The Sustainable Port

The Port of Amsterdam’s sustainability objectives and initiatives
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The port is a highly dynamic environment in which international shipping operates 24 hours a day, right before our very eyes. It makes us proud to witness what made Amsterdam great on a daily basis: import and export. Our port brings ships and cargo flows, energy and data and people and ideas together in an entrepreneurial metropolis. We accommodate shipping and establish businesses, which provide jobs and prosperity. Our port also offers a location for urban amenities that contribute to the city's vitality. Examples include water treatment, waste processing and the supply of energy. A more explicit connection with the metropolitan region will enable us to evolve to become the driving force behind the economy and to reinforce our international competitive position.

**SUSTAINABLE GROWTH**

The Port of Amsterdam is one of the largest energy ports in Europe. We are well aware of society's growing concern about the port's environmental impact on the surrounding area and that of fossil fuels on our climate. As a result we opt for sustainable growth, so that we will be one of Europe's leading sustainable ports by 2030. Economically sound, with a strong competitive position and concern for the environment, our surrounding area and society. The need for energy transition and lower port emissions offers room for new opportunities. Examples include renewable energy generation and the storage and transshipment of alternative energy sources and recyclable raw materials.

We prefer to demonstrate sustainable leadership instead of waiting until legislation compels us to act. We do this on three levels. First and foremost, as a responsible organisation we strive to be a role model by minimising our CO2 footprint and promoting good employer behaviour. In addition we are working with our clients on a sustainable port that has a minimum impact on the surrounding area, which appeals to sustainable innovators. Lastly, our aim is to be a committed partner, which encourages transparency in the supply chain.

**FASTER, SMARTER AND CLEANER**

Our clients are looking for flexible ways of transporting cargo faster, more efficiently and with increased awareness, from the port to their final destination. They need a location where they can do business and experiment. To facilitate this development we must continuously improve the access we offer as a port: make it faster, smarter and cleaner. This is the only way we can achieve our vision of a metropolitan port.
AN AGENDA UNDER DEVELOPMENT
We share our priorities and our initiatives in this document. It is not our first step: we have already achieved concrete results in the past few years. We have significantly reduced our CO₂ emissions, installed shore-side power connections and invested in temporary nature and solar and wind power.

A sustainability policy is never finished. The rapidly changing reality requires continuous reflection, fine-tuning and feedback, with and from our clients, the surrounding area and civil society organisations. Therefore we also consider this plan as a document that is in constant development, just like our port. We report our progress and results on an annual basis.

PASSIONATE AND RESPONSIBLE
The Port of Amsterdam is responsible for service provision and the business climate in the port region, the corresponding infrastructure and the smooth-running and safe handling of shipping traffic. As the port authority we bring shipowners, terminals, shipping agents, logistic suppliers and authorities together and in doing so, constitute an important logistic link in the international supply chain.

Society is becoming increasingly critical of the origin of cargo. Expectations of our impact on supply chains are high. Naturally, we share the sense of urgency with regard to responsible and safe trade and we see the need to reduce the negative social impact of products that pass through our port. We feel responsible and involved, but we are also realistic: the focus of our influence lies within the port region. Here we can reward good behaviour and fair and responsible trade and discourage undesirable practices. We also cooperate with other ports, authorities and international organisations in this respect.

PORT OF PARTNERSHIPS
Our approach favours dialogue. By engaging in dialogue with our clients, civil society organisations and authorities we can look for a positive, constructive way to achieve improvements and identify alternatives. The port is often the binding factor between clients, sectors and society. We have the power to bring parties together and to try and transform new insights into specific measures. As a Port of partnerships, we build on optimal trust and respect between all parties concerned.

On behalf of the Board of the Port of Amsterdam,
Michiel de Brauw and Koen Overtoom
Opportunities and challenges

Every time is characterised by its own dynamic and imposes requirements on the way in which we operate. We use five themes to represent the relevant social developments that play a role in our sustainability policy. They provide opportunities and challenges that have a direct impact on the port's current and future activities.
1. ENERGY TRANSITION AND THE CIRCULAR ECONOMY

In the past year, accelerated energy transition has become increasingly urgent. The Paris climate agreement provided international consensus: greenhouse gas emissions must decrease as quickly as possible. This provides an additional boost for the growth of renewable energy sources such as solar and wind power. This development goes hand in hand with promoting alternative energy sources such as biomass. In parallel, the use of coal to generate electricity will decrease over time and minerals will become increasingly scarce. Furthermore, busier cities will result in an increase in consumption, in energy needs, in food and traffic flows, also in Amsterdam. What does this mean for us, as an energy port?

RENEWABLE ENERGY
At the end of 2015, 77% of storage and transshipment in our port consisted of coal and oil. Renewable energy sources are becoming an increasingly realistic alternative to a number of fossil fuels (especially with regard to electricity generation) and are quickly acquiring a place in our energy system.

ENERGY CYCLE WITH THE CITY
The port’s connection to the city offers an effective basis for an energy cycle that converts waste flows from the city into new raw materials and fuel. By working together and using energy and waste intelligently we can provide a cleaner ecosystem.

BREEDING GROUND FOR INNOVATION
The Port of Amsterdam is the ideal breeding ground for young, innovative businesses and sustainable pioneers. We can make a contribution to sustainable opportunities for the future by making our port as appealing as possible to knowledge-intensive businesses.

INDUSTRIAL INTERACTION
Clients already exchange waste flows at a number of sites in the port region. The port possesses the infrastructure, knowledge and market channels necessary for industrial symbiosis and the exchange of heat and energy. An expansion of symbolic clusters offers the port an incredible opportunity.
2. THE ENVIRONMENT AND SURROUNDING AREA

The Amsterdam Metropolitan Area is one of the most densely populated places in the world. The region continues to grow, an increasing number of people live, work and play close together. Sometimes this is not a problem because everything is located a stone's throw away. However, it can result in additional environmental pressure for local residents. How do we ensure the port develops without increasing the pressure on the environment and the surrounding area?

