
STAYING ON COURSE IN EXCEPTIONAL TIMES MAKE IT HAPPEN.

Highlights of 2020 Annual Report



Foreword from the Executive Board



Staying on course in exceptional times

The title of our annual report accurately reflects how we experienced 2020. It was a turbulent year. We were constantly looking for, and finding, solutions to a succession of new questions. Working with a large range of parties, we successfully kept the port fully operational. We are proud of that success.

The volume of goods throughput in the port of Rotterdam in 2020 was 6.9% down on the previous year. Once again, with a total throughput of 436.8 million tonnes of goods, we were the largest seaport in Europe in 2020, and we achieved an impressive financial result of €351.7 million. We welcomed 28,170 seagoing vessels and 92,552 inland vessels. As a port and industrial complex, we were also able to take important steps towards making the energy system more sustainable, reducing carbon emissions and making the logistics chains more efficient.

COVID-19

COVID-19 had a major and wide-ranging impact on the port and industrial complex, forcing us to switch gear constantly. Our primary concern was the safety of everyone in the port and industrial complex. Of course, that also includes our own workforce. We are continuing to comply with the strict corona guidelines from Dutch authorities. As of 13 March 2020, all of our employees were working from home, with the exception of our operational colleagues. Everyone responded well to this enforced change in the approach to our work. As an organisation, we demonstrated resilience. That is shown by the favourable results from various staff surveys: our colleagues are proud of each other, that they put their shoulders to the wheel together, and that they feel they are well equipped to do their work in these times and help one another.

COVID-19 brought us even closer together as a port community. To address the major issues arising from the pandemic in the most focused way possible, we organised the Corona Port Consultations twice a week from 20 March onwards. These were attended by representatives of nautical service providers, terminals, lobby groups and other partners in the chain. We therefore had a clear overview of operations at all times and an up-to-date picture of the numerous sticking points and issues, including a solution-oriented action list. We also saw that some companies in the port and industrial complex were in difficulties because of COVID-19. We immediately started talking to these clients about how we could help, for example by extending payment terms.

We also feel that we have a duty to help ship crews in need. The port of Rotterdam therefore helped vessels that had been stranded elsewhere by COVID-19. As a consequence of this humanitarian approach, we were able, among other things, to repatriate 4,000 crew members working on cruise vessels.

Security and safety

Security and safety are a top priority. Nautical safety, transport and environmental safety, flood risk management, social safety, cyber security and personal safety are central here. In the last area, we introduced seven 'Life Saving Rules' in 2020, focusing on strengthening our own safety awareness. 2020 was a relatively safe year for shipping in the port of Rotterdam. There were no very serious maritime accidents. By comparison with 2019, the number of nautical accidents was almost unchanged, falling from four to one.

Strategy

Global trends and developments affect the economy and society, our clients and their clients, and therefore the future of the port. Our new corporate strategy for 2020 - 2024 responds in three focus areas: *smart partner in logistics chains*, making efficient and reliable logistics chains possible; *accelerator of the sustainability of the port*, helping companies to make processes more sustainable and to attract sustainable activities; *entrepreneurial and decisive organisation*, opting for a clear focus that ensures that we can have even more impact, especially for our clients.

Investments

The Port of Rotterdam Authority was also a genuine investment machine in 2020, despite COVID-19. In 2020, we invested €265.8 million. We fuel the machine with solid financial results and a strong balance sheet. We invest in today by maintaining and expanding the existing portfolio and we invest in tomorrow by focusing on digitalisation and the energy transition. At €1.5 billion, our investment programme for the next five years is considerable. Healthy finances are therefore vital.

To maintain the level of investment, a breakthrough will be needed to tackle the nitrogen problem. The permit procedures for port and industrial companies have been on hold since the Council of State's ruling on 29 May 2019 on the Nitrogen Reduction Programme (PAS). This means that the required overhaul of the port and industry, and investments, are in danger of being moved elsewhere in Europe. It is important for the Dutch government to establish a better, welcoming, business climate for companies that combine economic growth with care for the environment.

A broadly supported and decisive solution to the nitrogen problem is therefore urgently required. Of course, we will be making a contribution. We have been working for some time with a range of partners on different approaches to addressing the challenge.

Enterprising developer

Despite the nitrogen issue and COVID-19, we have been working hard on our infrastructure. The Theemsweg route is improving rail access for the companies towards the western part of the port. This major infrastructure project fits in with our policy to make hinterland connections more sustainable, and rail, road and shipping traffic more efficient. We also made progress on the energy transition. We worked on innovations in practice, applied new technologies and welcomed sustainable companies. Porthos was in the spotlight. This approach to carbon capture and storage is unique in the world and it will make a necessary contribution to the national sustainability objective in the short term. Important developments in the past year were the submission of the Environmental Impact Report (EIR) and the signing of agreements with companies that wish to use Porthos. In late 2020, the European Union (EU) recognised the value of Porthos by committing to contribute €102 million to the project.

