

SUSTAINABILITY REPORT 2022

for bremenports GmbH & Co. KG and the special assets
Port and Fishing Port (Waterside)

The Senator for Science and Ports

Free Hanseatic City of Bremen

bremenports

FOREWORD

SUSTAINABILITY IS ESSENTIAL FOR A GOOD FUTURE

Last year bremenports commissioned a comprehensive study to ascertain how the ports of Bremen are regarded and assessed. One important finding was that the participants stated that in terms of sustainability, our ports have meanwhile gained a significant advantage over the competition. This result will change the brand presentation of the ports of Bremen. In future, we will continue to develop our sustainability strategy and make it a key element of our activities to promote the ports of Bremen.

This welcome image of our ports is the result of a port policy that has been systematically geared to sustainability for decades. Port policies can only succeed if there is smooth interaction between all the stakeholders, which is why it is so important to pay due attention to the wishes and demands of the port community. To ensure that our sustainability management lives up to the expectations of our stakeholders, in 2021 we conducted an online survey in which the participants had the opportunity to tell us what they expected of a sustainability strategy.



Senator Schilling and Managing Director Howe on the observation tower at Luneplate

The survey identified generic areas of action which will in future form the basis of our sustainability management. Economic success is an essential aspect of all forward-looking port development. Accordingly, the competitiveness of the port is a central element of a successful sustainability strategy. A forward-looking port is environmentally compatible and helps to mitigate climate change. Social responsibility, for instance in the form of good working conditions, is an equally important element of a sustainability strategy as is a participative approach, which banks on cooperation with the port community. This Sustainability Report elaborates the strategic dimension of that policy transparently and in detail.

Joining forces for a strong port: parallel to this latest Sustainability Report, we are also drawing up the Port Development Concept 2035, which again focuses strongly on in-depth cooperation with business enterprises, professional associations and the science community. Participation will also be a central module of our sustainable port strategy in future.

This Sustainability Report is based on the key performance indicators for 2020 and 2021 and also takes into account data up to March 2022. It is published online and will, of course, be available as a download on the bremenports website.

In addition to countless facts about the sustainability strategy of the ports of Bremen, the report also features diverse interviews that provide interesting and in-depth information about adaptation to climate change, working conditions in marine shipping, and energy management.

The Sustainability Report thus provides a comprehensive picture of port development.

And it also reveals one thing absolutely clearly: the ports of Bremen are right on course for a sustainable future.



Dr. Claudia Schilling

Senator for Science and Ports of the Free Hanseatic City of Bremen



Robert Howe

Managing Director
bremenports GmbH & Co. LG

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SUSTAINABILITY

We regard sustainability management as a continuous improvement process and aim to safeguard the future viability of the ports of Bremen by means of economic, environmentally compatible and socially responsible development and thus make a contribution towards the 17 Sustainable Development Goals (SDGs). Accordingly, we engage in projects and networks in order to identify, promote and implement innovative technologies and processes for ports and shipping in consultation with our stakeholders.

SUSTAINABILITY MANAGEMENT



[STANDARDS: GRI 102-9, 102-11, 102-46, 102-48, 102-49]

SUSTAINABILITY TOPICS OF THE PORTS OF BREMEN IN FIVE AREAS OF ACTION

In 2021 we reorganised the principal topics of our sustainability management under the heading Stakeholder engagement.

This resulted in 5 areas of action in which we sum up our sustainability topics. Each topic makes a contribution towards achieving the United Nations 17 Sustainable Development Goals (SDGs).

The chapter on Sustainability topics explains the topics, GRI standards and SDGs that are addressed in the different areas of action.

The Materiality matrix (p. 17) explains which sustainability topic is addressed on each of our 3 survey levels: bremenports GmbH (staff of the port management company), Special Assets Ports (infrastructure of the ports of Bremen) and Ports of Bremen (location perspective).

The following policies of the 5 areas of action create the framework for our sustainability management:

Sustainability

We regard sustainability management as a continuous improvement process and aim to safeguard the future viability of the ports of Bremen by means of economic, environmentally compatible and socially responsible development and thus make a contribution towards the 17 Sustainable Development Goals (SDGs). Accordingly, we engage in projects and networks in order to identify, promote and implement innovative technologies and processes for ports and shipping in consultation with our stakeholders.

Market presence & port development

We invest in innovative and pioneering projects to preserve and enhance the competitiveness of the ports of Bremen. In that respect, we bear in mind that the future viability of our infrastructure has to be ensured under the conditions of climate change and consequently observe the requirements that apply to each individual location regarding water and nature conservation, efficient use of resources, land consumption and social aspects.

Climate protection

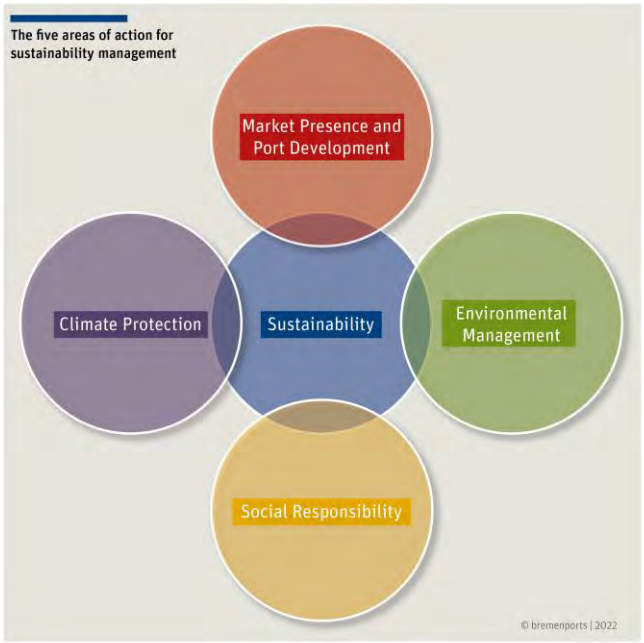
Our goal is to make the port climate-neutral. To do so, we aim to achieve GHG-neutral infrastructure by the year 2023. This involves raising energy efficiency and increasing the share of renewable energy in respect of our heat generation plant, company fleet and service vessels. Together with the relevant actors, we aim to achieve GHG neutrality at the port location by the year 2035.

Environmental management

Our goal is to avoid negative impact on the environment by the ports of Bremen or to keep such impact to a minimum. The PERS Environmental Management System, which was developed by the European Sea Ports Organisation (ESPO) especially for the requirements of the ports, ensures the continuous improvement of the environmental performance of the various port actors and promotes the successful future development of the ports of Bremen.

Social responsibility

The port management company promotes employee satisfaction and its attractiveness as employer by offering job security, comprehensive employee rights and a family-friendly corporate culture which promotes health and skills. We also endorse good working conditions at the port and in marine shipping, encourage a frank and fair exchange of opinions with the local population and are actively involved in specific projects.



The five areas of action for sustainability management

SUSTAINABILITY MANAGEMENT

We believe sustainability management is a continuous development process and implement it in line with the PDCA cycle shown here.

Since we first began sustainability reporting in 2012 we have published regular Sustainability Reports which are drawn up in line with the internationally recognised Global Reporting Initiative (last amended in GRI Standards 2016, 2018 / 2020). This ensures that the information and in particular the key performance indicators are comparable with other business enterprises and other ports throughout the world.

We also assess our performance in terms of the 17 Sustainable Development Goals of the United Nations. Wir verstehen das Sustainability management als kontinuierlichen Entwicklungsprozess und orientieren uns in der Umsetzung am hier abgebildeten PDCA-Zyklus.



Sustainability management PDCA cycle (Plan-Do-Check-Act)

The report contains a description of the management approach for each individual sustainability topic, i.e. a description of the materiality of the topic, defined goals for addressing this topic, the measures carried out during the period under review and a presentation of informative key performance indicators.

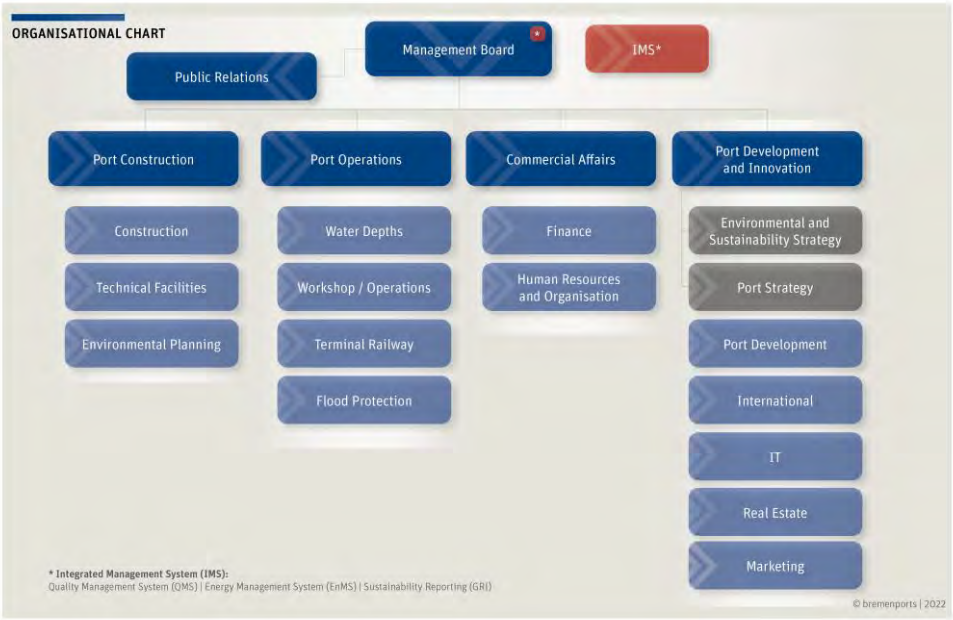
An overview of all KPIs for the preceding five years has been compiled in a table of our Key performance indicators. In addition to the indicators pursuant to the GRI standards, this also shows selected KPIs of our PERS Environmental Management System, our own Port Specific Indicators (PSI) as well as our Quality Management System indicators (QM). The revised GRI standards "Occupational Health and Safety" (2018) and "Waste" (2020) have been taken into account for the first time in this Sustainability Report.



Environment & Sustainability Team, from l. to. r: Meike Döscher-Mehrtens, Carsten Kühlke, Alexandra Groth-von Wahl and Sabine Müller

ORGANISATIONAL STRUCTURE OF OUR SUSTAINABILITY MANAGEMENT

At the beginning of 2022, bremenports GmbH & Co. KG created a new division entitled "Port Development & Innovation", which includes the Environment & Sustainability Management team as part of the Port Development department. As shown in the bremenports organisational chart, sustainability management inclusive of sustainability reporting pursuant to GRI standards is also part of the bremenports Integrated Management System (IMS), along with Quality and Energy Management. IMS is a management support unit which reports directly to and has regular meetings with the management



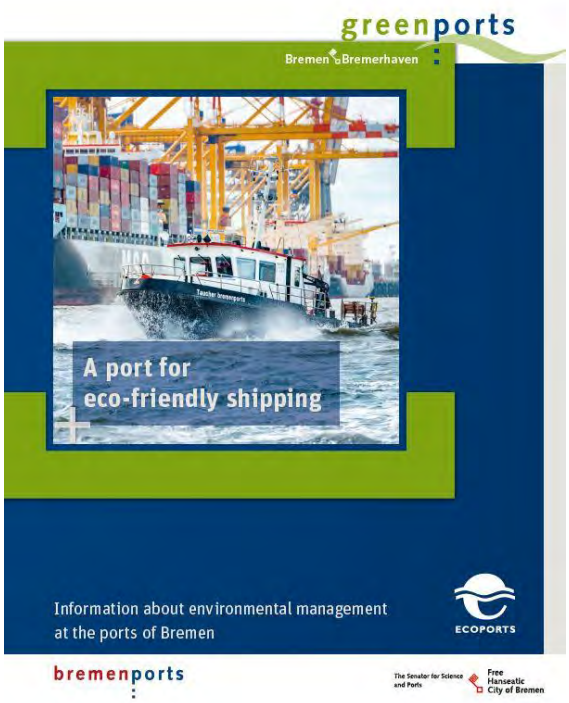
Organisational chart of bremenports GmbH & Co. KG

PERS ENVIRONMENTAL MANAGEMENT SYSTEM (PORT ENVIRONMENTAL REVIEW SYSTEM)

Parallel to bremenports' sustainability management system, the PERS Environmental Management System is also observed in cooperation between bremenports GmbH & Co.KG, Bremen's Senator for Science and Ports and Bremen's Port Authority (HBH). The PERS Environmental Management System, which was developed by the European Sea Ports Organisation (ESPO) specifically for ports, is intended to achieve a continuous improvement in the environmental performance of the ports of Bremen as an overall location. In addition to bremenports and the Special Asset Ports, it also monitors the environmental endeavours of Fischereihafen-Betriebsgesellschaft mbH (FBG), the Port Senate Department, Bremen's Port Authority (HBH) and port actors such as Eurogate and BLG.

In terms of organisation, the PERS Environmental Management System also forms part of the Port Development & Innovation division. It is handled by the Development Projects team in the Port Development department.

Detailed information about the PERS Environmental Management System is provided in our PERS Report, which is updated every two years. The latest version can be downloaded from the media centre on our website (www.bremenports.de/en).

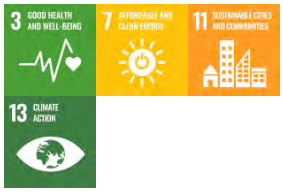


OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Sustainability Management				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
Ongoing development of sustainability management	Review of reporting activities on the basis of a benchmark study		2021	completed
	Continuous development of management and reporting in accordance with PDCA cycle		ongoing	ongoing
	Participating and observing the results of the IÖW (Institute for Ecological Economy Research) ranking in our sustainability reporting		2022	in progress
To promote staff commitment to sustainability	Publication of regular articles on greenports topics in intern@bremenports magazine and on the intranet		ongoing	ongoing
	Organisation of 2 annual project days for our trainees on the topic of "Sustainability in vocational training"		ongoing	suspended owing to Covid-19
	Staff survey on commuting		2021	completed
	Rolling out a staff competition to promote cycling		2021	Idea rejected
To raise the share of sustainable products and services in our internal procurement process	Regularly updating and ongoing development of binding internal purchasing guidelines for including sustainability criteria in the procurement of goods and services		ongoing	ongoing
	Drawing up and ongoing development of guidelines for the implementation of sustainability criteria in contract award		ongoing	ongoing

OUR SUSTAINABILTITY TOPICS

Sustainability topics	GRI-standards	Contribution to the Sustainable Development Goals (SDGs)
Sustainability		
Sustainability management	GRI 102: General disclosures	
Stakeholder engagement	GRI 102: General disclosures	
Cooperations & networks	GRI 102: General disclosures	
Compliance	GRI 102: General disclosures GRI 205: Combatting corruption GRI 307: Environmental compliance GRI 419: Socio-economic compliance	
Market presence & port development		
Market presence	GRI 203: Indirect economic impacts GRI 204: Procurement practices	
Port development	GRI 203: Indirect economic impacts GRI 304: Biodiversity	
Adaptation to climate change	GRI 102: General disclosures GRI 201: Economic performance	
Digitisation & smart port		
International third-party business		
Biodiversity	GRI 304: Biodiversity	

Sustainability topics	GRI-standards	Contribution to the Sustainable Development Goals (SDGs)
Climate protection		
Energy & climate protection in port infrastructure	GRI 302: Energy GRI 305: Emissions	
Climate-neutral port location		
Environmental management		
Water quality	GRI 304: Biodiversity GRI 413: Local community	
Air quality	GRI 305: Emissions GRI 413: Local community	
Waste, sediment & circular economy	GRI 304: Biodiversity GRI 306: Waste	
Social responsibility		
Attractive working conditions	GRI 102: General disclosures GRI 401: Employment GRI 403: Occupational health and safety GRI 404: Training and education GRI 405: Diversity & equal opportunities GRI 406: Non-discrimination GRI 407: Freedom of association & collective bargaining agreements	
Cooperation with the local population	GRI 305: Emissions GRI 413: Local community	

STAKEHOLDER ENGAGEMENT



[STANDARDS: GRI 102-40, 102-42, 102-43, 102-44, 102-46, 102-49]

CONTACT WITH OUR STAKEHOLDERS

We do not wish merely to react to the concerns of our stakeholders; instead, we are constantly looking for new ideas and impetus in the course of a transparent dialogue with them to enable us to overcome future challenges together.