HEALTH
In society more and more attention is devoted to the effects of air pollution on health. It is important that we minimise the port’s physical impact. In doing so we must concentrate on activities that produce particulate matter or those related to emissions of harmful substances such as nitrogen and sulphur.

NUISANCE
Since our port is surrounded by a growing city, we must manage the limited space we have more effectively. In addition we have to increasingly take into account noise, light and dust nuisance that could result from port activities.

CO₂ EMISSIONS
The industry in the port region, shipping and freight traffic jointly produce a substantial amount of CO₂ emissions. Therefore it is important that we encourage a shift in freight transport: less by road, more by water and rail.
3. CLEAN AND SAFE SHIPPING

The impact shipping has on the climate and the surrounding area is becoming an ever-important point for discussion. Reports related to shipping are dominated by the pollution caused by cruise liners and large sea-going vessels. Compared with other modes of transport shipping is the most environmentally friendly mode per tonne-kilometre. Nevertheless it does produce considerable levels of environmental pollution. Moreover the increase in shipping traffic results in additional ship movements in the North Sea Canal and the IJ. How can our port continue to grow while ensuring clean and safe shipping?

SAFETY

The increase in the number of ship movements in the North Sea Canal area must not take place at the expense of safety. This does not exclusively involve nautical safety: crisis and disaster response in the port region are also points of concern.

CLEAN SHIPPING

Emissions produced by shipping in the form of sulphur, nitrogen, particulate matter and CO₂ represent a significant share of emissions in and beyond the port region. Ballast water, underwater noise, ship waste, the degassing of volatile organic substances and ship recycling deserve attention too. Shipping will have to be cleaner in order to continue to represent a sustainable solution to logistic needs and legislation. As a port authority we can reward sustainability and thus make a contribution.
4. WORK AND KNOWLEDGE

Increasing automation is leading to a divide on the labour market. At the lower end of the market we see low-skilled work that does not lend itself to automation; at the top end there is work for more highly educated individuals, in which automation is becoming more and more self-evident. Over 68,000 people work in and around the port. Therefore the port represents a major source of employment for the region. At the same time, port logistics processes are becoming increasingly electronic. Track-and-Trace for cargo, just-in-time deliveries and complex supply chains require extensive knowledge in the field of information technology. What role could the port play in these developments?

ATTRACTING KNOWLEDGE
The port mainly offers low to medium-skilled work. At the same time more and more innovative companies are being set up in our region, which will need more highly-skilled employees. It is therefore important that the port also develops jobs for young, higher-skilled people and thus attract more and new knowledge. Intensive cooperation with colleges of higher education and universities as well as more internships and research projects could contribute in this respect.

ACCESSIBILITY AND SOCIAL SAFETY
The port region is vast and not always easily accessible by public transport. If people are able to reach the port easily and safely there’s a greater chance that they will be happy to work here. Therefore it is important that access and accessibility to the port is improved.

PARTICIPATION AND SELF-RELIANCE
The port is a major source of employment for the region. The highly diverse jobs and fields offer opportunities for employees with any kind of background. Even those distanced from the labour market. By employing these people we inspire businesses in the port to do the same. This means we can create opportunities for people with a physical disability or those facing social issues.
5. CHAIN RESPONSIBILITY

Production and supply chains are becoming more complex, which means that it is difficult to trace the origin of raw materials, work out what’s going on at suppliers, how products are manufactured and the destination to which they are transported. At the same time there is growing attention for responsible supply chains among authorities, civil society organisations and critical citizens. How can we best fulfil our responsibility and demand attention for a fair and transparent supply chain?

DIALOGUE AND COOPERATION

By talking about our challenges with stakeholders and clients we can clearly communicate what we do and don’t do, and involve them in our position. If we engage in dialogue with a stakeholder or client we can invite them to jointly reflect on our influencing ability to make supply chains more sustainable. Active cooperation with other ports via the Seaports Branch Organisation (BOZ), European Seaports Organisation (ESPO) and IAPH and in branch organisations is crucial in this regard.
Our efforts to achieve a sustainable port

Our port enables us to increase the prosperity and the well-being of the Amsterdam Metropolitan Area. We consider sustainability to be a fundamental principle as well as an opportunity to evolve into a large port with a small ecological footprint.
We exert greater influence in some areas than others. We are fully in control of our organisation's sustainability; however, when it comes to the impact of measures, our influence is relatively modest. In the port our influence is diminishing, while the impact of measures is ever greater. And our influence in the logistic chain is minimal, while the chain's impact is far-reaching. Therefore we demonstrate our efforts in a sustainability framework comprising three levels:

1. **A RESPONSIBLE ORGANISATION**
   We start with our organisation, reduce our CO₂ footprint and invest in being a good employer.

2. **A SUSTAINABLE PORT**
   We are working on a clean, future-proof port and a quality living environment, together with our clients. We do this by encouraging sustainable development and investing in promising initiatives.

3. **A COMMITTED PARTNER**
   We feel responsible for the direct and indirect impact of port activities on people and the environment. This is why we promote a sustainable and responsible chain.

On the following pages we explain how we apply this sustainability framework in practice. If you already want to consult an overview of all the initiatives, indicators and targets, please turn to page 27.

This illustration is provided in a large format on page 26.
1. A RESPONSIBLE ORGANISATION

A sustainable port starts with our organisation. We ensure our operations are sustainable and invest in being a good employer, thus serving as a role model. We do this for our surrounding area as well as for our employees. Through the standards we impose in this respect we hope to inspire them and give them something to spread around. Lastly, we can only impose requirements on our surrounding area if we, ourselves, do our utmost.

