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**FACTS & FIGURES.**  
**A WEALTH OF**  
**INFORMATION.**  
MAKE IT HAPPEN.

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DRY BULK



LIQUID BULK



CONTAINERS

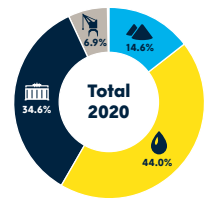
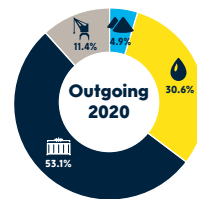
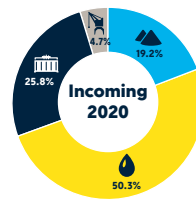
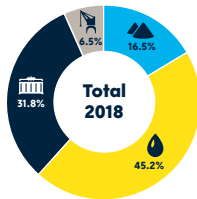
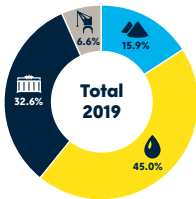
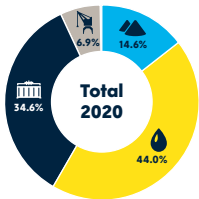


BREAKBULK

436.8

MILLION TONNES

## Cargo throughput



## TOTAL THROUGHPUT BY COMMODITY

|                             | 2020         | 2019         | 2018         |
|-----------------------------|--------------|--------------|--------------|
| Iron ore and scrap          | 22.7         | 30.0         | 30.1         |
| Coal                        | 17.3         | 22.4         | 26.4         |
| Agribulk                    | 10.3         | 9.8          | 9.9          |
| Other dry bulk              | 13.5         | 12.2         | 11.3         |
| <b>Subtotal dry bulk</b>    | <b>63.8</b>  | <b>74.5</b>  | <b>77.6</b>  |
| Crude oil                   | 93.6         | 104.2        | 100.3        |
| Mineral oil products        | 60.1         | 68.2         | 77.7         |
| LNG                         | 6.2          | 7.1          | 5.2          |
| Other liquid bulk           | 32.1         | 31.7         | 28.6         |
| <b>Subtotal liquid bulk</b> | <b>192.0</b> | <b>211.2</b> | <b>211.8</b> |
| <b>Total bulk goods</b>     | <b>255.8</b> | <b>285.7</b> | <b>289.5</b> |
| <b>Containers</b>           | <b>151.1</b> | <b>152.9</b> | <b>149.1</b> |
| Roll-on/Roll-off            | 24.0         | 24.3         | 24.1         |
| Other general cargo         | 6.0          | 6.5          | 6.4          |
| <b>Total breakbulk</b>      | <b>30.0</b>  | <b>30.8</b>  | <b>30.4</b>  |
| <b>Total throughput</b>     | <b>436.8</b> | <b>469.4</b> | <b>469.0</b> |

Unit: Gross weight x 1 million metric tons

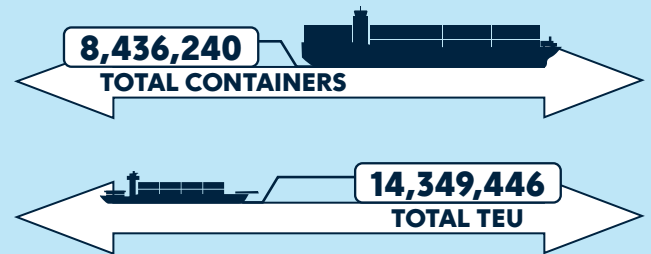
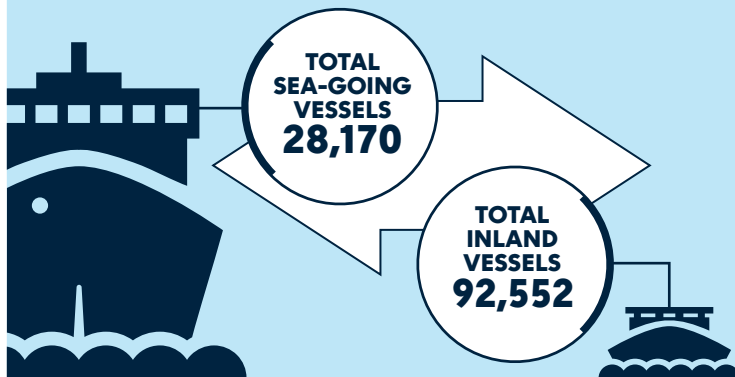
Source: Port of Rotterdam

## INCOMING AND OUTGOING BY COMMODITY 2020

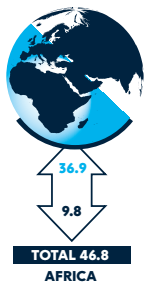
|                             | Incoming     | Outgoing     | Total        |
|-----------------------------|--------------|--------------|--------------|
| Iron ore and scrap          | 19.7         | 3.0          | 22.7         |
| Coal                        | 16.6         | 0.7          | 17.3         |
| Agribulk                    | 9.3          | 1.0          | 10.3         |
| Other dry bulk              | 11.4         | 2.1          | 13.5         |
| <b>Subtotal dry bulk</b>    | <b>56.9</b>  | <b>6.9</b>   | <b>63.8</b>  |
| Crude oil                   | 92.5         | 1.1          | 93.6         |
| Mineral oil products        | 31.4         | 28.6         | 60.1         |
| LNG                         | 5.8          | 0.5          | 6.2          |
| Other liquid bulk           | 19.2         | 12.9         | 32.1         |
| <b>Subtotal liquid bulk</b> | <b>148.9</b> | <b>43.1</b>  | <b>192.0</b> |
| <b>Total bulk goods</b>     | <b>205.8</b> | <b>50.0</b>  | <b>255.8</b> |
| <b>Containers</b>           | <b>76.3</b>  | <b>74.8</b>  | <b>151.1</b> |
| Roll-on/Roll-off            | 10.0         | 13.9         | 24.0         |
| Other general cargo         | 3.9          | 2.1          | 6.0          |
| <b>Total breakbulk</b>      | <b>13.9</b>  | <b>16.0</b>  | <b>30.0</b>  |
| <b>Total throughput</b>     | <b>296.0</b> | <b>140.8</b> | <b>436.8</b> |

