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# BUILDING A **SUSTAINABLE PORT**

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The Port of Rotterdam Authority creates economic and social value and wants to realise sustainable growth. So we play a strong role in keeping the port and the surrounding area safe, healthy and attractive. We aim to combat climate change and also to ensure that the port area continues to make a major contribution to prosperity and employment in the Netherlands.





### SAFE AND HEALTHY ENVIRONMENT

Safety is a top priority in our port. In addition, we constantly work to provide a healthy and attractive living environment.



### FLOOD RISK MANAGEMENT

Rotterdam's port area is situated several metres above New Amsterdam Water Level (NAP) and it is protected effectively from flooding. Global climate change is leading to sea-level rise. We are engaged in ongoing studies of the associated risks, impact and possible solutions. There appears to be no significant increase in the flood risk.



### TRUCK STOPS

Throughout the port area, the Port Authority has realised five dedicated stops for visiting trucks. The largest truck stop – Maasvlakte Plaza – has over 350 parking spaces. All the stops have a variety of facilities, including security surveillance, Wi-Fi, toilets and showers and a relaxation area.



### DISCOUNT FOR CLEAN SHIPPING

Sea-going vessels that comply with standards above the statutory requirement (as recorded in the Environmental Ship Index) qualify for a discount of up to 20% on port dues. Inland vessels receive a discount when they are cleaner than the current standards or when they have a Green Award Certificate.



### NATURE IN THE PORT

Rotterdam's port area is surprisingly rich in animal and plant life. The 'Green Gateway' near the Rozenburg Peninsula is home to 20 hectares of riverbank nature. The dunes on the Maasvlakte also contain a wealth of nature, such as the Bird Valley: a nature area covering 21 hectares that was developed by the Port Authority.



### E-NOSES

To track down noxious or hazardous emissions in time, hundreds of electronic sensors (known as e-noses) have been installed throughout the port area to prevent problems like odour nuisance. Two of the Port Authority's patrol vessels have also been fitted out with an e-nose.



### CLIMATE AND ENERGY

We are dedicated to combatting climate change. The port of Rotterdam is the place where the energy transition is taking shape.



### WIND AND SOLAR POWER IN THE PORT

There is a pilot study in progress with floating solar panels at the Slufter, the silt depot for Maasvlakte 2, and the lights on the bollards that line Caland Canal are powered by the sun. What's more: Rotterdam's port area is providing the room needed for wind power: generating capacity was 200 megawatts (MW) in 2016 and planned capacity for 2020 is 300 megawatts.



### HEAT ALLIANCE

The port's industrial sector generates a lot of residual heat that is currently lost to surface water or the air. With the construction of an underground network of pipelines, the port can supply this heat to industry and greenhouses and, potentially, to 500,000 homes.



### CARBON CAPTURE AND STORAGE

The most effective way to reduce carbon emissions quickly is to capture and store CO<sub>2</sub>. The Port Authority has teamed up with a number of other parties to study the construction of a CO<sub>2</sub> pipeline through the port area that will allow companies to capture their CO<sub>2</sub> for storage in empty gas fields under the North Sea.



### LED FOR PUBLIC LIGHTING

The Port Authority will be replacing all public lighting in the port area with LED lights. This has already been completed on the Maasvlakte, and the other port areas will follow before 2020. LED lights last longer and consume 50% less electricity than conventional lights.



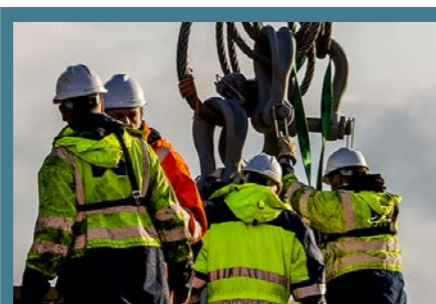
### THE PORT AUTHORITY'S CARBON FOOTPRINT

The Port Authority not only encourages companies in the port to reduce their carbon emissions, it is also taking action itself. By commissioning hybrid patrol vessels, or by using hydrogen and electric vehicles and green wind power.



### PEOPLE AND EMPLOYMENT

We committed to socially responsible employment.



### SOCIAL AGREEMENT

In late 2016, trade unions, container companies and the Port Authority signed a joint sector agreement on employment conditions. The Port Authority played an intermediary and facilitating role in this process. An important feature of the agreement was job security until July 2020 for all port personnel with permanent contracts.



### RDM ROTTERDAM

RDM Rotterdam (Research, Design and Manufacturing) at the Heijlplaat location is a unique area where companies, students and researchers are working together on the development of a new manufacturing industry for the port and the city that can create new jobs for the employees of the future.



### PORT WELFARE COMMITTEE

The Rotterdam Port Welfare Committee supports projects and initiatives undertaken by a variety of organisations for the benefit of seafarers in Rotterdam, such as the seamen's institutes that are open to international seafarers for counselling and support.



### FUTURELAND & EIC MAINPORT ROTTERDAM

FutureLand is the Port Authority's premier information centre at Maasvlakte 2. Every year, some 110,000 people visit the centre and enjoy its programme of boat tours, exhibitions and guided coach tours. And EIC Mainport Rotterdam introduces some 20,000 young people annually to a range of port-related training programmes and professions.



### STARTBAAN

Through the Startbaan project The Port Authority gives young people without basic qualifications for the employment market an opportunity to obtain a diploma and therefore to improve their job prospects. Many of the young people go on to find jobs or start training.



## CORPORATE SOCIAL RESPONSIBILITY STATEMENT

*'We work to build a vital, future-proof port where economic growth and improving the living environment goes hand in hand. We conduct our operations in a socially responsible way, with respect for people and the environment. Our efforts are focused on the port and our own organisation. Safe & Healthy Environment, Climate & Energy and People & Work are the key themes in this respect.'*



**The Port of Rotterdam Authority works to promote economic growth and prosperity, and to create an attractive living environment. Our Corporate Social Responsibility (CSR) statement explains how we put our social responsibility into practice. The energy transition plays a key role, as described by Port Authority CEO Allard Castelein:**

'The port of Rotterdam is home to the largest petrochemical complex in Europe and is responsible for some 20% of Dutch greenhouse gas emissions. As a signatory to the Paris Agreement, the Netherlands has agreed to reduce its greenhouse gas emissions by 80 to 95 percent. The Wuppertal Institute has clearly set out for us how this reduction could indeed be achieved in the port of Rotterdam by using a range of technologies. But it remains a formidable challenge because our industrial sector still relies heavily on fossil fuels and large amounts of raw materials, both of which will continue to play an important role in the years ahead. Our society still needs petrol, diesel and kerosene. Many of the products we use today are still petroleum-based – paint, for example, or the high-grade polymers used in products like insulation materials.

That is why we need to work with business to make industry cleaner. We will be achieving that goal through a number of different projects such as the utilisation of residual heat from industry for district heating, and carbon capture and storage. At the same time, we will bring new types of industry to the port. Plants that can re-use waste for example, and even convert it into new raw materials and energy. And we hope to use the energy produced by offshore wind farms as an alternative to fossil fuels. Rotterdam already has the largest bio-based cluster in Europe, with a variety of factories for biofuels and bio-based chemical products. They use vegetable products like maize to produce fuels and packaging materials, for example. The port of Rotterdam is home to global leaders.

These companies, as well as the firms – often newcomers – that specialise in these new technologies, are all making their own contribution to the energy transition. Together, we are renewing industry and promoting the development of new activities. We are combining forces to make our industrial cluster strong, while significantly cutting carbon emissions. Our ambition is to be the international frontrunner in this field.'

### 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.

### More information

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