The 'Starter Motor' we introduced in 2020 was our response to the government's wish to see the Netherlands investing its way out of the crisis. In twelve projects, we aim to make the economy more sustainable, achieve progress towards the climate objectives and ensure that our economy also supports our prosperity in the long term. The Rotterdam projects will create more structural jobs, make a significant contribution to the gross domestic product and lead to a major reduction in carbon emissions. One of the plans involves the development of a hydrogen cluster, including a hydrogen transport pipeline. We cannot complete projects like this on our own. That is why we are looking to cooperate with partners who share our ambitions. That emphatically includes government authorities.

The power of collaboration

With these initiatives, we are demonstrating the innovative strength of Rotterdam's port and industrial complex. The intensive collaboration with like-minded partners makes Rotterdam the perfect place for innovation, with the primary focus being on sustainability and digitalisation. In this respect, we are grateful to all the parties who also put their trust in us in 2020.

Our clients and other stakeholders, for whom we work, keep us on our toes and we appreciate their commitment. We would also like to express our appreciation here for the efforts made by our workforce. In this exceptional year, they demonstrated that our entrepreneurial and decisive organisation can make the difference for our clients. With the same motivation and enthusiasm, we will also be working in 2021 on the leading, sustainable, safe and efficient port where our customers can achieve business success.

Port of Rotterdam Authority
Rotterdam, 18 February 2021

The Executive Board
Allard Castelein, Vivienne de Leeuw, Boudewijn Siemons

Highlights

Safety

0

major incidents



There were no major incidents in the port of Rotterdam in 2020.

Throughput

436.8

million tonnes



During the COVID-19 pandemic, the port of Rotterdam remained fully operational but the pandemic did affect cargo throughput, which fell by 6.9% in 2020.

Revenue

753.3

million euros



Our revenue rose by 6.6% in 2020 over the previous year.

Gross investments

265.8

million euros



In 2020, the Port of Rotterdam Authority invested €265.8 million in client-related infrastructure, in public infrastructure, in capital assets and in participating interests.

Port calls

120,722

port calls



In 2020, the number of port calls to Rotterdam rose by 5,262 over 2019.

Sustainable business operations

48.2%

committed and passionate employees



Our staff survey showed that 48.2% of our employees are committed and passionate. This score was up on the previous survey (47.5%). Our score is in the top quartile of the benchmark.

Employment

196,713

jobs



The port of Rotterdam employed (directly and indirectly) 196,713 people in the Netherlands (2019 figure, source: 2020 Port Monitor).

Added value

3.0%

of gross domestic product



The added value of the port of Rotterdam was more than €24.5 billion in 2019 (last known figure, source: 2020 Port Monitor).

Milestones



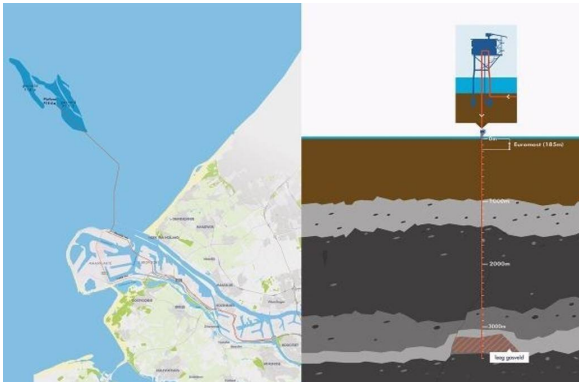
Port fully operational

Despite the disruptive impact of the COVID-19 pandemic on the economy, production and logistics, the port of Rotterdam remained fully operational.



Theemsweg route

The 177-metre-long railway bridge over the Rozenburg lock was successfully installed on 4 April 2020. The railway bridge is an important part of the Theemsweg route, a new section of the harbour railway line measuring more than four kilometres.



Porthos

The European Commission has decided that the Porthos project qualifies for a grant of €102 million. This grant is part of the Connecting Europe Facility for energy infrastructure established by the European Union to support the development of energy from renewable sources. Porthos is a project for storing CO₂ from industry under the North Sea. The Port of Rotterdam is one of the organisations behind the initiative.



ZES

ZES was launched on 2 June 2020. It is an initiative that was set up by ING, Engie, Wärtsilä and the Port of Rotterdam Authority. ZES leases exchangeable battery containers (ZES-Packs) to inland shipping operators.



Firsts in the port of Rotterdam

The port of Rotterdam had a number of 'firsts' this year. The Ramform Titan (the widest vessel in the world), HMM Rotterdam (a mega container vessel), Gas Agility (the world's largest LNG bunker vessel) and the LNG-powered container vessel Jacques Saade came to our port.



Shore-based power

The City of Rotterdam and the Port of Rotterdam Authority are working together on the roll-out of shore power for seagoing vessels. The aim is to ensure that a large proportion of the seagoing vessels will be 'plugged in' while berthed.



Autonomous transport

There was a first in the port of Rotterdam on 22 May: a drone delivered parts to Allseas' Pioneering Spirit. This was the first time a drone had delivered a package to a vessel in the Netherlands. A drone delivered the first package to a sailing vessel in September.



Extension of Maasvlakte Plaza

In 2020, the Maasvlakte Plaza truck park was extended by 210 parking spaces. The truck park now has 567 parking spaces and every possible convenience. The total number of truck parking spaces in the port of Rotterdam is 945.

Mission, vision and core tasks

The mission of the Port of Rotterdam Authority is:

We create economic and social value by achieving sustainable growth in the world-class port in collaboration with clients and stakeholders.

