



JADEWESERPORT
WILHELMSHAVEN

PERS Environmental Report 2021



**JadeWeserPort Realisierungs GmbH & Co. KG
(JWPR)**



EUROPEAN SEA PORTS ORGANISATION ASBL / VZW
ORGANISATION DES PORTS MARITIMES EUROPEENS ASBL / VZW

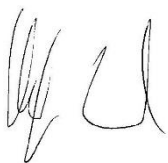




**PERS Declaration Form by Port Senior Manager
to support the Port Environmental Review System (PERS) Application**



Name of Port	JadeWeserPort Wilhelmshaven
Name of Senior Manager	Holger Banik
Position	CEO
<p>On behalf of the JadeWeserPort I declare that the information provided, and the circumstances described in the PERS documents are accurate and based on the actual port situation. I further confirm that there are no resolutions of competent authorities to the effect that a violation of significant environmental regulations has been established and/or that there are no decisions in writing that have been made by the prosecuting authorities with regard to prosecution for any criminal offense or any violation of significant environmental regulation.</p>	



Holger Banik, CEO JadeWeserPort
Wilhelmshaven, December 15th, 2021

Foreword

Dear Readers,

Climate protection, climate adjustments, and securing the biodiversity are almost daily on the agenda in politics and in society. Even our own agenda is increasingly shaped by sustainability.

For many years we, i.e., the JadeWeserPort Realisierungs GmbH & Co. KG, in close cooperation with the Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co KG, have been committed to the protection of the environment.

With our facility, we, as a port infrastructure operator, are the bridge between land and sea. International streams of goods are transhipped via the JadeWeserPort, and a great variety of transportation modes converge here. Our strong position within the logistics chain is also our strength, when it comes to climate protection. The efficient alignment of the streams of goods onto all the different modes of transportation and the utilization of the site advantages in collaboration with our customers and business partners is the focal point of our sustainability endeavors.

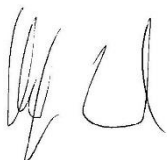
Our facilities are energy efficient, and since the JadeWeserPort is still young, most of them are still state-of-the-art. Despite that, in our areas of influence, we are constantly striving to re-evaluate ways to streamline planning and port management, administration and real estate affairs, as well as construction and expansion possibilities, and to implement the commensurate measures.

With this document, we are presenting to you our fourth PERS Environmental Report, in which we would like to showcase the developments around the environmental protection at JadeWeserPort. In the overall scheme of things, continuous reporting makes up only a small part of the overall sustainability here at JadeWeserPort; our colleagues are the ones making sustainable decisions on a daily basis, thus steering our ports in a future-oriented direction.

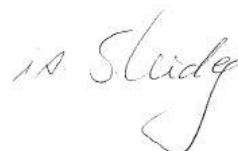
Enjoy the read, and ahoy! on your journey through our Environmental Report!



Holger Banik
Managing Director



Mr. Holger Banik
Managing Director



Ms. Silke Lüders
Environmental Coordinator

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Schedule of Abbreviations

ESI	Environmental Ship Index
GVZ.....	Güterverkehrszentrum (Cargo Transport Center)
IAPH.....	International Association of Ports and Harbors
ISPS.....	International Ship and Port Facility Security (Danger Prevention and Defense)
JWP	JadeWeserPort
JWPM	Container Terminal Wilhelmshaven JadeWeserPort Marketing GmbH & Co. KG
JWPR.....	JadeWeserPort Realisierungs GmbH & Co. KG
KV Facility:	Transshipment Facility for Multimodal Transport
LNG.....	Liquefied Natural Gas
MARPOL.....	Convention for the Prevention of Marine Pollution from Ships
NPorts	Niedersachsen Ports GmbH & Co. KG
OPS	Onshore Power Supply
QM	Quality Management
TEU.....	Twenty-Foot Equivalent Unit
TSC.....	Truck Service Center
WHV.....	Wilhelmshavener Hafenwirtschafts-Vereinigung
WPCI.....	World Ports Climate Initiative

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1 Company Profile

1.1 Company Structure

The JadeWeserPort is under the administration of the JadeWeserPort Realisierungs GmbH & Co. KG (hereafter referred to as "JWPR") with their place of business in Wilhelmshaven. Aside from that, there is the Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG (hereafter referred to as "JWPM"), which, as a 100% subsidiary of the State of Niedersachsen, is responsible for the marketing and the management of the industrial and logistics areas located inside the Güterverkehrszentrum (Cargo Transport Center).

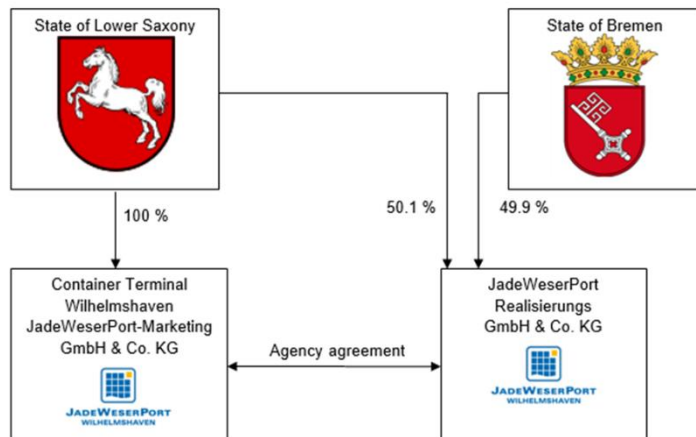


Image 1 Ownership Structure of the Shareholders

The Port Railroad and the Truck Service Center (TSC) are important performance assets of the Güterverkehrszentrum (GVZ) and, together with the surface areas of the Güterverkehrszentrum and other real estate of JWPM, are managed by JWPR within the realm of the Contract of Agency. The company structure is schematically depicted in Image 1. Solely for this section, for organizational purposes, we are making a distinction between the JWPM and the JWPR. For any other section, the JadeWeserPort companies will be viewed as one entity.

The Container Terminal is operated by EUROGATE Container Terminal Wilhelmshaven GmbH & Co. KG (hereafter referred to as EUROGATE).

JWPR is the entity responsible for the operation of the port infrastructure and its shares are held by the States of Niedersachsen at 50.1%, and Bremen at 49.9%.

As port operator of the JadeWeserPort, JWPR takes on the typical tasks of a port infrastructure company. This entails, among other things, the levying of port usage fees, the management of the own surfaces, call for bids and award of concessions for maritime services, maintenance and monitoring of the port facilities, including the nautical measuring devices.

In addition, the field of tasks encompasses the rule-making and enforcement of the rules of use in the shape of a Port Usage Regulation, general terms of use, a ships' waste management plan, and an Alarm and Emergency Plan. In the course of implementing the plan approval notice, JWPR has also established a Port Management Plan, which delineates the port management from the authorities' standpoint and which ensures a safe and functioning port operation in line with the above-named rules and regulations.

1.2 Historical Development

There had already been a first push to build a container deep water port on the Jade and it was initiated in 1993 by the Wilhelmshavener Hafenwirtschafts-Vereinigung (Wilhelmshaven Port Business Association/WHV). In the years 1998 and 2000, an analysis for potential and a feasibility study were drawn up.

In order to implement the project JadeWeserPort, after submitting the applications for plan approval, the heads of state of the States of Niedersachsen and Bremen founded the JWPR in January of 2003.

In April of 2006, the EUROGATE Group was awarded the contract for the operation of the JadeWeserPort.

The plan approval notice required for construction of the first section was granted in March of 2007. In May of 2008, the hydraulic sand fill operation commenced and it took two years to complete. From August of 2008 on, the ramming of the pile moorings occurred.

In January of 2011, the first construction segment of the quay with a length of 1,000 meters was handed over to the operator, EUROGATE.

No later than April of 2012, the port went into trial operation mode. The official commencement for the JadeWeserPort took place on September 21, 2012.

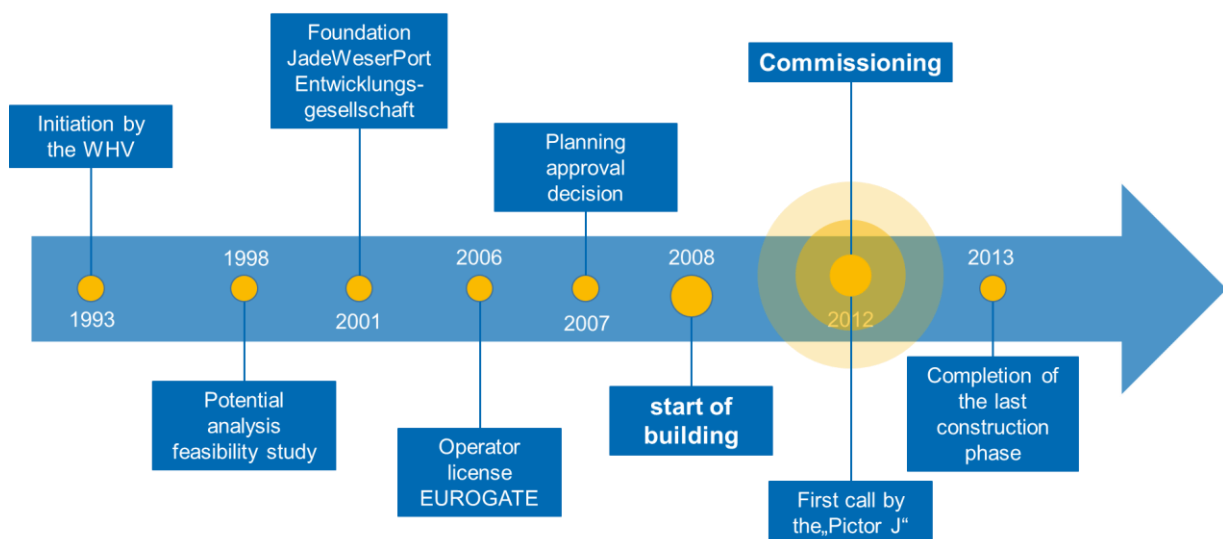


Image 2 Historic Development of the JadeWeserPort

Nowadays, the JadeWeserPort is Germany's only deep-water container port. Due to its short approach travel and an excellent hinterland connection, the port is ideally positioned for container ships, which keep growing in size.

