Rotterdam plays a crucial role in global supply chains. Our clients, including established businesses and shipping companies, are part of these chains. As the port manager, we have limited influence over cargo flows. As highlighted in the 'cargo flows in the value chain' diagram, we are connected to the upstream and downstream supply chains of our clients but do not have direct control over them. We use our influence in various ways, such as engaging with stakeholders and partners. The import, throughput and use of raw materials in production processes within the port take place safely, efficiently and with increasingly cleaner environmental technologies. We aim for clean and safe trade and seek to reduce the negative social impact of products passing through our port. Society is becoming increasingly critical of the origins of freight and is holding us accountable more frequently. We strive to use our position to mitigate the risks associated with the negative impacts of cargo flows. For example, we actively engage with stakeholders who file complaints about human rights violations in the value chain. In 2024, this was done multiple times by activist groups concerning cargo flows such as coal, LNG, and hydrogen.

Activities

Safe and inclusive port

The Port of Rotterdam Authority contributes to a safe and inclusive port through various initiatives, including attracting (new) talent, promoting labour mobility, enhancing inclusivity and diversity, and increasing the visibility and appeal of working in the port of Rotterdam. We see developments in the labour market, education sector and demographics that pose risks to the safety, inclusivity, and attractiveness of the port. Many of these challenges are national issues rather than port-specific. However, despite their national scope, we take a proactive role in mitigating these risks and ensuring that the port remains an attractive, safe and inclusive workplace. We firmly believe that everyone should have the opportunity to find a job in the port and feel welcome to work here.

Human Capital Coalitaton for the Energy Transition (HCCE)



Within the Human Capital Coalition for the Energy Transition (HCCE), companies collaborate with various stakeholders to address these challenges. This coalition serves as a regional platform for transition initiatives, focusing on attracting, retaining and developing talent, workforce and expertise. The coalition is working on five breakthrough projects, which have delivered various results in 2024.



One of these projects is www.werkeninderotterdamsehaven.nl, aimed at promoting the visibility and attractiveness of working in the port of Rotterdam. Additionally, 30,000 primary and secondary school students are introduced to the port of Rotterdam each year. Further initiatives include the development of the toolbox inclusiehaven.nl, designed to enhance inclusivity and diversity within the port business community, the establishment of the centre for energy transition, and the employment of approximately 200 status holders in the port and industrial complex. Eighty per cent of companies report that the 'Working in the port of Rotterdam' campaign has been successful. The Port of Rotterdam Authority is proud that our clients recognise and appreciate the projects within the Human Capital Coalition for the Energy Transition.

Human Capital Coalition for the Energy Transition

Human Capital Coalition for the Energy Transition

In 2023, six parties signed the Human Capital Coalition for the Energy Transition (HCCE) declaration of intent. Deltalinqs, Rotterdam University of Applied Sciences, Techniek College Rotterdam, the Shipping and Transport College (STC), the Municipality of Rotterdam, and the Port of Rotterdam Authority work together on a structural basis. The coalition is committed to attracting and developing talent, workforce and expertise, ensuring that the right skills are available to support the energy transition in the port and industrial complex.

Ongoing initiatives

- Enhancing the visibility and attractiveness of working in the port of Rotterdam.
- Increasing the number of applicants per vacancy in the port.
- Encouraging more graduates from vocational (MBO), higher professional (HBO) and university (WO) education to pursue careers in the port.
- Investing more in lifelong learning opportunities for students and employees.
- Promoting diversity and inclusive employment practices.
- Strengthening the port of Rotterdam's positioning in the (international) market.

Achievements

- *Werken in de Rotterdamse haven.nl* campaign with 19+ million visits per year.
- Continuous learning line to make the port visible and knowable among young people (aged 8 to 18) in which EIC Mainport, Youth INCorporated, Maritime Museum, IT Campus and Tax & Customs Museum collaborate.
- The inclusive toolbox inclusiehaven.nl.
- Attracting international talent, with 200+ status holders employed in the port.
- Improving conditions for migrant workers.
- Focusing on retaining international students for the port of Rotterdam and labour market.

Inclusive and diverse port

Social innovation team

Collaboration between government, education, businesses and research institutions plays a key role within the social innovation team. Through this team, we work together with these partners on social innovation initiatives. Stakeholders within the port and industrial complex recognise that current challenges are too significant to tackle individually.

Therefore, we aim to align existing and new initiatives. To achieve this, we are developing a programmatic and integrated approach to improve collaboration between education and the labour market. This approach has resulted in the Human Capital Coalition for the Energy Transition. This focuses on inspiring, training, and reskilling the workforce needed for the energy transition in the port.

Initiatives

We participate in various initiatives, including Women at the port, Inclusive port, Rotterdam works and Facta non verba, to promote an inclusive port and enhance labour mobility. Additionally, we provide businesses with tools, such as an inclusivity scan and workshops on inclusion, to support their efforts in diversity and inclusion. We are also actively engaged in Rotterdam's neighbourhoods through our presence in neighbourhood hubs. The goal is to use these hubs to reach a more diverse workforce. One example is our involvement in the recently opened neighbourhood hub in Pendrecht-Zuidwijk, one of Rotterdam's most disadvantaged areas.

Working conditions

The Port of Rotterdam Authority remains committed to preventing labour rights violations in the Rotterdam port and industrial complex, including freedom of association, fair wages, appropriate working hours and job security. Ensuring these rights is essential to us, as a safe and healthy working environment makes the port attractive to both employers and employees. As a socially responsible organisation, we also see protecting labour rights as our duty, which is why we actively invest in this area. We work towards ensuring proper working conditions in the port to safeguard labour rights and prevent their deterioration. This is achieved through close collaboration with various partners and businesses within the port.

Working conditions and other labour rights

PoR as a role model

Developing and maintaining a proactive safety culture and continuously improving working conditions are the foundations of our policy. The Port of Rotterdam Authority aims not only to excel for its own employees but also to serve as a role model for clients, contractors and other stakeholders in the port area. As a contracting authority, the Port of Rotterdam Authority must ensure that its contractors have the capability to minimise risks related to working conditions as much as possible.

Other activities

We provide workshops, conduct audits and organise activities in collaboration with NGOs and stakeholders to further support our policy. For large projects, we carry out social impact assessments to identify the potential effects on local communities and mitigate any negative consequences. We conduct due diligence investigations on potential (international) partners to safeguard integrity and carry out regular inspections, including within our control framework for procurement activities.

Other labour rights

We recognise our responsibility to society and have formalised this commitment in our [CSR-statement](#). We see opportunities for further collaboration with our direct partners and suppliers to increase awareness of the impact they have within their supply chains.