The vision of the Port of Rotterdam Authority is:

We are the developer of a leading, safe, efficient and sustainable port where our customers can achieve business success.

The strength of the existing port and industrial complex with the professional services of our clients, the efforts of our partners and our own role provide the basis we need to make an impact and transform our vision into a reality.

The core tasks of the Port of Rotterdam Authority:

Operation of port areas

The Port of Rotterdam Authority invests in the development of land and in the port infrastructure such as quay walls, jetties, roads and waterways, and cable and pipeline facilities.

Promoting safe and efficient shipping traffic

The Harbour Master is responsible for maintaining the safe and smooth handling of shipping. The staff of the Harbour Master's Division assist vessels remotely by monitoring, informing, advising and, if necessary, instructing them. In addition, they provide smooth and safe guidance for shipping traffic with multifunctional patrol vessels. That work also includes inspection and enforcement.

Supporting initiatives to make the Rotterdam port and industrial complex future-resilient

The Port of Rotterdam Authority operates as an enterprising developer to make the Rotterdam port and industrial complex future-resilient. By creating the right conditions, we help our clients in the chemical, energy, transport & logistics and maritime & offshore industries to operate competitively. To achieve this goal, the Port of Rotterdam Authority acts as, among other things, an entrepreneurial developer, matchmaker, facilitator, booster, director, investor and initiator.

Added value

.. including retroactive indirect effects

The added value of the port of Rotterdam including retroactive indirect effects was more than €24.5 billion in 2019 (last known figure). That is 3% of the Dutch gross domestic product (GDP). This emerged from the '2020 Port Monitor'. We use the term 'indirect retroactive effects' to refer to the added value resulting from purchases by port-related companies elsewhere in the Dutch economy.

.. and also including forward indirect effects

The 2020 Port Monitor did not include the forward indirect effects. A 2018 study that did include them ('The Rotterdam Effect - Impact of mainport Rotterdam on the Dutch economy') calculated that the added value and employment in 2017 was much higher if forward indirect effects were also included: €45.6 billion and 385,000 jobs. Forward indirect effects are economic activities in the Netherlands resulting from the presence of the Rotterdam port, such as re-export through logistics and distribution.

There will be a follow-up to the study referred to here in 2021, allowing us to update the results for the 'Rotterdam Effect'.

Corporate strategy

Our vision of the future and the most recent trends and developments resulted in a new corporate strategy for 2020 - 2024. Generating economic and social value means executing our core activities well and making the most of our resources. Generating an impact that is more than simply increasing volume is central to the three priorities in the new strategy. Relevance and quality also matter. By focusing on the three priorities, we are contributing to the vision of the Port of Rotterdam Authority: a port where our clients can achieve business success.



Smart partner in logistics chains

We are working hard on the availability of information and the use of data. Examples are PortXchange and Nextlogic. In addition to the availability of information, the excellent accessibility of the port of Rotterdam and the hinterland continues to be important. For example, we are investing in the development and maintenance of port areas, public infrastructure (waterways, railways, road infrastructure and pipelines) and customer-specific infrastructure (such as quay walls and jetties). Where possible, we are also cutting energy consumption and encouraging the use of cleaner fuels. With this smart strategy, we are working to strengthen our competitive position and ensure that more 'cargo' will opt for Rotterdam.

Accelerating sustainability in the port

As an accelerator of sustainability in the port, we establish connections between partners, provide the room that is needed and, where necessary, invest ahead of the market. Porthos for carbon capture and storage and our work on establishing a hydrogen backbone in the port are examples. In addition, we are committed to expanding our position as a production location in the value chain of future-resilient, sustainable activities. We are focusing on value chains for renewable fuels and raw materials, including the production of synthetic fuels and biofuels, and the chemical recycling of plastics. In addition, our global data exchange supports the planning of transport movements. This is where our roles as a smart partner in the logistics chain and an accelerator of sustainability in the port come together optimally.

Entrepreneurial and effective organisation

We work effectively, efficiently, entrepreneurially and proactively. We do this by maintaining access to, and the high quality of, the data needed to take the right decisions. Working as an entrepreneurial and effective organisation, we aim to further improve the quality and flexibility of the organisation, manage operating costs and capital expenditure, and raise our customer focus and the effectiveness of the organisation to an even higher level.

Our contribution to the Sustainable Development Goals

As an organisation at the heart of society, we are committed to the seventeen Sustainable Development Goals (SDGs) of the United Nations. The three priorities of the corporate strategy can be linked directly to the principal SDGs that have been selected and the secondary goals. As a smart partner in logistics chains, we make progress towards SDG 9 possible. Our activities as an accelerator of sustainability in the port contribute directly to SDGs 7 and 13. We support SDG 8 through our programmes focusing on our aim to be an entrepreneurial and effective organisation. As safety plays a central role in all our activities, our selection also includes SDG 3. In addition, we identified two SDGs (Gender Equality and Partnership for the goals) to which we contribute more indirectly.

The SDGs to which we contribute are shown below.



Port community stands firm against COVID-19

The Netherlands was introduced to COVID-19 in late February 2020. Followed quickly by the cancellation of events and the call to work from home. The Port of Rotterdam Authority already had a range of scenarios on hand at that time to address the consequences of a lockdown. The COVID-19 year in short.