As a fundamental principle, we are always interested in a frank and transparent exchange of opinions. However, there is no single systematic process for doing so. While standardised structures have already become established for certain groups, we are in contact with other groups on an ad-hoc basis.

The stakeholder groups that were to be involved were determined and selected on the basis of their interest in the ports of Bremen. The survey levels are: location, infrastructure (Special Asset Ports) and management company (bremenports GmbH & Co. LG).

At the beginning of 2021, all these groups were invited to take part in an online stakeholder survey in which they had the opportunity to express their concerns. The procedure is described in detail below. On page 175 you will finde a list of the concerns stated by the participants.

We are also actively involved in numerous cooperative ventures and networks, both in the capacity of driver and participant, in order to identify, promote and implement innovative technologies and processes for ports and shipping in consultation with our stakeholders. An overview of these initiatives is provided in the chapter Cooperation & networks.

Furthermore, in case of adverse impact resulting from port operations, we mediate dialogues between the parties who are responsible and the parties who are affected. The chapter Cooperation with the local population deals with the negative impacts that have recently been reported. Residents can state their concerns at any time by sending an e-mail to the general bremenports address: office@bremenports.de.



ONLINE STAKEHOLDER SURVEY TO UPDATE OUR MATERIAL SUSTAINABILITY TOPICS

Reasons for updating our material sustainability topics:

At the beginning of 2021, a materiality analysis pursuant to the GRI standards was conducted in order to identify the sustainability topics that are of particular importance for the survey level of the port management company bremenports, the “Special Asset Ports” infrastructure and the “Ports of Bremen” location. Following the relevant evaluations in 2014 and 2017, we have now performed a third materiality analysis. We plan to conduct updates at 3-yearly intervals.

The GRI standards define a “material topic” as one that reflects the significant economic, ecological and social impacts of an organisation or one that significantly influences the assessments and decisions of the stakeholders. The materiality principle provides the basis for deciding which topics are so important that it is necessary to include them in reporting. As expected by the GRI, we took into consideration a combination of internal and external factors. The external factor covers those concerns that were reported directly by our stakeholders in the course of an online stakeholder survey. The internal factor covers the viewpoint of the company, i.e. the evaluation of a group of in-house experts together with the management.

Online stakeholder survey procedure:

The online stakeholder survey was live from 20 January to 12 February 2021. 474 participants responded to the invitation to take part that was issued on our website, social media, intranet, in the local press and by e-mail. The participants came from the sectors port users & port business, research & science, local residents & citizens' representatives, NGOs, politics & local authorities, port and shipping associations, supervisory board and shareholders as well as bremenports employees. The bremenports employees made up the largest group of 28 %, followed by the port business community/port users at 24 %.

Participants were given the question *"What topics or areas of action should we take into account in order to safeguard the future viability of the ports of Bremen in terms of sustainability?"* Their answers were then collected online. Participants could state any number of sustainability topics at their own discretion and anonymously.

All the topics that were named, i.e. the total input from the other stakeholders, were then rated in relevance (materiality) by the individual participants on a rating board. The three topics with the highest ratings were then investigated in further detail: "Why are these topics particularly important, are they given sufficient attention and do you have any suggestions for their implementation?" The ranking of the topics stated as well as the stakeholders' specific expectations and suggestions regarding the individual topics are shown in the table of Stakeholder concerns (p. 177).

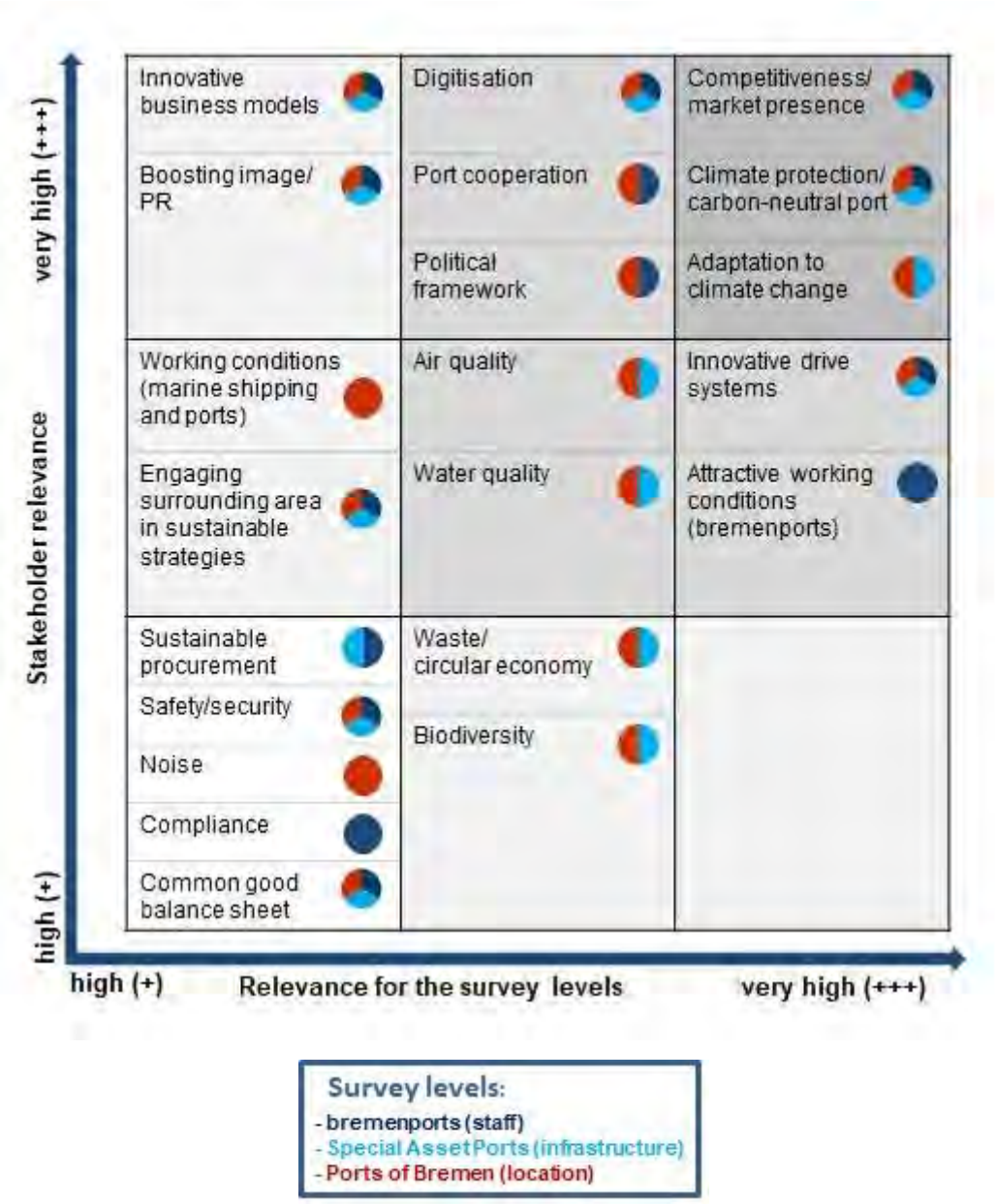
Internal rating procedure at bremenports:

A group of bremenports in-house experts assessed the topics stated by the stakeholders in terms of relevance for the three survey levels:

- bremenports (management company/staff)
- Special Asset Ports (Infrastructure)
- Ports of Bremen (location)

In addition to the aspects "Materiality" and "Scope for influence" of the three survey levels, the group also examined the "Impact of the survey levels on economy, environment and society". It was also reviewed whether the topics stated by the stakeholders reflected the full range of sustainability topics of other European and global ports on the basis of the ESPO Environmental Report 2020 (https://www.espo.be/media/Environmental%20Report-WEB-FINAL.pdf) and the World Ports Sustainability Report 2020 (https://sustainableworldports.org/wp-content/uploads/WORLD-PORTS-SUSTAINABILITY-REPORT-2020-FIN.pdf).

The in-house expert group also considered sustainability topics which had not been stated by the stakeholders, such as Sustainable Procurement, Safety & Security, Maintaining biodiversity, Compliance, Noise, as well as Waste/Circular Economy, in particular Dredging Spoils. The names of the topics stated by the stakeholders were also modified in order to achieve maximum selectivity and comprehensibility. In some cases, individual topics were allocated to generic focal topics.



The topics with a dark grey background, Market presence, Climate protection and Adaptation to climate change, were given the highest ratings.

Topics with a white background, such as Compliance, Sustainable procurement, Noise, Safety & Security and Economy for the common good, ranked relatively far down the table. These are topics which we still regard as important and which are meanwhile clearly regulated on the basis of existing rules and regulations, functioning processes and management systems. There is accordingly no acute need for action and/or information at present. We will continue to report on these "less" relevant topics in our established GRI indicators and KPIs in a less prominent position in the Key performance indicators or in the GRI content index.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Stakeholder engagement				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To intensify our PR work and stakeholder dialogue	Redesigning the "Sustainability" section on the bremenports website		2022	in progress
	Supporting marketing with social media activities		ongoing	ongoing
	Stakeholder workshop to consolidate the major sustainability topics		2021	completed
	Repeating stakeholder survey or workshop at 3-yearly intervals		2024	planned
	Systematising stakeholder engagement processes		2023	planned

COOPERATIONS & NETWORKS



[GRI-STANDARDS: 103-1,103-2, 103-3]

THE GROUNDS FOR ACTION

Although according to the German Constitution, the ports lie within the competence of the individual Federal Laender, i.e. Bremen, Hamburg, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein, they perform tasks that are of key national importance. The Coalition Agreement signed by the new federal government stipulates the targets of developing a national port strategy as well as close co-operation between the ports.

The five coastal Federal Laender invest many millions of euros in their ports every year in order to fulfil these tasks, creating jobs and generating added value. While it is obvious that the individual port locations also have to protect their own interests, this need not necessarily lead to a competitive situation. This is evident from various cooperation projects between the different port locations and the individual port management companies of the above Laender.

Whether in a national or international environment, sharing knowledge and information by way of active participation in various associations, societies and working groups is important for the ongoing development of the port location and our fields of business.

OUR OBJECTIVES

- To stabilise and expand cooperation between the North German ports and port management companies
- To participate actively in national and international networks

OUR PROCEDURES

Cooperation between the port locations and port management companies of the North German Federal Laender already takes place on many different levels and in many different areas, wherever this is permitted by the federal structure and likely to lead to a win-win situation. This is a trend that we actively promote.

The ports of Bremen have in fact already cooperated with other port management companies in various areas for many years, for instance in the fields of port construction and port maintenance. The focus of such cooperation is to share experience and expertise. The parties meet to discuss issues such as waterfront structures, innovative ship propulsion systems, the treatment of dredging spoils and dredging operations, corrosion protection, port planning and logistics, marine shipping or nature and environmental protection. This leads to solutions which benefit the ports in terms of cost efficiency and promote the latest technological developments. The port management companies are convinced that such cooperation should always be based on mutual respect for market economy principles.

There is also cooperation between the environmental authorities of the individual Laender. Besides, we also actively participate in numerous professional associations, societies and working groups and network here especially when innovative sustainability issues are involved. For many years, this knowledge sharing took place mainly on an ad-hoc level between specific persons and relating to specific topics, with the focus on mainly technical areas, but in recent years cooperation has been extended to include management board level. The management boards now regularly discuss subject areas such as the strategic objectives of the individual locations, continuous changes in the framework conditions, corporate development and collaboration between the port-related institutions, business enterprises and public authorities.

Participation and stakeholder engagement in networks, cooperative projects, business sectors and interest groups

We are actively involved in the following national or local cooperation groups and networks as driver and/or participant with the aim of identifying, promoting and implementing innovative technologies and processes for ports and shipping in consultation with our stakeholders. We also participate actively in many international professional associations and interest groups. The objective is to secure the competitiveness of the ports of Bremen and design our port infrastructure to meet the challenges of the future:

Topic	Initiative	Objective and procedure
Market presence	BREMEN BREMERHAVEN LOGISTICS TALK	The Logistics Talks hosted by bremenports are panel discussion and network in one. The event is intended for businesses in the maritime transport business. This platform focuses on cultivating contact with individual customers and providing an opportunity to meet new potential customers. The Logistics Talks take place several times a year at venues inside Germany and in neighbouring European countries.
Port development	Drawing up the Port Development Concept	Updating Bremen's Port Development Concept was organised so as to include our stakeholders. The aim was to ensure that business enterprises and professional associations as well as any interested members of the general public had the chance to participate. A total of three moderated stakeholder workshops, each of which lasted 5 hours, took place in October and November 2021. They focused on topics such as the competitiveness of

		the ports, hinterland transport connections, gross economic value generated by the ports of Bremen, innovation and digitisation, the challenge of climate change and the vision of the port in 2035. The latest Port Development Concept 2035 will be available in the media centre of our website as from June 2022.
	Smart Port Community	The ports of Bremen plan to foster a culture of innovation under the heading "Smart Port". At the beginning of 2022, management consultants KPMG conducted a SWOT analysis to assess the digital action options for the ports of Bremen. The analysis also included various stakeholders and provides a basis for establishing a stakeholder-based "Smart Port Community".
	BHV HAFEN · TRANSPORT · LOGISTIK	The port promotion agency BHV represents the interests of Bremen-based business enterprises within the context of the ports, economy and logistics. It is simultaneously a network which offers its members diverse working meetings and working groups. The Transport working group deals with challenges and issues relating to all aspects of traffic and transport in Bremen, Bremerhaven and the surrounding area. This includes railway connections, heavy goods traffic, the roadworks and traffic situation, administrative framework aspects, such as customs, police and licences, as well as future requirements of the rail and road transport modes.
	WESERBUND ...die Lobby der Weser	Weserbund e.V. is a non-profit organisation whose remit and object is promotion of the Weser, Werra and Fulda Region in terms of landscape conservation and management, managing the course of the Weser for the purpose of flood and coastal protection, improvement of the water quality and Weser nature areas, promoting cycling and hiking trails for recreation of the local population in the interests of landscape conservation and improving the use of eco-friendly and safe waterways to relieve traffic congestion on land.
	WirtschaftsverbandWESER.	Wirtschaftsverband Weser e.V. (Weser Economic Development Association) acts across all state boundaries and all administrative levels to represent the maritime interests of the entire Weser region. It campaigns for the economic importance of the maritime business sector in the Weser region vis-à-vis the EU, the federal and Land governments and demands forward-looking economic and transport policies for competitive location conditions. bremenports supports this organisation and its "#ZukunftWeser" working group, which has set itself the goal of promoting the swift adjustment of the fairways in the Outer and Lower Weser and supporting the execution of this project.