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam



## Incoming and outgoing goods, grouped by continent



|              | Incoming     |              | Outgoing     |              | Total        |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              | 2019         | 2018         | 2019         | 2018         | 2019         | 2018         |
| Europe       | 147.8        | 152.8        | 56.7         | 64.3         | 204.6        | 217.1        |
| Africa       | 36.9         | 35.3         | 9.8          | 10.3         | 46.8         | 45.6         |
| America      | 73.9         | 68.7         | 19.6         | 17.6         | 93.5         | 86.3         |
| Asia         | 59.9         | 58.1         | 40.3         | 39.4         | 100.2        | 97.5         |
| Oceania      | 7.1          | 8.3          | 1.2          | 0.9          | 8.3          | 9.2          |
| Unknown      | 0.1          | 0.0          | 15.9         | 13.2         | 16.0         | 13.2         |
| <b>Total</b> | <b>325.8</b> | <b>323.2</b> | <b>143.6</b> | <b>145.7</b> | <b>469.4</b> | <b>468.9</b> |

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

## Incoming and outgoing containers by sea



### 2020

| Incoming         | Empty     | Loaded    | Total     |
|------------------|-----------|-----------|-----------|
| Total containers | 605,924   | 3,763,872 | 4,369,796 |
| Total TEU        | 1,046,998 | 6,383,623 | 7,430,621 |

| Outgoing                | Empty            | Loaded            | Total             |
|-------------------------|------------------|-------------------|-------------------|
| Total containers        | 787,051          | 3,279,393         | 4,066,444         |
| Total TEU               | 1,322,964        | 5,595,861         | 6,918,824         |
| <b>Total containers</b> | <b>1,392,975</b> | <b>7,043,265</b>  | <b>8,436,240</b>  |
| <b>Total TEU</b>        | <b>2,369,962</b> | <b>11,979,484</b> | <b>14,349,446</b> |

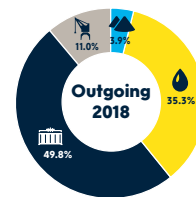
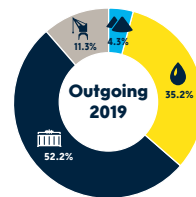
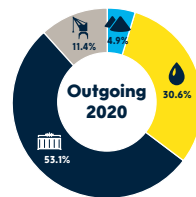
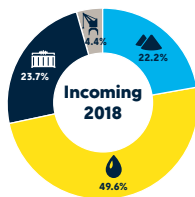
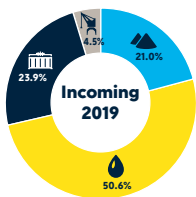
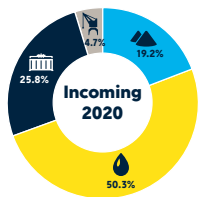
### 2019

| Incoming         | Empty     | Loaded    | Total     |
|------------------|-----------|-----------|-----------|
| Total containers | 698,821   | 3,868,406 | 4,567,227 |
| Total TEU        | 1,201,162 | 6,515,236 | 7,716,398 |

| Outgoing                | Empty            | Loaded            | Total             |
|-------------------------|------------------|-------------------|-------------------|
| Total containers        | 956,679          | 3,257,279         | 4,213,958         |
| Total TEU               | 1,623,153        | 5,481,945         | 7,105,099         |
| <b>Total containers</b> | <b>1,655,500</b> | <b>7,125,685</b>  | <b>8,781,185</b>  |
| <b>Total TEU</b>        | <b>2,824,315</b> | <b>11,997,182</b> | <b>14,821,497</b> |

Unit: Number of containers and TEU (Twenty-Foot Equivalent Units)

Source: Port of Rotterdam



## INCOMING BY COMMODITY

|                         | 2020         | 2019         | 2018         |
|-------------------------|--------------|--------------|--------------|
| Total dry bulk          | 56.9         | 68.3         | 71.9         |
| Total liquid bulk       | 148.9        | 165.0        | 160.4        |
| Containers              | 76.3         | 78.0         | 76.6         |
| Total breakbulk         | 13.9         | 14.5         | 14.4         |
| <b>Total throughput</b> | <b>296.0</b> | <b>325.8</b> | <b>323.2</b> |

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

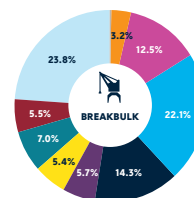
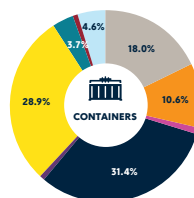
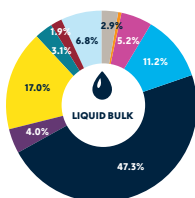
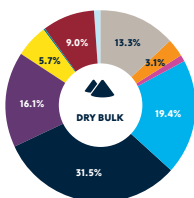
## OUTGOING BY COMMODITY

|                         | 2020         | 2019         | 2018         |
|-------------------------|--------------|--------------|--------------|
| Total dry bulk          | 6.9          | 6.2          | 5.7          |
| Total liquid bulk       | 43.1         | 46.2         | 51.4         |
| Containers              | 74.8         | 74.9         | 72.5         |
| Total breakbulk         | 16.0         | 16.3         | 16.1         |
| <b>Total throughput</b> | <b>140.8</b> | <b>143.6</b> | <b>145.7</b> |