We aim to prevent human rights violations at all times, both in our direct and indirect value chains. Through our Human Rights Due Diligence process, we have identified where risks of human rights violations may arise. We strongly condemn human rights violations, such as forced labour in the port or within the indirect value chain. Such violations not only conflict with our values but can also lead to reputational damage or financial consequences in the form of compensatory measures. By actively implementing our policy, we combat human rights violations among our partners. We are aware of our connection to cargo flows passing through the port and take responsibility for them. Even for entities further removed from us, we remain committed to preventing human rights abuses.

Results

The Port of Rotterdam Authority regularly evaluates and reports on the results of its human rights policy. This includes measuring the effectiveness of the measures implemented and identifying areas for improvement. Our human rights policy is integrated into our overall risk management system and is reviewed twice a year. The results of both internal and external audits are shared to ensure transparency and accountability. We hope that our efforts will lead to greater awareness of human rights issues among both our employees and partners. Additionally, we have observed that the Executive Board and the Supervisory Board place increasing importance on the OECD Guidelines. Respecting human rights presents opportunities to strengthen our reputation, improve stakeholder relations and drive sustainable growth.

The Human Capital Coalition Energy Transition (HCCE) evaluates its progress and results every quarter. A quarterly report is submitted to the HCCE Steering Committee.

Through our collaboration with educational institutions and businesses, we are helping to reduce the skills gap between talent and job opportunities and to increase young people's interest in a career in the port. This collaboration remains essential, as the labour market continues to evolve and requires adaptability from young talent.

Target

In our new corporate strategy (2025–2029), 'In balance with society and the environment' is a key priority, with defined key results. As of 2025, we have established the following key result: 'Promoting a balanced and inclusive labour market.'

Outlook

We remain committed to enhancing our policy and its implementation in practice. Future steps include strengthening collaborations, expanding training programmes, and further integrating sustainability and human rights into our corporate strategy. By critically reviewing internal regulations and working closely with stakeholders, we aim to build a responsible and sustainable future. This forward-looking approach is embedded in our new corporate strategy, which will take effect from early 2025.

3.9 Subversive crime

Subversive crime involves serious criminal activities where criminals exploit legitimate businesses and service providers for illegal purposes. This blurs the lines between the criminal underworld and the legitimate economy. The port of Rotterdam is increasingly affected by this issue, with criminals targeting companies and their employees to gain information and access to sites. The recruitment and bribery of port workers are often accompanied by intimidation.

While we have no formal legal obligation (the Harbour Master has supervisory duties under the Port Security Act), we feel a strong social responsibility to combat this issue in cooperation with our partners such as FIOD, the Public Prosecution Service, Deltalinqs, Customs, and the Ministry of Justice and Security. Subversive crime is a top priority – we do not want it in our port. The Port of Rotterdam Authority's objective is: 'To make it as difficult as possible to misuse the port of Rotterdam for drug-related and subversive crime while protecting our assets.' The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Subversive crime	Combatting illegal activities in the port and industrial complex (HIC).	Increased crime leads to a reduced sense of security, affecting the safeguarding of human and labour rights.	The reputation of the port of Rotterdam may suffer, impacting public support and the port's attractiveness as a place to work and invest.	Strengthening cooperation with trusted partners in the Secure Chain helps mitigate risks. The smart innovation systems developed to combat crime enhance Rotterdam's attractiveness as a major port with high throughput.

Policy

As the Port of Rotterdam Authority, we are responsible for the design and management of port assets, contracting new clients and allocating sites. To make drug-related crime more difficult, we aim to create barriers that make the port less attractive for such criminal activities. Employees in the port may unknowingly come into contact with crime.

We inform our employees on how to recognise and report criminal activities in the port, for example, through our intranet page. If a colleague receives a suspicious request potentially linked to criminal activities, they can report it in various ways – to their manager, an internal or external confidential advisor, or through our whistleblowing procedures as outlined in our [company code of conduct](#). In cases of suspected integrity violations or wrongdoing within the Port of Rotterdam Authority, reports can be made through multiple channels

Activities

We work closely with the Municipality of Rotterdam, the Seaport Police, the Public Prosecution Service and Customs to combat smuggling, threats and logistical disruptions. Our role includes managing port assets, contracting new clients and allocating sites. To hinder drug-related crime, we implement barriers that make the port a less attractive target for criminals.

Barriers in the port

Virtual fence

More than 300 smart cameras have been installed at strategic locations to improve surveillance, increase the likelihood of catching criminals and strengthen evidence collection. Using intelligent software, the system can detect illegal patterns early, triggering alerts for Customs and Police control rooms. The Harbour Master's Division also uses the system for waterway surveillance. In 2024, the number of cameras further increased.

Security by design

For business sites yet to be developed that are at risk, we assess physical security and impose additional security requirements where necessary.

Collaborations

We organise and facilitate meetings between businesses in high-risk sectors and public partners such as Customs, Police and the Municipality of Rotterdam. These knowledge platforms serve to exchange information, discuss best practices and share the latest developments in combating subversive crime.

Secure Chain

Since 1 April 2024, deep-sea containers from Latin America have been securely and reliably released in the port of Rotterdam via the Secure Chain. This system enhances security and combats crime by ensuring that only authorised parties can collect containers. In July 2024, the system was extended to container cargo from North America, and in October 2024, it was expanded to container cargo from Africa, the Middle East, India and Pakistan. Eventually, the Secure Chain will apply to all deep-sea containers arriving in Rotterdam.

Harbour Master René de Vries: "In the port of Rotterdam, hundreds of thousands of import containers were securely and reliably released digitally in 2024 via the 'Secure Chain'. Shipping companies issue PIN numbers for these containers that are not susceptible to fraud. Since 1 April, this method has applied to all import containers from Latin America, since 1 July to those from North America, and from 1 October 2024 to cargo from Africa, the Middle East, India and Pakistan. Eventually, all deep-sea import containers in the port of Rotterdam will be processed through the Secure Chain. The shipping company, shipper, freight forwarder and carrier digitally transfer authorisation for container collection, creating a closed supply chain accessible only to authorised parties. Businesses and government bodies are working together to enhance the digital resilience of port logistics."



Screening employees

Screening

In 2023, we decided to carry out a standard screening in the recruitment and selection of new employees that is more extensive than applying for a Certificate of Good Conduct (VOG). Since 2024, we also verify identity, diplomas and references. Additionally, employees must sign an integrity statement. For new employees in high-security risk roles, such as managers, an additional screening process is required, tailored to the nature of the role. This screening will also apply to external employees.

Implementation and results

We outsource screening investigations to a specialised party, ensuring both privacy protection and an integrity-focused screening process. If the Port of Rotterdam Authority does not receive a screening result – such as in cases where an individual refuses screening – this may result in the candidate not being hired or an existing employee losing access to certain systems or being restricted from performing specific tasks.