Climate neutrality	GETTING TO ZERO COALITION	The Getting to Zero Coalition is a strong alliance of more than 150 business enterprises from the sectors of shipping, energy, infrastructure and finance. It is supported by important government and international organisations. bremenports joined this alliance in August 2021 and signed a "Call to Action to Shipping Decarbonization".
	European Clean Hydrogen Alliance	The aim of the European Clean Hydrogen Alliance, ECH2A, is to gather representatives of industry, governments and civil society around one table to promote the rapid establishment of a climate-neutral hydrogen economy in Europe. It has far more than 800 members throughout the world. The Alliance is open to all public and private actors that are actively involved in the field of renewable or low-carbon hydrogen, that satisfy the membership criteria and wish to make an active contribution towards the objectives set forth in the Alliance mission statement. Any organisation wishing to join the Alliance is obliged to sign this mission statement, and in doing so undertakes to share the vision of the Alliance and contribute to its operative work. bremenports took that step in May 2021 and joined the ECH2A.
	North German hydrogen strategy	In this initiative set up by the five North German Federal Laender, various institutions cooperate to promote coordinated action and thus support the transition to green energy by establishing a hydrogen ecosystem.
	e4ports	e4ports is a joint network of the German seaports and the National Organisation of Hydrogen and Fuel Cell Technology (NOW GmbH), which has assumed responsibility for coordination. bremenports is a member of the organisational steering committee which sets up working groups and contacts participants from the port locations. There is currently a working group on port service vehicles and another on mobile shore power facilities, in which bremenports itself participates.
	H2BX Wasserstoff. bewegt. uns.	Since mid-2018 we have been a member of "H2BX - Hydrogen for the region of Bremerhaven", which supports hydrogen and fuel cell technology, the related topics of electromobility, the development of hydrogen as an energy system integrator of renewable energy and hydrogen-based energy storage.
	SWH green hydrogen network	Some years ago, Bremen's Senate Department for the Ports (SWH) launched a network to promote the use of hydrogen applications in shipping and at the ports. bremenports initiated the establishment of this network, which is headed by the Senator for Science and Ports, and

		provides support for the department.
	KURSKLIMASTADT BREMERHAVEN	The seaport of Bremerhaven has set itself the target of becoming a climate-friendly city and undertook to reduce its CO_2 emissions by 40% by 2020, relative to the year 1990. bremenports endorses this initiative by means of its own activities, which are aimed at achieving the status of climate-neutral port (carbon-neutral port infrastructure).
Environmental protection	NORDWESTHÄFEN effizient und innovativ	Since 2019, we have hosted regular network meetings together with Niedersachsen Ports under the slogan "North-West ports - efficient and innovative". The target group for these meetings includes port operators, the port industry, public authorities, the science community and any other interested parties, whether national or international, also beyond the borders of the metropolitan region. These network meetings were devised in the course of a cooperative project sponsored by North-West Metropolitan Region. A total of nine network meetings were held up to 2021, latterly in the form of an online meeting on a highly topical issue: "Ports put the spotlight on adaptation to climate change".
	Cooperation of the environmental managers of the German seaports	The network of environmental managers of the nine German seaports meets regularly at least once a year to share knowledge in the field of "Environment & Ports". In 2021, the nine German seaports signed a Memorandum of Understanding on a joint project entitled "ZeroEmission@Berth". The project is described in detail under the heading Air quality.
	Bio-fouling round table with BSH	In November 2019, the Federal Maritime and Hydrographic Agency (BSH) hosted the first national round table on biofouling. There are numerous gaps in our knowledge in connection with the management of biofouling as well as various discussion items to be addressed and resolved as a cooperative effort by all the sectors and groups involved. Since November 2021, additional small groups have been set up to enable in-depth exchange of information and to support the work on national and international biofouling issues and promote the implementation of the IMO Biofouling Guidelines and Guidance.
	METROPOLREGION NORDWEST	The objectives and remit of Bremen-Oldenburg Metropolitan Region are to promote regional development, improve the competitiveness of the region and strengthen the metropolitan functions. As a member of the "Wirtschaft pro Metropolregion e.V." support association, we address the ongoing development of this region in a

National and international professional associations and interest groups		public-private partnership.
	PARTNERSCHAFT UMWELT UNTERNEHMEN	We participate in “partnerschaft umwelt unternehmen Bremen", a network of approx. regional 200 companies which act as role models in the sector of environmental and climate protection and thus promote the attractiveness of Bremen/Bremerhaven as a business location.
	Impulsgeber Zukunft beruf & familie	The mission of the non-profit association "Impulsgeber Zukunft e. V." is to establish a policy of family-friendliness in the corporate and city culture of the Federal Land of Bremen. We attend regular meetings which give us the opportunity to share knowledge with other members as a basis for the ongoing development of our range of options for combining family and career.
	maritimes cluster norddeutschland	The Maritime Cluster Northern Germany (MCN) is a maritime network with more than 350 members from business, science and politics. It was founded in 2011. It has been a registered association since the beginning 2017. bremenports is a member and actively participates in various projects (such as ZeroEmission@Berth, MCN Cup).
	ZDS Zentralverband der deutschen Seehafenbetriebe e.V.	bremenports is a member of the Central Association of German Seaport Companies (ZDS), the national organisation of the 156 companies involved in sea freight throughput at the ports in Bremen, Hamburg, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein. The ZDS represents the joint business, industrial, social and collective bargaining interests of these companies and concludes collective wage agreements for port workers for the member companies that are bound by collective agreements.
	HG Hafentechnische Gesellschaft	HTG (German Port Technology Association) was founded in 1914 and is a non-profit organisation which addresses all theoretical and practical questions of a technical and economic nature from the fields of ports, shipping and logistics, and the implications of these for carriers and coastal protection. bremenports is an active member and participates, for example, in working groups and delivers presentations on specialist topics at events.
	WPSP WORLD PORTS SUSTAINABILITY PROGRAM	IAPH stands for the "International Association of Ports and Harbors". As one of 55 ports worldwide, the ports of Bremen signed the World Ports Climate Declaration (WPCI) in July 2008. In 2018, this was superseded by the World Ports Sustainability Program (WPSP) and expanded

		to include other areas of action to enable the ports to contribute to the UN Sustainable Development Goals (SDG).
	ESPO ECOPORTS	The mission statement of the European Sea Ports Organisation ESPO is to promote a sustainable (safe, efficient and eco-friendly) European port sector. The Ecoports network created as part of the ESPO drew up the Port Environmental Review System (PERS), an environment management system which is designed to match the requirements of port locations. The Senator for Science and Ports is a member of Ecoports and represented on ESPO committees, but bremenports does not play an active role.
	PIANC A.D. 1885 AIPCN NAVIGARE NECESSE	PIANC is an international association for waterborne transport infrastructure and shipping. Various working groups address viable developments for the future. bremenports collaborated on the report of the EnviCom Working Group 150 entitled "Sustainable Ports" which was published in 2014.
	Wadden Seaports	In May 2018, bremenports signed a cooperation agreement on behalf of the ports of Bremen with 7 other Wadden Seaports in the Netherlands, Denmark and Germany, as joint strategies are needed to ensure the coexistence of the ports and the Wadden Seas area in future. The ports are planning closer cooperation on that basis in order to exploit synergies and ensure long-term cooperation in respect of environment-related sustainability topics.
	HFO-FREE ARCTIC	Bremenports signed the Arctic Commitment in February 2018. Together with the other signatories, it endeavours to protect the Arctic from heavy fuel oil. These efforts include obtaining a ban on the use and transport of heavy fuel oil in the highly sensitive Arctic environment.

OUR PORTFOLIO OF MEASURES REGARDING THE TOPIC

Cooperation & Networking				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To stabilise and expand co-operation with North German ports and port companies	Safeguarding competitiveness with the help of cooperation agreements with other ports		ongoing	in progress
	Designing cooperation with other port companies in various areas		ongoing	ongoing
To participate actively in national and international networks	Active participation in professional associations, networks, societies and working groups on relevant and future-oriented topics	 	ongoing	ongoing

COMPLIANCE



[STANDARDS: GRI 102-16, 103-1, 103- 2, 103-3, 205-1, 205-2, 205-3, 307-1, 419-1]

THE GROUNDS FOR ACTION

Compliance covers the sectors of anti-corruption, data protection, port security, risk prevention and cyber security. Compliance with laws, regulations and voluntary codes determines all our actions and generates long-term trust in our company and the ports of Bremen – both from the general public and from our own employees.

OUR OBJECTIVES

- To create technical and organisational conditions that permit compliance with legal obligations
- To ensure no infringements of the International Ship and Port Security Code (ISPS Code)
- To increase security at the ports of Bremen
- To set up and continue to develop cyber security aspects in relation to the entire ports in Bremen / Bremerhaven

OUR PROCEDURES

Anti-corruption

The Anti-Corruption department is organised as a management support unit which is directly affiliated to the management. Its activities are based on the contents of the Public Corporate Governance Code of the Free Hanseatic City of Bremen in order to ensure good and responsible governance. We also comply with the relevant administrative regulations.

Preventive measures are intended to avert corruption in the first place. An Anti-Corruption Code of Conduct has therefore been issued and all new recruits receive instruction on this topic as part of the onboarding process. This instruction is documented.

To date, there is no obligation for our employees or business partners to read and sign the above Code of Conduct at regular intervals. Employees are systematically informed of all new additions and changes via the IMS. All employees also have the opportunity to attend regular anti-corruption training offered by Bremen's Central Anti-Corruption Office. Regular attendance is compulsory for employees whose job is subject to a high risk of corruption.

Every 5 years, the Anti-Corruption Officer conducts a risk analysis to assess the risk of corruption for the individual areas of work. The last risk analysis was carried out in 2018, the next is planned for 2023.

In the period under review there were no legal proceedings owing to breaches of legal regulations which led to significant non-monetary sanctions.



Protected data – our servers

Data protection

We place great emphasis on data protection and privacy. The collection, processing and use of personal data of our staff, customers and suppliers are all handled in accordance with international and national data protection standards. Particular importance is given to compliance with regulations in connection with the use of CCTV systems.

To ensure compliance with legal data protection requirements, we have appointed a Data Protection Officer, who has paramount authority and reports directly to the management. All personal data is processed solely for the purpose for which it was provided. No personal data is disclosed to third parties unless we are legally obliged to do so or have obtained the written consent of the person concerned. In addition to close internal cooperation with the individual departments in which sensitive data is processed, the bremenports' Data Protection Officer has regular meetings with representatives of Bremen's State Commissioner for Data Protection and with the data protection officers of other business enterprises and public authorities.

No breaches of data protection relating to customer, staff or job applicants' data or the loss of any such data were established in the period under review. There was one notifiable incident in 2021.

Online training in data protection

Hardly any classroom training could be offered in 2020 and 2021. Nevertheless, in many areas it is important for our staff to remain aware of new developments and this also applies to data protection. Our employees from the port development department promptly created a digital option: with the help of an e-learning platform, we can continue to obtain information about how to keep our data secure in future.

The advantage of e-learning is that it communicates knowledge interactively and then offers a test to check that the trainee has understood the material. Attendance is recorded and trainees receive a certificate as proof of training.

The world of data is permanently changing and it is of vital importance to protect data against abuse in future. Current issues include the storage of personal data in third countries (e.g. cloud services, use of social media platforms) and applications that are used to trace Coronavirus contacts.

Port security, cyber security & risk prevention

The individual risks for each new port facility and/or facility conversion are identified and risk prevention plans drawn up in consultation with the responsible security authorities. General preventive measures are set out in a port master plan which is the responsibility of the authorities. Despite comprehensive preventive measures, it is not possible to avoid all risks entirely. In case of emergencies, it is therefore essential to have access to tried-and-tested mechanisms and trained staff. Our emergency management system plays a key role in that respect.

Our security regulations are based on the International Ship and Port Facility Security Code (ISPS Code), European and national security legislation and the Port of Bremen Security Act. The management, together with the appointed Port Facility Security Officers (PFSO), are responsible for compliance with these regulations.



Warning signs at the western quay

The effectiveness of our management policies is monitored by carrying out emergency drills involving various actors (security authorities, infrastructure manager, PFSO security services, and bremenports staff) and confirmed in audits conducted by the regulatory authorities. In the interests of improving these processes, they are also verified in the form of overall port drills for the port locations Bremen and Bremerhaven. These are the responsibility of the Port Authority.

Compliance with all legal regulations is also monitored by representatives of the EU and the American government. Any incidents are evaluated in cooperation with the security authorities. In the period under review, the security authorities did not allocate any lock facilities or waiting areas at the ports in Bremen and Bremerhaven to higher risk categories.

In addition to structural, technical and organisational measures, the focus is increasingly on cyber security. The project "SecProPort - protecting the ports from cyberattacks", which was also supported by bremenports in the capacity of associated partner, was completed in December 2021 and a follow-up project is already planned.

Other relevant facts and figures about this topic

are provided in our **Key Performance Indicators** beginning on page 152.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

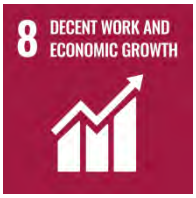
Compliance – anti-corruption				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To create technical and organisational conditions that permit compliance with legal obligations	Continuation of the internal Compliance working group		ongoing	ongoing
	Adapting the procedure for reporting concerns anonymously in accordance with German transposition of the EU Whistleblower Directive		2021	in progress
	Conducting corruption risk assessment at 5-yearly intervals		2023	planned
	Management of legislation and information and update service		ongoing	ongoing
	Introduce online anti-corruption training courses		2022	ongoing
Compliance - port security, cyber cecurity & risk prevention				
No infringements of the ISPS Code	Upkeep of the Statement of Compliance		ongoing	ongoing
To increase security at the ports of Bremen	Development of camera systems to improve waterside monitoring (in cooperation with the federal government)		2022	in progress
	Additional measures for waterside monitoring at Überseehafen		2021	completed
	Extension of the port geoinformation system (GIS)		2022	under implementation
Setup and ongoing development of cyber security aspects in relation to the entire ports in Bremen / Bremerhaven	Supporting the "SecProPort - protecting ports from cyberattacks" project which is aimed at developing resilient security architecture for the alliance of port communications systems		2021	completed



MARKET PRESENCE & PORT DEVELOPMENT

We invest in innovative and pioneering projects to preserve and enhance the competitiveness of the ports of Bremen. In that respect, we bear in mind that the future viability of our infrastructure has to be ensured under the conditions of climate change and consequently observe the requirements that apply to each individual location regarding water and nature conservation, efficient use of resources, land consumption and social aspects.

MARKET PRESENCE



[STANDARDS: GRI 103-1, 103-2, 103-3, 203-2, 204-1 AS WELL AS PSI 10 AND 11]

THE GROUNDS FOR ACTION

The ports of Bremen rank amongst the most important universal ports in Europe. The key factors for their success are the good accessibility of the ports from sea and hinterland, the reliable operation of the port facilities as well as a range of first-class service providers and cargo handling companies. These factors are of central importance for creating gross economic value in the Federal Land of Bremen, for encouraging companies to set up business here and for the regional labour market.

OUR OBJECTIVES

- To analyse competitiveness
- To analyse the share of rail and inland shipping in the modal split
- To analyse the creation of gross economic value in the region and the effects on the labour market

OUR PROCEDURES

How many ocean-going vessels called at Bremen's ports? How has container throughput developed over the past five years? What types of cargo are handled at Bremen's ports? The latest traffic and cargo figures from Bremen and Bremerhaven are presented as tables and charts on the statistics page of our website (www.bremenports.de/en):

Analysis and forecast of sea freight throughput

Total throughput at the ports of Bremen in 2021 amounted to approx. 71.5 million tons. Taking into account the actual trend for sea freight throughput at the ports of Bremen between 2010 and 2020 and on the basis of two studies conducted by the Institute of Shipping and logistics (ISL) in 2022, total throughput of around 91 million tons is forecast for the port location on the River Weser in 2030 and approx. 104 million tons in 2035.