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

## TOTAL THROUGHPUT BY COMMODITY IN THE HAMBURG - LE HAVRE RANGE



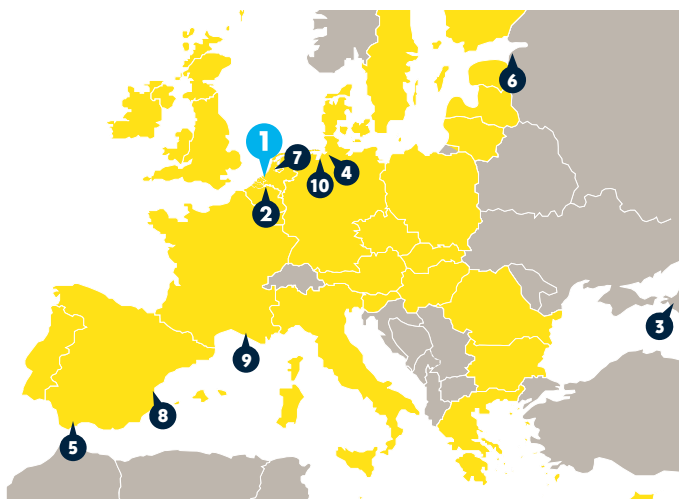
|                             | Hamburg      | Bremerhaven | Wilhelms-haven | Amsterdam   | Rotterdam    | North Seaports | Antwerp      | Zeebrugge   | Dunkirk     | Le Havre    |
|-----------------------------|--------------|-------------|----------------|-------------|--------------|----------------|--------------|-------------|-------------|-------------|
| Iron ore and scrap          | 11.1         | 3.0         | 0.0            | 16.5        | 22.7         | 6.8            | 1.5          | 0.0         | 8.8         | 0.3         |
| Coal                        | 4.7          | 0.4         | 1.0            | 10.8        | 17.3         | 5.1            | 1.2          | 0.0         | 3.5         | 0.2         |
| Agribulk                    | 7.5          | 0.5         | 0.0            | 7.6         | 10.3         | 4.7            | 0.8          | 0.3         | 3.3         | 0.0         |
| Other dry bulk              | 3.6          | 2.3         | 1.1            | 4.2         | 13.5         | 15.9           | 8.1          | 0.0         | 2.6         | 1.3         |
| <b>Subtotal dry bulk</b>    | <b>26.9</b>  | <b>6.2</b>  | <b>2.1</b>     | <b>39.2</b> | <b>63.8</b>  | <b>32.6</b>    | <b>11.6</b>  | <b>0.3</b>  | <b>18.1</b> | <b>1.8</b>  |
| Crude oil                   | 0.8          | 0.0         | 18.2           | 0.1         | 93.6         | 0.0            | 2.1          | 0.0         | 0.0         | 13.2        |
| Mineral oil products        | 8.5          | 2.4         | 2.4            | 41.4        | 60.1         | 11.7           | 51.7         | 1.3         | 3.3         | 13.1        |
| LNG                         | 0.0          | 0.0         | 0.0            | 0.0         | 6.2          | 0.0            | 0.0          | 11.0        | 3.8         | 0.0         |
| Other liquid bulk           | 2.3          | 0.0         | 0.4            | 3.9         | 32.1         | 4.5            | 15.2         | 0.3         | 0.4         | 1.5         |
| <b>Subtotal liquid bulk</b> | <b>11.6</b>  | <b>2.4</b>  | <b>21.0</b>    | <b>45.4</b> | <b>192.0</b> | <b>16.2</b>    | <b>69.0</b>  | <b>12.6</b> | <b>7.6</b>  | <b>27.8</b> |
| <b>Total bulk goods</b>     | <b>38.5</b>  | <b>8.6</b>  | <b>23.1</b>    | <b>84.6</b> | <b>255.8</b> | <b>48.8</b>    | <b>80.6</b>  | <b>12.9</b> | <b>25.7</b> | <b>29.6</b> |
| <b>Containers</b>           | <b>86.6</b>  | <b>51.1</b> | <b>5.2</b>     | <b>1.1</b>  | <b>151.1</b> | <b>2.7</b>     | <b>139.1</b> | <b>17.9</b> | <b>4.0</b>  | <b>22.3</b> |
| Roll-on/Roll-off            | 0.4          | 0.0         | 0.0            | 0.4         | 24.0         | 2.7            | 4.5          | 14.2        | 14.8        | 0.6         |
| Other general cargo         | 0.7          | 6.8         | 0.0            | 5.7         | 6.0          | 9.4            | 6.8          | 0.6         | 0.6         | 0.0         |
| <b>Total breakbulk</b>      | <b>1.2</b>   | <b>6.8</b>  | <b>0.0</b>     | <b>6.1</b>  | <b>30.0</b>  | <b>12.0</b>    | <b>11.2</b>  | <b>14.8</b> | <b>15.5</b> | <b>0.6</b>  |
| <b>Total throughput</b>     | <b>126.3</b> | <b>66.5</b> | <b>28.3</b>    | <b>91.8</b> | <b>436.8</b> | <b>63.5</b>    | <b>230.9</b> | <b>45.6</b> | <b>45.1</b> | <b>52.4</b> |
| <b>Total Market share</b>   | <b>10.6%</b> | <b>5.6%</b> | <b>2.4%</b>    | <b>7.7%</b> | <b>36.8%</b> | <b>5.3%</b>    | <b>19.5%</b> | <b>3.8%</b> | <b>3.8%</b> | <b>4.4%</b> |

Unit: Gross weight x 1 million metric tons

Bremerhaven and Le Havre: other general cargo incl. Roll-on/Roll-off; Le Havre: other dry bulk incl. iron and scrap; Zeebrugge: incl. bunker materials.