We strive to be an open and informal organisation with employees that feel a strong bond with the company. Our people are a source of talent, inspiration and energy. They are the experts that determine the port's success. Sustainable development can only be successful with their involvement and professionalism. We will achieve our objectives with a clear focus, unambiguous targets and by focusing on our core values: cooperation, passion, respect and responsibility. We build on inspiring partnerships to innovate together. This provides growth and economic and social value.

WE ARE MAKING OUR OPERATIONS SUSTAINABLE

We are reducing our CO\textsubscript{2} emissions and making our operations sustainable. We are extending these efforts to our organisation as a whole: from our premises to our fleet.

BY LOWERING OUR CO\textsubscript{2} FOOTPRINT

We aim to lower our organisation’s CO\textsubscript{2} footprint by 25% compared with 2014. This equates to a reduction of 591 tonnes of CO\textsubscript{2} from 2,364 tonnes in 2014 to 1,773 tonnes in 2021. In the past few years we have already made various efforts to reduce our CO\textsubscript{2} emissions. We made our fleet sustainable by introducing hybrid company cars. The port building’s renovation resulted in a significant reduction. The modernisation of our fleet also represented a major contribution. In 2016, we launched a pilot in which we are mixing 30% Hydrotreated Vegetable Oil (HVO, used cooking oil) with the fuel for our patrol vessels. The use of this blend for all vehicles could provide a CO\textsubscript{2} reduction of at least 14%.

OBJECTIVE

- To reduce our CO\textsubscript{2} emissions by 25% to 1,773 kilotons of CO\textsubscript{2} (compared with 2,364 kilotons in 2014) by 2021.
WE STRIVE TO BE A GOOD EMPLOYER
An enthusiastic employer that binds employees, is able to motivate its people and get the best out of them.

BY CHALLENGING OUR EMPLOYEES TO DEVELOP
We strive to be an employer for people with different levels of education and backgrounds. Good working conditions, education, training and development contribute to this goal.

BY INVESTING IN VITALITY AND HEALTH
We offer our employees various schemes for keeping fit. We facilitate training sessions and workshops related to lifestyle, exercise and nutrition and being a dynamic workplace, we are testing the Deskbike. Our policy has resulted in a decrease in the percentage of absenteeism for years. We are aiming for an absenteeism percentage lower than 3%. This is far below the national average of 4.6% for companies with over 100 employees (Source: CBS, 2014). In 2015, our absenteeism percentage fell once more to 3.2% (from 3.4% in 2014).

BY STRIVING TO BE AN EMPLOYER FOR EVERYONE
We believe it is important to make a contribution to socio-societal challenges in the region. Therefore we promote employment for youths and adults that are distanced from the labour market. Working on their self-reliance provides them with more opportunities in society. Our Infra & Management Department works with Pantar, a workplace learning company for people distanced from the labour market. Along with Pantar we provide jobs and support for approximately 50 residents in Amsterdam and Diemen. Our office and our port are workplace learning locations for youths from Emma at Work and School2Work (see box ‘Duck decoy structure’ on page 22). We are also going to do more to promote secondary vocational education (MBO) internships at the port.

BY PROMOTING DIVERSITY
We already committed to the target of a 30% share of women in our workforce a number of years ago. In 2015, this percentage was 31%. We also signed the ‘Talent to the Top’ charter in 2015, by which we strive for a 30% share of women on our Board of Directors and Supervisory Board.

BY SUSTAINABLE PROCUREMENT
We apply criteria for socially responsible procurement related to installing infrastructure, managing the port region and our premises, but believe we could do even better. Therefore we are developing a sustainable procurement policy involving the themes of CO2, circular procurement and social return. The procurement policy will be ready in 2017.

OBJECTIVES
- An employee satisfaction score of 8 or higher by 2021.
- An absenteeism percentage lower than 3% by 2021.
- At least 30% of our workforce to consist of women by 2021.

WE ARE MAKING OUR OPERATIONS SUSTAINABLE

BY SUSTAINABLE PROCUREMENT
We apply criteria for socially responsible procurement related to installing infrastructure, managing the port region and our premises, but believe we could do even better. Therefore we are developing a sustainable procurement policy involving the themes of CO2, circular procurement and social return. The procurement policy will be ready in 2017.
WE ARE ANCHORING SUSTAINABILITY IN OUR ORGANISATION
In recent years we have taken many sustainable initiatives. We are the joint developer of the Environmental Ship Index (ESI) rebate, an international environmental rebate arrangement of port dues for sea-going vessels, we are committed to the wind farm in Westpoort and have initiated diverse quality of life projects, such as the installation of odour detectors. Since 2015, we have been using a programmatic approach to align our efforts and our sustainability targets.

BY REPORTING ON OUR SUSTAINABILITY PERFORMANCE
If we anchor our sustainability policy it means we must be transparent with regard to our performance. As of 2016, we will compile our annual report in accordance with the Global Reporting Initiative (GRI) 4. The GRI is a certified and internationally accepted guideline for sustainability reporting.

BY IMPLEMENTING ACTIVE STAKEHOLDER MANAGEMENT
By effectively listening to our stakeholders we will obtain a realistic picture of the way in which they view us and their experiences with us. On this basis we can fine-tune our policy and our efforts. This is why every two years, we conduct a reputation survey and an annual customer satisfaction survey. We are also developing our stakeholder management strategy. We engage in dialogue with various stakeholder groups twice a year. This provides us with insight into the sustainability themes that concern our stakeholders.

BY DESIGNING A COMPASS
Our core values constitute the foundation of our code of conduct and thus the way our employees behave. To facilitate the application of the core values in practice, in 2016 and 2017 we are translating them into business principles, which will serve as a compass for the organisation as a whole.

OBJECTIVES
• For our annual report to be compiled in accordance with GRI guidelines as of 2016.
• For all stakeholder groups to rate our reputation as good to excellent by 2021: a minimum score of 71 points on a scale of 100.