In comparison with the first year of operation, the number of containers handled was increased by more than 700%.

1.3 Description of the Port Areas and Facilities

The total surface area of the JadeWeserPort measures 340 hectares (~840 acres). That surface is divided into various port areas. These port areas are hereafter explained by numbering in Image 3.

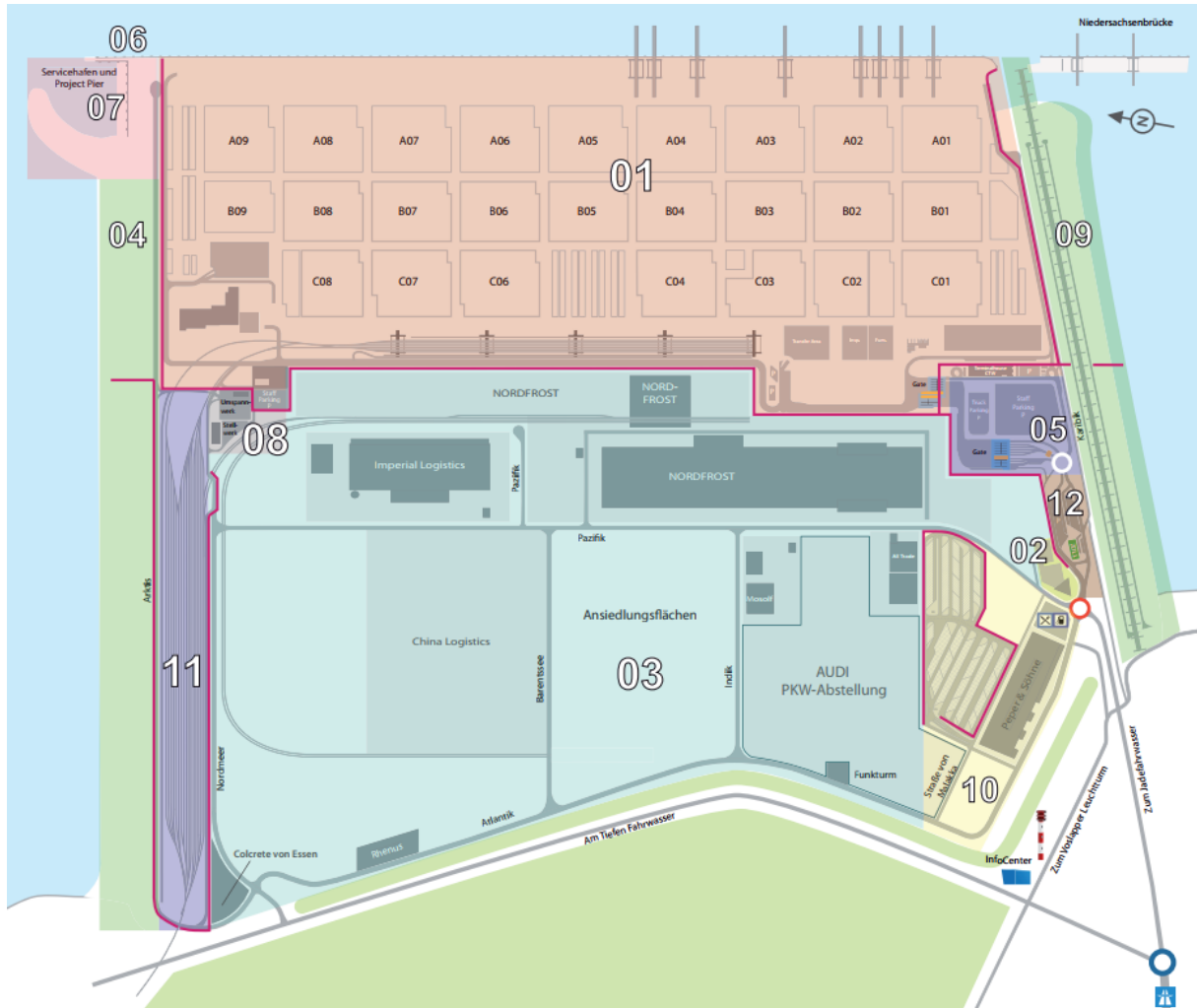


Image 3 Overview Site Map of the Total Area JadeWeserPort

- 01 Terminal Area: The terminal area measures 130 hectares (~321 acres). This is, where the containers are transshipped and stored for ontransport. This is ensured by the terminal operator EUROGATE. This port area is also home to the KV Facility (multi-modal facility) for the transshipment of containers onto and off of the rail. The KV Facility features six rail tracks and five gantry bridges for multimodal transport.

-
- The quay has a length of 1,725m (~1.1 miles) and can accommodate four large container ships or 12 feeder vessels at the same time. There are eight container bridges for the container transshipment.
- 02 Port Services Center: This is where the administration of the primary office of JWP, the Port Office and the Port Captain, among others, have their primary office.
- 03 Settlement Areas: The commercial settlement areas offer room for logistics companies and companies with an affinity to the port. There is a total of 150 hectares (~371 acres) of surface areas available here, divided into commercial and industrial classifications. There is also a one-track rail connection that leads from the staging/shunting yard to the settlement areas.
- 04 & 09 Flood Water Protection Dams: Both on the north and south end, the port area is protected by a dam or a seawall, respectively.
- 05 Pre-Gate: In this part of the port there is the gate towards the Container Terminal as well as the ISPS headquarters and the administration building of EUROGATE.
- 06 Project Pier: The Project Pier has a length of 65m, supports a transport load weight of 2000 metric tons, and features a transshipment area of 1,200m² (~12,900 sqft). It is designed for the handling of oversized and heavy loads.
- 07 Service Port: At the northern end of the port, you will find the Service Port, featuring several berths for water crafts of nautical service providers.
- 08 Rail Switch Tower: The rail switch tower is manned year-round, 24/7. At JadeWeser-Port, there is an electronic rail switch system in use that controls the track and signal technology.
- 10 Truck Service Center: The Truck Service Center is a fenced-in area for parking trucks. There are some 311 parking slots, washrooms and disposal possibilities available. Reefer containers can be supplied with electricity through retractable power supply modules on the ground, free of charge and low in emissions.
- 11 Staging/Shunting Rail Yard: The 16-track staging/shunting yard takes on a buffering function between the container port and the hinterland. Container trains up to the max. permissible train length of a completed container cargo train can be assembled here and picked up for their trip. Locomotives can be supplied with electricity in a low-emission way through power supply modules.
- 12 Customs: German Customs is housed in this area, with a check point and office buildings.

2 Environmental Strategy of JadeWeserPort

2.1 Policy Statement of JWPR

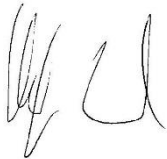
We, JWPR, commit to avoiding damage to the environment and to act in any and all areas of the company with the principle of sustainability. With this in mind, our environmental policies have already been implemented in all business areas of our company and are practiced by our employees in their respective job fields.

As a port operator, JadeWeserPort Realisierungs GmbH & Co. KG's primary focus is on the port management and on the management of planning and development. On behalf of the Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG, we are performing business services, including, but not limited to the implementation of the environmental compensation measures and the operational activity areas Rail, Truck Service Center, and Güterverkehrszentrum (GVZ/Cargo Transport Center).

In order to minimize the burden on the environment and to improve the quality of the environment, we take the following steps:

1. Efficient utilization of our site advantages, such as the short approach travel from sea and the direct and uncomplicated hinterland connection
2. Introduction of environmental controlling to gain information, so that we can continually improve the environmental protection and increase the energy efficiency
3. Dedication to the development of innovative and environmentally friendly solutions in the maritime navigation industry, with a focus on saving resources and energy, and on reducing emissions
4. Avoidance and diligent handling of the occurring waste amounts that are regulated by our Ships' Waste Management Plan
5. Informing about and adhering to the latest and most relevant environmental laws and standards and taking steps to maintain such compliance and putting an emphasis on making the protection of nature a key indicator for the operation of the port and its development
6. Ensuring a high security standard through a Port Office, which is manned 24/7, and through an Alarm and Emergency Plan to minimize the risk of accidents and their potential consequences for the environment, but also to ensure safe port operation; proper maintenance of the port facilities for the same, aforementioned reasons

7. Publication of an Environmental Report, which transparently documents the long-term progress and developments of the port with the help of designated defined performance indicators, and updating of this report and the information contained therein on a regular basis
8. Expansion and solidification of the networks with cooperating partners, such as Niedersachsen Ports GmbH & Co. KG and bremenports GmbH & Co. KG
9. Ensuring the availability of necessary resources for the realization of this Policy Statement.



Mr. Holger Banik
Managing Director



Ms. Silke Lüders
Environmental Coordinator

2.2 Environmental Goals

With their sustainability strategy, the European Union charts a clear and unmistakable environmental policy course. There are directives packages and standards, e.g., for increasing the energy efficiency or for the reduction of emissions, which outline a definite scope of action, which must be followed. In order to meet these requirements and to support the global implementation of goals, the JadeWeserPort has derived their own environmental goals from the EU's four environmental policy focal points below:

- Climate Protection
- Nature and Biological Diversity
- Environment and Health
- Natural Resources and Wastes

Devising the environmental goals and their active implementation occurs within JWPR's own realm of influence throughout every corporate area. For JadeWeserPort (JWP), sustainability means harmonizing ecological, economic and social interests.

Furthermore, JadeWeserPort is dedicated to the implementation and the ongoing development of the environmental strategy with the following environmental goals (see Table 1), focusing on emission reduction and the management of green spaces, which was conceptualized in

cooperation with Niedersachsen Ports GmbH & Co. KG (NPorts). NPorts manages the state-owned seaports of Niedersachsen and is a cooperation partner of JWPR in many areas.