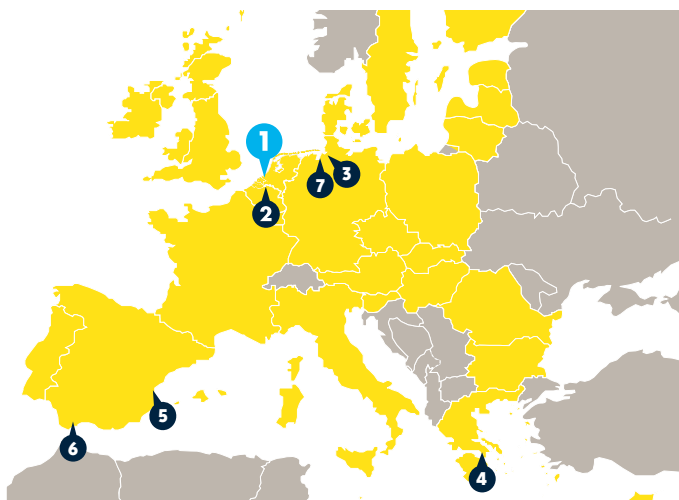
Source: Port of Rotterdam

## European ports



|                |             |                |             |
|----------------|-------------|----------------|-------------|
| 1 Rotterdam    | Netherlands | 6 Ust-Luga     | Russia      |
| 2 Antwerp      | Belgium     | 7 Amsterdam    | Netherlands |
| 3 Novorossiysk | Russia      | 8 Valencia     | Spain       |
| 4 Hamburg      | Germany     | 9 Marseilles   | France      |
| 5 Algeciras    | Spain       | 10 Bremerhaven | Germany     |

## European container ports



|             |             |               |         |
|-------------|-------------|---------------|---------|
| 1 Rotterdam | Netherlands | 5 Valencia    | Spain   |
| 2 Antwerp   | Belgium     | 6 Algeciras   | Spain   |
| 3 Hamburg   | Germany     | 7 Bremerhaven | Germany |
| 4 Piraeus   | Greece      |               |         |

Source: Port Authorities

## Port infrastructure

### SITES AND TERMINALS

#### Oil and oil products

|   |    |
|---|----|
| Oil refineries                              | 5  |
| Refinery terminals                          | 6  |
| Independent tank terminals for oil products | 11 |

#### Chemicals, biofuels and edible oils

|  |    |
|--|----|
| Chemical locations   | 45 |
| Biofuels plants  | 4  |
| Vegetable oils refineries  | 5  |
| Independent tank terminals for chemicals, biofuels and edible oils | 17 |

#### Gas and power, coal and biomass

|                               |    |
|-------------------------------|----|
| Gas fired power plants        | 3  |
| Coal and biomass fired plants | 3  |
| Natural gas terminals         | 1  |
| Wind turbines (total 183 Mw)  | 66 |

#### Utilities

|                                   |   |
|-----------------------------------|---|
| Industrial gases and water plants | 3 |
| Steam and power plants            | 2 |
| Waste processing                  | 1 |

#### Container terminals

|              |    |
|--------------|----|
| Deepsea      | 5  |
| Shortsea     | 3  |
| Empty depots | 20 |

#### Breakbulk terminals

|                     |    |
|---------------------|----|
| Roll-on/Roll-off    | 5  |
| Other general cargo | 22 |

#### Dry bulk terminals

|  |    |
|--|----|
| Agribulk, ores and scrap, coal, biomass and other dry bulk | 14 |
|--|----|

#### Tankstorage (capacity 1 million m<sup>3</sup>)

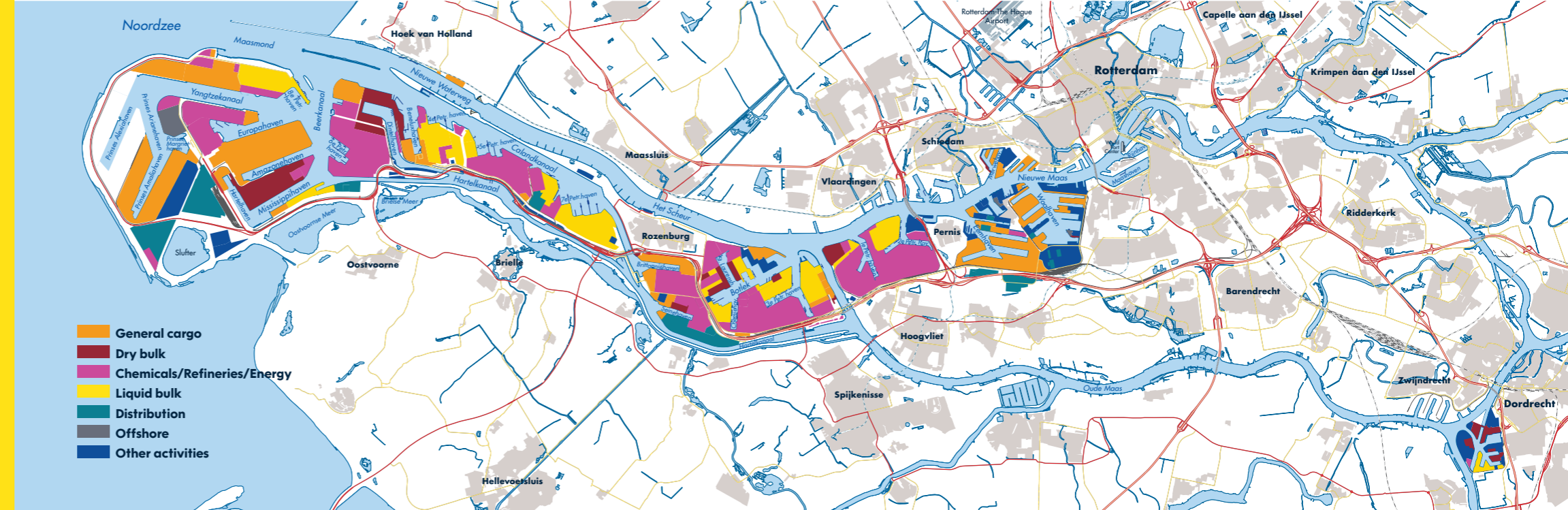
|                         |      |
|-------------------------|------|
| Crude oil               | 14.5 |
| Mineral oil products    | 14.4 |
| Chemical products       | 3.2  |
| Vegetable oils and fats | 1.4  |

