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DRY BULK



LIQUID BULK



CONTAINERS

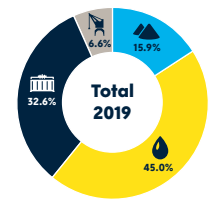
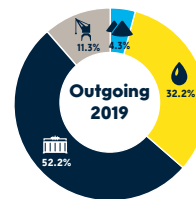
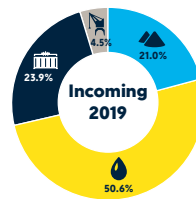
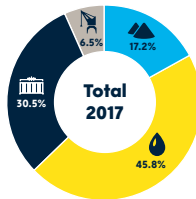
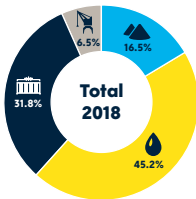
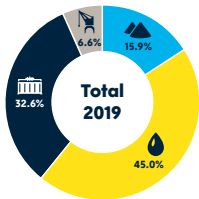


BREAKBULK

469.4

MILLION TONNES

Cargo throughput



TOTAL THROUGHPUT BY COMMODITY

	2019	2018	2017
Iron ore and scrap	30.0	30.1	31.2
Coal	22.4	26.4	25.8
Agribulk	9.8	9.9	11.1
Other dry bulk	12.2	11.3	12.1
Subtotal dry bulk	74.5	77.6	80.2
Crude oil	104.2	100.3	104.2
Mineral oil products	68.2	77.7	79.2
LNG	7.1	5.2	2.0
Other liquid bulk	31.7	28.6	28.9
Subtotal liquid bulk	211.2	211.8	214.3
Total bulk goods	285.7	289.5	294.5
Containers	152.9	149.1	142.6
Roll-on/Roll-off	24.3	24.1	23.8
Other general cargo	6.5	6.4	6.5
Total breakbulk	30.8	30.4	30.3
Total throughput	469.4	469.0	467.4

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

INCOMING AND OUTGOING BY COMMODITY 2019

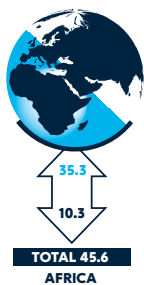
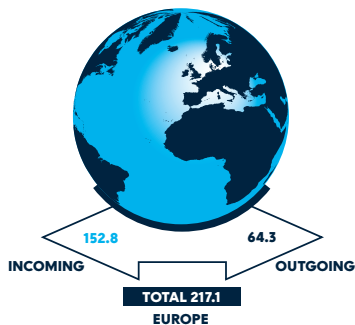
	Incoming	Outgoing	Total
Iron ore and scrap	27.6	2.4	30.0
Coal	21.7	0.8	22.4
Agribulk	8.9	0.9	9.8
Other dry bulk	10.1	2.1	12.2
Subtotal dry bulk	68.3	6.2	74.5
Crude oil	103.3	0.9	104.2
Mineral oil products	35.7	32.5	68.2
LNG	6.5	0.6	7.1
Other liquid bulk	19.5	12.2	31.7
Subtotal liquid bulk	165.0	46.2	211.2
Total bulk goods	233.3	52.4	285.7
Containers	78.0	74.9	152.9
Roll-on/Roll-off	10.3	14.0	24.3
Other general cargo	4.2	2.3	6.5
Total breakbulk	14.5	16.3	30.8
Total throughput	325.8	143.6	469.4

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam



Incoming and outgoing goods, grouped by continent



	Incoming		Outgoing		Total	
	2018	2017	2018	2017	2018	2017
Europe	152.8	152.8	64.3	63.8	217.1	216.7
Africa	35.3	39.1	10.3	9.6	45.6	48.7
America	68.7	61.0	17.6	17.5	86.3	78.5
Asia	58.1	64.0	39.4	38.4	97.5	102.4
Oceania	8.3	6.9	0.9	1.0	9.2	7.9
Unknown	0.0	0.0	13.2	13.1	13.2	13.1
Total	323.2	323.9	145.7	143.4	469.0	467.3