The number of containers handled in 2021 amounted to approx. 5.3 million TEU. The forecast for container throughput in Bremerhaven predicts approx. 6.8 million TEU in 2030 and approx. 7.9 million TEU in 2035.

Automobile throughput amounted to approx. 1.9 million vehicles in 2021. The forecast for Bremerhaven is approx. 2.4 million vehicles for 2030 and approx. 2.5 million vehicles for 2035.

Analysis of the Top 4 ranking in container and automobile throughput

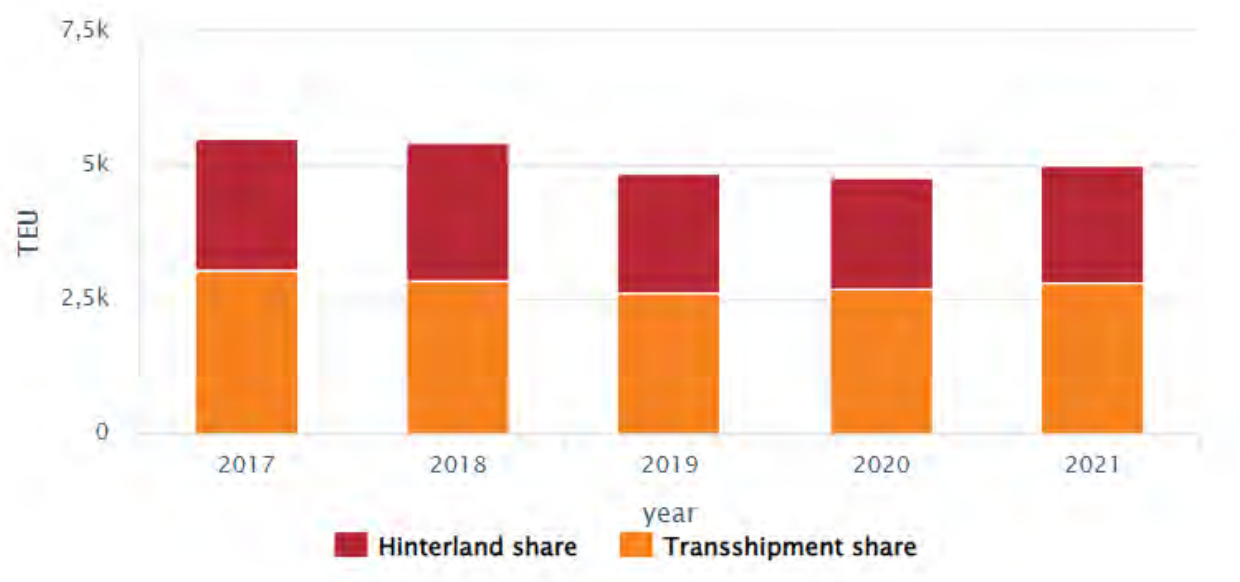
Despite a stagnant throughput trend, the ports of Bremen have succeeded in defending their fourth place in the Top 4 ranking of the largest container terminals in North-Western Europe over the last 10 years.

Although the ports of Bremen had to cede their leading position in automobile throughput to Zeebrugge in 2014, they succeeded in maintaining second position despite a stagnant throughput trend and ranked far ahead of Emden and Antwerp.

The ranking figures for the last 5 years are shown in our Key performance indicators.

Analysis of hinterland traffic and modal split

Between 2015 and 2020, the number of hinterland containers decreased by approx. 11 %. In line with the forecast by bremenports, approx. 2.2 million TEU hinterland containers were transported via Bremerhaven in 2021. ISL forecasts the figures for container hinterland traffic at approx. 3 million TEU in 2030 and approx. 3.6 million TEU in 2035, which means an increase of approx. 50 % for the period 2010 to 2030 and approx. 81 % by 2035.



Hinterland and transhipment share of container traffic in Bremerhaven

In 2021, rail hinterland traffic again achieved excellent figures, both in terms of its share of the modal split and also in absolute volumes. Since 2010, the share of rail in hinterland traffic has risen from 45 % to approx. 48 % in 2021, i.e. by 3 %. Over that same period, the share of road traffic decreased from 50.6 % to approx. 49 % (forecast by bremenports based on provisional figures).



Modal Split of container hinterland traffic in Bremerhaven

Analysis of local content percentage as contribution to regional economic value

Regional economic value is created directly due to the importance of the ports of Bremen as a multimodal cargo handling location.

The LOCO percentage indicates the share of goods that remain in the metropolitan region of the port concerned and are used or processed there rather than continuing their journey as port hinterland traffic. A high LOCO percentage therefore indicates high regional economic value. The Federal Land of Bremen is still the container hinterland region with the highest traffic figures from the ports of Bremen and achieved an increase of 25 % between 2013 and 2018. The LOCO percentage of container hinterland traffic thus rose from 29 % to 31 % (ISL, 2020).

Analysis of the effects on the labour market

In 2019, the ports of Bremen safeguarded a total of approx. 39,000 jobs in the Federal Land of Bremen. A total of approx. 6500 persons were employed directly in port and terminal operations and complementary services, thus accounting for only a small share. Approx. 26,500 jobs are directly related to the port-related transport chain and industry and thus account for the major oart of the total figure. The effects of the Covid 19 pandemic on the number of jobs in the Federal Land of Bremen that are dependent on the ports of Bremen can only be estimated. The ISL assumes that jobs related directly to the ports in the Federal Land of Bremen decreased by approx. 3.3 % in 2020. Following the gradual recovery of the cargo handling business during 2021 and the following years, it is assumed that the number of jobs will increase once again.

The ports of Bremen are a central element of the marine economy and of outstanding importance for the Federal Land of Bremen, the whole of Germany and, as an international hub in hinterland and transhipment traffic, also for other European countries. In addition to this key role in international goods trade, the port-related industry in Bremen generates high added value, which in turn leads to a significant number of highly qualified jobs both in the region and throughout Germany. The overall macroeconomic importance of the ports of Bremen is evident when one considers their function as gateway to the global markets for German export and import businesses. In 2019, this gateway function of the ports of Bremen accounted for 345,000 industrial jobs throughout Germany.

The Covid 19 pandemic had an adverse impact on the economy not only in Bremen, but throughout Germany. The ISL has calculated a decrease of around 2.5 per cent in the number of jobs in the manufacturing and processing industry sectors for the year 2020. The decrease for the automotive industry, which is of extreme significance for the ports of Bremen, amounted to 2.8 per cent.

As the ISL first applied a new standardised national method in 2020, the effects shown are not comparable with the figures from the 2015 and 2010 studies. [Source: Effects of the ports of Bremen on the labour market for the year 2019/2020, Final Report, Institute of Shipping and Logistics (ISL), Bremen, 2021]

For further information on market presence please refer to our **Key performance indicators** (beginning on page 152) and the statistics page of our website.



OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Market presence				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To analyse competitiveness	Update "Facts & Figures", update market share within the North-West range		ongoing	in progress
To analyse local economic value and effects on the labour market	Analysis of local economic value		ongoing	in progress
	Analysis at 5-yearly intervals of the effects of port operations on gross economic value and the labour market		2021	completed
To analyse the shares of rail and inland waterway in the modal split	Figures are published in the course of updating "Facts & Figures"		2022	in progress

PORT DEVELOPMENT





[STANDARDS: GRI 103-1, 103-2, 103-3, 203-1, 304-2 AS WELL AS PSI 13]

THE GROUNDS FOR ACTION

We wish to consolidate and expand the competitive position of the ports of Bremen on the basis of far-sighted port development. Identifying and exploiting opportunities at an early stage is of crucial importance in that respect.

The dynamic development of the global economy, changing economic and ecological conditions, new challenges in the port-related working world, measures to adapt to climate change, new requirements for propulsion systems and fuels and, last but not least, the effects of the pandemic on the entire port and logistics industry, all mean that Bremen's port concept has to be updated. This update was performed in 2021/2022 under the heading "Future concept for the ports of Bremen in 2035" and bundles pioneering projects for the ports of Bremen which are to be implemented over the coming years.

The key challenges identified in the port development concept which have to be tackled by the Federal Land of Bremen in the coming years as part of its responsibility for port infrastructure are stated below. These issues have to be addressed and implemented over the next few years:

- Optimisation of infrastructure
- Optimisation of traffic development
- Optimisation of hinterland connections
- Promoting environmental and sustainability topics
- Climate protection/climate-neutral port location
- Adaptation to climate change
- Promotion of digitisation / Smart Port
- Sites: increasing port affinity
- Generating and safeguarding jobs
- Increasing LOCO percentage and gross economic value
- Promotion of port cooperative activities
- Optimisation of marketing
- Initialisation and promotion of support projects

The "Future concept for the ports of Bremen in 2035" will be published in June 2022 and is also available in our media centre.

OUR OBJECTIVES

As part of our sustainability management we have defined goals for each sustainability topic and backed these goals with specific individual measures. We have also done so for the topic of port development. The following goals do not completely match the challenges stated above in the "Future concept for the ports of Bremen in 2035", as they are assessed within a different framework. The challenges stated in the "Future concept for the ports of Bremen in 2035", such as Cooperative port activities, Digitisation & smart port, Energy & Climate Protection in respect of Port Infrastructure, Climate-neutral port location, Adaptation to climate change, Sustainability in general, or Employment, are not featured in the Sustainability Report under "Port development" but in the relevant individual chapters.

- To identify and implement pioneering projects for the ports of Bremen
- To optimise conditions for marine shipping and adjust our infrastructure to match forecast developments
- To provide shore power connections for marine and inland shipping
- To optimise the terminal railway infrastructure
- To improve management and steering of truck traffic
- To optimise conditions for inland shipping
- To upgrade the port locations to include energy port functions (generation, transport and storage of hydrogen and synthetic fuels)
- To design infrastructure measures in line with location conditions and sustainability aspects



Trucks parking at Überseehafen in Bremerhaven

OUR PROCEDURES

The total investment volume for upgrading the infrastructure of the ports of Bremen in 2021 amounted to approx. EUR 34 million. The following projects were of particular importance:

Name of project	Construction of a new Columbus Quay in Bremerhaven	Dismantling large swing bridge	Adjustment of container terminals (CT I to CT IIIa)	Flood protection at Oslebshausen lock
Project period	2020 - 2024	2021 - 2023	2020 – 2022	2017 - 2021
Costs sustained in 2021	EUR 11.45 million	EUR 4.88 million	EUR 0.41 million	0,49 Mio. €
Planned total budget	EUR 76.68 million	EUR 6.98 million	EUR 1.10 million	EUR 7.53 million
EU funds (total budget)	none	none	none	70 %
Total costs sustained to date	EUR 18.46 million	EUR 4.94 million	EUR 0.44 million	EUR 2.46 million
Reason for the investment	Renewal of existing infrastructure	Renewal of the destroyed swing bridge	Adjustment to meet new requirements of container shipping and cargo handling technology	Adaptation to climate change resulting from rising sea levels
Anticipated positive effects	Retaining and expanding cruise shipping business in Bremerhaven	Multimodal connections to Columbus peninsula at Überseehafen Bremerhaven	Long-term competitiveness and safeguarding jobs	Providing a secure and flood-proof sea lock as access to the port areas

Major investment projects in port infrastructure in 2021

Optimising conditions for marine shipping and adjusting infrastructure to match forecast developments

The continuing trend towards increasingly large vessels means that the mega-carriers currently in operation are meanwhile up to 400 m long and up to 61.5 m wide. The latest forecasts predict vessels with a length of 450 m and a beam of 65 m in future. The draughts of these vessels are therefore also constantly increasing. The first sections of the container terminal in Bremerhaven were built 50 years ago and no longer satisfy these requirements. The Senate of the Free Hanseatic City of Bremen has therefore commissioned bremenports to prepare a position paper as a decision-making basis for sections CT I to CT III of the container terminal in Bremerhaven. This will involve structural adjustments to refurbish the relevant terminal areas to satisfy the new requirements. The study will be prepared in the course of 2022 and will identify potential technical solutions, their costs and importance for Bremerhaven as a seaport location.

Providing shore power connections for marine and inland shipping

In June 2020, Bremen's government resolved to make shore power connections widely available for marine shipping at the ports. In doing so, Bremen is following the current trend of providing increasing shore power facilities for shipping companies. Eight stationary shore power connections are to be provided for marine shipping.

In addition to this project, shore power connections are to be made available at all suitable berths for inland shipping which do not yet have such facilities. Two shore power units are to be installed at Industriehafen in Bremen in 2022 in addition to the present 20 shore power facilities for inland shipping. All currently available inland shipping berths will then have access to shore power produced with 100% green electricity. The use of these facilities was specified in the Schedule of Port Charges in 2021. This means that irrespective of whether or not they use the facilities, shipping companies are obliged to pay a flat rate for the power that is supplied in order to avoid the emissions generated by ship engines when in port.



Shore power connection for inland shipping

It remains to be seen whether and to what extent the planned eight shore power facilities will actually be used by ocean-going vessels in future and, if they are used, whether this will also impact on air pollution, where the situation is already critical. Parallel to the provision of shore power, bremenports participates in the ZeroEmission@Berth project which aims to find alternative solutions to reduce emissions by marine shipping when in port.

The use of mobile shore power facilities in the form of powerpack solutions is still being investigated in connection with promotion of the use of LNG and hydrogen at the ports of Bremen.

Optimising terminal railway infrastructure

The ports of Bremen are railway ports. Roughly half of all containers leaving or entering the ports to and from the hinterland are already carried on rail. The share of automobiles carried on rail is even higher. In view of the forecast increase in container hinterland traffic, maintaining and developing efficient rail infrastructure is therefore of crucial importance for the competitiveness of the ports of Bremen.

Over the coming years, new track infrastructure capacities will therefore be created or existing facilities reactivated, for instance at Bremerhaven-Speckenbüttel and at Bremerhaven's Fischereihafen.



Renewing switches at Überseehafen

Improving the management and steering of truck traffic

Efficient road connections are another crucial requirement for ensuring attractive and competitive infrastructure at the ports of Bremen. Restoring, maintaining and upgrading road connections is accordingly of key importance. This involves, for example, restoring existing connections, creating new facilities, easing pressure on traffic nodes that are prone to congestion, creating new parking and pre-storage areas for trucks and implementing digital projects for incoming truck management. A system for steering incoming trucks is therefore to be established in order to avoid congestion and thus help reduce negative impact on the urban environment caused by traffic, pollutants and noise emissions.

Optimising conditions for inland shipping

Upgrading the Middle Weser for the use of high-powered barges with a length of 110 m, a beam of 11.45 m and a draught of 2.50 m has meanwhile been completed, apart from a few remaining tasks. This means that high-powered barges can now navigate this whole section of the river. Other improvements will immediately become noticeable as soon as the final work is completed. It still remains necessary to make the Middle Weser navigable by barges which can carry three tiers of containers if inland shipping is to exploit its full potential.

Designing infrastructure measures in line with location conditions and sustainability aspects

The expansion of port infrastructure entails a number of adverse effects on the marine and coastal habitats at the Weser estuary and the neighbouring Wadden Sea. The measures we take to compensate for the impact of land consumption are explained in detail in the chapter on Biodiversity.

Another component of sustainable infrastructure expansion involves using our natural resources sparingly and efficiently. In view of the ongoing global increase in resource consumption, it is increasingly necessary to abandon the throwaway culture (linear economy) which is largely practised today and establish a circular economy instead. The objective of a circular economy is to establish a renewable system which – wherever possible – forgoes the use of primary raw materials and instead enables the reuse of existing components.