Table 1 Environmental Goals of JWPR

Business Area	Goal	Implementation
Operation	Reduction of CO ₂ Emissions	ESI, electrical connections for reefers (refrig. containers) at the TSC, prep work for LNG, Onshore Power Supply (OPS), vehicle fleet, IT solutions, energy overhaul
Planning and Development	Planning and management of new and existing infrastructure, taking into account environmental points of view	Avoidance and reduction of traffic routes, efficient utilization of the infrastructure
Planning and Development	Management of Green Spaces	Long-term planning of coherence and compensation measures
Cooperation	Collaboration with stakeholders of the port economy for environmental protection	Consideration of ecological aspects during the cooperation with partners
Marketing	Environmental protection inside and outside of the company	Communicating the environmental protection measures with internal and external stakeholders in the form of environmental reports, brochures, and employee training
Finance	Environmental Controlling	Generating input/output balance sheets to obtain information for better environmental protection

Beyond that, the continued certification of the port pursuant to the Environmental Management System PERS is part of our Environmental Strategy. One of the aspects of the certification is to investigate the ecological effects of the JadeWeserPort and to reduce the environmental impact through environmental management and thus obtain a measuring basis for reaching the environmental goals. Here, the identification of substantial environmental aspects is a key step to discovering the impact on the environment and to formulate environmental goals and solutions. Of utmost importance at the JadeWeserPort are the following environmental aspects, which are included as an integral part of the port's environmental strategy:

- Emission of Airborne Pollutants,
- Water Emission and Water Quality,
- Waste Management,
- Soil Contamination,
- Effects on Habitats and Biotopes,
- Noise Emission.

3 Environmental Aspects, Legal Bases, and Environmental Parameters

3.1 Responsibility for the Determination of Environmental Aspects

Various different individuals, authorities, and companies are responsible for the activities, which have an impact on the environment. The individual responsibilities are clearly summarized in Table 2, which can be found on the following pages.

Any operational activities of cargo handling are the responsibility of EUROGATE. The only exceptions can be found at the Project Pier, where heavy load projects are transshipped and stored, and in the Service Port, where the bunkering of fresh water and fuel is carried out.

The Project Pier, the Service Port and also the Port Office are the sole responsibility of JWPR. Moreover, the Port Office is the first point of contact at the JadeWeserPort for the area of port operation, as it supports the smooth ships' operation at the quay. Management is responsible for various activities, which also includes the Environmental Management. Since many strategic decisions are made here, for instance with regard to the port operation or the port railroad, and many long-term concepts are drawn up, there is a clear emphasis on the importance of the environmental protection in all areas of the JadeWeserPort.

Table 2 Responsibilities and Competencies of the Activities at Port

Environmental Responsibility of Key Positions		
Activity	JWP Department	External Company
Dredging	Engineering and Consulting	
Nautical Affairs	Port Management/Port Office	Port Authority Wasserstraßen- und Schifffahrtsamt (Waterways and Shipping Office) Weser-Jade-North Sea Transport Control Center Wilhelmshaven Lotsenbrüderschaft (Brotherhood of Pilots) Weser II/Jade
Loading		
Terminals		EUROGATE
Mooring		Jade-Dienst
Quay Management		EUROGATE

Environmental Responsibility of Key Positions		
Activity	JWP Department	External Company
Strategic Planning	Corporate Management	
Approvals	Proxy Holder/Legal	
Contract Management	Real Estate and Commercial Settlement Management	
Emergency Planning	Port Management/Port Office	Port Authority Wasserstraßen- und Schifffahrtsamt (Waterways and Shipping Office) Weser-Jade-North Sea Central Command for Maritime Emergencies
Waste Management	Port Management	Gewerbeaufsichtsamt (Trade and Industry Control Office)
Sustainability Commissioner		
Energy Monitoring	Environmental Coordinator (f)	
Measurement of Water Currents	Engineering and Consulting	
Water Supply	Port Management	GEW Wilhelmshaven EUROGATE
Port Railroad	Port Management	Niedersachsen Ports GmbH & Co. KG Eisenbahn- und Verkehrsbetriebe Elbe-Weser GmbH
Floodwater Protection	Port Management	Oldenburgischer Deichbund
Introduction of Surface Water	Real Estate and Commercial Settlement Management	
Road System Within the Port Area	Real Estate and Commercial Settlement Management	
Real Estate	Real Estate and Commercial Settlement Management	

Environmental Responsibility of Key Positions		
Activity	JWP Department	External Company
Compensation Areas	Proxy Holder/Legal	
Maintenance of Green Areas	Real Estate and Commercial Settlement Management	Shepherds for Grazing Sheep Various Other Service Providers

3.2 Environmental Aspects and Their Legal Bases

Within the scope of the environmental management, it is crucial to know, which of the port's activities have an impact on the environment. In addition, it has to be clearly defined, which individual, department or organization is responsible for which activity, and which regulatory directives and guidelines apply for the respective activity.

This information was comprehensively summarized in Table 4. For transparency's sake, we created an additional directory (Table 3), outlining the used abbreviations, the title of the regulatory directive and its current legal status.

For a better understanding and to distinguish the contents in a more logical way, the abbreviations mentioned in this section are not mentioned in the Schedule of Abbreviations listed at the beginning of this report.

JadeWeserPort is in close contact with the Port Captains, who communicate any current statutory changes and developments. The Port Captains' functions encompass both governmental and commercial portions and they are kept informed about changing laws on a regular basis.

On top of that, the existing law and regulation roster has been updated and added on to by co-workers from the environmental management task force and by in-house lawyers, as needed. In addition, the law and regulation roster is reconciled on an annual basis with the Port Captain.

Table 3 shows the most important international, national, and private-law stipulations. Table 4 refers to just such laws by reference. Each respective reference number can be found in the second column in Table 3. The logic depends on the level of legislature. International laws are abbreviated as an "I", followed by national laws with an "N", and the private-law stipulations with a "P".

The legal register was checked and confirmed by a law firm. This confirmation is included on the following page.



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Worpswede, den 14.12.2021

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Declaration of Conformity

I confirm that the laws and further legally binding provisions mentioned in section 3.2 of the PERS application dated December 15th, 2021 are relevant for the activities of JadeWeserPort Realisierungs GmbH & Co. KG and the Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG. This refers to internationally applicable provisions, such as those of the European Union, laws of the Federal Republic of Germany, as well as laws of the State of Niedersachsen (Lower Saxony), and the self-imposed provisions of JadeWeserPort GmbH & Co. KG and cooperating companies.

Jan-Hinnerk Faida
Rechtsanwalt

Table 3 Important International, National, and Private-Law Regulations for the Port

Abbreviation	Ref.	Latest Version	Last Amended	Title of the Law/Ordinance
International Stipulations				
EU Directive 92/43/EEC	I1	05.1992	07.2013	Directive on the conservation of natural habits and of wild fauna and flora
EU Directive 2000/60/EC	I2	10.2000	11.2014	Directive of establishing a framework for Community action in the field of water policy
EU Directive 2002/49/EC	I3	06.2002	03.2020	Directive relating to the assessment and management of environmental noise
EU Directive 2008/50/EC	I4	05.2008		Directive on ambient air quality and cleaner air for Europe
EU Directive 2008/56/EC	I5	06.2008	06.2017	Marine Strategy Framework Directive
EU Directive 2008/98/EC	I6	11.2008	05.2018	Directive on waste and repealing certain Directives
EU Directive 2009/147/EC	I7	11.2009	06.2019	Directive on the conversation of wild birds
EU Directive 2014/95/EU	I8	10.2014	12.2014	Directive amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups
EU Directive (EU) 2019/883	I9	04.2019	04.2019	Directive on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 200/59/EC
Regulation (EU) No 1143/2014	I10	10.2014		Regulation on the prevention and management of the introduction and spread of invasive alien species
MARPOL 73/78	I11	11.1973		International Convention for the Prevention of Pollution from Ships

Abbreviation	Ref.	Latest Version	Last Amended	Title of the Law/Ordinance
OSPAR	I12	08.1994	10.2006	International treaty for the protection of North Sea and the North Atlantic
National Level				
AEG	N1	12.1993	12.2020	General Railroad Act
AbfBeauftrV	N2	12.2016	07.2017	Ordinance on company representatives for waste
AltöIV	N3	04.2002	10.2020	Ordinance on Waste Oils
AWSV	N4	04.2017	06.2020	Ordinance on systems for handling substances hazardous to water
BBodSchG	N5	03.1998	09.2017	Fed. Soil Protection Act
BBodSchV	N6	07.1999	06.2020	Fed. Soil Protection and Legacy Contamination Ordinance
BImSchG	N7	05.2013	12.2020	Federal Emissions Control Act
BNatSchG	N8	07.2009	02.2021	Fed. Nature Conservation Act
CSR-Richtlinie-Umsetzungsgesetz	N9	04.2017		Law to strengthen the non-financial reporting of companies in their management and group reports
EBV	N10	07.2000	10.2016	Railroad Operator's Ordinance
EDL-G	N11	11.2010	08.2020	Energy Services and Other Energy Efficiency Measures Act
EEG	N12	11.2010	08.2020	Law for the expansion of renewable energies

Abbreviation	Ref.	Latest Version	Last Amended	Title of the Law/Ordinance
ErsatzbaustoffV	N13	07.2021		Ordinance on the introduction of a substitute building materials ordinance
ERegG	N14	08.2016	06.2021	Railway Regulation Act
GefStoffV	N15	11.2020	07.2021	Ordinance on protection against hazardous substances
GEG	N16	08.2020	08.2020	Building Energy Act
GGBefG	N17	07.2009	12.2019	Carriage of Hazardous Goods Act
GGVSee	N18	10.2019	12.2019	Carriage of Hazardous Goods by Oceangoing Vessels Ordinance
KrWG	N19	02.2012	10.2020	Closed Substance Cycle Waste Management Act
NAbfG	N20	07.2003	05.2019	Niedersachsen's Waste Disposal Act
NAGBNatSchG	N21	02.2010	11.2020	Niedersachsen's Implementation Act for the Federal Nature Conservation Act
Nds. GVBI No. 5/2003 page 72	N22	02.2003	10.2006	Niedersachsen's Ordinance for the Unloading of Ships' Wastes and Cargo Residues in Seaports
NESG	N23	12.2004	05.2019	Niedersachsen's Law on railways and cable cars
NHafenO	N24	01.2007	01.2013	Niedersachsen's Port Ordinance
NHafenSG	N25	02.2009	05.2019	Niedersachsen Port Safety Act