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

Incoming and outgoing containers by sea



2019

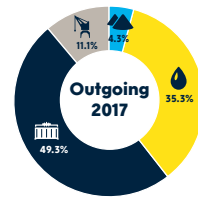
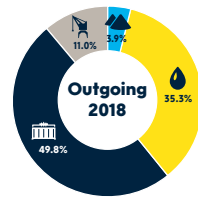
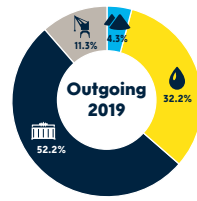
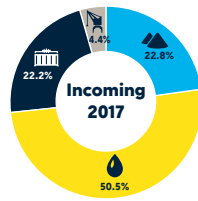
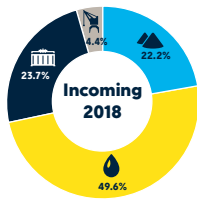
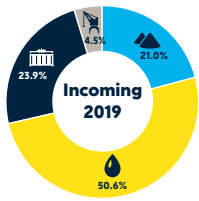
Incoming	Empty	Loaded	Total
Total containers	698,821	3,868,406	4,567,227
Total TEU	1,201,162	6,515,236	7,716,398
Outgoing	Empty	Loaded	Total
Total containers	956,679	3,257,279	4,213,958
Total TEU	1,623,153	5,481,945	7,105,099
Total containers	1,655,500	7,125,685	8,781,185
Total TEU	2,824,315	11,997,182	14,821,497

2018

Incoming	Empty	Loaded	Total
Total containers	673,698	3,825,893	4,499,591
Total TEU	1,148,376	6,423,058	7,571,433
Outgoing	Empty	Loaded	Total
Total containers	955,536	3,180,655	4,136,191
Total TEU	1,608,796	5,332,431	6,941,227
Total containers	1,629,234	7,006,548	8,635,782
Total TEU	2,757,172	11,755,488	14,512,661

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

Source: Port of Rotterdam



INCOMING BY COMMODITY

	2019	2018	2017
Total dry bulk	68.3	71.9	73.9
Total liquid bulk	165.0	160.4	163.7
Containers	78.0	76.6	71.9
Total breakbulk	14.5	14.4	14.4
Total throughput	325.8	323.2	323.9

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

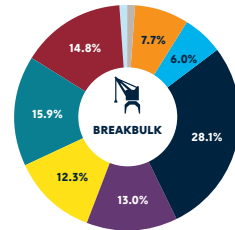
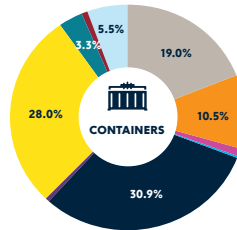
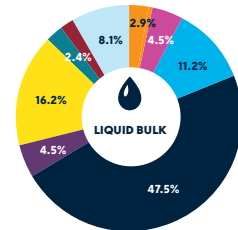
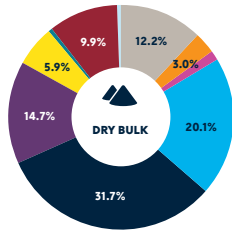
OUTGOING BY COMMODITY

	2019	2018	2017
Total dry bulk	6.2	5.7	6.2
Total liquid bulk	46.2	51.4	50.6
Containers	74.9	72.5	70.7
Total breakbulk	16.3	16.1	15.9
Total throughput	143.6	145.7	143.4