Target

Material topic	(Critical) Performance Indicators	Target 2024	Realisation 2024	Realisation 2023	Realisation 2022
Subversive crime	Increasing awareness	8	7.9	-	-

The 'subversive crime' programme primarily focuses on severe security breaches in the port, including drug smuggling, human trafficking, fraud and corruption. To assess our progress in raising awareness, we asked our supply chain partners in the Implementation Agenda to evaluate the Port of Rotterdam Authority's success in increasing awareness of criminal infiltration over the past year. Our target score was 8, but respondents rated us at 7.9, meaning we narrowly missed our objective. Due to a change in calculation methodology, the 2024 figure cannot be directly compared with the 2023 figure.

Outlook

We take pride in the outstanding facilities and natural advantages of the port of Rotterdam. Unfortunately, criminals also exploit these advantages. While we can never completely eliminate drug trafficking through the port, we will continue to collaborate with our partners in the implementation agenda to combat smuggling, address associated threats and prevent logistical disruptions. This is not only our social responsibility but also crucial for maintaining the integrity, security and competitive position of the port.

In the coming years, we will continue to invest in further optimising algorithms to reduce the risk of criminal infiltration.

3.10 Port disruptions

In a time of increasing uncertainty due to climate change, cyberattacks and geopolitical tensions, the Port of Rotterdam Authority aims to ensure that the Rotterdam port remains resilient and robust. The uncertain economic and geopolitical context impacts market and logistics activities. We aim to enhance resilience and adaptability to respond swiftly to economic fluctuations, physical and digital disruptions in supply chains, and unexpected climate events. This chapter outlines the themes of cybersecurity, geopolitical tensions and climate adaptation. The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Port disruptions (climate adaptation)	The port and industrial complex (HIC) is affected by the physical risks of climate change. Rising sea levels and extreme weather may impact port infrastructure and assets of the PoR and our clients.	PoR has no material impacts in the area of climate adaptation.	Implementing climate-adaptive measures, such as raised quay walls, results in increased investment and maintenance costs for infrastructure. The HIC's lack of resilience to the physical risks of climate change could result in operational disruptions, leading to a decline in throughput and a deterioration of the investment climate.	PoR works closely with clients and other stakeholders to enhance the resilience of the environment through climate-adaptive measures.
Port disruptions (cybersecurity)	The disruption of PoR operations due to cybercrime affecting port processes.	PoR has no material impacts in the area of cybersecurity.	The disruption of operations due to cyber threats may impact port activities reliant on our systems. This could result in reduced throughput and decreased client confidence.	Developing a secure, resilient port alongside increasing connectivity within the port presents opportunities to further optimise logistics processes and accelerate port digitalisation.
Port disruptions (geopolitical conditions)	The disruption of operations in the HIC due to geopolitical tensions, such as a trade war or terrorist attacks.	PoR has no material impacts in the area of geopolitical tensions.	Geopolitical tensions may lead to security risks, such as a terrorist threat, which could negatively impact client confidence. Geopolitical tensions could also reduce throughput due to factors such as regulatory boycotts or increased import tariffs.	Strengthening the resilience of the port of Rotterdam against geopolitical tensions fosters greater cooperation and connectivity among stakeholders.

Policy

Climate adaptation

Through our adaptation strategy (implementing flood risk measures over time and in coordination), we ensure that the port remains protected against flooding. In all new investment projects and maintenance programmes, we assess whether to invest more in flood risk management measures. We also incorporate flood risk management considerations in new contracts and contract extensions.

We assess medium- and long-term climate change impacts, map out potential effects, and set priorities. In total, we have identified 26 climate-related topics that could affect the port, with six key topics posing higher risks. We apply three types of measures to prepare for the effects of climate change: preventive measures, spatial adaptation and crisis management.

The following medium- and long-term climate issues are prioritised and addressed through a structured programme:

1. Rising sea levels – increased flood risk for companies and public infrastructure.
2. Saltwater intrusion – availability of freshwater supply for industry.
3. Extreme rainfall – ensuring safe accessibility of infrastructure.
4. Lower river levels on inland shipping corridors – accessibility of the hinterland for inland vessels.
5. Extreme wind conditions – safe mooring of vessels.
6. Extreme weather in relation to reduced manoeuvring space on the North Sea.

Cybersecurity

The Port of Rotterdam Authority has a legal obligation regarding cybersecurity. The government classifies the handling of shipping traffic as a critical service. We demonstrate compliance with the Network and Infrastructure Security Act (Wbni). Additionally, we adhere to the General Data Protection Regulation (GDPR).

Geopolitical tensions

As a global logistics hub, the port of Rotterdam faces significant challenges due to geopolitical tensions that impact world trade and port operations. To address this, we are strengthening the position of the port and industrial complex by enhancing our flexibility, resilience and adaptability. We achieve this by investing in innovative technologies and sustainable solutions, ensuring that we remain a reliable and attractive partner for (inter)national clients.

Activities

Climate adaptation

Rising sea levels

The port of Rotterdam is predominantly located outside the dikes, meaning that dikes and flood barriers do not provide full protection. This makes the port vulnerable to rising sea levels. Climate scenarios predict a sea level rise of 26 to 124 centimetres by 2100, affecting flood risk management. Although port sites are relatively elevated and storm surge barriers offer partial protection, we remain vigilant. We participate in the 'Delta Programme Rijnmond-Drechtsteden' and are involved in the 'Sea Level Rise Knowledge Programme'. Within these programmes, we collaborate on flood risk management and accessibility during high water events.

Businesses and asset owners in the unprotected areas of the port bear the risks of water damage and must take their own preventive measures. They have received guidance on flood risk management, and an information page offers 50 measures they can implement. In cooperation with the Municipality of Rotterdam and other stakeholders, we are developing adaptation strategies to ensure resilience to flooding. These strategies and flood probability assessments are available on the information page.

Saltwater intrusion

Due to rising sea levels and low river discharges, saltwater intrusion is increasing. This affects companies that extract freshwater from the Brielse Meer freshwater basin. In collaboration with the Hollandse Delta district water board and the Delfland Polder Board, we are implementing measures to strengthen the freshwater system.

Extreme rainfall

Climate change is leading to increased precipitation and more frequent extreme downpours. Prolonged or intense rainfall can cause localised flooding, potentially disrupting the safe use of infrastructure.

Low river levels on inland shipping corridors

Extended drought periods will result in lower water levels in rivers such as the Rhine and Maas. Long-term projections suggest that the likelihood of (excessively) low water levels will increase from once every 60 years now to once every 10 years by 2050, assuming a scenario of rapid climate change. Together with Rijkswaterstaat and inland waterway organisations, we are exploring ways to maintain accessibility for the inland vessels under such conditions. Rijkswaterstaat provides real-time water level information via its [Water Information Portal](#).

Extreme wind conditions

While overall wind conditions are not expected to change significantly, we anticipate an increase in storms in the Rotterdam port area. Extreme wind conditions pose risks to shipping, particularly when it comes to safe mooring. Large container ships, which have high wind exposure, may break loose from their berths. To address this, research institutes are improving wind condition forecasting. Additionally, we are investing in mooring innovations, such as smart bollards, quick-release hooks and shore-tension systems. We are also exploring decision-support software to assess which ships are at potential risk during forecasted wind events. These types of developments help ensure safe navigation through the port and secure mooring.