February 2020

A 'crisis team' at the Port of Rotterdam Authority met to discuss the consequences of the spread of COVID-19 and the worldwide consequences that were already evident. It was essential to maintain operations at all times. In anticipation of possible government measures and other developments, the crisis team drafted a range of scenarios in late February.

March 2020

The government announced nationwide measures. From mid-March onwards, colleagues at the Port of Rotterdam Authority left their desks in the World Port Center and other locations to work at home. That did not apply to colleagues working in operations, who continued to do their work in more complex circumstances.

The government designated the handling of shipping as a vital activity. The priority was to maintain the overall handling of shipping: if we did not execute this chain process as a whole, the result would have been congestion in the port and the offshore approaches, as well as market shortages.

Communications play an important role in terms of addressing the impact of COVID-19. To ensure that the port stayed operational 24/7, Allard Castelein chaired the Corona Port Consultations twice a week. They were attended by representatives of nautical service providers, terminals, lobby groups and other chain partners. The meetings addressed topics, issues and actions with the entire chain. The goal was to keep the port of Rotterdam fully operational for business and that goal was achieved.

May 2020

Because of all the strict COVID-19 travel measures, it sometimes took months to relieve crews on seagoing vessels. In addition, shore visits were no longer allowed and so there were no breaks from life on board. The Harbour Master worked with other authorities to make arrangements for crews to be repatriated from Rotterdam. As a result, 4,000 crew members on cruise vessels were able to leave for home via Rotterdam early in the COVID-19 crisis.

July 2020

The port of Rotterdam achieved throughput of 218.9 million tonnes in the first six months of 2020, 9.1% less than in the first half of 2019, which was a throughput record at the time. The economic impact of the COVID-19 pandemic was the primary factor behind the decrease in volume.

September 2020

After an initial decline in the number of infections and a short period of stability, the number of infections rose again in September. Additional measures to contain the pandemic were imminent. The Port of Rotterdam Authority expected the economy to recover cautiously in September. The final quarter of 2020 was around the corner.

The World Port Days in Rotterdam attract hundreds of thousands of visitors each year, making it the largest annual maritime event in the Netherlands. Given COVID-19, the 43rd World Port Days took place online under the name 'Port Stories 2020'.

The Port of Rotterdam Authority conducted a staff survey in September. It is important to keep a finger on the pulse during COVID-19. In terms of commitment (job satisfaction), our score matched the last survey in November 2019: 7.8 out of 10. We conclude from this that we can cope with change effectively. Engagement was up 0.3, which means we are in the top quartile of the industry benchmark. We support our organisation and we enjoy working there.

October 2020

In October, we reported that the volume of cargo throughput in the port of Rotterdam up to and including the third quarter of 2020 was 322.3 million tonnes. By comparison with the second quarter of 2020, there were clear rises in volumes in a range of segments. Allard Castelein: *'It's still too early to conclude that we have turned the economic corner. Even so, I'm optimistic about the resurgence of international trade flows and the resilience of the economy. The Port of Rotterdam Authority, the government and businesses in our port can work together to give our economy a kickstart by accelerating investment. In that way, we can save jobs, generate prosperity and make the Netherlands more sustainable.'* Allard Castelein was referring here to the 'Starter Motor' project introduced in 2020.

November 2020

We had now been working in accordance with the national coronavirus guidelines for more than eight months. Working from home was the standard, unless there was absolutely no other option. In late November, the Executive Board decided that the Port of Rotterdam Authority would adopt a hybrid approach to work in the future. On average, we will work at home 40% of the time.

December 2020

We went into the final month of the year knowing that the traditions of the festive season would take place remotely. We were also looking ahead to the New Year. Allard Castelein: *'We will have to pull out all the stops to achieve as many of our ambitions as possible in 2021. Our strategy is strong and we have good projects in place. Now it's up to us to move ahead and make the difference. In words and deeds! Together, we can have an impact!'*

Starter Motor drives economy

COVID-19 is having a negative impact on our economy. The Dutch government wants the Netherlands to invest itself out of the crisis. The current situation calls for decisive solutions, which is why the Port of Rotterdam Authority has launched the 'Starter Motor'. In this initiative, we are working on a smart, sustainable port and also complying with the government's wish to boost the economy. It takes the shape of twelve projects, three of which play a particularly important role:

- The development of a hydrogen cluster in Rotterdam, including the production of blue and green hydrogen, and a hydrogen transport pipeline linking production and consumption locations.
- A pipeline bundle between Rotterdam, Chemelot (Geleen) and North Rhine-Westphalia for the transport of hydrogen and CO₂ in particular. It will allow industry in Rotterdam's hinterland to become more sustainable and Rotterdam to consolidate its position as the energy hub of Northwest Europe.

- A third key project is Porthos, the project for capturing and storing CO₂ from industry under the North Sea. This approach allows us to keep a lot of carbon emissions out of the atmosphere at low cost in the short term.

The Rotterdam projects will create more structural jobs, make a significant contribution to the gross domestic product and lead to a major reduction in carbon emissions.