Unit: Gross weight x 1 million metric tons

Source: Port of Rotterdam

TOTAL THROUGHPUT BY COMMODITY IN THE HAMBURG - LE HAVRE RANGE



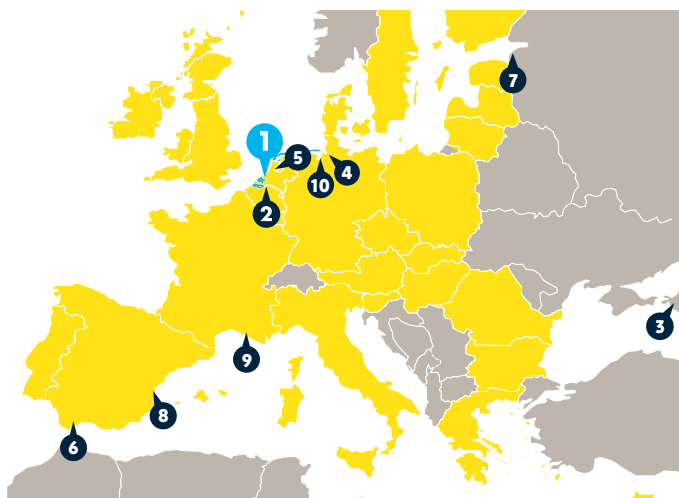
	Hamburg	Bremerhaven	Wilhelms-haven	Amsterdam	Rotterdam	North Seaports	Antwerp	Zeebrugge	Dunkirk	Le Havre
Iron ore and scrap	11.8	3.9	0.0	17.2	30.0	7.8	1.9	0.0	13.2	0.2
Coal	7.3	0.8	2.3	19.3	22.4	7.0	2.9	0.0	5.0	0.0
Agribulk	6.2	0.6	0.0	7.9	9.8	5.2	0.8	0.2	2.0	0.0
Other dry bulk	3.4	1.8	0.6	3.0	12.2	14.5	8.5	1.1	2.9	1.0
Subtotal dry bulk	28.6	7.1	2.9	47.3	74.5	34.6	13.9	1.3	23.2	1.2
Crude oil	0.9	0.0	18.7	0.0	104.2	0.0	5.3	0.0	0.0	20.9
Mineral oil products	9.0	2.1	1.0	47.3	68.2	15.4	50.3	2.8	3.4	13.4
LNG	0.0	0.0	0.0	0.0	7.1	0.0	0.0	7.6	5.6	0.0
Other liquid bulk	2.8	0.0	0.5	2.7	31.7	4.7	16.5	0.4	0.4	1.8
Subtotal liquid bulk	12.7	2.1	20.1	50.0	211.2	20.1	72.1	10.8	9.4	36.1
Total bulk goods	41.3	9.2	23.1	97.3	285.7	54.7	86.1	12.2	32.6	37.4
Containers	93.9	51.8	6.2	1.2	152.9	2.5	138.7	16.2	3.9	27.3
Roll-on/Roll-off	0.5	0.0	0.0	0.6	24.3	3.2	5.1	16.5	15.0	1.1
Other general cargo	0.9	8.4	0.0	6.0	6.5	11.0	8.3	0.9	1.2	0.0
Total breakbulk	1.4	8.4	0.0	6.5	30.8	14.2	13.4	17.4	16.2	1.2
Total throughput	136.6	69.4	29.3	105.0	469.4	71.4	238.3	45.8	52.7	65.8
Total Market share	10.6%	5.4%	2.3%	8.2%	36.6%	5.6%	18.6%	3.6%	4.1%	5.1%

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.

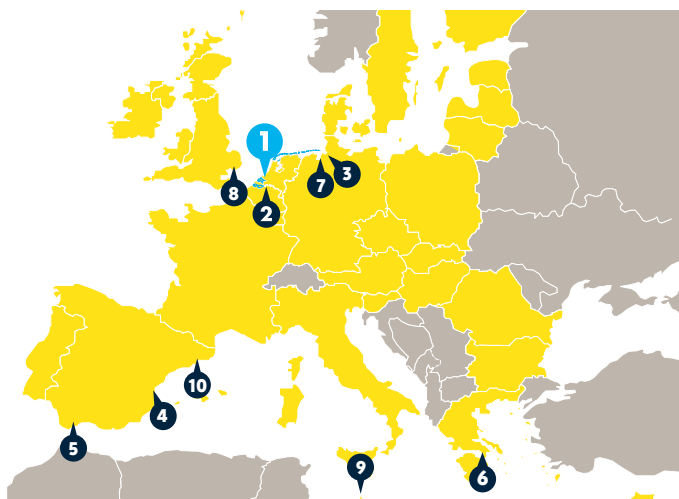
Source: Port of Rotterdam

European ports



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

European container ports



1	Rotterdam	Netherlands	6	Piraeus	Greece
2	Antwerp	Belgium	7	Bremerhaven	Germany
3	Hamburg	Germany	8	Felixstowe	United Kingdom
4	Valencia	Spain	9	Marsaxlokk	Malta
5	Algeciras	Spain	10	Barcelona	Spain