OUR COMPASS:
Organization

Processes and activities

CODE OF CONDUCT
CORE VALUES
CSR POLICY
BUSINESS PRINCIPLES
2. A SUSTAINABLE PORT

Our port is the hub where everything comes together: trade flows and energy issues, industry and the city, the past, present and the future. By working with clients, clusters and innovators we can make a significant contribution to a cleaner port and a quality living environment.

WE PROMOTE A SUSTAINABLE ENERGY SUPPLY

The Port of Amsterdam is one of the largest energy ports in Europe. We want to retain this position, but with an ever decreasing footprint. As a result we opt for sustainable growth, so that we will be one of Europe’s most sustainable ports by 2030. Sustainable port development is achieved using a step-by-step approach, in association with our clients and partners. Our aim is to gradually shift the balance between fossil fuel and non-fossil fuel cargo. We will not do this by pushing the fossil fuel industry away, but by increasing our share in renewable energy and other non-fossil fuel markets. State-of-the-art terminals will allow us to ensure our clients can already operate today in a manner that is as modern and clean as possible. In so doing our port will become a place where the search for alternative energy sources is put into practice.
**WE PROMOTE A SUSTAINABLE ENERGY SUPPLY**

THROUGH AN INCREASE IN SCALE OF THE GENERATION AND STORAGE OF SUSTAINABLE ENERGY.

Over the next few years we will make significant progress in the generation and storage of solar and wind power. Our aim is to have 100,000 m² of solar panels installed at the port. First and foremost we are investing in our locations. At the same time we are looking for clients and partners that would like to collaborate on a local energy marketplace. We believe that linking the supply and demand for sustainable energy in the port region offers major opportunities. We can supply sustainably generated energy to clients without the intervention of parties in the chain. If the port or a client generates more energy than it requires, it can be supplied to the grid, a neighbour or the city. Education, training and development contribute to this venture.

**BY WORKING ON MORE ONSHORE WIND**

Together with the Municipality of Amsterdam we see opportunities for more wind turbines in the port region. In 2012, we jointly founded Westpoort Wind Vision, which provided new search locations. Following a provincial moratorium in 2015, we were able, along with Windgroep Holland and WaterNet, to submit principle applications to the Province of Noord-Holland for the development of new wind farms in Westpoort. It concerns new rows of wind turbines and additions to, or the replacement of, existing rows. By 2021, we are aiming for a wind power capacity of 100 MW.

**BY PREPARING FOR OUR ROLE AS A SUSTAINABLE ENERGY HUB**

We are using our collaborative power to unite supply, demand and technology. We will do so, for example, by developing a smart grid: a flexible, decentralised energy infrastructure, which powers, for example, lighting in the port region. We are also working with partners to make the port a sustainable testing ground. A prime example is Clean Capital, a cooperation partnership between the Port of Amsterdam, Afval Energie Bedrijf Amsterdam (AEB) and WaterNet, which focuses on innovative projects in the field of sustainable energy and raw materials. We are jointly researching a steam pipe network, processing technology for fluid waste and the production of biobased materials and chemicals.

**OBJECTIVES**

- To increase turnover of non-fossil fuel cargo to EUR 95 million (from EUR 83 million in 2015) by 2021.
- To have installed 100,000 m² of solar panels by 2021.
- To increase wind power capacity from 65 MW to at least 100 MW by 2021.
WE PROMOTE THE BIOBASED AND CIRCULAR ECONOMY
We help with investments that are necessary to switch to a biobased and circular economy and align the supply and demand of waste flows. New business models and innovations will enable us to convert raw materials or waste into energy and retain them in the industrial cycle. We can make an important contribution by installing the necessary infrastructure. We have already achieved a great deal with companies in the port and the city. Waternet extracts phosphate from urine in sewage water, which ICL Fertilisers uses to produce fertiliser. Orgaworld, Biodiesel Amsterdam, NOBA and Rotie convert cooking oil and other organic waste into green power, biodiesel and heat, to heat thousands of homes in Amsterdam. Enhancing the value of as much waste and waste flows from the Metropolitan region and the city as possible in the port is an important goal.

BY ATTRACTION INNOVATIVE AND SUSTAINABLE START-UPS
We provide space for promising start-ups. This enables us to appeal to companies that, for example, convert plastic waste into fuel, to establish their businesses here. We jointly focus, with Innovation Lab Chemistry Amsterdam (ILCA), on getting promising start-ups to do just that. One example of this is in Prodock, a unique combination of indoor and outdoor workplaces. Here we offer a location and a platform where ambitious entrepreneurs, leaders, pioneers and existing clients can test, continue to develop and introduce innovative products to market. We make our knowledge, our network and the port available, so that we can continue to help promising ideas. With the Mainport Innovation Fund II (MIF II) we focus on investments in start-up technology companies in the field of transport, logistics, maritime shipping and aviation. Our partners in this fund are Schiphol, KLM, TU Delft and NS.

WE ARE WORKING ON AN OPTIMAL QUALITY LIVING ENVIRONMENT FOR OUR SURROUNDING AREA
We cannot escape the fact that activities in our port produce noise, odours, light and dust. However, we can minimise their impact using specific measures so that our surrounding area is inconvenienced as little as possible. To this end we are installing odour detectors and reducing noise nuisance by, for example, replacing the ‘beeping’ of reversing trucks (see box ‘Audibly Less’ on page 19). We also support initiatives taken by clients that contribute to a quieter and cleaner port.

BY COMBATING ODOUR NUISANCE
Odour nuisance results in a lot of environmental complaints from local residents. This is why we have installed 41 e-noses (odour detectors) around the North Sea Canal, at oil terminals and other businesses that may produce odours. We did this in association with the Province of Noord-Holland, the Environmental Service and ORAM. The e-noses signal changes in the composition of the air, which allows companies to act in a targeted manner. We take measures to continue to reduce odour nuisance based on analyses and complaints. Businesses in the port are also taking their own initiatives. At all oil terminals product fumes from ships are captured during loading and unloading using vapour treatment installations. Energy companies in the port jointly invest EUR 100 million a year complying with environmental regulations.