Market share & throughput

Our geographical location makes Rotterdam the gateway to the European market and a major hub for global goods flows. Rotterdam is Europe's largest port. Our goal is to maintain and strengthen our position as the market leader.

Port of Rotterdam throughput

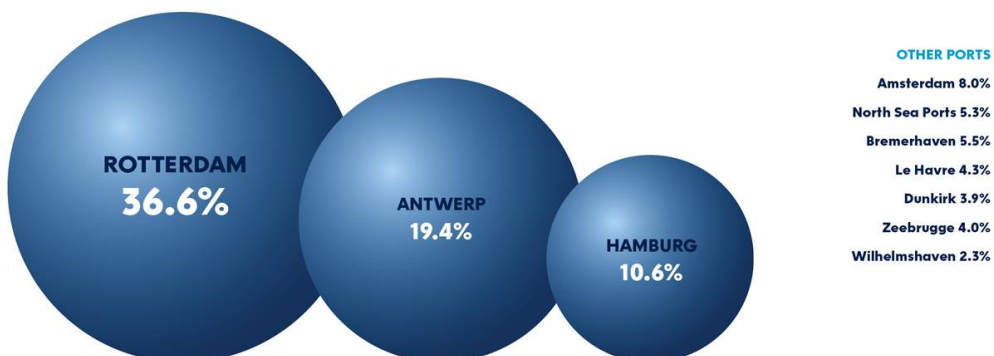
The port of Rotterdam achieved throughput of 436.8 million tonnes in 2020, 6.9% less than in 2019. Despite the disruptive impact of the COVID-19 pandemic on the economy, production and logistics, the port of Rotterdam remained fully operational. The economic impact of the COVID-19 pandemic was the primary factor behind the decrease in volume.

Throughput in Greater Rotterdam includes throughput in the terminals Hook of Holland, Dordrecht, Schiedam and Vlaardingen. In 2020, this throughput accounted for 4.1% of the total throughput volume for incoming and outgoing flows. The associated seaport dues do not accrue to the Port of Rotterdam Authority and they have therefore not been included in the financial reporting.

Market share Hamburg - Le Havre range

In 2020, our market share in the Hamburg-Le Havre range (HLH) was 36.6%. That is a small increase on 2019 (36.4%, market shares are up to and including Q3).

TOP 3 IN MARKET SHARE IN THE HAMBURG-LE HAVRE RANGE



Developments in cargo throughput

Dry bulk

The port of Rotterdam provides enough facilities for the throughput of dry bulk. Due to our location and the depth of the port, vessels can enter Rotterdam without any difficulties. The throughput of dry bulk amounted to 63.8 million tonnes, 14.3% less than in 2019. Dry bulk accounts for 15% of throughput in the port of Rotterdam. Falling volumes were seen primarily in the throughput of iron ore and scrap (-24.5%) and coal (-22.8%). Incoming iron ore fell, mainly due to a major decline in German steel production. The steel factories that use the port of Rotterdam for the supply of ore are producing much less than usual. Demand for steel fell sharply from March onwards as a result of production stoppages in the automotive industry and construction. A low gas price meant that more gas and less coal was used for power production. In addition, favourable weather conditions meant that there was an increase in the available wind energy, reducing the need to switch to coal-fired power stations. The Onyx power station on the Maasvlakte was also shut down. There was a sharp increase in biomass (+108.3%) due to the continued rise in co-firing in power stations. Agricultural bulk also rose, mainly due to more imports and stockpiling.

Liquid bulk

Liquid bulk throughput amounted to 192.0 million tonnes. That is approximately 19.2 million tonnes less than in 2019, a fall of more than 9.1%. Liquid bulk accounts for 44% of throughput in Rotterdam. The throughput of mineral oil products was 11.9% down, mainly due to a fall in the throughput of gas oil/diesel and fuel oil. Transport declined as a result of COVID-19 and the throughput of diesel/kerosene was down. In addition, IMO 2020 regulations have led to a significant decline in fuel oil. Crude oil also fell off (-10.2%), mainly due to a drop in demand. Consequently, some large refineries were operating at lower capacity than usual. The throughput of LNG was 12.7% down on 2019 at 6.2 million tonnes. This was mainly because quite large stocks of gas were built up in Europe in the first half of the year. The throughput of other liquid bulk was slightly higher than in 2019.

Containers

Container throughput in 2020 was down slightly on 2019 at 151.1 million tonnes, 1.2% less. During the early months of the pandemic, throughput declined but container throughput recovered again slightly from July onwards. With a market share of 32.1% (up to and including the third quarter of 2020), the port of Rotterdam is the market leader in the container segment in the Hamburg-Le Havre range. Our market share was higher than in 2019 (31.7%, third quarter).

Break bulk

The port of Rotterdam is an important logistics hub for the imports and exports of Roll-on Roll-off (RoRo) cargo. Our market share in the Hamburg-Le Havre range increased from 36.8% in 2019 to 38.9% in 2020 (up to and including the third quarter). In the second quarter of 2020, RoRo was one of the hardest-hit sectors in the COVID-19 crisis. Concerns about a hard Brexit led to stockpiling and therefore the recovery of RoRo throughput. At year-end 2020, RoRo throughput was 24.0 million tonnes, 1.2% less than in 2019.