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)	65

Utilities

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

Container terminals

Deepsea	6
Shortsea	9
Empty depots	24

Breakbulk terminals

Roll-on/Roll-off	5
Other general cargo	21

Dry bulk terminals

Agribulk, ores and scrap, coal, biomass and other dry bulk	14
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Tankstorage (capacity 1 million m³)

Crude oil	14.5
Mineral oil products	14.8
Chemical products	2.4
Vegetable oils and fats	1.4

Port of Rotterdam

Unrestricted accessibility 24 hours a day,
7 days a week

	2019
Total port area	12,686 ha
Land area	8,114 ha
of which rentable sites, including Maasvlakte 2 - phase 2	6,250 ha
Water area	4,572 ha
Total length Rotterdam's port area	42 km
Water depth N.A.P. (max.)	24 m
Depth Eurogeul in the North Sea N.A.P. (max.)	26 m
Length Eurogeul in the North Sea	57 km
Pipelines	1,500 km
Quay length	79.8 km
Banks (slopes)	199.4 km
Sea jetties	20
Inland jetties	107
Dolphins	15
Buoys	12
Pontoons	106



CONTINUED FOCUS ON THE FUTURE

'The Rotterdam port and industrial complex is in a strong position. Various developments including declining fossil fuel industry markets and new business models have made the prospects for further growth in world trade more uncertain. The effect of all these developments is that continued long-term success is by no means assured. Our strategy is to respond actively to this. We take on the role of director, initiating and developing new activities. Our approximate 1.5-billion-euro investment portfolio for the coming five years focuses on innovative energy transition projects and logistics chain digitisation. We have been making substantial investments in digitisation. By focusing on these initiatives and cooperating with clients, partners and employees, we are confident of a sustainable future for the Rotterdam port and industrial complex.'

Allard Castelein,

Port of Rotterdam Authority CEO, reflected on 2019 in the Annual Report.

You can view the complete annual report at:

www.portofrotterdam.com

These pages contain a selection of the 2019 milestones and projects within the themes that are 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.



Port of Rotterdam Authority NV Finances

At €706.6 million, the Port of Rotterdam Authority's turnover remained almost the same as 2018. Without tax, the result was €241 million, €13.2 million lower than 2018. 338.3 million euros were invested in 2019: 324.9 million euros in tangible fixed assets and 13.4 million euros in fixed assets. In total the Port of Rotterdam Authority paid €80.9 million in tax in 2019, approximately €25.9 million of which was corporation tax.

High investment level

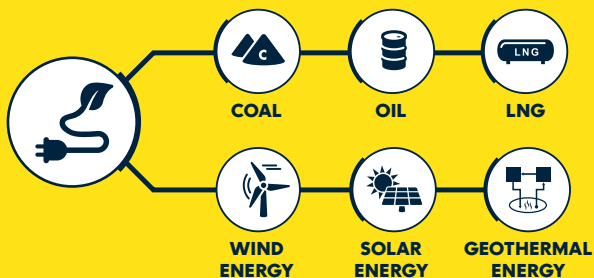
The Port of Rotterdam Authority continues to operate as an investment machine, investing almost 50% (706.6 million euros) of the turnover it achieved in 2019. The machine is driven by its sound annual financial results and strong balance sheet. Future investments focus on digitisation and the energy transition and the aim with short-term investments is to maintain and expand the existing portfolio.

Vivienne de Leeuw new Port of Rotterdam Authority CFO

Vivienne de Leeuw (1975) was appointed by shareholders as the Port of Rotterdam Authority's new Chief Financial Officer and member of the Executive Board as of 1 July 2019. De Leeuw succeeds Paul Smits, who stepped down after eight years as Port Authority CFO.