The building industry has extremely high resource consumption. In Germany alone, 517 million tons of mineral resources are used in construction every year. The use of recycled concrete can reduce the consumption of primary raw materials in port construction projects, as it can be used as an additive in recycled aggregates and thus reduce the quantities of sand, gravel and natural stone that are required. bremenports is currently planning to analyse the potential of resource-saving and sustainable building materials in port infrastructure construction projects.

Use of dredging spoils as a secondary resource

Dredging spoils consist of soil, soil material or excavated material that contains different shares of mineral and organic components. These spoils occur at the ports of Bremen in the course of maintaining the water depths and water management. Provided the contaminant concentration satisfies the relevant criteria (cf. chapter on Waste, sediment & circular economy), we endeavour to return the dredging spoils to the economic cycle. Dewatered dredging spoils that satisfy the criteria for recovery are used, for example, as a secondary raw material for construction and filling projects. They are used to produce the mineral safety elements of the mono-landfill for dredging spoils (technical barrier, mineral sealant) or for the construction of additional dewatering fields at the Integrated Disposal Facility for Dredged Material in Bremen-Seehausen (IBE) for the construction of the peripheral barriers and also as safety elements.

There is still great and as yet unexploited potential for the use of treated dredging spoils in the field of dyke construction. Although the dredging spoils have already been successfully used for dyke construction in Bremen on a large scale in cooperation with the dyke maintenance organisations and Bremen definitely plays a pioneering role in that respect, there are still unjustified reservations which make it difficult to find additional external purchasers who are willing to use this secondary raw material. bremenports continues its endeavours to raise the share of external use over the long term and actively participates in various national and international committees and also leads a nationwide working group which promotes knowledge sharing and networking between various producers of dredging spoils, i.e. the parties responsible for dredging spoils management at the port management companies, in the federal waterway administration bodies and in reservoir associations. The members also include engineering offices which handle the planning processes for potential recovery measures.



Potential uses for dredging spoils in dyke construction

Other relevant facts and figures about this topic
are provided in our **Key Performance Indicators** beginning on page 152.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Port development				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To identify and implement pioneering projects for the ports of Bremen	Implement Port Concept 2030		2030	in progress
	Continue to update Port Concept at 5-yearly intervals		ongoing	planned
To optimise conditions for marine shipping and adjust our infrastructure to match forecast developments	Adjusting infrastructure and water depths at the quay in Bremerhaven for the mega-vessels currently in operation		2023	planned
	Preparing an assessment of the potential of the southern part of Fischereihafen		2022	planned
	Monitoring the procedures for adjustment of the Outer Weser		open	in progress
To provide shore power connections for marine and inland shipping	Providing eight stationary shore power connections for ocean-going vessels		2024	in progress
	To provide shore power connections for all inland shipping berths where there is demand		ongoing	ongoing
To optimise the terminal railway infrastructure	Drawing up a master plan for the terminal railway at Fischereihafen		2021	completed
	Implementing the measures defined in the master plan for the terminal railway at Fischereihafen		ongoing	in progress
	Drawing up a master plan for Überseestadt		open	planned
	Electrification and refurbishment of Speckenbüttel railway station		open	planned
	Set up a public loading point at Track 57 Bremerhaven Kaiserhafen Franziusstrasse		2022	completed

Goal	Measures	SDG	Timeline	Status 2022
To improve management and steering of truck traffic	As an interim solution, a ferry service is currently being organised as a floating bridge to provide a crossing to and from the Columbus peninsula, near the former swing bridge. The long-term plan is to restore the previous road connection by building a new bridge.	 	open	in progress
	Creating new road connections (eastern link to port)		open	open
	Reduce congestion at busy intersections (Sen.-Borttscheller-Str. / Am Nordhafen)		open	open
	Creating new parking and prestorage areas for truck traffic (modular truck park)		open	open
To optimise conditions for inland shipping	"Tide to Use" project to optimise time slots and promote energy efficient lock management for inland shipping	 	2021	completed
	Upgrading the Middle Weser for the use of high-powered barges with a length of 110 m, a beam of 11.45 m and a draught of 2.50 m		2023	in progress
To upgrade the port locations to include energy port functions (generation, transport and storage of hydrogen and synthetic fuels)	Conduct a hydrogen potential study for the ports of Bremen (this has been commissioned from the Institute of Shipping and Logistics (ISL) in consultation with diverse stakeholders)	 	2022	in progress

ADAPTATION TO CLIMATE CHANGE





[STANDARDS: GRI 102-11, 103-1, 103-2, 103-3 AND 201-2]

THE GROUNDS FOR ACTION

The anticipated global, regional and local impact of climate change will confront society with great challenges. Accordingly, our primary interest has to be to take decisive action to mitigate climate change. The consequences of climate change are already clearly evident throughout the world today, especially in connection with extreme temperatures. Other effects, such as the increasingly swift rise in sea levels, will only become apparent gradually. Even if we take decisive action now to protect the climate, the consequences of climate change still remain inevitable. It is therefore important to examine the consequences of climate change at an early stage and integrate the findings of these analyses permanently in all port management procedures.

OUR OBJECTIVES

- To implement port development, port construction and compensatory mitigation measures which are adapted to climate change



OUR PROCEDURES

Analysis of the consequences of climate change

The risks posed by climate change which could potentially lead to significant changes in business activities, revenues and/or expenditure are summarised in the following table.

Risk		Potential impact	Potential management method
Physical	Rising sea levels	More frequent breakdown in operations due to storm surges	Documentation of downtimes Structural adjustments to avoid damage
		Increasingly high design water levels raise the risk of flood barrier failure	Structural adjustments to avoid damage Examine the consequences of failure
		Risk of flooding owing to heavy rainfall and lower capacity of outfall systems Increasing outlay for hinterland drainage	Precipitation management Draining the hinterland with the help of pump stations
	Rising temperatures	Increasing heat damage, e.g. to roads and railway tracks	Adjusting material mix, shading, cooling
		Increasing demand for air-conditioning in buildings and vehicles	Observe increased requirements Energy-efficient refurbishment of buildings
		Increasing stress for staff and potentially restricted scope for recreation in spare time	Adjust working conditions
	Increase in strong winds	More frequent breakdown of operations owing to strong winds	Documentation of downtimes Structural adjustments to avoid damage
	Increase in heavy rainfall	Flooding owing to overloaded drainage systems	Documentation of downtimes Structural adjustments to avoid damage
Regulatory	Adjustment of building regulations	Higher costs owing to stricter requirements	Cost allowance for adjustments
	Obligatory risk assessment	Increasing outlay / costs owing to obligatory regulations for assessing own risks	Preliminary / preventive own risk assessment, establish risk management

The opportunities resulting from climate change which could potentially lead to significant changes in business activities, revenues and/or expenditure are summarised in the following table.

Opportunity		Potential effect	Potential management method
Physical	Rising sea levels	Greater water depths have a positive effect on access for ships with large draughts	Documentation of rise in sea level Inclusion of this aspect is planned
	Rising temperatures	Low operating restrictions and/or damage owing to impact of ice or frost	Documentation of operating restrictions and damage resulting from ice Inclusion of this aspect is planned
		Lower heating requirements in winter	Documentation of heating requirements in winter
Other	Competitive advantage	Competitive advantage resulting from timely and comprehensive inclusion of adaptation to climate change	Drawing up adaptation concepts
	New services	Contributing expertise in third-party business Development of concept for adaptation to climate change for the ports	Communicate the expertise we have acquired to third parties

Adaptation measures already implemented

Most of our port facilities are located inside the public flood control line and are therefore protected against storm surges. When determining the height of a flood barrier system, a long-term (secular) rise in sea levels is already taken into account; to date this has been based on the observation of developments in the past. In 2007, the factor that had to be taken into account for the rise in sea levels was increased owing to the anticipated acceleration of rising sea levels as a result of manmade climate change. It can be assumed that this allowance for climate change will be raised once again in the next update of the Coastal Protection Master Plan for Lower Saxony / Bremen, which stipulates the height of flood protection systems in the Federal Land of Bremen. This means that flood protection in Bremen is already adapted in line with the anticipated impact of climate change. bremenports has been entrusted with adapting flood protection in Bremerhaven.



Flood protection at the Columbus peninsula

In summer 2021, bremenports and the Bremerhaven unit of the Federal Agency for Technical Relief (THW) signed a cooperation agreement to ensure better flood protection in Bremerhaven. This put their previous effective cooperation on an official footing. Cooperation is an important factor for ensuring protection of the dykes in case of critical and unforeseeable incidents. Amongst other things this will lead to advantages resulting from:

- direct contact and knowledge sharing between the responsible parties
- the availability of more manpower in unforeseeable situations. Especially if sandbag systems are to be used, it is essential to have access to a large number of trained persons
- ensuring that expertise is kept up-to-date by conducting regular exercises and training sessions with the relevant dyke facilities
- additional vehicles & special tools



The Federal Agency for Technical Relief and bremenports cooperate in flood protections

Development of a concept for adaptation to climate change at the ports of Bremen

A strategy for adaptation to climate change for the Federal Land of Bremen and the two municipalities Bremen and Bremerhaven was resolved at the beginning of 2018. This strategy provides a specific framework for taking action to prepare Bremen to cope with the consequences of climate change. Specific adaptation concepts are to be drawn up for the port locations in Bremen and Bremerhaven as part of the above strategy. The adaptation concepts for the port locations are currently being prepared. The individual stages for drawing up the concept for adaptation to climate change involve the following points:

- pooling the knowledge currently available on foreseeable changes resulting from climate change,
- reviewing possible follow-on effects, assessing the related risks and opportunities in respect of individual sectors and locations
- identifying and preparing measures and projects to improve resilience (in particular in respect of port development, port construction and in connection with compensatory mitigation measures), endeavours to achieve resilient transport chains at sea and on land.

Participation in research and development projects

bremenports participates in research projects on the subject of adaptation to climate change. The "Port Klima" project conducted by Bremen University of Applied Sciences developed education and training modules for integrating adaptation to climate change in the planning, construction and operation of seaports in Germany. The project was concluded in 2021. The "BREsilient" project initiated by the Senator for Climate Protection, Environment, Mobility, Urban Development and Housing examines the indirect consequences of climate change and the need for the maritime economy and logistics sectors to adapt in response to these potential changes, such as the breakdown of supply chains and sales markets, as a basis for drawing up proposals for more resilient supply chains. A second project phase began in June 2021 as the implementation phase.

Interview with Lena Lankenau, Development Projects department, on the topic „Adaptation to climate change"



Lena Lankenau,
Development Projects department

Not only climate protection but also adaptation to climate change have increasingly been in the spotlight in recent years. These two terms are occasionally confused. What does adaptation to climate change mean for bremenports?

L. Lankenau: For bremenports, adaptation to climate change means preparing the company and the port locations for the consequences of climate change as best as we can. We can already notice the effects of climate change today, for instance the increase in average air temperature and the resulting heatwaves and droughts. We know that even if we intensify our efforts to protect the climate, we will still have to face unavoidable consequences. However, if we take decisive action to protect the climate, we can control the extent of climate change and therefore the scope of the necessary adaptation. Achieving climate-neutrality, for example, is an important step to prevent aggravating climate change even further.

The Port Development Concept 2014 does not yet include the topic of adaptation to climate change. But it does mention preparing a concept for adaptation to climate change for the ports of Bremen. When was this concept developed and what are its core contents?

L. Lankenau: The concept for adaptation to climate change is currently being developed. The initiative for the concept is based on the strategy for adapting to climate change for Bremen and Bremerhaven. bremenports is responsible for developing a concept for adaptation to climate change for the port facilities in Bremen and Bremerhaven. Because of its remit, bremenports places a particularly strong focus on the municipal port facilities and infrastructure. The strategy itself is enshrined in Bremen's Climate Protection and Energy Act (BremKEG).

The core item of this concept will be to ensure the functionality of the port facilities. This means addressing these issues at an early stage, knowing how we ourselves will be affected and being aware of the consequences of climate change, analysing the relevant opportunities and risks, and developing measures to make us more resilient to the consequences of climate change.

I am responsible for the concept contents. As many groups of players from the port business are involved in maintaining the functionality of the port facilities and ensuring smooth processes at the ports, it is necessary to strengthen their own sense of responsibility.

Involving and informing these actors about this topic also plays a key role. It is my job to raise awareness of this subject so that the business enterprises and public authorities turn their attention to or focus more strongly on the topic of adaptation to climate change.

A stakeholder dialogue was conducted last year in which both the stakeholders and an in-house group of experts at bremenports rated the topic of adaptation to climate change as highly relevant. What conclusions should bremenports draw from this?

L. Lankenau: I was very pleased to see that our stakeholders rated the topic of adaptation to climate change so highly. This means that it appears important to many groups and belongs on their agenda. For bremenports this means that our current approach of drawing up a concept for adaptation to climate change and raising awareness of this subject with the different interest groups has hit a nerve. This is true both at bremenports and outside the company. This means that in future, adaptation to climate change will be a more important consideration in the planning and operation of the ports.

What special aspects apply to the ports of Bremen to ensure better protection from climate change and its impact? What is the greatest risk in our region?

L. Lankenau: The rise in sea levels and consequently flood protection are a particular challenge for our region. There has to be effective drainage of precipitation from the hinterland as there is otherwise a risk of backed-up water as a result of the higher sea levels.

Storms are also a major issue, but we first have to wait and see how things develop in that respect. There are still some uncertainties as to whether and to what extent the intensity and frequency of storms will increase.

A study of the climate in the Weser region predicts that if greenhouses gas emissions continue to rise significantly, our climate could become similar to the climate on the Atlantic coast in the south-west of France by the end of the 21st century. Owing to the comparatively fast climatic change, this could prove to be a problem that should not be underestimated for the environment, for humans and animals.

The German Port Technology Association (HTG) has set up a working group in order to address these risks and share information. Members of the group include the management companies of sea and inland ports, national research institutes (e.g. the German Meteorological Office (DWD), the Federal Waterways Engineering and Research Institute (BAW), the Federal Maritime and Hydrographic Agency (BSH)) and terminal operators. The objective of the working group is to draw up recommendations for adaptation to climate change.

We like to take a look at the future with our interviewees: What will the ideal port look like in future? What changes will a port have to make to adapt to climate change?

L. Lankenau: I would like to be able to say in the not too distant future: We will succeed in significantly limiting the impact of climate change. Adaptation to climate change will be included as a matter of course in planning processes and people will be aware of how they are affected. There is a joint concept for dealing with this issue as effectively as possible and that concept is actually put into practice.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Adaptation to climate change				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To implement port development, port construction and compensatory mitigation measures adapted in response to climate change	Measures to prepare the ports of Bremen for climate change			
	Drawing up concepts for adapting to climate change for the port facilities in Bremen and Bremerhaven		2022	in progress
	Preparing an assessment of the financial risks of climate change		open	planned
	Adapting flood protection facilities in response to rising sea levels		permanent	in progress
	Structural modification and design of buildings in view of higher air temperatures and extreme weather situations		permanent	in preparation
	Measures which contribute the interests of the port to social goals			
	"Port Klima" project for the development of education and training modules on the topic of adaptation to climate change at the ports		2021	completed

DIGITISATION & SMART PORT



[STANDARDS: GRI 103-1, 103-2, 103-3 AND QM PORT]

THE GROUNDS FOR ACTION

The maritime economy is changing. Challenges such as rising trade volumes and ports having to close because of the Covid crisis have caused global supply bottlenecks and forced ports to adapt in response to these new demands. The ongoing development of ports into SMART Ports that use state-of-the-art technology to improve efficiency has increased port capacities. Shorter and shorter throughput times, smooth processes and transparent communications are meanwhile seen as indispensable and taken for granted by everyone involved. The ports of Bremen plan to tackle this digital transformation into SMART Ports promptly to ensure that they remain competitive.