Safe manoeuvring on the North Sea

As North Sea activity intensifies, combined with extreme weather events, access to the port of Rotterdam for shipping may become more challenging, increasing the risk of collisions.

Cybersecurity

The Port of Rotterdam Authority is actively working to narrow the gap between growing cyber threats and the resilience of the port and industrial complex. Each year, we implement targeted measures based on digital threat analyses to strengthen our cyber resilience. We enhance our security posture by participating in FERM, the Port ISAC (Information Sharing and Analysis Centre), the European Maritime ISAC and the annual Cybernautics exercise. We follow a 'defence in depth' strategy, aligning with international standards and recommendations from the National Cyber Security Centre (NCSC). Additionally, we collaborated with our BOZ (Dutch Seaports Association) partners (Amsterdam, Groningen Seaports, Moerdijk, and North Sea Port) to develop the National Cyber Strategy for resilient seaports, resulting in the Cyber Strategy for Dutch Seaports. In December 2024, the FERM foundation was officially transformed into a national cybersecurity platform for all Dutch seaports, marking a significant step forward in collective cyber defence.

Geopolitical tensions

We work closely with our stakeholders to mitigate the impact of geopolitical changes. We develop scenarios and plans to respond swiftly to market shifts. Through this proactive policy, we manage risks and seize opportunities. We also focus on diversifying our trade flows. By exploring new markets and strengthening existing relationships, we reduce our dependence on specific regions, ensuring stability regardless of the geopolitical situation.

Results

Target

We have established two objectives for this area:

Material topic	(Critical) Performance Indicators	Target 2024	Realisation 2024	Realisation 2023	Realisation 2022
Port disruptions	No incidents in vital systems (cybersecurity)	0	0	0	0
	Quality of port infrastructure	7	7.6	7.4	8.8

The standard for 'no incidents in vital systems' is always zero. In 2024, no incidents were reported, meaning we met our target.

The quality of our port infrastructure is measured through five sub-KPIs:

1. ISO certification
2. Percentage of water surface at Nautically Guaranteed Depth (NGD)
3. Traffic flow across seven key road corridors
4. Availability of shore-based radar systems
5. Availability of Portbase's Port Community System (PCS)

The combination of physical (1 to 3) and digital infrastructure (4 and 5) demonstrates that both components play a crucial role in the infrastructure of the port and industrial complex. We express quality as a score, with a target of at least 7.0. In 2024, we achieved a score of 7.6, successfully meeting the target.

In our new corporate strategy (2025 to 2029), 'Resilience, security of supply & strategic autonomy' is a key focus area for which we have defined key results. For 2025, we have set the key result objective of 'increasing the flexibility and resilience of the port'. From 2025 onwards, we will measure progress against this target.

Outlook

Cybersecurity, geopolitical tensions and climate adaptation require continuous attention and proactive measures to safeguard the continuity and security of port operations. We are strengthening our cybersecurity measures by investing in advanced technologies and intensifying (inter)national collaboration. To minimise the impact of geopolitical tensions, we are enhancing cooperation with key partners. In the field of climate adaptation, we are implementing sustainable solutions and investing in climate-resilient technologies. This stems from our collaboration with experts and scientists, who support us in developing innovative strategies to make the port more resilient to climate change.

3.11 Noise and odor nuisance

A high-quality environment within and around the port and industrial complex is essential to attract investment and ensure an area where people can live, work and enjoy recreation. To achieve this, we engage in dialogue with stakeholders. The economic and societal value of the port is closely tied to environmental quality, which includes factors such as noise and odor nuisance. How local residents perceive the port of Rotterdam is important for maintaining public support.

The space available for industrial noise and odor emissions is limited, making careful management essential. Noise and odor disturbances stem from various sources, including road transport and industrial activities. The Noise Pollution Act (Wet geluidhinder, Wgh) sets threshold values for noise levels at sensitive locations such as residential areas. For odor nuisance, spatial planning regulations and company-specific measures apply. The policy and activities described stem from our [corporate strategy](#), with decision-making taking place through our [governance structure](#).

Effects, risks and opportunities

Topic	Definition	Impact	Risks	Opportunities
Noise and odor nuisance	Minimising noise and odor nuisance for residents living near the port and industrial complex.	Odor and noise pollution are not always directly harmful to health but contribute to secondary health impacts such as stress and sleep disturbances, reducing quality of life. New housing developments closer to the port may be less attractive due to nuisance concerns.	PoR has no material risks related to noise and odor nuisance.	PoR has no material opportunities related to noise and odor nuisance.

Shared responsibility

Multiple parties collaborate on managing noise and odor in the region, including Rijnmond DCMR Environmental Protection Agency, the Province of South Holland and the Municipality of Rotterdam. These authorities jointly manage noise regulations, allocate noise budgets and ensure compliance with environmental legislation. The DCMR verifies industry reports and incorporates noise budgets into their environmental permits.

Policy

Our policy focuses on developing a thematic environmental plan as part of the Harbour Noise and Environment Programme. This plan helps us establish a new balance between living, working and environmental quality. We are working on a long-term monitoring programme to gain more insight into the noise production of moored vessels. Until our thematic environmental plan is finalised, we are using a temporary approach for noise levels. For odor, as with other environmental themes, a duty of care applies: we must prevent or limit odor nuisance as much as possible to an acceptable level (Article 2.1 of the Activities Decree Environmental Management (Activiteitenbesluit milieubeheer, Abm). Companies requiring an environmental permit may be subject to specific tailored regulations in addition to general rules. We focus on reducing noise pollution and odor nuisance through source-oriented and effect-oriented measures. We have made agreements within the Regional Agreement on Noise and Spatial Development (RAK) and the Noise Space Agreement for the Waal-/Eemhaven to manage and reduce the impact. These agreements ensure good communication and coordination between the parties involved in both housing plans and developments within the port area.

Activities

Noise and odor			
Source-based measures We are reducing the number of vehicles, using quieter engines and tyres and optimising the modal split to limit transport movements. For odor nuisance, technical measures are enforced through regulations, such as those outlined in the Environmental Management (Activities) Decree.	Impact-based measures Our ongoing projects include the construction of noise barriers to reduce noise pollution along roads. For odor control, we use the e-nose network to detect and predict odor nuisances, allowing companies and municipalities to respond more quickly to the release of nuisance or hazardous gases.	New technologies and innovations We use shore power for moored vessels, reducing noise pollution by eliminating the need for onboard generators.	Collaboration and communication Effective communication and coordination between stakeholders help prevent surprises and conflicts and enable the development of effective solutions together. We work with Rijnmond DCMR Environmental Protection Agency, municipalities and companies to monitor environmental quality and take action when changes in air composition occur.