ENERGY TRANSITION

The Port of Rotterdam Authority is committed to combatting climate change and aims to play a leading role in the global energy transition. Reducing CO₂ emissions and the efficient use of raw and residual materials are important Port Authority tasks.



CCS project Porthos a step closer

Four companies signed an agreement at the end of 2019 to work in parallel on preparations for the capture, transport and storage of an approximate annual 2 million tonnes of CO₂ in an empty gas field beneath the North Sea. These companies are ExxonMobil, Shell, Air Liquide and Air Products. Transport to and storage beneath the North Sea is being prepared by Porthos, a project organisation from EBN, Gasunie and the Port of Rotterdam Authority.

Shore-based power Calandkanaal

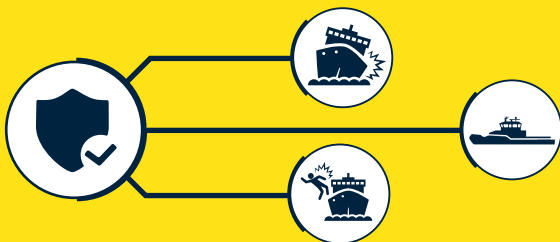
Heerema Marine Contractors is to work with Eneco, the Municipality of Rotterdam and the Port of Rotterdam Authority to supply shore power to crane vessels in the Calandkanaal. Using shore-based power cuts back on noise and air pollution, considerably reduces CO₂ emissions and will improve liveability in Rozenburg and Maassluis. According to planning, the project will be completed by end 2020.

uRecycle® selects Rotterdam

Recycling company uRecycle® is establishing a new factory in the Port of Rotterdam for battery recycling and reuse. The company selected Rotterdam because of its excellent strategic location. The uRecycle® site in Europoort is set to become operational in the first half of 2020.

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.



Port of Rotterdam Authority organises seminar on port integrity

During a closed seminar on integrity organised by the Port of Rotterdam Authority, Allard Castelein, the Mayor of Rotterdam, the Chief Constable and other security partners spoke with key port business community figures on how to combat crime in the port and further improve security. The seminar was part of the Integrated Port Programme.

Rotterdam-Rijnmond Safety Region and Harbour Master's Division conduct cyber crisis organisation exercise

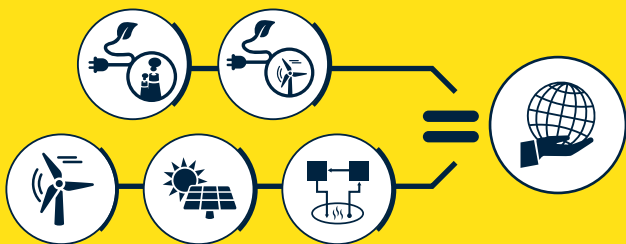
Nautical chain partners in the Port of Rotterdam came together to conduct CyberNautics2019 exercises. The Port of Rotterdam has been conducting cybercrime exercises with this crisis organisation since 2017, with the goal of ensuring that all nautical partners potentially at risk from a cyber incident train together in using the crisis procedure.

Quay walls safer than expected

Engineer Alfred Roubos used 75 billion calculations in his PhD thesis to demonstrate that quay walls require different structural assessments than buildings and bridges. Quay walls have a lower risk profile. The new insights resulted in changes to the Eurocode, the European standard for assessing the safety of all kinds of civil engineering structures.

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 will contribute to a sustainable future for the port.



First Dutch LNG-powered trailing suction hopper dredger dredges Port of Rotterdam

The Ecodelta has been dredging in the Port of Rotterdam since early 2019 and is the first LNG-powered trailing suction hopper dredger of the Netherlands. Van der Kamp, Zwolle-based dredging and construction firm, commissioned the vessel build. The Ecodelta will ensure that the required navigation depth in the western port area is maintained in the coming years.

Slufterdam Wind Farm 2.0 opens with double capacity

Eneco and Vattenfall's new improved version of the Slufterdam wind farm is now operational. The farm's 17 wind turbines have been replaced with 14 higher-efficiency turbines, almost doubling the capacity from 25.5 MW to 50.4 MW. Enough wind power is generated to supply the average annual consumption of approximately 60,000 households.