OUR OBJECTIVES

- To maintain IT availability > 98 %
- To foster a culture of innovation under the heading "Smart Port" at the ports of Bremen
- To digitise marine shipping
- To digitise inland shipping
- To digitise the terminal railway

OUR PROCEDURES

Ports are complex and elaborate systems that involve a large number of actors from the private and public sectors, international conglomerates, small and medium-sized business enterprises as well as diverse interest groups and associations. The different perspectives, experience and expertise of these actors are vital for the development of a port-specific SMART Port concept. Only if all the parties within the port system can reach a common understanding of the objectives and contents of the SMART Port concept and trust one another entirely will it be possible to agree on an appropriate target and the steps needed to achieve that target. Such a consensus boosts the competitiveness of the ports and improves their future viability.

bremenports is active in various areas to achieve the targets it has set itself and make progress in digitising the ports.



To maintain IT availability

Our internal processes are designed to ensure that our IT hotline is staffed and operational round the clock, 365 days a year. Our target is to raise data security and remain technically operational by maintaining a success rate of more than 98.5 %. In 2021 our rate was 99.82 %.

Smart Port Development

In order to incorporate the viewpoints of all port actors in the development and rollout of a "Smart Port" and offer scope for knowledge sharing, discussion and new ideas, a preliminary SWOT analysis was drawn up which stated various options for action. The analysis was commissioned in January 2022 and the project will be conducted by bremenports in cooperation with management consultants KPMG Deutschland.

The SWOT analysis asked a total of 133 stakeholders from different sectors of the ports of Bremen to say how they rated the competitiveness, innovation capacity as well as the strengths, weaknesses, opportunities and risks of the ports of Bremen. The online surveys were backed up with telephone interviews, also with actors from other ports, to enable a more accurate ranking of the ports of Bremen in an international context and permit an assessment of the innovation capacity of the ports of Bremen.

The resulting findings and core statements of the stakeholders, together with a comparison with the competitors in terms of SMART Port, then formed the basis for drawing up the overall target and the roadmap with the relevant recommended actions. These results are ultimately to be included in the SMART Port Concept 2022 and provide a basis for further decisions.

The concept envisages cooperation with other port actors in the interests of promoting digital networking and jointly developing new projects. One important element is the systematic search for partners such as universities, start-ups and technology companies to enable the challenges of SMART Port to be addressed more successfully. Moreover, the ports of Bremen are planning sustainability measures aimed specifically at achieving SMART Port targets. These could involve, for instance, raising the share of rail traffic, investigating the use of new technologies to achieve sustainable goals or the development of ecological KPIs.

Digitising marine shipping

Digital Outer Weser

Shipping and ports are now more closely linked than ever before and have to be considered as a whole in view of the crucial role they play in international supply chains. In an increasingly complex and dynamic market environment, issues such as steering and managing shipping traffic are increasingly important. In the individual estuary areas, it is essential to synchronise all aspects of shipping to match the highly diverse processes of both public and private actors at the ports.

The general growth in the size of container vessels increasingly leads to draught restrictions for ships calling at ports on the Outer Weser. This, in turn, leads to an increasing need for optimum coordination of the vessels of different customers in order to comply with the short time slots. For some time now, active ship coordination on the Outer Weser has also been endorsed by various customers and shipping companies under the slogan "Digital Outer Weser". Coordinating the different players is intended to improve traffic flows and optimise resource planning for everyone involved in port and ship operations, to reduce fuel consumption as well as costs. At the same time, it is intended to safeguard the competitiveness of Bremerhaven and of the ports on the Weser as a whole.

To date, neither nautical terminal coordination nor similar smart solutions are in operation at Bremerhaven and the Outer Weser estuary; in view of the increasingly fierce competition between the European ports, this is steadily proving to be a competitive disadvantage. As part of a preliminary project, traffic flow optimisation on the Outer Weser is to be analysed and a preferred operating concept drawn up. bremenports is working on this preliminary project together with EUROGATE and Hamburg Vessel Coordination Center (HVCC).

Digitising inland shipping

IW-NET RESEARCH PROJECT

bremenports participates in the IW-NET project ("Innovation-driven Collaborative European Inland Waterways Transport Network") together with 25 other business enterprises, research institutes and public organisations from the Netherlands, Belgium, France, Spain, Italy, Austria, Greece, Romania and Germany. The joint project investigates the question of how digital services, i.e. web applications or mobile apps, can improve the sustainability and competitiveness of inland shipping and promote Bremen as a port location.

A Europe-wide survey conducted by ISL and bremenports has revealed that Bremen's key strengths include in particular the nautical conditions, short waiting periods, berth availability, efficient accounting processes, the availability of information, as well as communication.

The survey also identified the following optimisation potential: the option of online port notification, uncomplicated access to shore power facilities, a customer portal which provides an overview of the vessel's own port stays, opportunity to book a berth and lock passages, information about bridge clearance heights and other services available at the port.

Further information about the project: https://www.isl.org/en/projects/iw-net

Digitising the terminal railway

PRINOS

In view of the constant increase in rail traffic at the ports, the use of new and efficient IT applications for managing terminal railway operations is urgently required. The PRINOS project refers to the new Port Railway Information System for Bremen's terminal railway and is monitored by a project group that consists of representatives from bremenports, the Senate Department for Science and Ports, DB Netz AG and dbh Logistics IT AG (software developers). The project was launched in September 2018 and system rollout is scheduled for the end of 2022..

PRINOS links the following modules: operations planning, dispatching, settlement of accounts, statistics and customer portal. In future it will also be possible to integrate additional interfaces, such as the interface to TAF-TSI (Telematics Applications for Freight Services). The shared data platform will improve data transparency as well as data security. The automated system leads to process optimisation in operational flows as well as better process quality and stability.

The customer portal allows railway operators, shunting service providers as well as terminal operators to participate in the operations management processes of Bremen's terminal railway. Customers can use the portal to transmit data to the terminal railway system and also view the current status of their own processes. This function leads to better customer satisfaction, higher productivity in respect of the entire terminal railway infrastructure and also gives the ports of Bremen a competitive advantage.

The Prinos project group gives customers and users the opportunity to participate at an early stage, which is a decisive factor for the project's success. This project is a milestone for all actors who are involved in the rail mode and promotes networking – including technological networking – between the players.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Digitisation & smart port				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To maintain IT availability of > 98 %	Creating conditions required to enable 24/7 IT availability and thus ensure 100% port availability		ongoing	ongoing
To foster a culture of innovation under the heading "Smart Port" at the ports of Bremen	Developing options for action on the topic of "Smart Port" with the help of a SWOT analysis (performed by KPMG management consultants in consultation with diverse stakeholders)		2022	in progress
	To establish a Smart Port Community together with stakeholders which initiates the ideas and projects identified in the SWOT analysis		2022	planned
To digitise marine shipping	Our "Digital Outer Weser" project is aimed at digitising traffic flows on the Outer Weser in order to optimise and synchronise efficiency improvements, inbound traffic management, transport modes and goods flows	 	2022	in progress
	Rollout of automated accounting for pilot services which will digitise all voucher-based processes for settlement of accounts for vehicles and ancillary services in order to reduce processing times and increase data security		2022	in progress

Goal	Measures	SDG	Timeline	Status 2022
To digitise inland shipping	Participation in "binntelligent" project to optimise inland shipping processes by developing a new app (project under the overall responsibility of the Institute of Shipping and Logistics (ISL), in cooperation with bremenports)	 	2021	completed, application submitted for follow-up project
	Participation in "IW-NET" project for the design and implementation of digitisation processes for inland shipping, including development of an inland shipping app and web application		2023	in progress
To digitise the terminal railway	The "Prinos" project is intended to optimise and automate traffic flows in the rail sector	 	2022	in progress

INTERNATIONAL THIRD-PARTY BUSINESS







[STANDARDS: GRI 103-1, 103-2, 103-3]

THE GROUNDS FOR ACTION

Over many years, the engineers, port planning specialists and environmental experts at bremenports have acquired comprehensive expertise in the planning and construction of large-scale projects such as Container Terminal 4 (CT4) or Kaiserschleuse lock in Bremerhaven. We believe that putting that expert knowledge to use on behalf of others and systematically marketing it on a global scale is the logical and important next step. bremenports therefore provides training and consulting services to support public and private clients in Germany and other countries with the planning and operation of their marine infrastructure.

Our experts analyse port structures, draw up development plans and advise ports on questions of logistics, environmental issues and port management. Working in cooperation with various partners we organise further education and training, from which port professionals from China, Indonesia, Timor Leste and Vietnam, for example, have already profited.

OUR OBJECTIVES

- Good networking with partners throughout the world
- International marketing and ongoing development of our own expertise
- Supporting the international cooperation activities of the Free Hanseatic City of Bremen and the Federal Republic of Germany

OUR PROCEDURES

Our International department is responsible for marketing our expertise outside Germany. The focus is on the development, acquisition and management of projects involving port development and planning, cargo handling and scheduling as well as port organisation. We work on projects dealing with specific issues in the form of consultancy commissions, contribute to feasibility studies and provide international training for specialists and managers from the maritime industry. In summer 2017 we joined forces with Wismar University of Applied Sciences to offer a course of studies in MBA International Logistics & Trade. We have excellent connections to international development banks, global engineering offices and well-known management consultants and universities in the maritime business. We are a respected consultant for matters relating to all aspects of the port.

The following are some examples of projects we have supported during the period under review:

2021: "China-Asean Port City Cooperation Network International online training"

In their role of link to regional and global markets, ports and port connectivity play an important role for the countries in the Association of Southeast Asian Nations (ASEAN). Despite the pandemic, ASEAN had evolved into the major trade partner for China by December 2020.

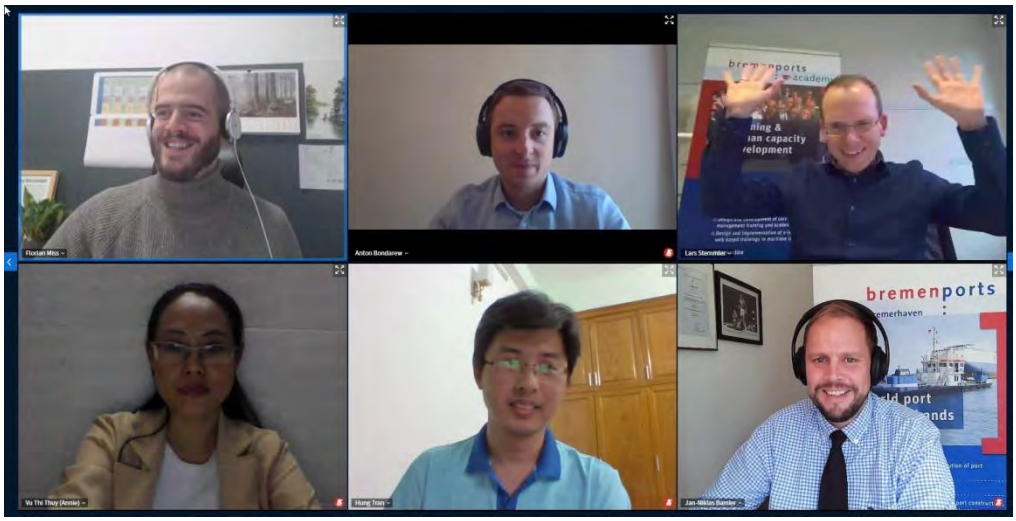
To assist the efforts of Cambodia, Laos and Vietnam to strengthen their port management capacities, the German Organisation for International Cooperation (GIZ) launched the "2021 China-ASEAN Port City Cooperation Network International Training and Exchange Programme" together with a regional partner in the Guangxi region. The target group includes representatives of regional port authorities and experts from the ASEAN partner countries of the SRECA project.

The project follows three goals, viz.:

- improving access to trade-related services for small and medium-sized enterprises (SMEs)
- strengthening the structures for cross-border (sub-)regional cooperation between the key countries and China
- promoting regional and/or triangular measures for sharing knowledge and experience between the key countries and/or with China in the field of regional economic cooperation.

Promoting trade calls for a strong focus on maritime logistics and ports in particular. The restrictions in connection with Covid 19 and its effects on logistics chains highlighted the important role played by the ports. The main challenge for ports is digitisation, and this applies even more in view of the pandemic. The training section provided by bremenports provided input on the above issues from both the German and Chinese viewpoints and is classified as third-party business. bremenports provided the German viewpoints on the following topics:

- intelligent port construction and digital port management
- port management and logistics in times of crisis (e.g. Covid 19 pandemic)



Group photo of the online participants

2017 – 2021: The #IWTS 2.0 project

This project to promote inland shipping as a reliable and climate-friendly alternative transport mode for all kinds of freight is supported by Interreg and addresses the following issues:

- setup of the iwts20.eu project website with the aim of placing this transport mode in the minds of future decision-makers in the logistics business: modal shift is mind shift. (in cooperation with Jade University of Applied Sciences)
- designing an Innovation Challenge for students (in cooperation with Bremen University)
- designing and executing a training programme for students (in cooperation with Osnabrück University of Applied Sciences)
- organising a Transport School Lab based on case studies (in cooperation with Upper Austria University of Applied Sciences)
- drawing up case studies
- Europe-wide SWOT analysis as a basis for delivering policy recommendations



Inland shipping – an important element at the ports of Bremen

Further information about the project: https://project-iwts20.eu/

Since 2020: Strategic consulting and HR development for the Transnib Railway

This project primarily assesses the scope for HR development at TransNamib as well as the hinterland connections of the port of Walvis Bay to the national rail network. This third-party commission was accepted on behalf of GIZ and involved training Namport staff in the fields of port operations, health & safety as well as the environment.



Kranzberg railway station in Namibia

Since 2020: Digitisation oft he ports of Bremen in the IW-NET research project

bremenports participates in the IW-NET project ("Innovation-driven Collaborative European Inland Waterways Transport Network") together with 25 other business enterprises, research institutes and public organisations from the Netherlands, Belgium, France, Spain, Italy, Austria, Greece, Romania and Germany. The joint project investigates the question of how digital services, i.e. web applications or mobile apps, can improve the sustainability and competitiveness of inland shipping and promote Bremen as a port location.

Further information about the project is provided in the chapter on Digitisation & smart port.

BIODIVERSITY



[STANDARDS: GRI 103-1, 103-2, 103-3, 304-1, 304-2, 304-3, 304-4 AS WELL AS PERS NO. 11]

THE GROUNDS FOR ACTION

The expansion of port infrastructure entails a number of adverse effects on the marine and coastal habitats at the Weser estuary and the neighbouring Wadden Sea. The objective is therefore to minimise land consumption for infrastructure projects. As a fundamental principle, we always examine potential alternatives in connection with all construction projects and endeavour to reclassify existing sites rather than develop new sites.

If it is impossible to avoid land sealing and construction on natural sites, numerous legal requirements have to be observed before infrastructure projects can be approved and executed. Because the ports of Bremen are located at the mouth of the River Weser, directly adjacent to Lower Saxony Wadden Sea National Park, comparatively strict requirements have to be fulfilled when planning compensatory mitigation measures.

OUR OBJECTIVES

- To minimise land consumption and preserve natural habitats wherever possible
- To keep natural habitat sites functioning
- To ensure availability of compensatory mitigation sites
- To protect, promote and communicate biodiversity

OUR PROCEDURES

Numerous port sites are immediately adjacent to nature conservation areas. Our Key performance indicators show which areas these are, which types of habitat are affected and which protected species live there. A list of the present nature reserves and a map are available on the website of the Senator for Climate Protection, Environment, Mobility, Urban Development and Housing.