Results

We have taken several steps to achieve our goals. We have updated our agreements with regional municipalities and launched a monitoring programme to measure noise from moored vessels. Under the ESI Noise programme, seagoing vessels receive a financial discount if they can demonstrate how much noise they produce while moored. Additionally, we have established new agreements on noise levels and explored how health considerations play a role in the planning and design of spatial areas.

Target

As part of our new corporate strategy, which runs from 2025 to 2029, 'in balance with society and the environment' is a key focus area, for which we have defined 'key results'. As of 2025, we have formulated the following key result: 'improving liveability in and around the port'.

Outlook

We are making new working agreements to further reduce nuisance and improve the quality of the living environment. The monitoring programme will continue to collect more data and implement targeted measures based on the findings. By addressing noise levels in new housing developments appropriately, we can implement noise-reducing measures to better protect residents from port-related disturbances.

3.12 Governance

Governance structure and management

The Port of Rotterdam Authority is a non-listed public limited company with two shareholders: the Municipality of Rotterdam (70.83%) and the Dutch State via the Ministry of Finance (29.17%). Through their interest in the Port of Rotterdam Authority, the shareholders safeguard the following public interests:

- Nautical safety in the port.
- The continuity and quality of the port of Rotterdam as a vital link in the mainport, efficient market relations, and sustainable land use.
- The sustainability of the port and industrial complex.

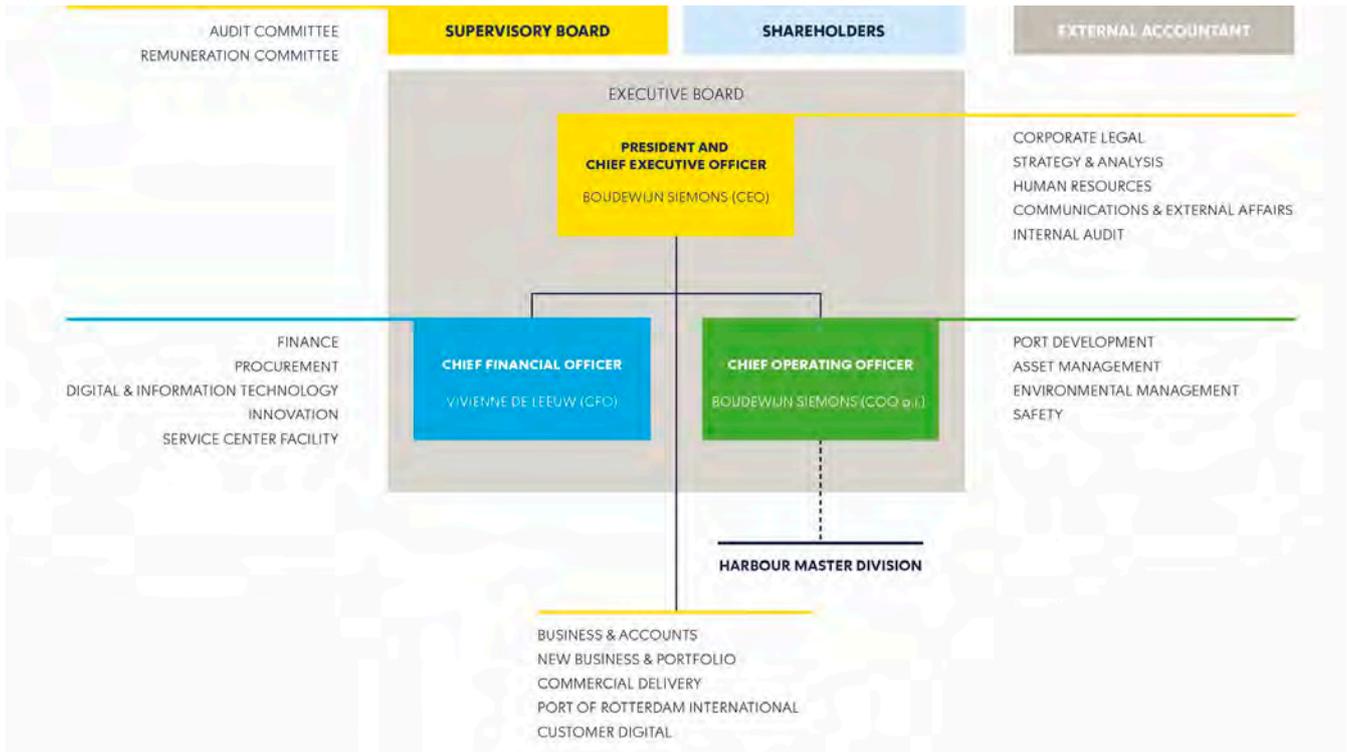
The governance of the Port of Rotterdam Authority is based on a relaxed structure with a two-tiered board structure. The Executive Board is responsible for managing the company, while the independent Supervisory Board oversees the Executive Board and the general affairs of the company. Our shareholders exert influence over the public limited company through the General Meeting of Shareholders.

The powers of the Supervisory Board and the General Meeting of Shareholders are laid down in law and the company's articles of association (see [here](#)). The shareholders have joint authority over major decisions. For example, investments exceeding €50 million and changes to the company's long-term strategy require the approval of both shareholders. The General Meeting of Shareholders also has the authority to appoint and dismiss executive directors and to determine the long-term strategy of the Port of Rotterdam Authority.

Dutch Corporate Governance Code

The shares of the Port of Rotterdam Authority are not publicly traded. However, the Port of Rotterdam Authority voluntarily applies the principles and best practices of the 2022 Dutch Corporate Governance Code, following the Port of Rotterdam Authority's 'comply or explain' principle. The regulations for the Supervisory Board and its committees (in 2023) and the Executive Board (early 2024) were updated to reflect the latest amendments to the 2022 Corporate Governance Code. The regulations, including the comply or explain overview, can be found [here](#).

Structure



The organisational chart above outlines our corporate structure in 2024. Some departments are responsible for the development and maintenance of the port and industrial complex, while others focus on commercial activities such as attracting and retaining companies operating in the port. The Harbour Master's Division carries out public-law duties on behalf of the (State) Harbour Master, including traffic management, inspections and incident response. Finally, there are support departments such as Human Resources, Communications & External Affairs, and Procurement.

Executive Board

Duties and responsibilities

On 1 February 2024, the shareholders appointed Boudewijn Siemons as CEO following the recommendation of the Supervisory Board. He had already been serving in this role on an interim basis since the departure of Allard Castelein. As a result, the COO position became vacant and Boudewijn Siemons also temporarily fulfilled the role of COO in 2024. The Executive Board of the Port of Rotterdam Authority therefore consisted of two members in 2024: a President Director and Chief Executive Officer (CEO), who also acted as interim Chief Operational Officer (COO), and a Chief Financial Officer (CFO). In November 2024, the Port of Rotterdam Authority announced that Berte Simons would be appointed as COO as of 1 January 2025. With this appointment, the Executive Board will be complete again from 1 January 2025.