The throughput of other break bulk fell sharply because of COVID-19 but less than in most ports in the Hamburg-Le Havre range. Throughput was 6.0 million tonnes, 8.3% down on 2019.

(Gross weight x 1,000 tonnes)	2020	2019	Difference (number)	Difference (%)
Ore and scrap metal	22,658	30,006	-7,349	-24.5%
Coal	17,339	22,449	-5,110	-22.8%
Agribulk	10,279	9,809	470	4.8%
Biomass	1,849	887	962	108.3%
Other dry bulk cargo	11,674	11,333	341	3.0%
Dry bulk cargo subtotal	63,798	74,485	-10,687	-14.3%
Crude oil	93,561	104,200	-10,640	-10.2%
Mineral oil products	60,065	68,164	-8,099	-11.9%
LNG	6,241	7,149	-908	-12.7%
Other liquid bulk cargo	32,120	31,697	423	1.3%
Liquid bulk cargo subtotal	191,986	211,211	-19,225	-9.1%
Total bulk cargo	255,784	285,696	-29,912	-10.5%
Deep-sea cargo	94,999	95,782	-783	-0.8%
Feeder cargo	29,655	30,510	-855	-2.8%
Short-sea cargo	26,406	26,613	-207	-0.8%
Containers	151,060	152,905	-1,845	-1.2%
Roll-on/roll-off cargo	23,958	24,253	-295	-1.2%
Other general cargo	6,005	6,548	-543	-8.3%
Break bulk	29,963	30,801	-838	-2.7%
Total general cargo	181,023	183,706	-2,683	-1.5%
Total cargo throughput	436,807	469,402	-32,595	-6.9%
Total numbers of containers	8,436,240	8,781,185	-344,945	-3.9%
Total TEUs	14,349,446	14,810,804	-461,358	-3.1%

Throughput, including throughput in the terminals Hook of Holland, Dordrecht, Schiedam and Vlaardingen. In 2020, this throughput accounted for 4.1% of the total throughput volume for incoming and outgoing flows. The associated seaport dues do not accrue to the Port of Rotterdam Authority and they have therefore not been included in the financial reporting.

National and international port alliances

The port of Rotterdam is a hub for international trade and it facilitates a strong industrial cluster. The Rotterdam port and industrial complex has a sound national and international reputation. The Port of Rotterdam Authority uses its knowledge and expertise nationally and internationally to further strengthen this reputation, to attract companies, to advise strategic parties and to strengthen our international network through participation. In that way, we can serve the interests of both Rotterdam and the Netherlands.

Sohar Port and Freezone, Oman: Sohar Port and Freezone is a 50-50 joint venture between the Port of Rotterdam Authority and the Omani government. Sohar Port and Freezone develops and manages the port of Sohar, which has grown in recent times to an annual cargo throughput of over 60 million tonnes.

Pecém, Brazil: Pecém is a 30/70 joint venture between the Port of Rotterdam Authority and the state of Ceará in Brazil. The Rotterdam participation in the port of Pecém offers opportunities for international trade flows and investments by customers who are active in the port of Rotterdam. Pecém is a rapidly growing industrial port complex in the north-east of Brazil.

Portbase: Portbase manages the Port Community System (PCS) of the Dutch ports and it is a strategic participation of the Port of Rotterdam Authority (75%). More than 4,700 companies use Portbase.

Safety and security

Safety and security are a top priority in our port. For shipping, but also for local residents, employees in the port, companies and users (including leisure users) of the port area. Nautical safety, transport and environmental safety, flood risk management, social safety, cyber security and personal safety are central here. We monitor the 'safety landscape' annually and share knowledge on the various subjects more widely inside the organisation.

Accidents

2020 was a safe year for shipping in the port of Rotterdam. We report on the safety of shipping traffic using the Nautical Safety Index (NSI). This is an index which takes the seriousness of accidents into account. In 2020, the NSI was 7.99, which is higher than the standard of 7.0. The number of nautical accidents and the number of incidents without damage was almost the same as in 2019. The number of serious accidents fell from four to one. The NSI therefore increased.

Smart approach to port infrastructure

Rotterdam is Europe's largest sea port. This is due to a range of factors, including good accessibility from the sea, world-class clients, adequate space for development, natural hinterland connections and an increasing focus on social infrastructure. With a maximum water depth of 24 metres, it is the only one of the four largest ports in the Hamburg-Le Havre range with unlimited access for the vessels with the deepest draughts. The port brings together shipping, inland shipping, rail, road and pipeline modalities. In 2020, 28,170 seagoing vessels and 92,552 inland vessels visited the port of Rotterdam.

Infra Innovation is an important component of our smart approach to port infrastructure. In this programme, we generate value with data by testing theory (such as design guidelines for structures) to see how it works in practice. The total package of optimisation, savings and design tools allows us to reduce the costs of investment in maritime infrastructure. The results show that we not only save on costs but also that, by using fewer and more sustainable materials, we also reduce carbon emissions by about 10 kilotonnes.