Abbreviation	Ref.	Latest Version	Last Amended	Title of the Law/Ordinance
NUVPG	N26	04.2007	12.2019	Niedersachsen's Alternative Denial Act
NWG	N27	02.2010	12.2020	Niedersachsen's Water Act
PfISchG	N28	02.2012	08.2021	Law for the Protection of Cultivated Plants
Plan Approval Notice	N29	03.2007	03.2007	Plan Approval Notice for the Expansion of the Federal Waterway Jade in the Area Between km7 and km15 by Construction of a Deep-Water Port for Container Ships (JadeWeserPort)
SaubFahrzeugeBeschG	N30	06.2021		Clean Vehicles Procurement Act
SeeUmWverhV	N31	08.2014	12.2019	Ordinance on environmentally friendly behavior in shipping
TA Lärm (Noise Control Guidelines)	N32	08.1998	06.2017	General Admin. Directive for the Federal Immissions Control Act Technical Instruction for the Protection Against Noise
TA Luft (Air Pollution Control Tech. Guidelines)	N33	07.2002	07.2002	General Admin. Directive for the Federal Immissions Control Act Technical Instruction for the Prevention of Air Pollution
UVPG	N34	02.1990	09.2021	Environmental Impact Assessment Act
WaStrG	N35	04.1968	06.2021	Federal Waterways Act
WHG	N36	07.2009	06.2020	Water Resources Act
Private-Law Stipulations				

Abbreviation	Ref.	Latest Version	Last Amended	Title of the Law/Ordinance
ANB-DE	P1	01.2021	01.2021	Allgemeine Nutzungsbedingungen der JadeWeserPort Realisierungs GmbH & Co. KG (General Terms of Use of JadeWeserPort Realisierungs GmbH & Co. KG)
GVZ-Ordinance	P2	01.2019	01.2019	Ordinance for the Güterverkehrszentrum (Cargo Transport Center) at JadeWeserPort
JWP-HBO de	P3	04.2020	04.2020	Hafenbenutzungsordnung (Port Usage Regulation) of the JadeWeserPort Realisierungs GmbH & Co. KG
JWP-NBS-AT / JWP-NBS-BT	P4	01.2019	09.2020	Conditions for the Usage of the Service Facilities of the Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG (General Part and Special Part)
SABP	P5	08.2020	08.2020	Ships' Waste Management Plan of the JadeWeserPort Realisierungs GmbH & Co. KG

Table 4 Register of Significant Environmental Aspects

#	Area	Impacts on	Responsible Department/External Organization	Applicable Legal Regulations/Laws (Ref.)	Purpose of the Laws	Controlling Measures of the JWP
Engineering and Consulting Department						
1	Maintenance Dredging	Biotope Sea; Sea Floors; Water Quality	JWP: Engineering and Consulting Department Wasserstraßen- und Schifffahrtsamt (Waterways and Shipping Office) Weser-Jade-North Sea	N27; N29; N34; N35; N36	Regulation of Dredge Work Directive for the Maintenance of Water Depths	Monitoring of Dredge Amounts and Water Depths

#	Area	Impacts on	Responsible Department/External Organization	Applicable Legal Regulations/Laws (Ref.)	Purpose of the Laws	Controlling Measures of the JWP
2	Port Construction & Maintenance of the Existing Facility	All Parts of the Environment	JWP: Engineering and Consulting Department	I1; I2; I5; I7 N8; N14; N21; N26; N27; N28; N29; N34; N36 P1	Determination of the Options for Action During Port Operation	Adherence to Construction Permits Documentation of Construction Measures
Real Estate and Commercial Settlement Management Department						
3	Operation by the Settlers (on the Terminal & Inside the GVZ)	Air, Soil, Water, Noise	JWP: Real Estate and Commercial Settlement Management JWPM Gewerbeaufsichtsamt (Trade and Industry Control Office) The Niedersachsen Ministry for Economic Affairs, Labor and Transportation	I3; I4 N3; N5; N6; N7; N8; N12; N19; N29; N32; N33; N36 P1; P2	Regulations in the Area of Air Pollution During Settlement and Usage of the JadeWeserPort	Port Supervision Documentation Adding External Entities in Areas Beyond the Own Expertise
Port Management Department						

#	Area	Impacts on	Responsible Department/External Organization	Applicable Legal Regulations/Laws (Ref.)	Purpose of the Laws	Controlling Measures of the JWP
4	Cargo Handling Dangerous Goods	Air, Soil, Water	EUROGATE Customs Port Authority Control Center for the Import and Export of Certain Goods	N4; N5; N7; N15; N17; N18; N24; N36 P3	Regulation of the Transshipment of Dangerous Goods in Ports Regulation of the Transport of Dangerous Goods on Shipping Routes at Sea	Inclusion of External Dangerous Goods Inspectors
5	Ships' Calls	Water, Air	JWP: Port Operation Department (Local Port Office) Port Authority WSA (Water and Shipping Authority) WSP (Waterways Police / Harbor Police)	I4; I12 N24; N25; N29; N31; N36 P1; P3	Determination of Regulations for Permission of a Port Call by a Ship	Inspection of Documents/Plausibility Check Random Checks Aboard Ships by the Port Supervision
6	Ships' Waste Disposal	Water, Soil	JWP: Port Management Department (Local Port Office) Port Authority	I6; I10; I11 N2; N3; N4; N5; N7; N19; N20; N22; N24 P1; P5	Regulation of the Ships' Waste Handover Possibilities, the Proper Disposal, and Recycling	Inspection of Documents/Plausibility Checks of the Ships' Waste Documents

#	Area	Impacts on	Responsible Department/External Organization	Applicable Legal Regulations/Laws (Ref.)	Purpose of the Laws	Controlling Measures of the JWP
			Gewerbeaufsichtsamt (Trade and Industry Control Office) Waste Removal Companies WSP (Waterways Police / Harbor Police)			Random Checks Aboard Ships by the Port Supervision
7	Operation of the Port Railway Facilities	Soil, Air, Noise	Railway Operation Manager JWP JWP: Port Management Department EVU LEA	N1; N10; N13; N23; N28 P4	Regulation of the Operation of Port Railways	Regular On-Site Inspections of the Rail Facilities Documentation
Environmental Coordinator JWP						
8	Energy Monitoring	All Parts of the Environment	JWP: Environmental Coordinator Energy Auditor	I8 N9; N11; N16; N30	Rules & Regulations for the Energy Efficiency of Buildings and Other Energy Efficiency Measures	Documentation of the Energy Flows Execution of the Energy Audit

3.3 Environmental Indicators

The impacts on the environment by the JadeWeserPort are measured with the help of various indicators. Those parameters were determined within the scope of a stakeholder dialog in 2019 and found to be meaningful.

To estimate the impacts on the environment, the following areas are considered:

- Coherence and Compensation Areas
- Mobility
- Overall Energy Consumption
- Overall CO₂ Output
- Number of Granted ESI Environmental Discounts for Ships
- The Quantity of Ships' Waste
- Rail Transshipment

The development of the parameters is presented and interpreted hereafter. Continued monitoring makes the assessment of progress from introduced measures possible.

Coherence and Compensation Areas

This environmental indicator demonstrates the relation between compensation & coherence areas, relative to the entire area of the JadeWeserPort. In 2020, the total surface of the coherence areas measured some 243 hectares (~600 acres), in addition, there were some 143 hectares (~353 acres) in compensation areas. This is compared to 275 hectares (~680 acres) of operational areas of the JWP, not including the portion for roads.

The nature preserve area Voslapper Groden South, which is own property, has a size of 380 hectares (~940 acres). This area may potentially also be used industrially in the future. In light of this, we are already planning and building compensation areas.

Keeping in mind the size ratios, you end up with 41% of operational area versus 59% of areas dedicated to the protection of nature. If you picture this ratio with the nature protection area Voslapper Groden South (earmarked for future industrial use), you end up with 49.6% operational area versus 50.4% of areas dedicated to the protection of nature and the preservation of natural biotopes.

There is no development between the reporting years 2018 and 2020. The area sizes and shares remain unchanged. In case the industrial utilization of Voslapper Groden

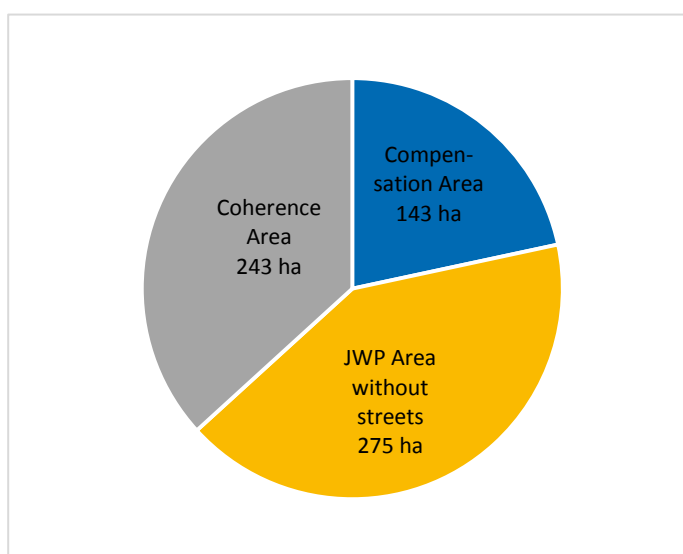


Image 4 Coherence and Compensation Area Shares

South should receive a go-ahead, additional areas for the protection of nature will be set aside.

Mobility

The employees of the JadeWeserPort companies may utilize the company's fleet vehicles for business appointments outside of the JadeWeserPort. These vehicles can be booked online. The pooled fleet of cars consists of a total of 5 vehicles. Leasing contracts ensure that this number stays constant, or fluctuates only very little.

Image 5 demonstrates the development of the vehicle usage by driven kilometers. In addition, the output of CO₂ emissions is also indicated. The time line from the last report was supplemented with the years 2019 and 2020. After the usage of vehicles had dropped, as early as 2018, the number of driven kilometers kept falling during 2019 to 55,776 kilometers. Caused in part by the Covid 19 pandemic and by the increased usage of video conferencing, only few kilometers were driven in those vehicles in 2020, therefore, the CO₂ emissions were commensurately low. Whether or not this positive trend can be continued in post-Covid time remains to be seen. However, within our company the opportunities afforded by video conferences were very well received.