Shore-based power for coasters on Parkkade in Rotterdam

The Municipality of Rotterdam and the Port of Rotterdam Authority launched a trial to supply small sea-going vessels with electricity on Parkkade. The vessels will then not need to run their diesel generators to generate power for use on board, resulting in reduced air pollution and noise. The size and setup of this trial make it unique in the world.

ADDED VALUE & EMPLOYMENT

The direct and indirect added value of the Port of Rotterdam was 45.6 million euros. This represents 6.2% of the Dutch gross domestic product (GDP).



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 2019 can be found in the adjacent columns.



DIGITISATION

Digitisation is taking off across the world. New techniques, players, partnerships and business models. The Port of Rotterdam is fully committed to innovation in order to maximise the benefits of the new potential that digitisation offers.



Port of Rotterdam Authority launches new PortXchange company

PortXchange was established to increase port call efficiency and to help clients reduce their emissions both in the port and between ports. The PortXchange launch offers a platform to enter into new strategic partnerships with ports, shipping lines and terminals, with the aim of implementing smart digital solutions in ports across the world.

Port of Rotterdam Authority launches Track & Trace containers

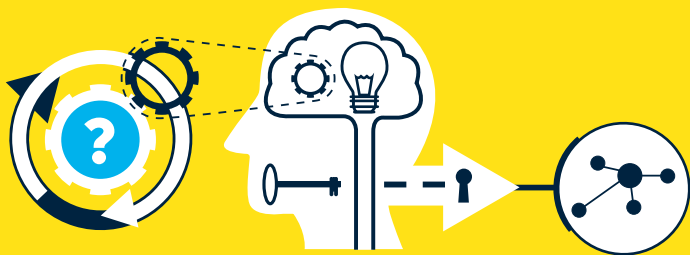
The Port of Rotterdam Authority launched 'Boxinsider' in early October 2019; an application that enables shippers and freight forwarders to monitor the location of their containers at any time. Boxinsider has now been incorporated in PortBase under the name Cargo Tracker, with PortBase managing the digital infrastructure of Dutch ports. Bundling the Track & Trace activities of both organisations has created a more complete and clear service for the market.

Rotterdam sends hyper-intelligent container on world trip

'Container 42' has left the Port of Rotterdam on a two-year data collection voyage around the world. The container records everything: vibrations, pitch, position, noise, air pollution, humidity and temperature. The data collected provide insight into the challenges of transport and logistics and contribute to further port digitisation.

INNOVATION

Rotterdam aims to be the world's smartest port. To maintain our leading position, we need to keep on innovating. Innovation is a crucial means of realising the envisaged changes in the energy transition and digitisation in the Port of Rotterdam.



Port of Rotterdam innovation catch-up

The port business community has been successful in forging ahead with innovation, closing the gap with companies elsewhere in the Netherlands. A considerable proportion of companies also believe that the Port Authority should take a more active role in digitisation, the energy transition and the labour market in the port. These were the outcomes of the Port Innovation Barometer, a long-term, large-scale research study conducted by the Erasmus Centre for Business Innovation.

Port of Rotterdam Authority to collaborate with four new companies

During the 4th annual innovation programme PortXL, the Port of Rotterdam Authority signed individual Letters of Intent with four enterprising new companies that are expected to help make the port more sustainable, more efficient and 'smarter'. The firms in question are Richtlijn Geodesie, Flower Turbines, Ladar Ltd and Planys Tech.

First blockchain container shipped to Rotterdam

DELIVER, a platform that operates using blockchain, was used to deliver the first paperless, immediately financed container fully traceable from door to door from Korea to the Samsung SDS warehouse in Tilburg via the Port of Rotterdam.

ACCESSIBILITY

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



Brexit impact on accessibility

Together with PortBase, customs and ferry companies, the Port Authority contacted exporters and importers to ensure that they have their customs documentation in order so that delays are minimised in the event of Brexit. PortBase developed an IT solution to support the logistics Ro-Ro chain. Temporary parking areas were also established in the vicinity of Ro-Ro terminals to accommodate trucks that do not have the correct documentation. Preparations for Brexit will continue in 2020.