Total area of the port	12,464 ha	Water depth relative to New Amsterdam Level (max.)	24 m
Land area	7,966 ha	Quay walls	79.5 km
Water area	4,498 ha	Jetties for sea and inland shipping	131
Total length of Rotterdam port area	42 km	Banks (inclines)	176.5 km

Accessibility

Good accessibility is crucial for the port of Rotterdam. The revised 2030 Port Vision states our ambition to become Europe's best connected port by 2030. To safeguard excellent multimodal accessibility in the long term as well, the long-term accessibility challenges have been identified. They have been classified on the basis of geographical location:

- Optimisation of the Rotterdam 'hub' (port and industrial complex/region);
- Strengthening the East and Southeast freight corridors in the Rotterdam-Antwerp-Ruhr network;
- Strengthening the connections with growth regions and economic centres through the East and Southeast freight corridors and TEN-T corridors.

We converted the 2030-2040 throughput forecasts into volumes for the different modalities and conducted a capacity analysis of the available networks, identifying a number of bottlenecks in the physical infrastructure network. We reformulated those bottlenecks as twenty principal challenges in the port and industrial complex/region and on the national and international (TEN-T) freight transport corridors.

We are working on possible solutions with our partners to address those challenges: we are focusing on using the existing infrastructure better (capacity management) and making joint investments with other parties in new and existing infrastructure. The use of smart information systems and the exchange of data between various parties in the chain will also help to improve accessibility. At the Port of Rotterdam Authority, we see digitalisation as the 'fifth modality' alongside water, roads, rail and pipelines.

Efficient port embraces digitalisation

The Port of Rotterdam Authority is working hard on our ambition to be the smartest port in the world. The pace of digitalisation is increasing all the time. Digital products and data are interrelated and interdependent. Not only in our organisation but also at our customers, where the physical and digital worlds are increasingly intertwined. The integrated digital strategy drafted in 2020 provides us with the digital foundations for all our challenges.

The digital strategy includes the following three areas:

1. Digitalisation at the Port Authority

Working with shipping and other port authorities, we will focus on digitalisation at the Port Authority, with the associated benefits for nautical safety, chain efficiency and emission reduction. This effort will allow port calls to be monitored and assessed in real time. Drones can also be used to further port safety. They open up the way to even better supervision and they can help inspectors and shipping masters to be in the right place at the right time.

2. Digitalisation of port development and management

Port development activities and port management activities are being digitalised. Examples include the administration of assets and contract data in SAP, spatial data in GIS and drawings in Autocad. Assets will increasingly include an IT component such as sensors and cameras that can collect information and data models that can provide new insights. That will allow us, for example, to improve the condition and availability of port areas, real estate and infrastructure, or to provide clients with an overview of, and transparency relating to, their consumption patterns and their use of space.

3. Commercial digital strategy

We aim to use our commercial digital strategy to optimise the logistics chains that include Rotterdam and contribute to further improving links to the hinterland and other important logistical hubs. With the port business community, we are working on a range of digital applications that will make transit through the port more predictable, faster, safer, smarter, more sustainable and more transparent. For example:

- PortXchange is an application that allows shipping companies, agents, terminals and other service providers to optimise the planning, execution and monitoring of all activities during a port call on the basis of standardised data exchange. That leads to improvements in predictability, shorter waiting times, lower costs and lower carbon emissions.
- In conjunction with Portbase, Nextlogic offers integrated planning for the handling of inland container shipping in the port of Rotterdam. That leads to the optimal deployment of the assets of deep sea terminals, empty depots and barge operators, and makes the inland shipping product efficient and reliable for shippers and freight forwarders.
- Cargo Tracker is the successor to Boxinsider, a track and trace service for containers that we developed in 2019. Portbase has been offering this tool since 2020. The new service allows the parties involved to stay informed about cargo they are handling or that is sent to them.

Energy transition

The Port of Rotterdam Authority wants to develop the port into the place where the energy transition takes shape. The companies in the port produce a lot of carbon emissions but they also have considerable expertise in the fields of energy, energy-intensive production processes and carbon reduction. That puts the port of Rotterdam in pole position in terms of the development and large-scale applications of technologies to reduce industry's carbon emissions to virtually zero.

The basis for the energy transition is the report presented in 2018 from the regional industry consultation platform for the National Climate Agreement: 'In three steps towards a sustainable Rotterdam-Moerdijk industry cluster'. It sets out concrete plans to bring the Rotterdam port and industrial complex in line with local, national and international climate targets. We assume this will take place in three steps.

Step 1

In step 1, the industry will implement efficiency measures. Residual heat will be used to heat homes, commercial buildings and greenhouses. CO₂ will be captured and stored under the North Sea. These developments will require a lot of additional infrastructure, such as pipelines and cables, in the coming years. One example is Porthos:

Energie Beheer Nederland (EBN), Gasunie and the Port of Rotterdam Authority share the ambition of establishing a basic infrastructure for the collection and transport of CO₂ in the Rotterdam port and industrial complex for storage in depleted gas fields in the North Sea. This is the Porthos project: Port of Rotterdam CO₂ Transport Hub & Offshore Storage. Porthos reached an important milestone in early October 2020, when the European Commission proposed granting the Porthos project a subsidy of €102 million.