OBJECTIVES
• To have welcomed 15 innovative start-ups to our port by 2021.
• To have provided 22.5 hectares of new land to start-ups with innovative concepts in offshore wind and the biobased and circular economy by 2021.
WE ARE WORKING ON AN OPTIMAL QUALITY LIVING ENVIRONMENT FOR OUR SURROUNDING AREA

BY PREVENTING DUST NUISANCE
Transshipment of coal can produce dust nuisance. This is why we take measures together with transshipment firms to make this process as clean as possible. The coal in our port is sprayed on a weekly basis, a thin film of cellulose is placed over coal heaps and covered conveyor belts are used to prevent dust. The Rietlanden coal terminal packs supplies in paper pulp and uses a dust monitoring system, which allows it to take direct action if dust norms are exceeded. This means the company actually goes further than its permit requirements.

BY MANAGING OUR (NOISE) SPACE AS EFFICIENTLY AS POSSIBLE
The growth of the North Sea Canal region must be achieved as much as possible in the existing port region. To do so sufficient environmental space is needed, including noise space. Therefore the noise zones in Westpoort (Municipality of Amsterdam) and HoogTij (Municipality of Zaanstad) have been adjusted. The new noise zones were irrevocably established in September 2015. They are mainly intended for the location of new companies on plots that are currently unused. An agreement was also concluded with the Municipality of Zaanstad related to efforts to reduce noise nuisance where possible. In addition we are working on the continued development of the ’Audibly Less’ project (see box) and we jointly invest in innovations that reduce the noise level, such as electric cranes. Lastly we are working on a Noise Allowance Plan and organising meetings with residents to inform people in the surrounding area about the latest developments. The Noise Allowance Plan will be formally adopted in the second half of 2017.

OBJECTIVES
• To utilise our space 10% more intensively by 2021.

FROM BEEP TO WHITE NOISE WITH AUDIBLY LESS
Local residents indicated they were bothered by the beeping of reversing trucks, loaders, cranes or forklift trucks. As a result, in 2015, we launched the Audibly Less project. In the pilot we replaced the beep by a white noise signal on 100 trucks. This signal is clearly audible at a short distance. At a greater distance the white noise is absorbed by ambient noise. The reaction of local residents and clients was enthusiastic. Clients also reported the issue and see our initiative as a great service.

Audibly Less was a first: this technology had never been applied as widely in a port region before. So it was an indisputable success! We are extending this project to Westpoort in 2016.
WE ARE WORKING ON AN OPTIMAL QUALITY LIVING ENVIRONMENT FOR OUR SURROUNDING AREA

BY MEASURING AND IMPROVING AIR QUALITY
We are launching several initiatives to address the air quality in and around the port. Five permanent measuring stations around the port region continuously measure the air quality. We obtained an insight into the air quality around our port region from measurements provided by the Municipal Health Service (GGD) and the Air Quality Agency. The average values of nitrogen (NO\(_x\)) and particulate matter (PM\(_{10}\)) around the port amply comply with the norm of 40 µg/m\(^3\). Sulphur (SO\(_x\)) is not subject to a standard level, but is relatively low. The values have improved over the past five years. Nevertheless as of 2016, we are monitoring the concentrations on a quarterly basis so that we can quickly signal any changes and take action where necessary.

<table>
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<tr>
<th>Year</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>NO</th>
<th>NO(_x)</th>
<th>SO(_x)</th>
<th>BENZENE</th>
<th>TOLUENE</th>
<th>XYLENE</th>
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<td>16.4</td>
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<td>1.5</td>
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<td>0.7</td>
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</tbody>
</table>

PM\(_{10}\) is particulate matter, NO\(_x\) is nitrogen oxide and PM\(_{2.5}\) is a finer fraction of particulate matter. The norm for NO\(_x\) and PM\(_{10}\) is maximum 40 µg/m\(^3\), SO\(_x\) is not subject to a standard limit.

BY EFFECTIVELY LISTENING TO COMPLAINTS
Local residents may feel unsafe or concerned about their health or the environment. We measure our impact using complaints and quantitative values and take measures that reduce the impact. In 2016 and 2017, we are going to analyse the quality of our complaints system to achieve a multi-annual target in complaint reduction.

BY INVESTING IN SHORE-SIDE POWER AND LNG
We have installed shore-side power connections at a number of berths for inland shipping and passenger ships. At these berths ships are no longer allowed to operate a generator. This is good for the environment and prevents noise nuisance. Over the next four years, we will increase the number of shore-side power connections and contribute to the installation of shore-side power points for the fishing fleet in IJmuiden. We want to promote the European shore-side power obligation, so that every ship in every European port is obliged to use shore-side power. This will encourage ships to install the facilities necessary for doing so. Furthermore we aim to expand our LNG bunker facility as quickly as possible. LNG is a more environmentally friendly alternative to diesel because it hardly contains any nitrogen or sulphur. As a result, during combustion, fewer harmful emissions are produced such as particulate matter, nitrogen oxide, sulphur oxide and CO\(_2\) than with diesel.

BLIS MAKES INLAND SHIPPING MORE APPEALING
In practice transport by inland shipping is not yet sufficiently appealing compared with road transport. Therefore we launched the Inland Shipping Berths Information System (BLIS) project. We use BLIS to measure occupancy of berths in the port (based on signals transmitted by inland shipping, which are made anonymous) and identify vacant berths. Thanks to BLIS skippers know whether and where there is space, and save time and fuel searching for a berth. In this case smarter and cleaner operations go successfully hand in hand.
**WE ARE WORKING ON AN OPTIMAL QUALITY LIVING ENVIRONMENT FOR OUR SURROUNDING AREA**

**BY HELPING TO PROTECT NATURE RESERVES IN OUR SURROUNDING AREA**

Our port is surrounded by Natura 2000 areas, such as the North Sea Coastal Zone and the Oostvaarderplassen. These areas are protected due to their biodiversity and species of flora and fauna. We constantly look for ways in which industrial activities, port activities and nature can live together in harmony. Therefore, in port development projects that border Natura 2000 areas, such as the construction of the new sea lock, we take measures to ensure that these areas are not burdened as a result. In addition we create toad pools where there are no plans to build and erect brood boxes for bats. A swallow wall has been created to the west of the Hempont. Calm, shallow water has been created on the banks of the Madagascarhaven, which serves as a spawning ground for fish.