The members of the Executive Board are collectively responsible for the management of the company, the general course of business, and the operations of the group companies affiliated with the company. The Executive Board is also responsible for ensuring the continuity of the company and its affiliated businesses, as well as for the sustainable long-term value creation of both. In fulfilling its duties, the Executive Board takes into account the impact of the company's actions on people and the environment and considers the interests of relevant stakeholders. The Executive Board is guided by the best interests of the company and its affiliated business.

According to the regulations, the Executive Board's responsibilities include addressing the socially relevant aspects of business for the company, achieving the company's corporate and public objectives, and defining the strategy and policies that drive necessary to realise these goals. Additionally, the Executive Board is responsible for establishing, embedding and maintaining values that foster a culture focused on long-term value creation, encouraging conduct that align with these values, and demonstrating them through leadership. Furthermore, the Executive Board ensures compliance with all applicable laws and regulations, assesses and manages risks, and oversees the company's financial strategy. The Executive Board is accountable for the fulfilment of its duties to the Supervisory Board and the General Meeting of Shareholders.

The Executive Board is responsible for the company's impact in the area of sustainability, specifically managing the effects of business activities on people and the environment and addressing the associated risks and opportunities. The risks related to disruptions in port operations, including geopolitical tensions, cybersecurity, and climate adaptation, are incorporated into the company's risk matrix. The management team, in collaboration with the Supervisory Board, reviews the risk matrix twice a year. Furthermore, the Executive Board works closely with stakeholders such as the Province of South Holland, the Municipality of Rotterdam, and Rijnmond DCMR Environmental Protection Agency to manage impacts, risks, and opportunities related to air and water pollution, as well as odor and noise nuisance. The Port of Rotterdam Authority also cooperates with law enforcement agencies to mitigate the risks and impacts associated with subversive crime. The Executive Board has a duty of care to ensure a safe working environment for employees. It is responsible for maintaining good working conditions in consultation with employees. Regular audits and assessments of the processes and responsibilities within the organisation ensure continuous improvement and compliance with human rights standards.

Supervisory Board

Duties and responsibilities

The Supervisory Board oversees, monitors and advises the Executive Board on various matters, including:

- Achievement of the objectives of the Port of Rotterdam Authority;
- Strategy for sustainable long-term value creation and the risks associated with business activities;
- Design and effectiveness of internal risk management and control systems;
- Financial and sustainability reporting processes;
- Compliance with laws and regulations;
- Relations with shareholders; and
- Socially relevant aspects of business operations.

In accordance with the company's articles of association, the Supervisory Board must also approve decisions regarding investments exceeding €10 million and the allocation of sites larger than 25 hectares.

Additionally, the Supervisory Board is responsible for publicly disclosing and maintaining the corporate governance structure of the company, overseeing the selection and appointment process for the external auditor, determining the remuneration and terms of employment of individual Executive Board members, proposing the Executive Board's remuneration policy, and evaluating the performance of both the Executive Board and the Supervisory Board.

The Supervisory Board also oversees the reporting procedure for suspected misconduct and irregularities, ensures that reports are investigated appropriately and independently, and – if wrongdoing or irregularities are identified – ensures that appropriate corrective actions are implemented.

Composition and independence of the Supervisory Board

The Supervisory Board consists of a minimum of five members, with a target composition of six. The Board elects a chair and vice-chair from among its members. Since 1 January 2024, Koos Timmermans has served as chair, with Wouter van Benten as vice-chair.

The Supervisory Board is composed entirely of independent members. Its composition ensures the necessary expertise, background and competencies to effectively fulfil its responsibilities. One-third of the board members are appointed based on recommendations from the Works Council, which reflects strong employee trust.

In 2024, two board members departed: Miriam Maes (1 January 2024) and Nynke Dalstra (20 September 2024). As a result, by the end of 2024, the Supervisory Board comprised four independent members, with two vacancies. When filling these vacancies, the board aims to prioritise expertise in finance, sustainability, and resilience.

The board considers that it meets the independence requirements outlined in best practice provisions 2.1.7 to 2.1.9 of the 2022 Corporate Governance Code. Additionally, the composition of the Supervisory Board aligns with the Port of Rotterdam Authority's diversity and inclusion policy objectives.

Committees within the Supervisory Board

The Supervisory Board has two committees: the Audit Committee and the Remuneration Committee, which also serves as the Selection and Appointment Committee. The composition of these committees is determined by the Supervisory Board. Until September 2024, Nynke Dalstra served as chair of the Audit Committee, with Wouter van Benten, Thecla Bodewes (until September 2024) and Koos Timmermans (from September 2024) as members. Following Nynke Dalstra's departure, Wouter van Benten became chair of the Audit Committee in September 2024. Jacqueline Prins chairs the Remuneration Committee, with Koos Timmermans (until September 2024) and Thecla Bodewes (from September 2024) as members.

The committees advise the Supervisory Board, prepare decision-making processes and contribute to effective governance. During Supervisory Board meetings, the committees provide oral reports and share (draft) minutes. However, the Supervisory Board retains collective responsibility for decisions prepared by its committees.

Each committee operates under its own set of regulations, outlining its rights, responsibilities and best practices. The regulations of the Audit Committee and the Remuneration Committee are included in the regulations of the Supervisory Board. The Audit Committee is responsible for overseeing the internal risk management and control systems, the financial and non-financial reporting of the organisation, and the follow-up of recommendations and observations from internal and external auditors. The Audit Committee meets four times per year, and at its request, meetings may be attended by the external auditor and the head of the Internal Audit Department. The audit committee maintains contact with the external auditor, particularly regarding audit activities and in cases where the external auditor suspects irregularities related to the financial reporting.

The Remuneration Committee prepares decisions for the Supervisory Board, including selection criteria, appointment procedures, and performance evaluations of both the Executive Board and the Supervisory Board members. Additionally, it prepares proposals on the Executive Board's remuneration policy, as approved by the General Meeting of Shareholders, and determines the individual remuneration of Executive Board members.

Appointment and dismissal

The members of the Executive Board and the Supervisory Board are appointed by the General Meeting of Shareholders upon the recommendation of the Supervisory Board. The Supervisory Board prepares a profile and a list of candidates, which are submitted for approval to the General Meeting of Shareholders. The nomination and appointment process takes into account the corporate and public objectives of the company, the nature of the business, its activities, the required expertise and experience, and – when appointing a Supervisory Board member – their required independence.

The Port of Rotterdam Authority strives for a composition of the Executive Board and the Supervisory Board that reflects broader society. Since 1 January 2023, the Supervisory Board has implemented an updated diversity policy covering expertise, experience, competencies, other personal qualities, gender identity, age, nationality, and (cultural) background for the composition of the Executive Board and the Supervisory Board. Regarding gender balance, the Port of Rotterdam Authority aims for:

- At least 30% women in the Executive Board
- At least 40% women in the Supervisory Board

These targets are considered appropriate and ambitious, given the number of Executive Board members (three) and the desired composition of the Supervisory Board (six). The current composition meets these diversity targets: as of the end of 2024, the Executive Board consists of one woman and one man (50% ratio), while the Supervisory Board consists of two women and two men (50% ratio).