Step 2

Step 2 will involve changing the energy system. Instead of using oil and gas for heating, industry will switch to electricity and hydrogen, preferably green hydrogen. This will require large amounts of affordable electricity from sources like wind and solar. One example is the use of hydrogen:

In just a few years, hydrogen has evolved from an eternally unfulfilled promise as a transport fuel into a widely accepted key to the energy transition. Our vision for hydrogen is that the port of Rotterdam will, by 2050, be the hydrogen hub for Northwest Europe, with 20 million tonnes of hydrogen passing through our port annually. A current example of the development of hydrogen is an initiative from Air Liquide and the Port of Rotterdam Authority to have 1,000 trucks running on hydrogen in the Netherlands, Belgium and western Germany by 2025. A range of partners from the supply chain, such as VDL Group, Vos Logistics and Jongeneel Transport, have joined the initiative.

Step 3

Step 3 involves replacing fossil raw materials. It can be achieved by using biomass, recycled materials, green hydrogen and CO₂. An example is the production of synthetic kerosene:

In collaboration with Rotterdam The Hague Airport and Rotterdam The Hague Innovation Airport, we are studying the large-scale production of sustainable, synthetic aviation fuel in the port of Rotterdam. Over the next few years, a test plant will be built at Rotterdam The Hague Airport to produce 1,000 litres of synthetic kerosene a day. Working with the partners, we are also looking at what is needed to scale up a plant of this kind to deliver a much larger production capacity.

Sustainable transport

Alongside industry, the transport of goods to, in and from the port area will also have to become climate-friendly. The Port of Rotterdam Authority is developing activities to help the logistics sector reduce carbon emissions.

Financial results and investment portfolio

The Port of Rotterdam Authority must continue to invest as an enterprising developer in the port infrastructure and respond to the opportunities provided by the energy transition and digitalisation. Adequate investment capacity is therefore crucial. The financial scope to invest depends on, among other things, operating costs and revenue, the returns on our investments, the size of our investment portfolio (past, present and future) and agreements with our financiers.

Robust result

We continued to be financially healthy in 2020. Our revenue of €753.3 million was 6.6% up on 2019. The result before tax was €272.6 million, which is €31.6 million (+13%) more than in 2019. This increase is due to higher returns from contracts.

Investment portfolio

In 2020, we invested €265.8 million: €257.5 million (gross) in tangible fixed assets and €8.3 million in financial fixed assets. Our investments relate to the development of infrastructure for our new and existing clients, and the development of the role in society of the Rotterdam port and industrial complex. Investments for new and existing clients generate a direct financial return; investments in the public domain do not. We monitor the balance between the two. In 2020, we invested in port development, the energy transition, digitalisation and international port development.

Focus on strategic themes

As in recent years, we released additional funds in 2020 for our strategic themes: the energy transition, digitalisation and innovation. The aim is to accelerate the development of the opportunities afforded by the strategic themes for the port of Rotterdam.

All ratios are well above the standard values

The goal of the Port of Rotterdam Authority's strategy is to have a financial position appropriate to at least an A rating in order to achieve our investment ambitions and maintain our operating activities in the event of unexpected negative developments. On the basis of our long-term financing plan, our cash flows are positive. The expectation is that, in the long term, the amount of loan capital taken out by the Port of Rotterdam Authority will remain at the current level. That means our financing consists of a mix of loans and capital market products. The most important financial ratios that we follow are: net debt in relation to EBITDA, solvency and the interest coverage ratio. All ratios are well above the standard values stated in the financing contracts. In 2020, we raised €70 million in loan capital to strengthen our working capital position. We have already repaid €25 million of this.

Balance sheet

	Ref.	31 December 2020	31 December 2019
Assets			
Fixed assets			
Tangible fixed assets	1	4,011,016	3,927,452
Financial fixed assets	2	1,377,751	1,279,997
		<u>5,388,767</u>	<u>5,207,449</u>
Current assets			
Inventory		628	591
Accounts receivable	3	181,321	180,225
Cash and cash equivalents	4	206,836	136,093
		<u>388,785</u>	<u>316,909</u>
Total assets		5,777,552	5,524,358

Liabilities			
Shareholders' equity			
Issued share capital	5	900,000	900,000
Share premium reserves	5	391,200	391,200
Legal reserves	5	49,571	75,016
Other reserves	5	2,488,207	2,350,245
Result for appropriation	5	351,718	238,860
		<u>4,180,696</u>	<u>3,955,321</u>
Provisions	6	<u>57,018</u>	<u>59,726</u>
Long-term debts	7	<u>1,353,694</u>	<u>1,308,943</u>
Short-term debts	8	<u>186,144</u>	<u>200,368</u>
Total liabilities		5,777,552	5,524,358

(Before result appropriation, amounts x € 1,000)

Income statement

	Ref.	2020	2019
Net revenue	11	714,959	669,874
Other operating income	11	38,296	36,700
Total operating income		753,255	706,574
Wages, salaries and social security	12	-116,219	-116,685
Depreciation and impairment of tangible fixed assets	1	-161,428	-153,394
Other operating expenses	13	-159,504	-156,489
Total operating expenses		-437,151	-426,568
Result before depreciation		316,104	280,006
Financial income and expenditure	15	-45,343	-41,732
Result from ordinary activities before taxation		270,761	238,274
Taxation	16	79,147	-2,094
Income from participating interests	17	1,810	2,680
Result after taxation		351,718	238,860

(Amounts x € 1,000)