By 2021, bremenports had created approx. 1400 hectares of compensatory mitigation sites in connection with various construction projects. Approx. 700 hectares of these sites are located on Luneplate / Tegeler Plate alone. Luneplate is meanwhile an official EU bird habitat that has been designated as the largest nature conservation area in the Federal Land of Bremen. In recent years it has evolved into a valuable resting place for migrant birds, such as barnacle geese, wigeon, teal, golden plover, avocet and lapwing, some of which occur in internationally significant numbers, making this an Important Bird Area, the highest possible rating. The observation points completed in 2015 (in particular the hide and the observation tower) provide fascinating glimpses of this habitat and are fixed items on the agenda of our Excursions.



Barnacle geese at Luneplate

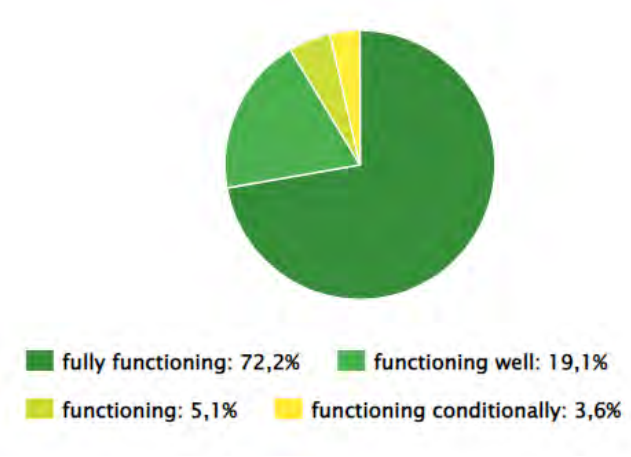
Maps showing the location and reason for our individual compensatory mitigation sites you will finde on page 185.

The **Key performance indicators** (beginning on page 152) and the **GRI content index** (beginning on page 119) contain further information about biodiversity.

Keeping natural habitat sites functioning

597 hectares of the compensatory mitigation sites created by bremenports are still undergoing systematic development. The remaining 672 hectares have already been successfully developed and passed into the maintenance phase.

With only a few exceptions, the habitat sites developed by bremenports staff are maintained by our own staff as "green port infrastructure". The nature conservation authorities greatly appreciate the fact that all aspects of these projects – from the planning stage and development right through to maintenance – are handled as one overall package. bremenports is consequently planning to implement all compensatory mitigation measures itself in future. The status of the total 54 measures is assessed annually by specialists from bremenports on the basis of a five-level scale (ranging from fully functioning to non-functioning). In 2021, 96 per cent were rated as "functioning" or higher.



Size of comensatory mitigation sites according to functionality

Ensuring availability of compensatory mitigation sites

We are currently in the process of developing further compensatory mitigation sites with the help of natural habitat site pools even before construction projects actually impact on nature. Because this is done in advance of the actual construction work, nature actually benefits for the duration of that period. Thanks to this forward-looking planning, future port construction projects can be implemented relatively quickly.

Project example: ecological restoration of the River Billerbeck

Ideal habitat conditions for flora and fauna in a meandering stream instead of a largely channelled watercourse with low species diversity: this was the target of a compensatory mitigation project that a team from bremenports carried out along the middle and upper reaches of the River Billerbeck last year.

The Billerbeck is a small tributary on the left bank of the River Lune. It runs for a total length of around 11 km, has a catchment area of 41.33 km² and is situated in the municipalities of Axstedt, Holste (Oldendorf village) and Beverstedt (Bokel village). As a special area of conservation and nature reserve, the area is subject to special protection under nature conservation legislation. The Billerbeck was rerouted along a length of 2850 metres and gravel installed along some sections, so that it now meanders again. 30 ground sills and deadwood were incorporated to change the course of the river. Seven stagnant ponds and 25 shallow pools were created in the surrounding area.

Surplus topsoil from the area around the river was used to improve the soil structure on arable land. Soils containing peat and loam were deposited along the borders of a nearby bog to encourage the development of peatland. This project has converted what was once a monotonous, straight watercourse into a near-natural stream with good structural diversity.



Billerbeck revitalisation inauguration ceremony in July 2021

The floodplains bordering the River Billerbeck will evolve into premium grassland and woodland habitats. Low-nutrient succession areas were created next to the watercourse and will allow the gradual development of a natural site.

The work carried out on the River Billerbeck itself will optimise its suitability as a habitat for plants and animals. Fish species diversity and stocks are also expected to improve, for instance with a significant increase in stocks of lampreys, a protected species of fish. The project has also created suitable conditions for potential colonisation by sea trout. The planned improvement in fish stocks is also likely to attract an increasing number of kingfishers, and the Billerbeck will also provide an excellent habitat for otters. This project will also improve the living conditions for pond bats, a species protected by the Habitats Directive, as well as the bird species snipe and green sandpiper.

Protecting, promoting and communicating biodiversity

Nature experience activities

No guided tours of Luneplate could be offered to the general public in 2021 owing to Coronavirus restrictions. However, we believe it is important to continue this opportunity to visit and experience our compensatory mitigation sites and therefore plan to re-introduce these tours again as soon as possible. Tour dates will then be published on our website.

Fortunately, however, it was possible to offer our Cyclists Day on Luneplate. This was the third time that bremenports gave employees and the general public the opportunity to learn more about Luneplate on a Sunday. At various points along the route, the participants of all ages could engage in different activities and obtain comprehensive information about the nature reserve. At one of these points, they encountered water buffalo, Galloway cows and calves. These animals create ideal conditions for diverse bird species because they keep the grass short.

In addition to snacks and drinks for everyone, the programme included many items that were specifically geared to children and young adults. The observation tower on the eastern border of Luneplate afforded a spectacular view of this natural landscape that we have created. On the areas in front of the tower, the visitors learned interesting facts about fish, amphibian and reptile life in the ditches. From the hide at the tidal polder, visitors could view water and wading birds such as lapwing, redshank and black-tailed godwit through the telescope without being seen themselves.



Cyclists Day on Luneplate in September 2021

Harvesting seets with the meadowseed collector

Regional seeds are available only in limited quantities and usually involve high costs. A (relatively) new invention can now help the situation: a device by the name of "Wiesefix" has a rotating brush which separates and collects the ripe seed from the plants. This means that not only individual species, but entire plant communities which are moreover ideally adapted to the local conditions, can be transferred from meadows or border strips with a rich variety of species and flowers to sites with lower biodiversity.



The Wiesefix at work

bremenports used this device on Luneplate in summer 2021 to upgrade a grassland site with seeds harvested locally from a wide variety of species. Some of the harvested seeds were supplied to Bremen in order to optimise low-species grassland sites as part of nature conservation measures.

Grassland areas with a very high variety of species, such as those that have evolved on Luneplate after 25 years as a compensatory mitigation site, have meanwhile become very rare. There are plans to use this seed collector on Luneplate again in 2022, also for nature conservation areas in the city of Bremen. The Wiesefix can collect up to 40 kg of seeds per hectare. There is no need to mow the site in order to collect the seeds, so that there are no disadvantages in terms of hay harvest for the site owner.

The distribution and conservation of meadows with high species and flower diversity not only helps to protect rare and endangered plant species, but also helps to protect and increase the insect population. The process of collecting the seeds does not endanger insects, because although they are captured and "harvested" by the brush, they can escape from the collecting bucket at any time.

Other relevant facts and figures about this topic

are provided in our **Key Performance Indicators** beginning on page 152.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Biodiversity

Goal	Measures	SDG	Timeline	Status 2022
To minimise land consumption and preserve natural habitats wherever possible	To investigate alternatives in connection with construction projects and give priority to reclassification of existing sites rather than using new sites		ongoing	ongoing
To keep natural habitat sites functioning	Ensuring the functionality of these sites	 	ongoing	ongoing
To ensure availability of compensatory mitigation sites	Development and maintenance of the Drepte lowland compensation pool (30 hectares of grassland, reedbeds, watercourses). Keeping undeveloped sites available for forthcoming construction projects.	 	ongoing	under development
	Ongoing preparation and development of Untere Lune compensation pool (25 hectares of riparian zones, upgrading this watercourse which has a total of 8 sections). Keeping undeveloped sites available for forthcoming construction projects.		ongoing	partly under development
	Preparation and development of the compensation pool at the River Billerbeck (water development measures of watercourse and floodplain on a 53-hectare site). Keeping undeveloped sites available for forthcoming construction projects.		ongoing	under development
	Participation in a compensatory mitigation site pool in the Geeste lowlands, Cuxhaven rural district. This envisages the provision of compensatory mitigation measures on a site of 100 hectares. An agreement was signed with the nature conservation foundation of Cuxhaven rural district in 2021. Keeping undeveloped sites available for forthcoming projects.		ongoing	ongoing

Goal	Measures	SDG	Timeline	Status 2022
To ensure availability of compensatory mitigation sites	Development of the compensation pool at Upper Drepte/ Brockmannsmühlen (0.05 hectare site: construction of a new bypass = ecological passage, large-scale upgrading effects in the hydrographic network). Keeping undeveloped sites available for forthcoming construction projects.		ongoing	ongoing
To preserve, promote and communicate biodiversity	Interim use of unused sites as flower meadows		ongoing	ongoing
	Using the herbaceous and grass seed harvested on Luneplate on compensatory mitigation sites and green sites in the port area		2022	ongoing
	Offer activities to provide a nature experience on our compensatory mitigation sites		ongoing	ongoing



CLIMATE PROTECTION

Our goal is to make the port climate-neutral. To do so, we aim to achieve GHG-neutral infrastructure by the year 2023. This involves raising energy efficiency and increasing the share of renewable energy in respect of our heat generation plant, company fleet and service vessels. Together with the relevant actors, we aim to achieve GHG neutrality at the port location by the year 2035.

ENERGY & CLIMATE PROTECTION IN PORT INFRASTRUCTURE



[STANDARDS: GRI 103-1, 103-2, 103-3, 302-1, 302-4, 305-1, 305-2, 305-3, 305-5, PERS No. 5, AS WELL AS PSI 18]

THE GROUNDS FOR ACTION

In the Paris Agreement, (COP21) the international community agreed on the target of restricting global warming to 1.5 degrees Celsius compared with the pre-industrial level and thus reducing the impacts of climate change.

Coastal regions and consequently ports are particularly vulnerable as they are the first places that will be affected by the forecast rise in sea levels. The future viability of the ports of Bremen therefore depends to a great extent firstly on preparating for changes which can no longer be averted (cf. chapter on Adaptation to climate change) and secondly on their endeavours to help to limit climate change as much as possible.

Fast action - i.e. reducing GHG emissions as soon as possible - is therefore absolutely essential.

OUR OBJECTIVES

- To reduce total energy consumption by a total of 15% by 2025, relative to the year 2015
- To make the entire port infrastructure in Bremen/ Bremerhaven greenhouse gas-neutral by 2023

OUR PROCEDURES

ENERGY MANAGEMENT SYSTEM IN ACCORDANCE WITH DIN EN ISO 50001:2018

We are endeavouring to pave the way for a GHG-neutral port on both strategic and operational levels.

With that aim in mind, we introduced an energy management system which has already been successfully certified to DIN EN ISO 50001 since 2016 and which was recertified once again in 2019 in accordance with the updated standard. Our energy team draws up ongoing measures to identify potential for raising energy efficiency and continuing to reduce our total energy consumption.

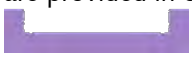
In 2020, we already achieved the goal we set in 2016 of reducing energy consumption by ten per cent.

In addition to improving energy efficiency, we also attach great importance to opting for renewable energy.



Other relevant facts and figures about this topic

are provided in our **Key performance indicators** beginning on page 152.



Interview with Carsten Kühlke, deputy energy management officer

Over the last three years bremenports rolled out new software to record energy consumption and energy costs for the port infrastructure. What was the reason for purchasing this software and what preparations did the energy team have to make?

C. Kühlke: Before we introduced this software our team used a spreadsheet programme for both data management and data evaluation. They had to enter the energy consumption figures from the energy suppliers' invoices manually, and also enter the meter data and energy costs manually in a database. The problem with this method was that it could not guarantee sufficient data consistency over the long term, nor was it possible to evaluate the individual and total costs properly.

The aim of introducing special energy management software was to enable us to present the complete data situation as from the year 2015 (reference year for our calculations pursuant to DIN EN ISO 50001). It was no longer possible to do so in spreadsheets using data from different sources and of inconsistent quality. As the data situation and structure of our plant and equipment are highly complex, modifying the software to suit the requirements of the ports of Bremen was very time-consuming.

The source data was provided as a mixture of Excel and Access and involved not only countless different electricity tariffs spread across 22 major consumers and more than two hundred small consumers, but also data for the other energy media that we use, such as natural gas, propane, diesel, petrol and marine diesel. It is therefore vital to ensure correct input and management of the different tariffs.

With the help of the IT and electrical engineering departments we managed to provide the software manufacturer with detailed information about the different facilities and thus minimise errors in data transfer and allocation. The preparations also involved setting up a coherent structure in which individual consumers could be allocated to the relevant budget managers.

What changes had to be made at the individual locations?

C. Kühlke: One of the advantages of the new software was that we did not have to retrofit anything at our business locations. The IT department installed a new SQL server for us with the new software. The quarter-hourly load profiles (= individual user profiles of the consumption points) of our main consumers are now sent to us at the end of each month by the energy suppliers as MSCONS (Metered Services Consumption Report Message) and automatically integrated into Interwatt.

What conclusions can you draw now that the software has been in operation for 3 years?

C. Kühlke: We are highly satisfied with the diverse evaluation options and the good reliability of the software. In the meantime, all emission factors of the media we use are recorded in the system, which helps to enable reliable reporting pursuant to DIN EN ISO 50001 and GRI.



Carsten Kühlke, Deputy Energy Management Officer

After changeover to the new system, it immediately became apparent who is responsible for the budget at each consumption point and what costs this generates. And all of this as a comparison with reference year 2015, incl. a graph of consumption trends. In the event of individual consumption changes in the load profiles, we can analyse this without the need to install further submeters, because consumption is shown on the basis of the quarter-hourly meter. This enables us to identify and present energy savings more accurately and within a specific period of time. In respect of energy efficiency measures, we frequently supplement this data with mobile measurements on site over a defined period of time.

We like to hazard a look at the future with our interviewees:
What will the ideal port look like in future?

C. Kühlke: I think it will be very similar to the present port, but much quieter. The extensive changeover to electric drive systems will significantly reduce the noise levels of working machinery and vehicles everywhere. I personally welcome this trend with open arms.



The top-up channel in Bremerhaven – energy-saving addition of water

Reducing energy consumption

Total energy consumption as a superordinate variable is subject to certain fluctuations, as it is strongly dependent on operational requirements and/or the utilisation of our plant and equipment. Moreover, there can also be changes in the reference base due to the addition or retirement of assets. It is therefore not possible to measure energy efficiency itself solely on the basis of total energy consumption as a global KPI; this requires detailed indicators which rate energy consumption in relation to the delivered performance. Such indicators are calculated and monitored e.g. for office areas, the terminal railway or topping up water in the harbour basins, as part of our energy management.