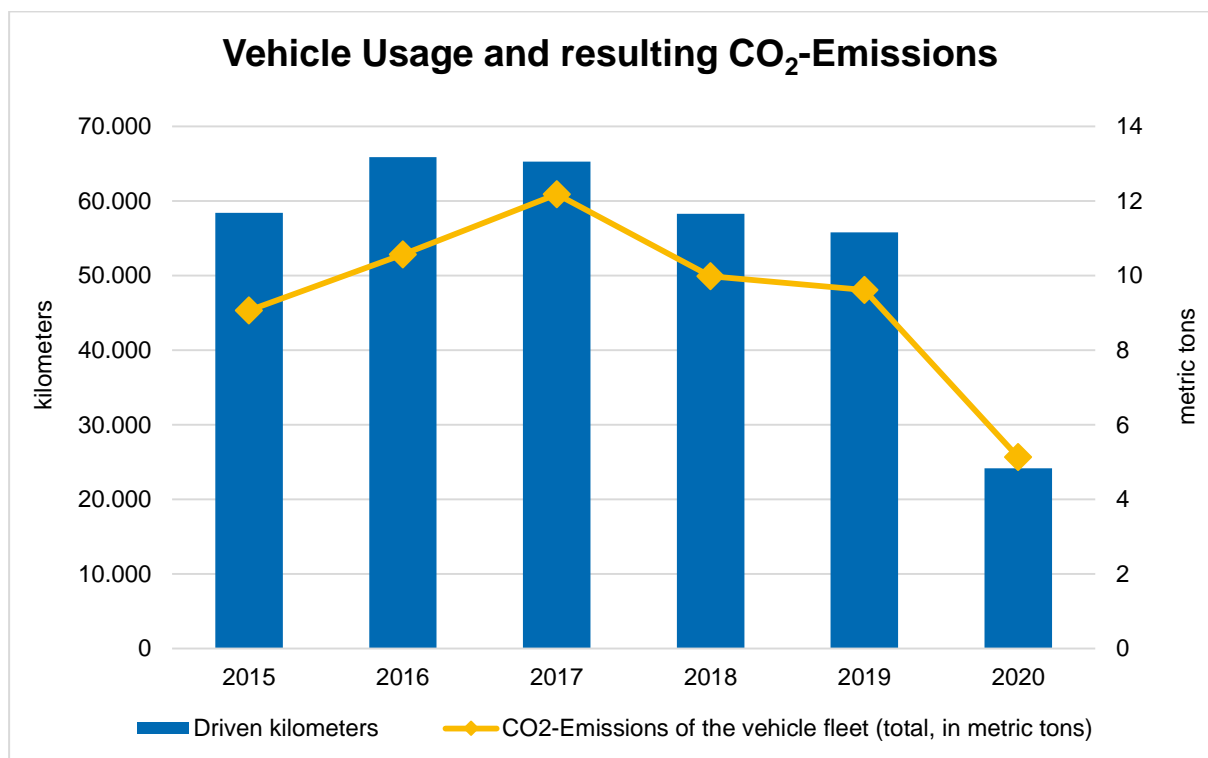


Image 5 Vehicle Usage and Resulting CO₂-Emissions

Overall Energy Consumption

The JadeWeserPort is constantly striving to reduce the energy consumption. The energy sources utilized by the JadeWeserPort companies are electricity, natural gas, and diesel. The

recording and regular checks of the energy consumption data is accomplished through an energy monitoring system.

Table 5 List of the Energy Consumptions between 2015 and 2020

	2015	2016	2017	2018	2019	2020
Energy Consumption Total [kWh]	641,510	799,109	630,237	613,298	549,582	536,992
Electricity Portion Thereof	566,438	712,671	525,296	528,281	463,555	474,170
Natural Gas Portion Thereof	41,012	46,701	59,167	47,511	49,893	43,544
Diesel Portion Thereof	34,060	39,737	45,774	37,506	36,134	19,277
Change vs. Previous Year [%]	/	+24.6	-21.2	-2.7	-10.4	-2.3

During the past years, the energy consumptions showed some really positive development. From 2016 on, we were able to continually reduce our energy consumption. When you compare 2020 to 2015, we saved more than 100,000 kilowatt hours. This development also manifests itself in the CO₂ footprint.

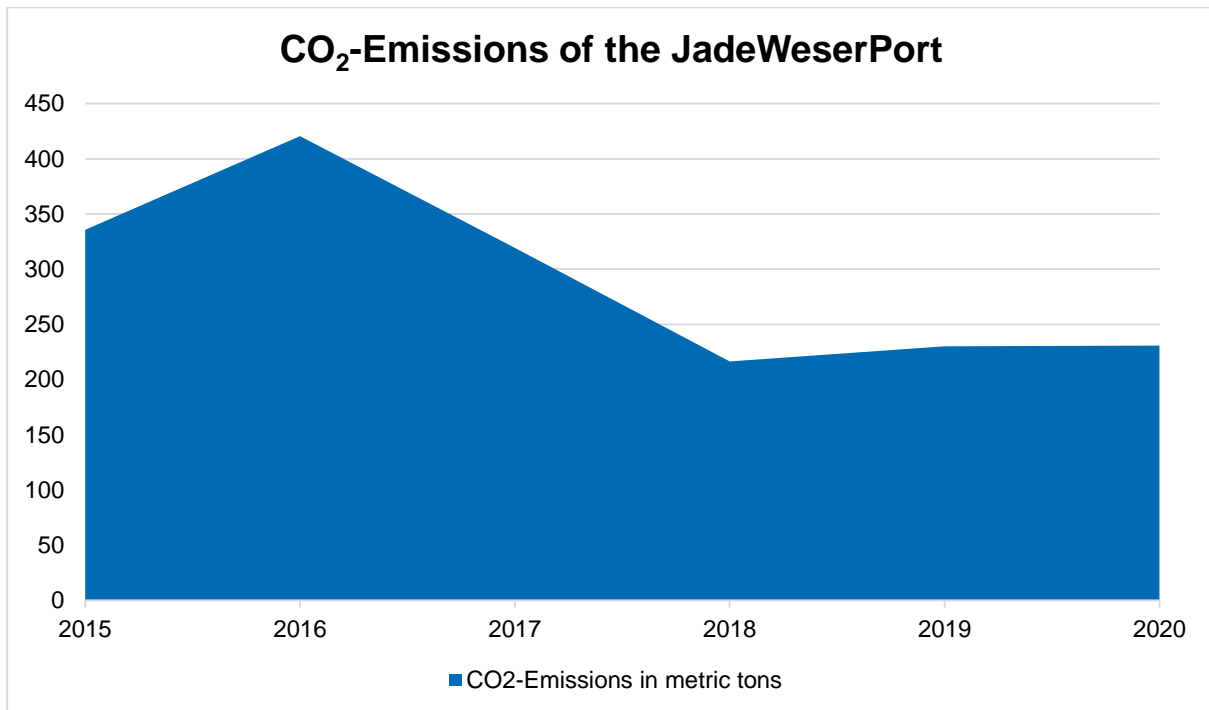


Image 6 CO₂-Emissions of the JadeWeserPort in metric tons

The reduction of the CO₂ emissions is a firm goal of JWP's Environmental Strategy. During the past few years, we were already able to observe a positive development. Now we can tweak additional dials to reduce the CO₂ emissions and energy consumptions even further for the future.

Environmental Discounts Granted (ESI)

JadeWeserPort is a member of the World Port Climate Initiative (WPCI) and grants a discount on the harbor dues to particularly low-emission water crafts, as long as (at the latest at the time of the incoming ship registration) the appropriate ESI Certificate is presented and the number of ESI points demanded by JWP is met. Current rebates are given to water crafts with an ESI value of 31 points or more (max. 100 points). The rebate amounts to 5% of the harbor dues, but is capped at max. € 750.00.

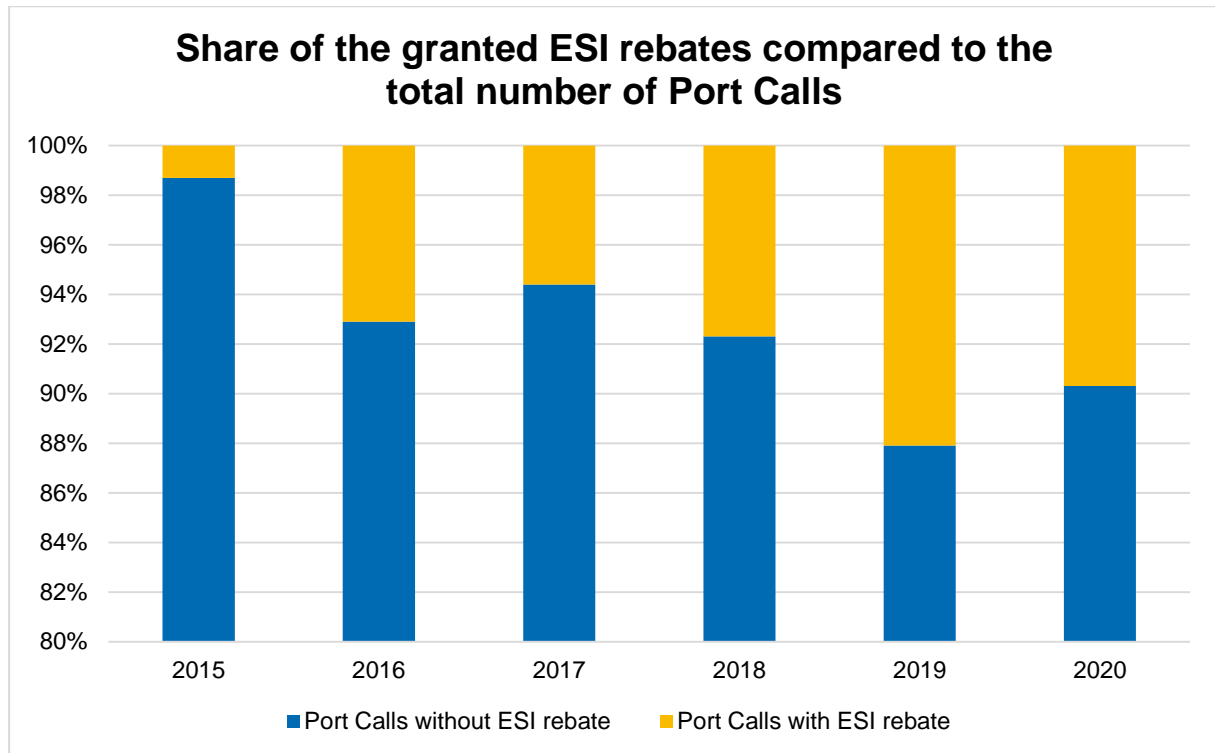


Image 7 Share of the granted ESI rebates compared to the total number of Port Calls

Between 2015 and 2016, the share of the granted ESI rebates compared to the total number of port calls increased by several percent points. Since that year, the share has been in flux a little, but stayed stable at a level of around 10%. With the increased dynamics around the topic “alternative methods of propulsion”, an increase in the number of granted ESI rebates can be expected. Alternative fuels, or the use of ships’ diesel vs. heavy fuel oil, increases the number of points a ship can score.