Deepening of Nieuwe Waterweg complete

The Directorate-General for Public Works and Water Management (Rijkswaterstaat) and the Port of Rotterdam Authority celebrated the completion of the deepening of the Nieuwe Waterweg and Botlek. One of the busiest waterways in the Netherlands has been deepened by a metre and a half across a distance of 25 kilometres. The ceremonial opening of the deepened Nieuwe Waterweg and Botlek was performed by Minister Cora van Nieuwenhuizen (Ministry of Infrastructure & Water Management) and Ronald Paul (Port of Rotterdam Authority COO).

Inland shipping chain approach

Initiatives in the market and cooperation between chain parties have improved the reliability of inland container shipping transport to and from Rotterdam. Examples include a guideline for shippers and freight forwarders and the Notification Container Hinterland Barge service, which was developed by PortBase and linked to Nextlogic. Barge operators and inland terminals are also cooperating on bundling containers to and from the deep sea terminals.

INTERNATIONAL PORT DEVELOPMENT

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



Port of Sohar established for 15 years

The fifteenth anniversary of SOHAR Port and Freezone was celebrated on 4 November 2019. The Port of Rotterdam Authority and the Omani government have been joint shareholders of SOHAR Port and Freezone since 2004. The Port Authority supports Sohar's development through knowledge exchange and the deployment of 'Rotterdam' expats and representatives in the Board of Directors.

Port of Rotterdam Authority and Erasmus University establish unique programme

The Port of Rotterdam Authority and Erasmus University Rotterdam have established the Port Executive Leadership Circle, a unique programme for future port leaders. The joint training programme enables knowledge and skills to be shared with the port leaders of the future. What makes the training unique is its personalised development pathway. The intensive week-long programme starts on 3 February 2020.

Representative office with Broekman Logistics India

Broekman Logistics became Representative for the Port of Rotterdam Authority in October 2019. The appointment of a Representative team in India will enable the Port of Rotterdam Authority to further develop its international activities. This includes acting as consultant, the sale of digital products, attracting investments and promoting maritime trade flows between India and Europe via Rotterdam.

WORK AND EDUCATION

The port and work are changing fundamentally. We need strong hands as well as smart minds if we are to remain a vital and competitive port. That is why it is important to get more and more people from school to work, from work to work, and back to work again.



Rotterdam residents start long-term Workplace Learning Agreement

The agreement, Koepel Leerwerkakkoord Rotterdam, was signed on 5 February 2019 in cooperation with various partners. A Port sector agreement was also signed, in which the three defined tracks (school to work, work to work, and back to work again) are used to improve labour market stability and promote labour mobility in the Rotterdam region.

South Holland Human Capital Agenda signed

The South Holland Human Capital Agenda was signed on 24 June by 66 parties from the business community, education and the government. Until 2024, the region will enable 40,000 employees to further develop, 55,000 employees to switch to another sector, and will find more work for 20,000 part-time workers seeking extra work.

24th match for Rotterdam Werkt

The Rotterdam Werkt network celebrated its 24th match in late 2019. Promoting the circular economy of people in the Rotterdam region, the network uses voluntary labour mobility to match talented and enthusiastic employees from the affiliated organisations with vacancies or work experience positions. Various organisations are involved, including the Port of Rotterdam Authority, Van Oord, Vopak, Rotterdam Ahoy, Huisman and Engie.

PORT OF ROTTERDAM AUTHORITY

The objective of the Port of Rotterdam Authority is to enhance the port's competitive position as a logistics hub and world-class industrial complex. Not only in terms of size, but also with regard to quality. The Port Authority is therefore leading the transition to sustainable energy and it is committed to digitalisation in order to make the port, and the supply chain, more efficient. The core tasks of the Port Authority are to develop, manage and exploit the port in a sustainable way and to deliver speedy and safe services for shipping.

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

- Port Authority: 1,200 employees, turnover approx. € 710 million.
- Employment: (direct and indirect) 385,000 jobs in the Netherlands.

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