In (re)appointments to the Executive Board and the Supervisory Board, diversity objectives are actively incorporated into the profile, recruitment and selection process. The Works Council has the right to provide advice on the appointment of Executive Board members. Additionally, for one-third of the Supervisory Board appointments, the Works Council has a strengthened right of recommendation. The Works Council has exercised this right, leading to the appointment of the Chair of the Supervisory Board and Supervisory Board member Jacqueline Prins, both of whom enjoy special trust from the Works Council.

A director or Supervisory Board member is appointed for a four-year term and may be eligible for reappointment. The maximum tenure is three terms of four years, or 12 years in total. The General Meeting of Shareholders has the authority to suspend or dismiss directors, while the Supervisory Board holds the power to suspend a director. The Supervisory Board periodically evaluates the performance of the Executive Board.

Members of the Supervisory Board

Name	Term	Appointment	Final year of current term
Timmermans	First term	1 oktober 2021	2025
Van Benten	Second term	1 september 2022	2026
Bodewes	First term	15 december 2023	2027
Prins	First term	15 december 2023	2027
Dalstra	First term	15 december 2020	2024

Members of the Executive Board

Name	Term	Appointment	Final year of current term
Siemons	First term CEO	1 februari 2024	2028
	First term COO	1 oktober 2020	2024
De Leeuw	Second term	30 juni 2023	2027
Simons	First term	1 januari 2025	2029

Corporate social responsibility

The Supervisory Board supports the Port of Rotterdam Authority's leading role in corporate social responsibility (CSR). For the Port of Rotterdam Authority, this role extends beyond the management, operation and development of the port and industrial complex. We recognise that the Port of Rotterdam Authority is a high-performing company in the field of CSR, demonstrating leadership in ambition and reporting. With new reporting obligations, the integration of key ESG themes into daily operations is expected through governance, monitoring and documentation. We also see opportunities to further embed CSR principles into our activities. The Port of Rotterdam Authority actively promotes CSR among its clients, for example, by assisting shipping and industry in their sustainability efforts.

CSR considerations are an integral part of decision-making for both the Port of Rotterdam Authority and the Supervisory Board. This means that sustainability is not treated as a separate agenda item but is discussed per project or investment by the relevant decision-making body. Management team and Executive Board meetings take place every two weeks, while Supervisory Board meetings occur quarterly or more frequently if deemed necessary by the Executive Board and the Supervisory Board.

The CSR Steering Group oversees the Port of Rotterdam Authority's sustainability efforts through the CSR programme. This programme ensures the integration of CSR into the Port of Rotterdam Authority's mindset and operations. The CSR Steering Group also acts as a preparatory body for decision-making on CSR-related topics (e.g., climate targets and human rights policies). Official decisions on these matters follow the standard governance structures. The [CSR](#) themes are:

- Safe and healthy environment: Safety, living environment, nature, biodiversity, plastic pollution
- Climate & energy: Climate, energy transition, energy efficiency, circularity
- People & work: Diversity, inclusion, human rights, integrity

The CSR Steering Group comprises the CEO (chair), direct reports from the departments of Environmental Management, Communications & External Affairs, New Business & Portfolio, Strategy & Analysis, the CSR Program Manager, and a Strategy Consultant. The CSR manager plays a coordinating role between departments on organisation-wide sustainability themes. The direct reports ensure that expertise on each CSR theme is embedded at the appropriate level within the organisation. The topics discussed by the CSR Steering Group in 2024 included the human rights policy, compliance with OECD guidelines, the long-term sustainability perspective ('Net Positive'), and engagement with climate activists.