Ships' Waste (MARPOL)

Ships have the opportunity, in line with statutory stipulations, to dispose of ships’ waste at the JWP. For waste pursuant to MARPOL I (wastes containing oil) and MARPOL V (ships’ waste/waste similar to household waste), receptacle facilities are made available in cooperation with specialized disposal companies.

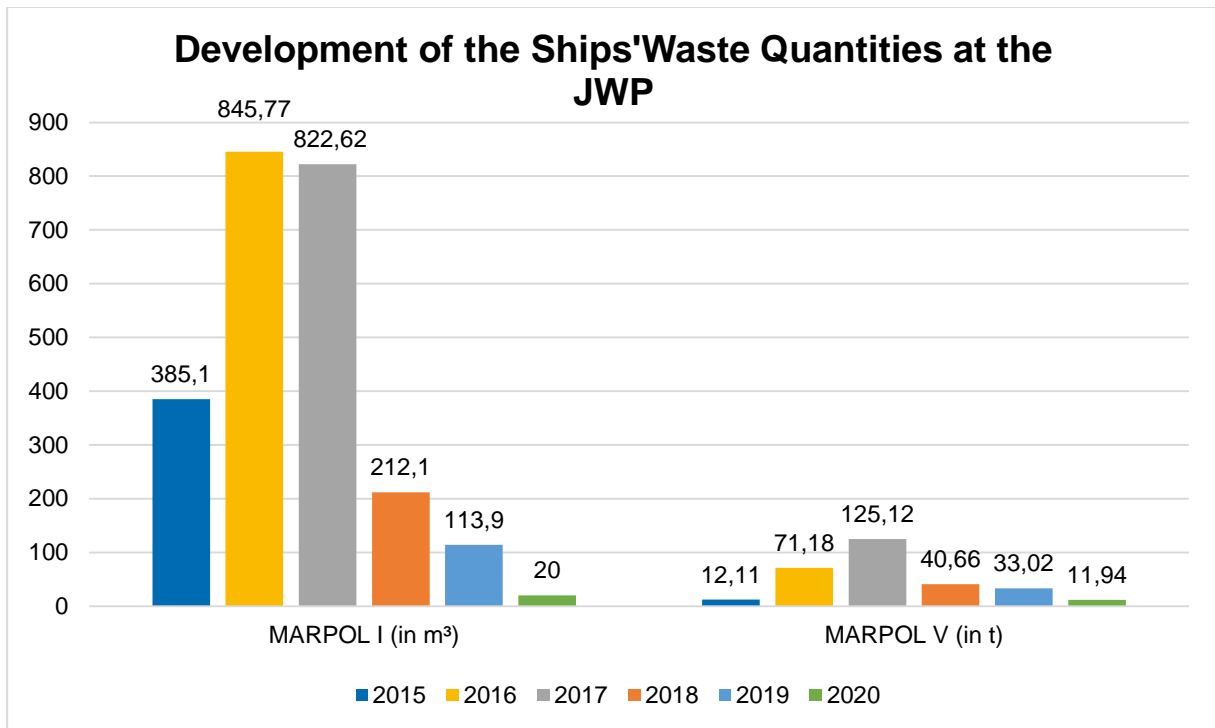


Image 8 Development of the Ships' Waste Quantities at the JadeWeserPort

The quantities to be disposed of are in direct correlation with the number of ships' calls and the type of the incoming transport. Long-distance transports, making their first call after having just completed an overseas trip, have larger quantities to dispose of. Feeder transports, on the other hand, are traveling within Europe and have shorter distances between the individual ports. These factors also played a role at the JWP. Within the past few years, both the number of ships' calls and therefore also the MARPOL waste volume were less.

An interpretation of the numbers in respect to the eco-friendliness of the JWP is not possible. Waste disposal is regulated, therefore the opportunities for the creation of incentives for disposals is rather limited.

Rail Cargo Handling

For any port, the transport mode 'rail' is of exceptional importance. Hinterland transports by rail are eco-friendly and unburden the traffic situation on the roads.

Capturing the cargo handling quantities via JWP's port railway has already occurred since the inception of the port. The indicator 'Rail Cargo Handling' allows an insight into the modal split of the JWP and permits us to make statement about the degree of capacity utilization of the rail infrastructure. An increase of that share is viewed as positive.

Table 6 shows the development over the past years.

Table 6 Share of Rail Cargo Handling, Compared to the Overall Handling (in TEU)

	2015	2016	2017	2018	2019	2020
Total Cargo Handling in TEU, Sea Cargo	429,331	480,282	554,888	658,629	636,590	423,243
Total Cargo Handling in TEU, Rail Cargo	13,456	18,248	47,276	47,276	69,894	41,473
TEU Portions by Rail	3%	4%	9%	9%	11%	10%

In the years 2015 and 2016, the share of the TEUs that were transported by rail to the JadeWeserPort, or from the JadeWeserPort to the Hinterland, made up 3% or 4% of the total cargo handling, respectively. From 2017 on, the transport by rail started experiencing an up-trend. Within only one year, the share increased to 9%, and in 2019 by another 2% to 11%. Due to the Covid-19 crisis in 2020, the share dropped slightly to 10%. The JadeWeserPort is expecting another positive development thanks to the current expansion of the feeder corridor from Oldenburg and the electrification of this lane.

4 Competencies and Resources

4.1 Organizational Structures

At JWPR, there are three areas under the corporate management. Engineering & Technical, Legal & Real Estate, and Business & Commercial Affairs. These are each subdivided into additional departments.

Our operational business is performed by the Operation Department. This also covers the Port Office, the Port Management and Port Rail.

Internal Auditing, but also Environmental Coordination are separate and acting independently. They fulfill a specialty role.

Due to slight restructuring, the QM processes are now in the area Business & Commercial Affairs.

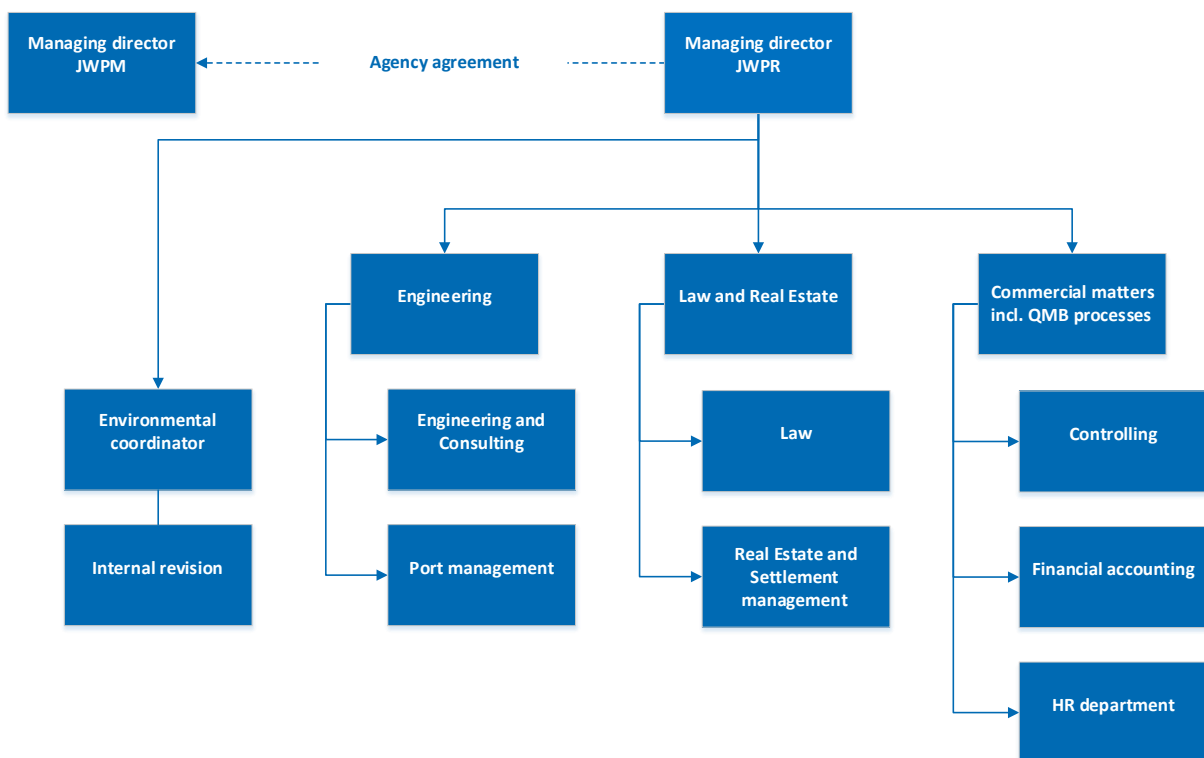


Image 9 Organizational Chart of the JadeWeserPort Realisierungs GmbH & Co. KG

4.2 Resources for Environmental Protection

For the protection of the environment, JadeWeserPort has various resources available. Those are divided into personnel (staff), financial, and material. This includes both, our own resources, but also external support.

In particular the personnel resources play a significant role here. Environmental protection is only possible through proactive actions and shaping.

In the following Table 7, the resources are concisely summarized.