To keep the port as clean as possible we do our utmost to reduce floating waste and litter. Since 2010, we have monitored the production of waste from inland shipping. In addition we collect household and waste water from ships (see Green Deal box) and we facilitate collective waste collection. We also encourage the effective use of sand and building materials that are produced at building and demolition sites in the port. As part of the ‘Clean Water in and around Amsterdam’ cooperation covenant we work with partners such as Waternet, the Municipality of Amsterdam and the Plastic Soup Foundation to reduce floating waste and litter in Amsterdam’s waters. We jointly clean the riprap banks. We aim to reduce the number of items on riprap banks from 990 per m² to 500 per m² in 2017.

**BY PROMOTING A SHIFT IN ROAD TRANSPORT TO TRANSPORT BY SHIP AND RAIL**

This is more environmentally friendly especially when longer distances and greater bulks are concerned. By, for example, creating additional berths, we can make conditions more appealing to inland shipping. We are also working to improve rail infrastructure as part of the Rail Freight Transport Cooperation Programme with Prorail and the Port of Rotterdam. Moreover we strive to promote accessibility for and to the port region and make it more appealing for employees. This is why we support the Westpoort bus. This initiative was launched ten years ago, for and by businesses in Westpoort when public transport was inadequate.

**A BREEAM CERTIFICATE FOR ATLAS PARK**

Atlaspark has evolved to become our port’s ultimate logistics hotspot. This site, a ten-minute drive from Schiphol and fifteen kilometres from the centre of Amsterdam, is the new base of high-profile companies such as G-Star RAW, Renault and Starbucks. Sustainability was a major focal point in the redevelopment of this site. This was partly motivated by the special location, close to the Spaarnwoude recreational area and Amsterdam Golf Club. The site is also home to an old sea wall and lots of recreational cycling paths. The responsible development was awarded a BREAAM certificate with an exceptional score: excellent (four stars). BREAAM is an internationally established tool that makes sustainability transparent. This could lead to tax and subsidy advantages, from which clients could (indirectly) benefit. Atlas park represents a model for sustainable site development. We strive to inspire businesses that move to the area and elsewhere in the port to think differently about sustainability.

**OBJECTIVE**

- For 65% of cargo to be transported using inland shipping, 5% by rail and 30% by road by 2021. This would mean a 10% increase in our share of inland shipping.
WE ARE PREPARING FOR FUTURE EMPLOYMENT ISSUES

Our port makes a major contribution to employment in the region. As a port authority our tasks do not include job placement services. We do provide an insight into regional developments by sharing a biennial labour market analysis with businesses in the port and we work with Watertalent, a job vacancies database of jobs in and around the port. We also help with a number of significant employment issues. For example, how do we ensure that the port continues to find the right people with the right skills? How do we respond to a potential labour shortage in specific job groups? And how do we cope with developments such as those related to robotics? We also report on employment in the port on an annual basis.

We see it as our responsibility to alert the port’s business community about opportunities for ‘perspectiefbanen’ (jobs offering perspective for the unemployed) and encourage them. We do this in association with ORAM, the largest business network in the greater Amsterdam area. The port authority organises meetings with the Employers Service Point (WSP). We also invest in the Lock and Port Information Point (SHIP), which provides information about job opportunities in the port.

A NEW DUCK DECOY STRUCTURE AND A NEW PERSPECTIVE

Every year several dozen VMBO pupils (preparatory vocational secondary education) in the Amsterdam region join ROC TOP, small-scale MBO (senior secondary vocational education and training) that prepares youths, who risk dropping out of the school system, for employment or further study. ROC TOP, along with the Amsterdam Department of Social Development and School2Work, give them the opportunity to learn a profession in practice. Our port offers this venture plenty of possibilities. There has been a duck decoy structure in the green outskirts of the Western Port region since 1652. Youths from School2Work helped repair the decoy structure, build the workplace and public area and maintain the green spaces. Working in the natural environment helped them practice discipline, work on their motivation and acquire a new perspective.
3. A COMMITTED PARTNER

Being a logistic hub we play a role in (international) production and supply chains. We are and feel responsible for social developments in the region and the indirect impact of our port on society. Therefore we work with clients and authorities on lobby and agenda setting in cooperation partnerships and international networks. This enables us to encourage clean shipping and a sustainable, responsible and safe chain.

WE ENCOURAGE CLEAN SHIPPING

Every year, 50,000 ocean liners, cruise ships and inland vessels visit the Port of Amsterdam. Compared with other modes of transport shipping is the most environmentally friendly form per tonne-kilometre. Nevertheless it still produces considerable levels of emissions. Ballast water, ship waste (see ‘Green Deal’ box), noise and degassing are also points for concern. This is why we take initiatives on several levels to promote clean shipping. We have a Port Waste Plan, we invest in shore-side power (see page 20) for inland shipping and river cruisers as well as in LNG bunkering. We also apply environment-related rebates to sustainable pioneers and are working on European pilots to reduce emission limits in the port region (SECA region). Furthermore we are active in the European Sea Ports Organisation (ESPO), which strives to put sustainability themes such as ship waste on European agendas. On the environmental committee of the International Association of Ports and Harbours (IAPH) we share cases related to clean shipping so we can learn from each other’s successes.