Source: Port of Rotterdam

# Port of Rotterdam

Unrestricted accessibility 24 hours a day,  
7 days a week

|   |                  |
|---|------------------|
|   | <b>2020</b>      |
| Total port area   | <b>12,464 ha</b> |
| Land area   | <b>7,966 ha</b>  |
| of which rentable sites, including Maasvlakte 2 - phase 2 | <b>6,260 ha</b>  |
| Water area  | <b>4,498 ha</b>  |
| Total length Rotterdam's port area                        | <b>42 km</b>     |
| Water depth N.A.P. (max.)                                 | <b>24 m</b>      |
| Depth Eurogeul in the North Sea N.A.P. (max.)             | <b>26 m</b>      |
| Length Eurogeul in the North Sea                          | <b>57 km</b>     |
| Pipelines   | <b>1,500 km</b>  |
| Quay length   | <b>77.5 km</b>   |
| Banks (slopes)  | <b>202.5 km</b>  |
| Sea jetties   | <b>20</b>        |
| Inland jetties  | <b>100</b>       |
| Dolphins  | <b>13</b>        |
| Buoys   | <b>12</b>        |



- General cargo
- Dry bulk
- Chemicals/Refineries/Energy
- Liquid bulk
- Distribution
- Offshore
- Other activities

# STAYING ON COURSE IN UNIQUE TIMES

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*'Our annual report title is a good reflection of how we experienced 2020. It was a turbulent year involving a continuous search for solutions for many new challenges. In cooperation with many partners, we succeeded in keeping the port fully operational. And we are proud of that.'*

## **The strength of partnerships**

*We are presenting various initiatives here that demonstrate the innovative force of the Rotterdam Port and industry complex. Intensive partnerships with like-minded partners makes Rotterdam the perfect place for innovation, particularly with a focus on sustainability and digitisation. Our thanks to all the partners who placed their trust in us again in 2020.*

*Our clients and other stakeholders, for whom we work, keep us alert, and we value their involvement. We also aim to be a leading, sustainable, safe and efficient port in 2021; a place where our clients can do business with success.'*

From the Annual Report 2020, Port of Rotterdam.

The Port of Rotterdam Authority's Annual Report is available at:  
**[jaarverslag2020.portofrotterdam.com/downloads](https://jaarverslag2020.portofrotterdam.com/downloads)**

Rather than an exhaustive summary, these pages offer a selection of the 2020 milestones and projects on themes important for the port.

# PORT OF ROTTERDAM AUTHORITY

The Port of Rotterdam Authority aims to enhance the competitive position of the Port of Rotterdam as a logistics hub and world-class industrial complex. Not only in size, but also in quality.



## Finances

The Port of Rotterdam Authority's financial results improved compared with 2019. The net result was 351.7 million euro. A strong financial position enables us to continue to make major investments in port infrastructure improvements and realise social impact. Despite COVID-19, the Port Authority invested 265.8 million euro.

## COVID-19

The Port of Rotterdam Authority started organising twice-weekly Port Corona Consultations from 20 March. The consultations included representatives from nautical service providers, terminals, interest groups and other chain partners. When some companies in the port and industrial area faced problems due to COVID-19, we started immediate discussions with these clients to see how we could offer support, for instance by extending their payment terms.

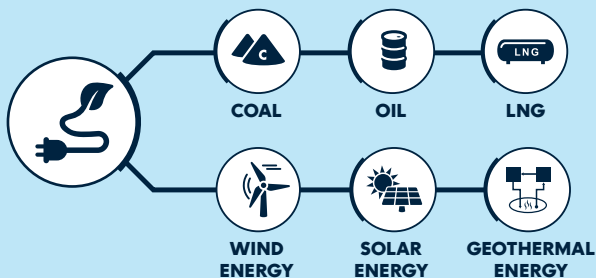
## Startmotor

The Port of Rotterdam Authority introduced the 'Startmotor' in 2020 as response to the government's wish for the Netherlands to invest itself out of the crisis. The Port Authority is using twelve projects to make the economy more sustainable, achieve climate goal progress and ensure that our economy continues to support our welfare in the long term. The Rotterdam projects contribute to employment, the gross domestic product and reducing CO<sub>2</sub> emissions. One of the plans is to develop a hydrogen cluster, including hydrogen transport pipelines.