Table 7 Resources for Environmental Protection

Staffing Related	•	Environmental Coordinator
	•	Employee(s) within the Port Management
	•	Employee(s) within the Port Office
	•	Employee(s) within the Real Estate and Planning Management
	•	Employee(s) within the Legal Dept.
	•	Employee(s) within the IT Dept.
	•	External assistance, when needed
Finance Related	•	Purchase and Construction of Coherence Areas
	•	Maintenance of Coherence Areas by External Service Providers
	•	Measures for the protection of amphibians
	•	Expenses for Certifications/Audits
	•	Expenses for Green Area Maintenance by Service Providers
	•	Monitoring of the Service Providers
	•	Promotion of Environmentally Friendly Measures (ESI, Quiet Brakes, etc.)
Materially	•	Measuring Equipment (e.g., for measuring wind speed or water currents)
	•	Passive Buildings
	•	Utilization of Ground Heat
	•	Purchase of energy efficient devices and appliances (e.g., in the kitchen), motion sensors for lighting, faucets, etc.
	•	LED Lighting
	•	Retractable Power Supply Modules for the reduction of carbon dioxide emissions

5 Monitoring the Measures of the Environmental Management and Verification of Adherence to Regulatory Laws

Monitoring of the environmental protection measures and compliance with the laws are central elements of a valid Environmental Strategy. Without verification, success and progress cannot be evaluated and no adjustments can be made.

The Environmental Strategy stipulates the monitoring of the environmental measures. In order to verify compliance with the law, we have introduced our own system.

Responsible for the monitoring and the execution of the checks and verifications is the Environmental Coordinator, assisted by the expert staff of each relevant area. Depending on the complexity of the task, external personnel may be consulted for verification, as well, to ensure that current standards are taken into account and to ensure constant improvement. To make sure that the requirements are met, various checks are performed within the company on a regular basis.

Image 10 gives an overview over any processes for the compliance with the statutory stipulations. The port area is patrolled and checked multiple times a day on a regular basis by the coworkers from the Port Supervision (1.). The supervision also entails, in addition to the proper operation of the port, the inspection of the port regarding any debris and contaminations. If any irregularities are noticed, they will be recorded by the employees in the shift books and reported to the right place. Any JadeWeserPort employee is encouraged to report irregularities via reporting lists or even informally (2.). As the need arises, these coworkers are canvassing the port area.

The Port Office gathers the reports and conveys them to the department managers of the respective specialty fields, so that the problem can be remedied. Beyond that, we have regular talks with the companies established in the port area, where we can bring up the deficiencies we have noticed and we can encourage those companies to take measures to resolve those deficiencies (5.). The management is informed about the state of the port and about environmental law and other legal violations that were noticed on a monthly basis (4.). This affords us the opportunity to devise measures to ensure compliance with the law in coordination with the department managers.

Should immediate measures be required after, for instance, the discovery of acute contaminations in the area of the JWP, the documentation in the Alarm and Emergency Plan provides exact procedure and reporting instructions.

Within the scope of regularly occurring drills, the knowledge of the measures to be taken is exercised and tested (3.). The contents of the drills are selected at random. These drills are documented in detail (drill minutes). Aside from the description of the drill scenario, the drill minutes also contain an assessment of the drill's course and progress, and an assessment, as to what kind of improvements could be made. After that, the responsibility for the implementation of these improvements is individually assigned

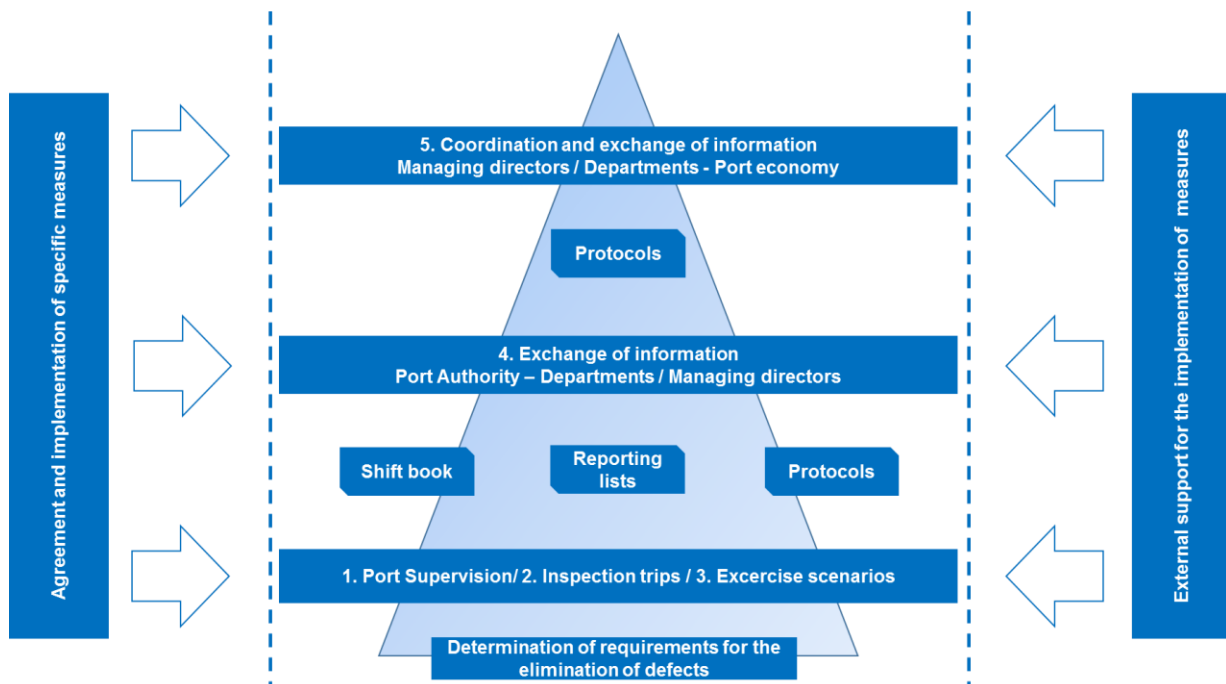


Image 10 Process Overview for the Compliance with Statutory Provisions

The formats deployed for the compliance with the law are explained hereafter one more time in detail in Image 11.

1. Port supervision	
Involved	Port Authority, Port Supervisor
Frequency	3x daily
Tasks	Operational supervision and control of the port with regard to compliance with legal obligations
2. Inspection trips	
Involved	all employees
Frequency	as required within the scope of the respective task fulfillment
Tasks	Visual inspection of the port area
3. Exercise scenarios	
Involved	relevant employees, Port Management, Port Economy
Frequency	quarterly
Tasks	Training of all those involved in the execution of alarm and emergency management in the event of acute damage
4. Exchange of information Port Authority – Departments / Managing directors	
Involved	Port Authority, Head of Departments, Managing directors
Frequency	monthly
Tasks	Report on violations of legal requirements and agreements on further action to remedy defects
5. Coordination and exchange of information Managing directors / Departments – Port Economy	
Involved	Head of Departments, Managing directors, resident Businesses and Authorities
Frequency	ca. 6-8 weeks
Tasks	Report on violations of legal requirements and agreements on further action to remedy defects

Image 11 Standard Formats within the Environmental Management

6 Environment Report

6.1 Environmental Measures within the Port

Our defined environmental goals are equipped with measures for their implementation. They can also be attributed to the corporate areas Operation, Planning & Development, Cooperation, Marketing, and Finance. This is also, where you find the connection to the resources for the protection of the environment. The employees are at the forefront and are the decisive force responsible for the implementation of the measures.

Measures for the Reduction of CO₂ Emissions

Especially the mobility area at the JadeWeserPort companies and the business partners or customers is responsible for the largest share of CO₂ emissions.

The companies have defined measures for the reduction of their own emissions.

The company's vehicle fleet operates on the car sharing principle. We have a pool of cars that can be freely used by the employees for business trips. Leasing contracts ensure that we can make use of technological innovations. The pool vehicles are exchanged in regular intervals for newer models. During procurement, we also keep environmental aspects in mind. Our colleagues have been sensitized to avoid one-person trips and to only go on business-related trips, when warranted.

The area Information Technology (IT) was also added to the pool of measures. On the one hand, IT devices are also energy consumers and relevant to the environment. During procurement, we therefore look for labels and certificates, such as the “Energy Star” rating. On the other hand, we only buy new devices when the old ones quit working or can no longer be utilized due to privacy regulations. Getting away from individual devices and switching to common devices that serve the whole staff also makes a positive contribution.

Aside from the individual consumption of the IT equipment, the smart utilization of software solutions can also contribute to the reduction of CO₂ emissions. The Energy Monitoring System, an individually programmed software, enables the systematic capture of the energy flows. This is the only way to recognize streamlining potentials and derive commensurate measures. The system stands out through its in-detail structure and through capturing, down to the individual user. Here, not only the electricity consumption is taken into consideration, but also other energy sources, such as gas and fuel. Through regular checks and consulting with corporate management, the consumptions can be managed in a targeted fashion and energy efficiency measures can be prepared and fine-tuned.

In addition, the JadeWeserPort companies also believe in the Energy Overhaul for the reduction of energy consumptions. The buildings at the JadeWeserPort are only a few years old and are not the focal point of this effort. The buildings on our compensation and coherence areas, on the other hand, are a different issue altogether. These partially contain old buildings that, without being overhauled, have bad energy balance sheets. Overhauling their energy infrastructure dramatically improves their energy consumption.

Our customers and business partners can also do their share for the reduction of CO₂ emissions. With the help of incentives and technologies, we want to encourage eco-conscious behavior.

To our ship owners & operators, we offer a rebate on harbor dues for eco-friendly ships, the so-called ESI Rebate. The Environmental Ship Index is an assessment method for the classification of air-polluting emissions of a ship. The higher the ESI score, the more eco-friendly the ship. At the JadeWeserPort, we grant a 5% rebate, starting at an ESI score of 31. The development of the ESI rebates is shown in Chapter 3.3.

In addition, we also proactively offer opportunities for the reduction of air pollutants. Even when the JWP was still under construction, a potential supply of Shore Power was factored in. The electric feed-in into the board grid of a vessel makes the use of the diesel engines redundant. Particularly in view of the current push towards a comprehensive expansion of shore power facilities, we anticipate an increasing demand for shore power within the next years. Since we had already laid the infrastructural foundation for this, we will be in a position to offer shore power at the JWP, even on short notice. Aside from the supply of shore power, alternative fuels will also play a significant role at the JWP in the future. Joining work groups and initiatives had been an integral part for us to secure the sustainability of the port for years now. Recently, in addition to LNG, hydrogen has also increasingly become a discussion topic. In this regard, the JadeWeserPort companies are also going with the times.