We are also developing a vision on clean shipping. It defines our objectives for the number of shore-side power connections (the feasibility of which we are examining for ocean cruises), pushing the European shore-side power obligation and promoting the Green Award and Environmental Ship Index. We have also started performing emission calculations for maritime shipping. These calculations make it possible to take additional measures and steer the reduction of these emission values.
WE ENCOURAGE CLEAN SHIPPING

BY APPLYING ENVIRONMENT-RELATED REBATES ON PORT DUES
In our quest to be a sustainable port we aim to attract as many clean ships as possible. As part of the World Ports Climate Initiative (WPCI, part of the IAPH) we initiated the Environmental Ship Index (ESI), an environmental rebate on port dues for sea-going vessels, along with the ports of Antwerp and Rotterdam. We also reward clean inland vessels with a Green Award by applying a rebate on the (inland) port dues.

OBJECTIVE
• For at least 20% of the sea-going vessels that enter the Port of Amsterdam to receive a rebate on port dues because of the environmentally friendly measures they have taken, by 2021.

WE WORK HARD ON SAFETY

THROUGH STRICT MONITORING
It is vitally important that we are a safe port. This involves nautical, transport, environmental and port safety at port facilities as well as safety related to risky objects. We strictly monitor this on a daily basis, along with inspection bodies such as customs, the police and the Environmental Service.

Since 2015, we have used Hazardous Substances & Environment Inspectors 24 hours a day, seven days a week. Inland shipping and sea-going vessels can now also be subject to night inspections. This provides us with greater insight and control of safety awareness in the port. In 2015, 417 environmental and safety inspections were performed on inland vessels. A total of 4,408 cases of sea-going vessels entering the port were inspected, during which 510 deviations were discovered. Currently, 20% of sea-going vessels are inspected. Our aim is to maintain this percentage, but reduce the number of deviations. We also inspect the quality of registrations of production and the final production of ship waste.

Our Harbour Master’s Division plays a major role in preventing and combating incidents on the water in the area of jurisdiction of the Central Nautical Management and onshore in Westpoort. In 2015, we purchased a new fire-extinguishing pontoon to support the Amsterdam-Amstelland Fire Brigade. We are also strict when it comes to water pollution. The number of water pollution cases fell in 2015 to 25 (from 116 in 2013 and 56 in 2014).
BY EMBRACING OECD GUIDELINES
We want to use our international activities (under the ’Port of Amsterdam International’ flag) to contribute to the economic, social and ecological progress of the host country. This is based on OECD guidelines. They indicate what the Netherlands government and those of the other 45 Member States expect of international organisations with regard to corporate social responsibility.

BY CONTINUOUSLY ENGAGING IN DIALOGUE WITH OUR PARTNERS
Our stakeholders are important sparring partners when it comes to dilemmas. Therefore we aim to develop an approach for active stakeholder management. To this end we opted for a multi-annual partnership with the Stichting Natuur & Milieu environmental organisation. Via the Leaders for Nature forum (the business network of the International Union for Conservation of Nature (IUCN), with members such as the World Wide Fund for Nature, the Ministries of Economic Affairs and Foreign Affairs and the Port of Rotterdam), in 2015 we explored how we could contribute to making the chain sustainable. As a result we examined the possibilities of encouraging good conduct by clients, also in their countries of origin. Together with the Seaports Branch Organisation (BOZ), we support Bettercoal, a non-profit initiative that promotes responsible entrepreneurship in the coal chain. As a relatively small player this allows us to make a specific contribution to a fairer chain and better conditions in coal mines. We take a critical look at the transparency of monitoring and reporting and monitor compliance with agreements made.

WE ARE JOINTLY WORKING ON SOLUTIONS TO SOCIAL ISSUES
Cargo that enters the Port of Amsterdam has often travelled halfway around the world. Some of these cargo flows are linked to human rights violations or poor working conditions. Examples include ‘blood coal’ from Colombia or African cocoa, which is controversial because of the use of child labour. The need for the transparent certification of raw materials and chains is great and a major responsibility, which we are happy to reflect on, being a link in the logistical chain. We also place the topic on the agenda and discuss it in a broader context, including with the Seaports Branch Organisation (BOZ). We examine whether and how we can arrive at a common standpoint and decision-making framework for ethical dilemmas.
The Sustainable Port

Responsible organization

- Energy transition and circular economy
- Environment and the surrounding area
- Clean and safe shipping
- Work and knowledge
- Responsible supply chain
Overview of Objectives
1. A RESPONSIBLE ORGANISATION

### Sustainable operations

<table>
<thead>
<tr>
<th>Level and Initiative</th>
<th>Indicators and Objectives for 2021</th>
<th>Status Mid 2016</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce our CO₂ footprint</td>
<td>Reduce our CO₂ emissions by 25% to 1,773 kilotons of CO₂ (compared with 2,364 kilotons in 2014).</td>
<td>Emissions for 2016 are expected to be approximately 2,190. This is 8% lower than in 2014. The HVO pilot involving patrol vehicles started in September 2016: mixing (30%) Hydrated Vegetable Oil. If successful, we will expand the pilot to include the entire fleet. This could deliver a total reduction of 14%.</td>
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</table>

### Be a good employer

<table>
<thead>
<tr>
<th>Level and Initiative</th>
<th>Indicators and Objectives for 2021</th>
<th>Status Mid 2016</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good working conditions</td>
<td>Increase employee satisfaction to an 8 or higher.</td>
<td>The employee satisfaction score for 2016 is 7.3.</td>
<td></td>
</tr>
<tr>
<td>Vitality and health</td>
<td>Keep absenteeism well below 3%.</td>
<td>In 2016, we launched a vitality programme. The absenteeism percentage is currently 3.2% (1 January 2016).</td>
<td></td>
</tr>
<tr>
<td>Promote diversity</td>
<td>Maintain the 30% share of women in the workforce.</td>
<td>On 1 January 2016, women accounted for 31%.</td>
<td></td>
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</tbody>
</table>