# ENERGY TRANSITION

The Port of Rotterdam Authority is committed to combating climate change and aims to play a leading role in the global energy transition. Reducing the carbon footprint and efficient use of raw and residual materials are important tasks for the Port Authority.



## Shore-based power for sea-going and inland shipping

Rotterdam and the Port Authority are together rolling out shore-based power for sea-going vessels. The objective is that by 2030, many sea-going vessels will be 'plugged in' when berthed at the quay, enabling them to switch off diesel generators, which will improve air quality and reduce CO<sub>2</sub> emissions. Park-Line Aqua will supply a uniform shore-based power system for inland shipping and river cruises for the Port of Rotterdam Authority, North Sea Ports, Drechtsteden, Antwerp Port Authority, and the Flemish Water Authority.

## Construction of hydrogen infrastructure

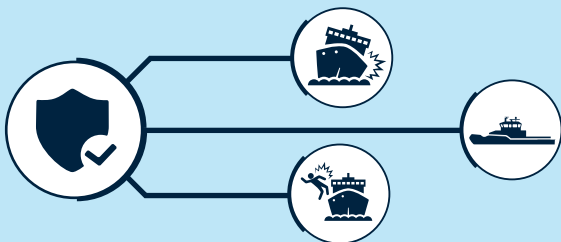
Shell has announced its plan to operate a green hydrogen plant on Maasvlakte 2 as early as 2023. The hydrogen will be transported via new pipelines to the Pernis refinery. Gasunie and the Port of Rotterdam Authority will be laying the pipeline together. The system will combine production and use in industry and the import and transport of hydrogen to other parts of the Netherlands and Northwest Europe. Hydrogen is seen as the energy carrier of the 21st century.

## Rapid fall in CO<sub>2</sub> emissions

CO<sub>2</sub> emissions in the Port of Rotterdam fell by 27% in the 2016-2020 period. Nationally, the emission of greenhouse gases fell by 14% in this period. Emissions in Rotterdam fell by 12% in 2020 and by 8% across the Netherlands. The consequence of this rapid reduction is that companies in the Port of Rotterdam now emit 13.5% of all Dutch CO<sub>2</sub> emissions. This was close to 20% several years ago.

# SAFETY

The Port of Rotterdam aspires to be the safest and most efficient port in the world and is working on this ambition constantly. This requires close cooperation, for which the port undertakes various activities.



## First trial using mobile degassing installation successful

An initial trial using a new mobile degassing installation on the Seinehaven public quay in Rotterdam was successful. Inland tanker Visioen was degassed of petrol without measurable vapours being released into the atmosphere. The degassing took place outside a facility, which is unique in the Netherlands.

## Joint Port Bye-Laws Amsterdam and Rotterdam

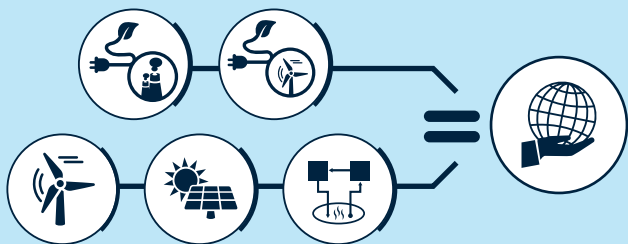
For the first time, Amsterdam/IJmond and Rotterdam/Rijnmond, the Netherlands' two largest ports, have joint Port Bye-Laws. The new Port Bye-Laws are clearer and provide unambiguous regulations. The number of articles has been reduced and the bye-laws are clearer. One example is that the ban on smoking, sparks and naked flame at petroleum or oil terminals has been combined from two provisions into one.

## Pile trial on Maasvlakte

A foundation pile trial on Maasvlakte 2 offered insight into the most efficient pile-driving method. 12 foundation piles of 36 metres each were used to determine the load under which they would buckle, enabling evaluation of the additional officially-determined safety measures. The trial is part of a series of projects that focus on more efficient construction of quay walls. The Port of Rotterdam Authority owns 89 kilometres of quay walls and is developing innovative construction methods for quay walls and slopes.

# SUSTAINABILITY

The Port of Rotterdam creates economic and social value and plans to realise sustainable growth. Here you can see a small selection of projects that contribute to the port's sustainable future.



## LNG year

This was a real LNG year for Rotterdam. LNG (Liquefied Natural Gas) is a clean fuel with low nitrogen, sulphur and particulate emissions. Highlights included the arrivals of Sleipnir, the world's largest semi-submersible LNG-powered crane vessel, and Iona and Mardi Gras, LNG-powered cruise ships. The biggest ever LNG bunkering took place in Rotterdam in November involving a container ship. CMA CGM JACQUES SAADE, with a tank capacity of 18,600 m<sup>3</sup>, was supplied with LNG while port loading operations continued as normal.

## Sustainable earthworks and civil engineering

The Port of Rotterdam Authority is embracing the Sustainable Earthworks and Civil Engineering approach to ensure sustainable construction and maintenance of port infrastructure. The Port Authority is using sustainability criteria in the design, implementation and maintenance phase of infrastructure projects. The focus during tenders is not only on price but also on sustainable implementation. For example, using materials with low emissions or a low environmental impact, such as recycled raw materials.