In addition, we also offer truckers and freight forwarding companies a chance to lower their energy consumptions. With the help of Retractable Power Supply Modules, reefer containers can be supplied with power, free of charge, while still on the truck. This way, no diesel is used to power the cooling system.

Measures for the Planning and Management of New and Existing Infrastructure Facilities, Taking into Account Environmental Points of View

The site advantages of the JWP have also shown to be effective measures for the avoidance and reduction of transport routes. The federal freeway (Autobahn) ends right at the Container Terminal, and even the rail tracks terminate directly at the terminal. This means that trucks do not have to travel any additional distances through the city or over smaller highways.

The hinterland transports via the transport mode rail are eco-friendly and are therefore always supported and encouraged by the JWP. The 16-track staging/shunting yard, and the 6-track, multimodal KV Terminal offer ideal conditions for the loading and unloading of trains. The electrification of this rail corridor and the expansion of the feeder tracks further strengthen this mode of transport and ensure the efficient utilization of the existing infrastructure.

Measures for the Management of Natural Habitats

What is taken from the environment when port facilities are built, must be returned to it at a different location. For the functional compensation of intrusions into nature, the JWPR, on behalf of the JWPM - during the course of business management - creates so-called compensation areas to compensate for changes in other areas, which creates substitute areas of similar quality. Unavoidable intrusions into the natural balance through construction projects have been successfully compensated and we were able to prove an environmental upgrade of areas. We will introduce hereafter some compensation and coherence projects. Part of these are areas immediately owned by JadeWeserPort or areas that are financed by them.

Warnsath and Möns

To compensate for the suffered loss of land caused by the construction of the railroad bed, an area of 64 hectares (~158 acres) was acquired in Warnsath and Möns. The goal of the compensation measure is to create substitute habitats for meadow-nesting birds on the one hand, and to develop a wet biotope with landscape-typical water-logged surface structures on the other hand, which are largely unencumbered by agricultural utilization. To accomplish this, previously intensively used plowed fields and cattle grazing land was extensified and turned into wetland - with a positive impact on the biodiversity, which is typical for this geographic location.

The conservation foundation Friesland-Wittmund-Wilhelmshaven looks after the areas and conducts regular monitoring.

Table 8 Development of Species in Möns und Warnsath

Compensation Area	Special Area Character	Positive Development of Flora and Fauna
Möns	Bogs and Swamps	Common cotton grass, pennywort, common sedge, and the purple moor grass
		Pewit, bluethroat, skylark, grasshopper warbler, yellowhammer, garden warbler, chiffchaff, European willow warbler, and chaffinch
Warnsath	Nutrient-poor grassland	Sweet vernal grass, crested dog's tail, common self-heal, and the narrow-leaved rattle
		Skylark, pewit, quail, and meadow pipit

Langwarder Groden

The Langwarder Groden is an area of about 140 hectares, which is bordered towards the mainland by the main seawall and towards the sea by a summer dyke. By partially opening the summer dyke, one area of the Langwarder Groden was exposed again to the tidal flow. And now, an invaluable salt marsh landscape is developing. The construction of a 5-kilometer trail loop with a lookout platform and observation shelters also allows nature lovers to explore this nature experience park without disrupting the plants and animals. In 2015, the project was awarded the Silver Port Environment Award by the IAPH.

Proactive Protection of the Environment

In order to afford the development of the port with the space needed in the long run and to address the growing logistical demands, JadeWeserPort is already now proactively creating additional compensation areas, which - should the demand arise in the future - will be available to serve as coherence areas.

The main goal is the preservation of the Natura 2000 conservation area network within the EU and an early start on near-natural preparation of the areas. For this purpose, around 243 hectares (~600 acres) of land were purchased, which is gradually returned to its natural state. This includes for instance a former clay pit in Elsfleth, in which endangered species such as the common lady's mantle and the flowering rush, but also the bittern were able to reestablish themselves successfully.

As a first step, we have re-designed a partial area in the Hemmoor area in cooperation with the local Deichband (Seawall Maintenance Organization) there, in line with the coherence requirements. Planning for additional partial areas is underway.

In the Elsfleth area, for the peninsula "Elsflether Sand", we have already begun brainstorming ideas for the re-design of the areas into coherence areas there.



Image 12 Clay Pit in Oberhammelwarden

All measures are accompanied by regular monitoring so that the development of the areas can be documented. The areas are also maintained so that the compensation within the qualitative context of the "Natura 2000" network can be met.



Image 13 Measure Elsflether Sand

Measures for the Collaboration with Stakeholders of the Port Economy on the Environmental Protection

Port infrastructure operators are always part of many collaborations and partnerships. Even in this area, environmental protection measures can be realized. Particularly the consideration of environmental aspects in the collaboration with partners can have strong effects and is therefore especially important. In this context, it is not only the large projects and measures that count, but very often the small decisions. In the area Port Railway, for instance, we make sure to use weed control (when needed) that is gentle to the flora and fauna.

In the area Ships' Waste, we give ships' owners & operators the opportunity for expert disposal without all the red tape.

Excavation activities are coordinated together with our customers and service providers and are performed with the least amount of intrusion to the waterways possible. Whenever possible, we use water injection procedures that do not take any material out of the water, but only inject water into sediment cavities. This loosens sediment particles that are subsequently carried off by the tide.

Environmental Protection Measures Inside and Outside of the Company

As already mentioned, environmental protection in particular is a great topic for collaboration. By communicating the environmental protection measures through internal and external stakeholders with the help of environmental reports, brochures, and training sessions for employees, we intend to encourage the protection of the environment.

You can easily find the area Sustainability on our website and it is updated in regular intervals. We also disseminate sustainability topics via social media, such as LinkedIn, where they can reach a broad audience.

But this is only a first step. With the help of brochures and flyers, we are presenting the environmental measures in a comprehensible way and we are directly targeting business partners during fairs & exhibitions and events with them.

When communicating the environmental measures, we do not only address business partners though, but also neighboring residents and anyone interested. The planned coherence measures, for instance, were locally introduced during a citizen's dialog. In addition, we have created a newsletter that anyone interested in the measure can subscribe to.

Measures for the Environmental Controlling

The creation of Input/Output Balance Sheets to obtain information for a better protection of the environment with the help of the Energy Monitoring System enables us to make detailed statements. We evaluate in regular intervals, what energy streams occur in different areas. This way, we can recognize improvement potentials, spot deviations, and deduce commensurate measures.

6.2 Cooperations and Partnerships

To be successful as a container port, you need strong partners and great local and global relationships. Not only do the JadeWeserPort companies stand behind the Container Port and Cargo Transport Center project on a regional level, but also on a national and international level.

The JadeWeserPort is an active member of the International Association of Ports and Harbours, and of the World Ports Climate Initiative and is also a member of the EcoPorts Foundation.

Germany's only deep-water port took the challenge to continually improve and transparently document their contributions to the protection of the environment beyond regulatory directives. With the help of the EcoPorts Tool, the port on the Jade is on its way to introduce a sustainable environmental management.

Even organizations, such as the Chambers of Commerce and Industry or the Wirtschaftsverband Weser, continue to take up environmental issues again and again. In doing so they typically analyze and assess legal developments and planning, which could lead to imperiling fundamental port interest.



The regional cooperation is also important for the JadeWeserPort. As an example, future-relevant and sustainable lighting technologies were investigated and tested in a collaborative project with Niedersachsen Ports, bremenports, and locally established lighting companies. Among other things, these tests concern themselves with the comparison of conventional sodium vapor lamps vs. LEDs and LEPs (plasma lamps). The tests showed that the LED lighting is not only superior when it comes to energy efficiency, but also in terms of light quality, compared to other lighting systems. These results will be taken into account in future renovation, maintenance, or expansion projects.


Currently, the Company is aware of all the authorities and stakeholder associations relevant to and competent for environmental protection measures. For instance, when it comes to compensation measures, we are in close cooperation with them. During day-to-day business, there is regular contact between the employees and the competent stakeholders.

If there are any concerns by customers (even for environmental issues), they are directly addressed. Our female and male coworkers are managing stakeholder interest on a regular basis via their day-to-day business.

7 Best Practices

Below, we are showcasing choice measures that JadeWeserPort takes to protect the environment.

Port:	JadeWeserPort	
Country	Germany	
Contact:	Mr. Urban	
Position:	Head of Real Estate and Commercial Settlement Management	
e-mail:	h.urban@jadeweserport.de	
Environmental Impact:	Reduction of Emissions	
Effect:	Example/Activate/Encourage/Engage/Enforce	
Project/Title:	Charging Stations for Electric Passenger Cars at the Port Services Center	
Description	<p>We installed a publicly accessible charging station for electric passenger cars at the Services Center. This way, JadeWeserPort actively supports and enables their own employees, but also the employees of commercial settlement companies, to charge their e-vehicles during working hours or during their stay at JadeWeserPort.</p> <p>Electric Vehicles are more climate-friendly than vehicles with combustion engines. Therefore, with the help of this charging station, we enable other people to output fewer emissions.</p>	
Links:		
Photos:		

Port:	JadeWeserPort	 <p>JADEWESERPORT WILHELMSHAVEN</p>
Country	Germany	
Contact:	Mr. Witt	
Position:	Head of Port Management/Local Operations Manager Port Railway	
e-mail:	h.witt@jadeweserport.de	
Environmental Impact:	Reduction of Emissions Through Streamlined Energy Demand	
Effect:	Example/Activate/Encourage/Engage/Enforce	
Project/Title:	Demand-Driven (manual) Rail Switch Heating and Monitoring of the Switch Heaters	
Description	<p>In order to secure usability and functionality of the rail switches at the staging/shunting yard, the switches are heated at night, when there is frost in the forecast. This is done 'by hand' at JadeWeserPort through the colleagues from the rail switch tower. This ensures that heat is only applied to switches that are in use. This also means that the heating is only demand-driven. No unnecessary energy is wasted.</p> <p>In addition, and to make sure that the switch heaters are turned on only when needed, the individual switch heaters are monitored.</p>	
Links:		
Photos:	