### Anchor sustainability

<table>
<thead>
<tr>
<th>Level and Initiative</th>
<th>Indicators and Objectives for 2021</th>
<th>Status Mid 2016</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability reporting</td>
<td>Our annual report is compiled in accordance with GRI G4 guidelines</td>
<td>We will report in accordance with GRI for the first time in 2016. Preparations are underway.</td>
<td></td>
</tr>
<tr>
<td>Stakeholder management</td>
<td>A good to excellent reputation among all stakeholder groups: over 71 points on a scale of 100.</td>
<td>In 2016, we conducted another reputation survey. The score was higher than 71 points among three out of the six stakeholders. We will use the recommendations to develop our stakeholder management.</td>
<td></td>
</tr>
</tbody>
</table>
## 2. A SUSTAINABLE PORT

### Sustainable supply of energy

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Objective</th>
<th>Status Mid 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attract diverse cargo</td>
<td>An increase in turnover from non-fossil fuel cargo to EUR 95 million.</td>
<td>We have freed up capacity to attract biobased and circular entrepreneurship. We also conducted two feasibility studies into, for example, biorefinery. On 1 January 2016, the value of non-fossil fuel cargo amounted to EUR 83 million.</td>
</tr>
<tr>
<td>Invest in solar and wind power</td>
<td>Increase wind power capacity to at least 100 MW.</td>
<td>In 2016, we submitted applications for the permits to the Province of Noord-Holland, good for a total of 70 MW. In August 2016, four of the six permits were rejected by the Province. Existing wind turbine capacity in the port is 65 MW.</td>
</tr>
<tr>
<td>Achieve 100,000 m² of solar panels in the port.</td>
<td>A grant was requested and approved for 15,000 m² of solar panels on the roofs of our locations. There is a decision on SDE (Sustainable Energy Production Incentive) and a EUR 1.4 million subsidy for the Cotterell warehouse. It concerns 5,000 panels and at least 1.3 MW peak capacity (annual generation of 1.2 GWh, circa 380 households). In 2016, we aim to have 15,000 m² of solar panels in the port. In 2017, this should be doubled to 30,000 m². By 2020, we are aiming for the 100,000 m² target.</td>
<td></td>
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</tbody>
</table>

### Biobased and circular economy

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Objective</th>
<th>Status Mid 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting biobased and circular business, attracting sustainable start-ups</td>
<td>Welcome 15 innovative start-ups to our port.</td>
<td>In 2016, four new start-ups set up business in Prodock: 30 MHz, 3DFix, Drone addicts and Blackwood Technology.</td>
</tr>
<tr>
<td>22.5 hectares of new land allocated to game changers in the biobased and circular economy.</td>
<td>We find ourselves in an advanced stage with seven sustainable start-ups. This involves a total of 13.3 hectares.</td>
<td></td>
</tr>
<tr>
<td>LEVEL AND INITIATIVE</td>
<td>INDICATORS AND OBJECTIVES FOR 2021</td>
<td>STATUS MID 2016</td>
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<tr>
<td>----------------------</td>
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<tr>
<td><strong>Quality living environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimise nuisance</td>
<td>We are still determining this objective.</td>
<td>In 2016-2017, we will analyse the complaints system and improve our complaints management process.</td>
</tr>
<tr>
<td>Optimise the use of (noise) space</td>
<td>We are doing our utmost to reduce noise nuisance where possible.</td>
<td>In 2016, we are expanding the ‘Audibly Less’ project and jointly investing in an electric crane at Ableton. Furthermore we are organising meetings for residents to inform them about our Noise Allowance Plan.</td>
</tr>
<tr>
<td>Improve air quality</td>
<td>We are still determining this objective.</td>
<td>In 2016, we mapped out previous years’ emissions. We also began an impact analysis.</td>
</tr>
<tr>
<td><strong>Sustainable hinterland connections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote sustainable mobility</td>
<td>65% of cargo to be transported using inland shipping, 5% by rail and 30% by road. Our share of inland shipping will increase by 10%.</td>
<td>In 2016, we launched the Rail Freight Transport Cooperation Programme with Prorail and the Port of Rotterdam, to improve rail infrastructure. Expected transport in 2016: 60% by inland shipping, 1.5% by rail and 38.5% by road.</td>
</tr>
<tr>
<td><strong>Labour market</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>We are still determining this objective.</td>
<td>On 1 January 2016, the port was good for 34,157 jobs (direct employment).</td>
</tr>
<tr>
<td>Insight into supply and demand</td>
<td>Perform a structural labour market analysis.</td>
<td>In 2017, we will conduct a new labour market analysis.</td>
</tr>
</tbody>
</table>
3. A COMMITTED PARTNER

### Clean shipping

| Environment-related rebates (ESI and Green Award) | At least 20% of sea-going vessels that enter the Port of Amsterdam to receive a rebate on port dues as a result of environmentally friendly measures. | The percentage of ships eligible for environment-related rebates is gradually increasing: from 12.9% (2014) to 15.8% (2015). |

### Safety

| Actively reduce incidents | No increase in the number of nautical accidents alongside an increase in shipping. | In 2015 there were 44 nautical accidents. We will perform a relative calculation for 2016. |
| Inspections               | The number of deviations in relation to the number of environmental and safety inspections performed not to exceed 20%. | Until 2015, inspections and deviations were only recorded for sea-going vessels. The number of deviations in relation to the number of inspections is currently 12%. As of 2016, deviations related to inland shipping are also recorded. In 2016, the emphasis is on analysing the results and adjusting the checks. |

### Social issues

| Position                  | Formulate a position and framework for social dilemmas. | At the end of 2016, we expect a draft that we will discuss in the Seaports Branch Organisation. |
| Stakeholder management    | # stakeholder meetings related to social issues (we are still determining this objective. | In 2016 and 2017, we will initiate active stakeholder management. |
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