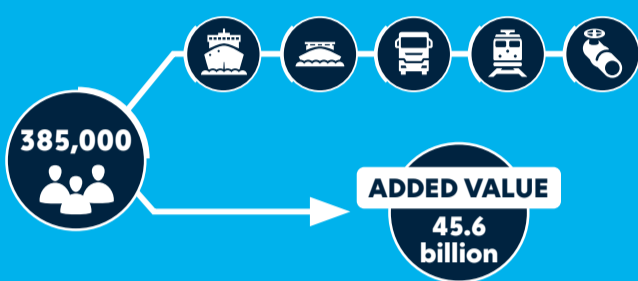
## Dutch sea ports win sustainability award

The Dutch sea ports of Rotterdam, Amsterdam, Terneuzen/Vlissingen, Moerdijk and Groningen have together won the 'World Ports Sustainability Award'. The award is for a joint project relating to the application of OESO guidelines for sea ports. These government guidelines concern corporate social responsibility when doing international business.

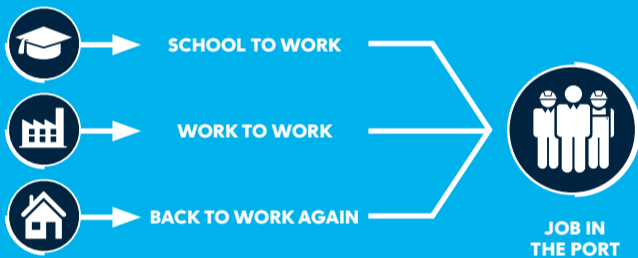


## ADDED VALUE, WORK AND EDUCATION

The direct and indirect added value of the Port of Rotterdam is more than 45.6 billion euro. This represents 6.2% of the Dutch gross domestic product (GDP).

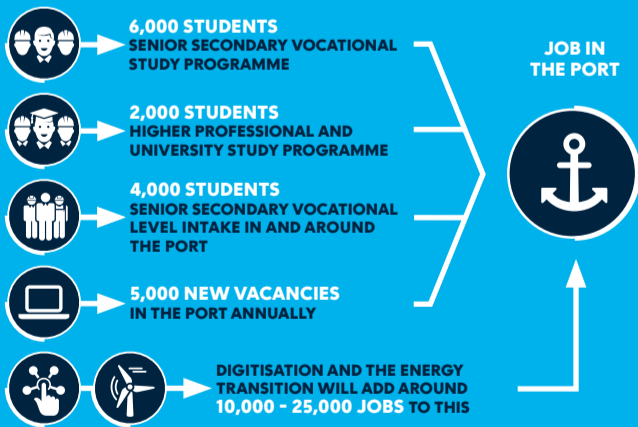


The port and work are changing fundamentally. We need sustainable, digital and competitive strong hands as well as smart minds if we are to remain a vital and competitive port. That is why it is important that employers, employees, pupils, students and people without work are ready for the Port of Rotterdam's work of today and tomorrow.



### Opening of Havenleerwerkplaats

Practice and education converge at the Havenleerwerkplaats, where new teaching programmes and work experience placements are realised. The opening of the lashing centre on the Havenleerwerkplaats, a partnership between ILS-Matrans and STC, contributes to this. An education fund was also established in 2020 based on the Workplace Learning Agreement, from which 10,000 education vouchers will be issued in the coming years. The focus is on retraining and additional training of employees to increase their employment opportunities in sectors with job vacancies.



### New teaching programme

IT Campus Rotterdam and IBM have started the first P-TECH teaching programme in the Netherlands. The business sector, education and authorities are cooperating in this teaching model to help young people obtain a senior secondary vocational level diploma in new technologies. Over 150,000 students from across the world have already followed a P-TECH programme.

### Lifelong development

The Rotterdam Social Innovation Initiative (RISI) was succeeded in 2020 by the launch of the SILLO platform (social innovation and lifelong development). The platform offers tools for companies to get started with lifelong development and new working methods. It also contributes to the agility and resilience of employees and companies. Around 200 employers and employees are now taking part in the platform.

# CORPORATE SOCIAL RESPONSIBILITY

Our Corporate Social Responsibility (CSR) statement sets out what we stand for. It guides our moral compass and defines the social issues that we focus on and where we can make a difference.



The achievements across all these themes in 2020 can be found in the adjacent columns.



# DIGITISATION

**Digitisation is taking off across the world. New technologies, players, partnerships and business models. The Port of Rotterdam is fully committed to innovation to maximise the benefits of the new opportunities offered by digitisation.**



## **First drone parcel delivery to a vessel**

For the first time in the Netherlands, a vessel has received a parcel via drone delivery. This delivery was a parcel containing vessel parts. Drones can also be used for prevention or control of incidents or fire, as well as for vessel, plant and bridge inspections and port operation supervision. In the long term, drones could even be used for heavy transport and passengers.

## **Successful electricity platform trial**

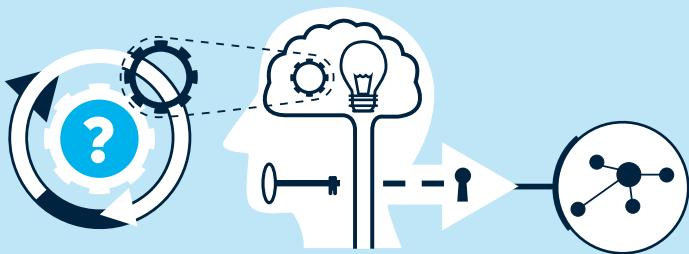
32 companies on the RDM site took part in a new energy platform trial: Distro. Solar panels, a battery and consumers trade in self-generated energy in a common market. In a world first, blockchain technology, artificial intelligence and high-frequency trading were combined into one platform. It has proven possible to coordinate supply and demand in local markets 48 hours in advance, based on fair price development and transparent trade agreements.

## **MASS Port Network established**

The MASS (Maritime Autonomous Surface Ships) Port Network was established in Singapore. This international partnership of port authorities introduces standards for communications between autonomous vessels and the shore, including detailed guidelines and conditions for trials in ports, international terminology and standards for ship reporting, traffic control and data exchange.