3.13 Risk management

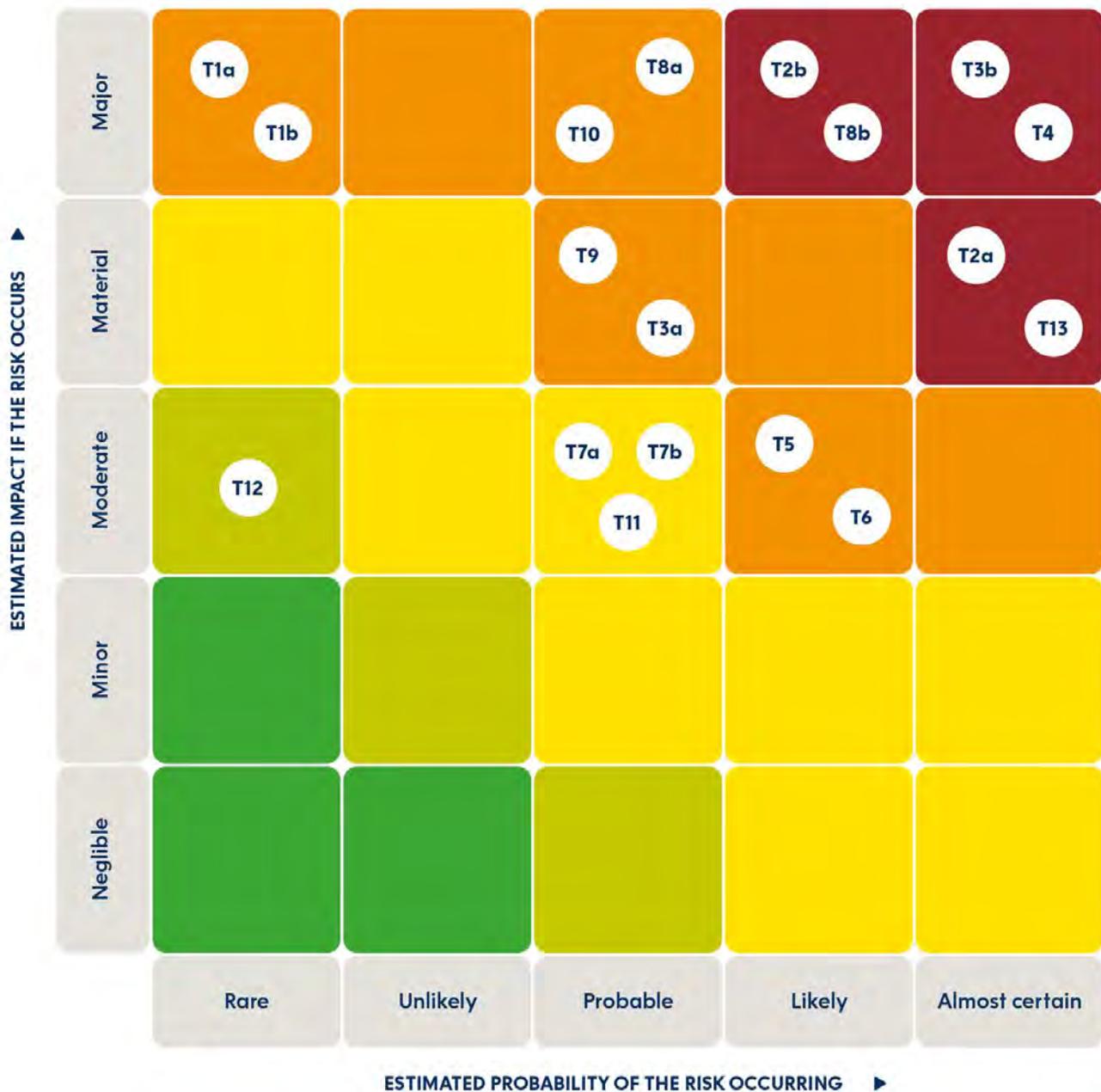
Risk management and monitoring system

We employ a risk control and monitoring system to identify, manage and report risks. This system is based on internationally recognised standards from the Committee of Sponsoring Organizations of the Treadway Commission (COSO), forming the foundation for Enterprise Risk Management within the Port of Rotterdam Authority.

Risk control and monitoring start at the operational level. Departments and project teams are responsible for identifying, assessing, managing and reporting risks. Risk management, compliance advisors and controllers provide support. These professionals form the Risk, Control & Compliance community, which meets at least four times a year, and more frequently if necessary. Their objective is to ensure that the Port of Rotterdam Authority executes its strategy and core activities with risk awareness and in compliance with laws and regulations. It aims for the Port of Rotterdam Authority to execute its strategy and core tasks with risk awareness and in compliance with laws and regulations. The Internal Audit Department is also part of this community and conducts periodic audits of the risk control and monitoring system. Additionally, the external auditor provides an annual management letter assessing the effectiveness of internal controls, specifically in relation to financial reporting. The Executive Board is ultimately responsible for the risk control system, while the Audit Committee of the Supervisory Board supervises its functioning.

The key risks (top risks) related to strategy, operational activities and regulatory compliance are periodically reviewed and established by the Executive Board as part of the strategic planning process. For a consistent risk assessment and prioritisation of our top risks, we apply the Port of Rotterdam Authority risk assessment matrix. The matrix indicates, depending on likelihood and impact, how risks are classified from very low to very high. The impact assessment considers financial damage to the PoR (financial impact), reputational damage to the PoR (reputational impact), safety risks for employees and third parties working on behalf of the PoR (people safety impact), environmental impact on the port area, and core business impact. The latter refers – across the entire organisation – to the statutory objectives and key tasks of the Port of Rotterdam Authority.

Each top risk has an owner at Management Team level. Monitoring is integrated into our planning and control cycle. The Management Team, Executive Board and Supervisory Board discuss the top risks twice a year. These top risks are also discussed with shareholders.



<p>T1a Incident water</p> <p>T1b Incident country</p> <p>T2a Legislation/enforcement creates unfavourable business climate</p> <p>T2b Nitrogen problem creates unfavourable business climate</p> <p>T3a Cyber attack PoR</p> <p>T3b Port cyber attack</p> <p>T4 High establishment and supply chain costs</p> <p>T5 Congestion in and around the port (available infrastructure and accessibility)</p>	<p>T6 Lack of digitisation of the logistics chain</p> <p>T7a Corruption and human rights issues abroad activities</p> <p>T7b Corruption and human rights issues, procurement activities</p> <p>T8a Energy transition will not succeed ≤2030</p> <p>T8b Energy transition will not succeed >2030</p> <p>T9 Lack of talent for port, now and in the future</p> <p>T10 Terrorist attack in the port</p> <p>T11 Declining support for port and industry</p> <p>T12 Lack of integrity & Fraud</p> <p>T13 Subversive crime in the port</p>
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LEGEND

- Risk heat map indicates status after measures (residual risks)
- Risk classification: dark green (very low) - red (very high)
- Numbering and order in the matrix are irrelevant
- T stands for Top Risk



4. OTHER INFORMATION

4.1 Keyfigures

Balance sheet

(Before result appropriation x € 1.000)	31. December 2024	31. December 2023
Assets		
Fixed assets		
Intangible fixed assets	98,287	84,117
Tangible fixed assets	4,058,206	4,008,727
Financial fixed assets	1,565,019	1,596,517
	5,721,512	5,689,361
Current assets		
Inventory	858	652
Accounts receivable	276,504	229,595
Cash and cash equivalents	309,293	290,811
	586,655	521,058
Total assets	6,308,167	6,210,419
Liabilities		
Shareholders' equity		
Issued share capital	900,000	900,000
Share premium reserves	391,200	391,200
Legal reserves	165,374	138,654
Other reserves	2,964,203	2,889,644
Result for appropriation	273,727	233,519
	4,694,504	4,553,017
Provisions	46,050	49,498
Long-term debts	1,322,612	1,364,146
Short-term debts	245,001	243,758
Total liabilities	6,308,167	6,210,419

Profit and loss account

(Amounts x € 1000)		2024		2023
Net revenue		845,017		806,562
Other operating income		36,984		34,947
Total operating income		882,001		841,509
Wages, salaries and social security		-139,825		-129,112
Depreciation and impairment of tangible fixed assets		-178,930		-187,208
Other operating expenses		-178,713		-163,834
Total operating expenses		-497,468		-480,154
Operating results		384,533		361,355
Financial income and expenditure		-43,724		-52,296
Result from ordinary activities before taxation		340,809		309,059
Taxation		-77,536		-75,703
Income from participating interests		10,454		163
Result after taxation		273,727		233,519

Keyfigures

Key figures	Unit					
		2024	2023	2022	2021	2020
Added value	Bln €	29.6	-	30.6	24.4	23.8
Employment	Jobs	192,364	-	193,427	183,004	174,057
Throughput total	Million tonnes	435.8	438.8	467.4	468.7	436.8
Throughput containers	TEU million	13.8	13.4	14.5	15.3	14.3
Ship calls (seagoing)	Number	27,617	27,886	29,029	28,876	28,170
Ship movements	Number	77,916	79,045	76,769	77,869	75,679
Very serious nautical incidents	Number	1	0	1	0	0
Nautische Safety Index	Score	6.07	7.51	6.39	7.46	7.99
Port reputation among local residents	Score	-	80.3	79.0	83.2	-
Carbon emissions HIC	Mtonnes	20.2	22.6	23.5	22.5	25.3
CO2 footprint HIC	Ktonnes	0.74	1.52	2.65	2.70	3.05
Proportion of women (total)	%	30.3%	29.4%	28.5%	27.2%	28.0%
Proportion of women (management)	%	29.0%	29.3%	31.8%	29.4%	31.4%

4.2 Credits

Publication

Port of Rotterdam Authority

Feedback

We would like to hear what you think of our annual report. You can send your comments to our [contact page](#).

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