# INNOVATION

**Rotterdam offers ample space for innovation and entrepreneurship. A carbon-neutral and smart port demands radical innovation and new technologies. We test innovations in practice, apply new technology and connect existing companies with young innovators from across the world.**



## **Start of MATCH innovation programme**

PortXL launched its MATCH innovation programme.

The objective was to work with companies to start 100 innovative pilots in the Port of Rotterdam. Connecting companies and startups creates opportunities for innovations to make the Port of Rotterdam cleaner, more sustainable and smarter.

## **Smart road gullies**

The Port of Rotterdam Authority is developing data-driven road gullies in partnership with Van Gelder civil engineers and Wavin, suppliers of construction and infrastructure solutions. Gullies allow rainwater to flow down into the public sewer but catch sand, sludge, waste and leaves. As standard, over 13,000 gullies are cleaned in the port area annually. The pilot uses smart road gullies to demonstrate how only necessary maintenance will be needed in the future.

## **Flower Turbines**

After participating in PortXL, Flower Turbines, based on the RDM 'Innovation Dock', is now manufacturing innovative silent wind turbines that are easy to install in urban areas. The wind turbines activate with hardly any wind and produce clean energy from every wind direction, providing a good energy source to complement solar power.

# ACCESSIBILITY

The Port of Rotterdam is working continuously to improve accessibility and strengthen its position as Europe's largest logistical and industrial hub. In this context, sustainable solutions are sought to optimise access to Europe by road, rail, pipeline and coastal and inland navigation.



## Rail bridge across Rozenburgsesluis

The 177-metre-long rail bridge across Rozenburgsesluis was installed in April. The rail bridge forms an important part of the Theemsweg route; an over four-kilometre-long new port railway route. The Theemsweg route increases companies' rail accessibility to the western section of the port. This large infrastructure project is in line with our policy to make hinterland connections more sustainable and rail, road and shipping traffic more efficient.

## Maasvlakte Plaza expansion

210 parking spaces were created at truck parking Maasvlakte Plaza. With this expansion, Maasvlakte Plaza now has 567 parking spaces, making it the world's biggest secure truck park. The total number of secure parking spaces across the entire Port of Rotterdam is now 945. The expansion was required, as this truck parking has seen high utilisation rates of over 90% since its opening in May 2017.

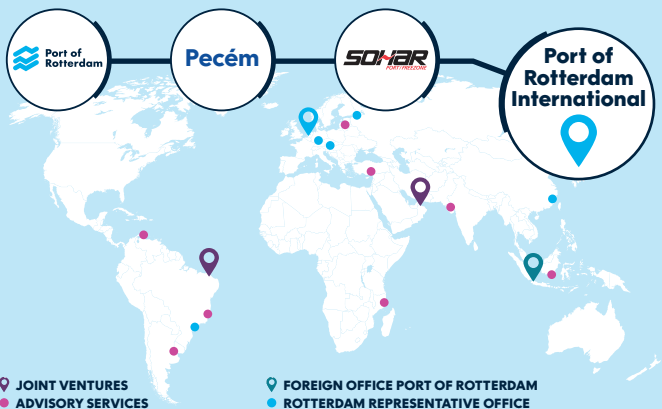
## Port of Rotterdam Authority deepens Amazonehaven

The Port of Rotterdam Authority worked with Hutchison Ports ECT Rotterdam (ECT) to deepen the Amazonehaven on Maasvlakte from 16.65 to 17.45 metres across a length of half a kilometre. This will ensure that the port remains easily navigable in the future for the latest generation of container ships.



# INTERNATIONAL PORT DEVELOPMENT

The Port of Rotterdam Authority is involved in international port developments as both a consultant and a partner.



## SOHAR Port and Free zone, Oman

Sohar is working proactively on the energy transition in Oman, including via solar power and research into green hydrogen. Despite Covid-19, throughput in this port grew by 4% to 65 million tonnes.

## Indonesia

From a base in Jakarta, the Port of Rotterdam Authority is supporting the Indonesian government in the further development of ports and is identifying port development projects that offer opportunities for Rotterdam and the Dutch maritime sector. In 2020, the Port Authority was involved in six projects in Indonesia and Malaysia.

## Port of Pecém, Brazil

An investigation took place in 2020 into the possibilities for local production of green hydrogen and for export, including to Rotterdam. The total throughput in Pecém was 15.9 million tonnes.

## Global activities

Over the past year, the Port Authority offered digital solutions to ports across the world as well as engaging in port development projects and consultancy. The Port Authority also delivered education, including via the Port Executive Leadership Circle and the online Port Management Programme – Digitisation.

# PORT OF ROTTERDAM AUTHORITY

The aim of the Port of Rotterdam Authority is to strengthen the competitive position of the port of Rotterdam as a logistics hub and a world-class industrial complex in terms of both size and quality. The Port Authority is able and willing to make an impact and so it is focusing on accelerating sustainability in the port and it is a partner in the digitalisation of the port and logistics chains. The Port Authority's core tasks are the sustainable development, management and operation of the port, the maintenance of the smooth and safe handling of shipping and supporting the future-resilience of the port of Rotterdam.

## **Facts and figures for the Port Authority and the Port of Rotterdam:**

- Port of Rotterdam Authority: approximately 1,270 employees, revenue approximately € 750 million.
- Employment: (direct and indirect) 385,000 jobs in the Netherlands.

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Differences due to rounding off are possible. The Port of Rotterdam Authority does not accept any responsibility for any errors that might occur in this publication.