Examples of energy efficiency and climate protection projects in 2020 and 2021:

- Changeover to LED for the lighting of the vehicle sheds at the building yard in Brückenstrasse: the new LED lighting saves 2000 kWh/a, ROI (Return on Investment) is 2.7 years.
- Changing the outdoor lighting at Kaiserschleuse lock to LED lamps: the new adjustable luminaires have reduced the installed wattage in normal operations by approx. 25 %. Assuming a minimum operating period of 4000 h/a, which will also be reduced by a minimum of 25 % thanks to the new control system, this corresponds to savings of at least 17,500 kWh per annum. If the savings in maintenance costs are also taken into account, the ROI for this measure is 3.7 years.
- Intelligent, efficient control of the water level at Industriehafen Bremen: the Tide2Use project will not only optimise water addition from the port pump station Kap Horn, but also through the lock gates at Industriehafen. Thanks to the constructive cooperation between the project partners, average energy consumption by the port pump station could be reduced by approx.20 %. This has amounted to savings of almost 170.000 kWh in 2020 and 2021.
- Additional bicycle parking: we have installed a second secure area for bicycles at Sail City for our staff, including a charger for e-bikes. The present bicycle shed at our building yard in Brückenstrasse was upgraded by extending the existing roof, improving the lighting, installing better bicycle stands and also providing charging facilities for Pedelecs and e-bikes.



Greenhouse gas emissions in scope 1, 2 and 3

The international regulations of the Greenhouse Gas Protocols (GHG Protocols) define three scopes for calculating the emissions of greenhouse gases (GHG) in the course of the company's supply:

Scope 1 covers all direct GHG emissions at the company. At the port infrastructure of the ports of Bremen these occur from the combustion of natural gas, heating oil, petrol, diesel, marine diesel, GTL and propane.

Scope 2 covers indirect energy related GHG emissions. At the port infrastructure these are emissions from the use of electricity from non-renewable sources.

Scope 3 covers all other (i.e. not covered by Scope 2) indirect harmful emissions (from upstream and downstream activities). For the infrastructure of the ports of Bremen, we currently record emissions from business travel for this scope.

The greenhouse gas emissions are stated as CO_2 equivalents. Non-CO_2 greenhouse gases are converted into CO_{2e}.

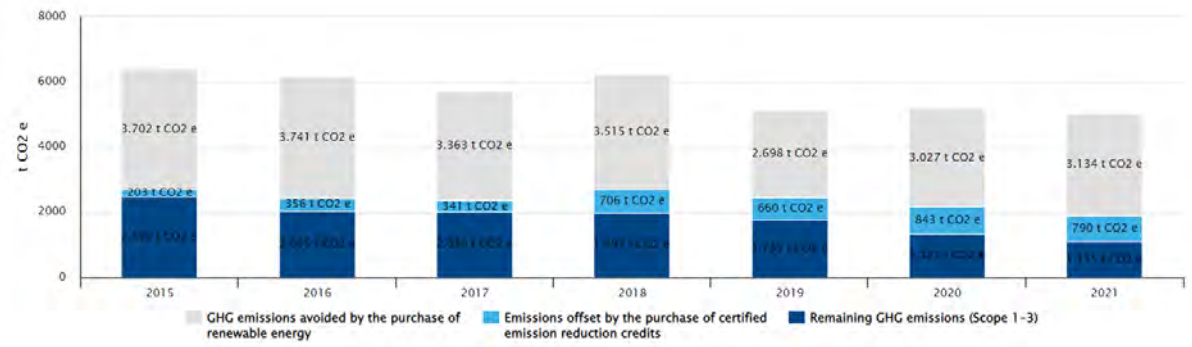
Certified emission reduction credits

Certified emission reduction credits are purchased to offset the unavoidable emissions of the port management company bremenports GmbH & Co. KG resulting from heat generation, company fleet and business travel, so that the port management company has been GHG-neutral (in Scope 1 and 2, also for business travel in Scope 3) in all reported areas since 2013.

Emissions from fleet operations have also been offset for the Special Asset Ports since 2017; since 2018, we have also offset emissions from electricity consumers for which we could not invite tenders for directly renewable energy.

All emissions (heat generation / plant operation) by the Special Asset Fischereihafen (Waterside) have been offset since 2020.

Emissions reduction credits were generated in accordance with the Verified Carbon Standard (VCS).



Reduction of scope 1 emissions

When replacing heat exchangers (oil and/or gas heating) we always check whether it is possible to replace or combine them with a renewable energy option. If possible, we opt for air to water heat pumps, especially in smaller buildings. These systems are not only more energy-efficient, but also GHG-neutral in operation as only renewable electricity is used. We will also add solar thermal units to the gas heating systems in another two buildings, which will also reduce emissions.

In 2018, we introduced our "Pioneering fleet" guidelines for the purchase of new vehicles, which stipulate emission reduction targets, currently up to the year 2024. In 2021, in addition to our conventional vehicles, our fleet already included ten electric vehicles with different ranges, as well as five hybrid and hybrid plug-in vehicles for longer journeys. As part of these measures, we also installed a total of fourteen charging stations for these vehicles. Our employees have the opportunity of using one of our seven electric bicycles instead of a car on short journeys. An electric cargo bike is also available at the building yard.



Hybrid forklift for the building yard

Reduction of scope 2 emissions

In accordance with our "Guidelines for energy-efficient and sustainable procurement" , we now invite tenders solely for green power. The fact that the share of green power has decreased since 2018, leading to an increase in our Scope 2 emissions, is due to the acquisition of plant which cannot yet be operated with renewable energy. As already stated, however, we subsequently offset the emissions resulting from these operations.

We will continue to assume active responsibility by generating our own renewable energy. The photovoltaic systems installed to date generate an annual average of 35,000 kWh electricity. This is fed into the public grid, thus avoiding around 18t CO_2 equivalents per annum.

Reduction of scope 3 emissions

The emissions reported at present result from business trips. Employees who use Deutsche Bahn long-distance trains are already using GHG-neutral transport. Air travel is permitted only where strictly necessary, although the annual number of flights and the destinations vary according to the business activities concerned (e.g. consultancy services). To encourage staff to use public transport instead of private cars to travel to work, we also offer a subsidised "job ticket" for the local public transport services.

As part of our mobility concept we conducted a staff survey at the beginning of 2021 to enable us to assess or extrapolate the emissions resulting from commuter traffic. Approx. 57% of our employees took part in the survey, so that it can be regarded as highly representative. The number of commuters is relatively high, with 60% of the respondents stating a journey time of more than 30 minutes. On average each employee travelled 23 km each way, which adds up to approx. 10,000 km per annum. It was satisfactory to note that roughly one third of the workforce already travels to work by bicycle, e-bike or uses public transport (or a mixture thereof). However the pandemic led to strong changes in commuter behaviour and it is currently difficult to forecast how many hours employees will work from home in future. The management and works council have already signed a company agreement which enables employees to work from home for up to 40 % of their regular working hours in future. The present staff survey will therefore be repeated at some point after the restrictions caused by the pandemic have ended in order to reveal any changes. For the coming years we plan to extend the KPI on Scope 3 emissions to include emissions from commuter traffic, as well as other relevant topics



The enlarged bicycle shed for our staff

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Energy & climate protection in port infrastructure				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To reduce our total energy consumption by a total of 15% by 2025, relative to the year 2015	Individual measures to increase energy efficiency in accordance with our energy management plan of action		ongoing	ongoing
	Installation and continuous development of "Interwatt" software as an analysis tool		ongoing	in progress
To make the entire port infrastructure in Bremen/ Bremerhaven greenhouse gas-neutral by 2023	Scope 1 and 2 measures			
	Monitoring the reduction of emissions resulting from the "Pioneering fleet" guidelines		ongoing	ongoing
	Updating our "Pioneering fleet" guidelines to specify new targets every 3 years		2025	ongoing
	Replacing fossil energy carriers by renewable ones, e.g. hydrogen, biofuels, synthetic fuels, heat pumps etc.		ongoing	ongoing
	Increasing generation of our own renewable energy		ongoing	ongoing
	Ensuring GHG-neutral propulsion systems when purchasing new vessels		planned	planned
	Scope 3 measures			
	Drawing up a mobility concept for our own operational traffic		2021	completed
	Documenting emissions from staff commuter behaviour		2021	completed

CLIMATE-NEUTRAL PORT LOCATION



[STANDARDS: GRI 103-1, 103-2, 103-3]

THE GROUNDS FOR ACTION

At the beginning of 2020 Bremen's parliament commissioned a Select Committee with the development of a "Climate protection strategy for the Federal Land of Bremen". Amongst other things, the remit included issuing specific recommendations as to how Bremen could reduce its emissions pursuant to the Paris Climate Agreement by the year 2030. The Select Committee began work in spring 2020 and, in its final report of 17 December 2021, resolved the following targets for the Federal Land of Bremen: in order to achieve climate neutrality the Federal Land of Bremen should set itself the target of reducing its greenhouse gas emissions, including those of the steel industry, by 60 % by the year 2030, 85 % by the year 2033 and 95 % by the year 2038, all relative to 1990.

After the Senate has stated its position on the Select Committee's report, the governing parties are to propose a climate protection plan of action to pave the way for climate neutrality inclusive of a procedure for monitoring the success.

OUR OBJECTIVES

- Together with relevant actors we are striving to achieve GHG neutrality for the year 2035.

OUR PROCEDURES

In addition to the plans stated in Energy & climate protection in port infrastructure to achieve greenhouse gas neutrality for the port management company and for Bremen's port infrastructure we are expanding the use of renewable energy with the aim of becoming (largely) self-sufficient, also in cooperation with other partners (incl. smart microgrids with energy storage capacities) and endorse the development of climate-neutral technologies for the ports, shipping and transport.

We are also making preparations, together with our partners, to prepare the ports to meet the challenges of the transition to green energy. Important issues in that respect include the import and/or generation, storage and onward transport of green hydrogen or synthetic fuels and supplying these resources to shipping, transport and industry (for information about shore power supply cf. the chapter on Port development), as well as the development of green transport corridors.

We are actually planning to exceed the target of greenhouse gas neutrality and achieve complete climate neutrality for the port location in future.

"Climate neutrality is a situation in which human activities ultimately have no net impact on the climate system. These activities include harmful emissions, measures aimed at removing greenhouse gases from the atmospheric cycle as well as manmade activities which have regional or local biogeophysical effects (e.g. changes in the surface albedo). [...] Accordingly, the objective of climate neutrality calls for policies which are different and more ambitious than the objective of greenhouse gas neutrality. In addition to greenhouse gas emissions, all the other effects of human action on the climate also have to be considered, such as land sealing in connection with road and housing construction." (Federal Environmental Agency 2021)

In order to achieve effective climate protection, it is necessary to develop carbon sinks which are intended to have positive effects on the climate balance.

SHARC project

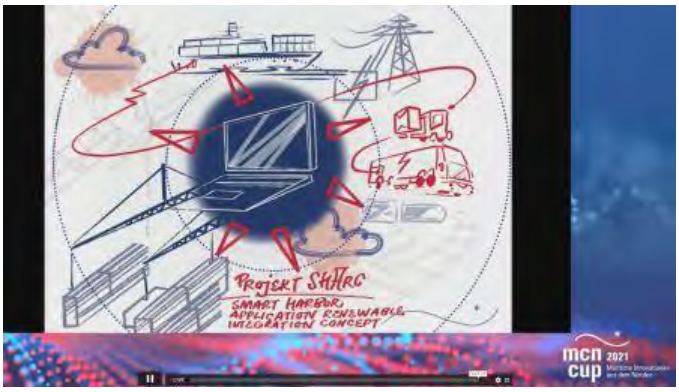
Port districts can be sustainably developed and decarbonised with the help of renewable energy sources, modified logistics processes and new operating models.

As a model project, the associate partners Siemens, Technische Universität Berlin, the Institute for Energy, Recycling and Environmental Protection (IEKrW), the German Research Center for Artificial Intelligence (DFKI) and bremenports examined the scope for integrating renewable energy sources into the port infrastructure and suprastructure as well as the logistics processes for various future scenarios in the Überseehafen port district in Bremerhaven. Taking into account various effects such as forecast energy consumption, rising (energy) costs and environmental impact, the most promising scenarios were elaborated at district level with the aim of obtaining optimum decarbonisation of the project district by 2030.

On the basis of the final preferred scenario the project partners drew up an investment plan and potential operating models for interaction between different stakeholders at the port district. The integration of renewable energy sources and carriers is to be achieved by means of district-wide, cross-company cooperation models.Mittels Sektorkopplung können Synergien erGoalt werden, vor allem durch die Nutzung von erneuerbarer Energie für Mobilitäts- und Transportleistungen. In einem ganzheitlichen Ansatz berücksichtigten die Verbundpartner neben betrieblichen Prozessen auch Aspekte des Energiemarkts und der Energietechnik.

Synergies can be achieved by means of sector coupling, especially by using renewable energy for mobility and transport services. The project partners take a holistic approach which takes into account not only operating processes, but also energy market and energy technology aspects.

The results show that decarbonisation of the entire port district is absolutely advisable from both the energy and also the economic viewpoints, but that decarbonisation to zero will only be possible with the inclusion of regionally produced biogas from farm manure. In view of the changing conditions (increasing energy costs, taxes on carbon), maintaining the status quo (business as usual) will become expensive. In order to avoid an investment backlog, prompt action has to be taken.



SHARC – winner of the MCN-Cup 2021

A large proportion of greenhouse gas emissions is generated in the mobility sector, for which a fully electric scenario was chosen under economic and ecological aspects. The operational feasibility (in comparison with the status quo and the use of hydrogen) is currently being tested in further simulations. Completion of the project is scheduled for mid-2022.

The project funding comes from the federal government's energy research programme:

https://www.bmwk.de/Redaktion/EN/Dossier/energy-research-and-innovation.html

The project findings and the developed models are then to be implemented together with the port business community.

In 2021 the SHARC project won the MCN Cup in the category "How can ports and maritime logistics be made more sustainable?"

Further information about the project is provided at www.sharc-project.de

Other projects

Together with other stakeholders from the port business, we are developing further projects to promote the development of the ports of Bremen into a climate-neutral node in climate-neutral transport corridors.

Various project outlines and applications are currently being developed in cooperation with different partners and submitted to potential funding schemes; one of these projects involves the development of a hydrogen-powered shunting locomotive. This is aimed in particular at analysing the special framework conditions and the special operating and infrastructure requirements for future use at the ports.

We are also promoting climate-friendly solutions for the port economy, shipping and transport in the form of development partnerships, incentive instruments (e.g. eco-friendly port charges, greenports awards, innovation competition zeroemission@berth, cf. also the chapter Air quality) as well as options for supplying ships with shore power.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Climate-neutral port location				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
Together with relevant actors we are striving to achieve GHG neutrality for the year 2035.	Developing a district concept for the integration of renewable energy carriers in the energy supply mix in preparation for a GHG-neutral port district as part of the "SHARC" R&D project		2022	in progress
	Designing follow-up projects relating to the GHG-neutral port district		planned	planned
	Project to promote the implementation of a hydrogen-powered shunting locomotive at Überseehafen in Bremerhaven		projekt start 2022	in progress
	Helping the port business community evolve into a "climate-neutral" node within "climate-neutral" transport corridors		ongoing	ongoing



ENVIRONMENTAL MANAGEMENT

Our goal is to avoid negative impact on the environment by the ports of Bremen or to keep such impact to a minimum. The PERS Environmental Management System, which was developed by the European Sea Ports Organisation (ESPO) especially for the requirements of the ports, ensures the continuous improvement of the environmental performance of the various port actors and promotes the successful future development of the ports of Bremen.

WATER QUALITY



[STANDARDS: GRI 103-1, 103-2, 103-3, 304-2, 413-2]

THE GROUNDS FOR ACTION

Contamination of the port waters is caused amongst other things by the anti-fouling paints used in shipping. These are intended to prevent natural growth on ship hulls. However, paints containing biocides continuously emit not only these biocides, but also microplastics into the water and the port sediment. The use of tributyltin (TBT) was banned in 2008 and since then antifouling coatings have increasingly contained copper as an active agent, with co-biocides as additive. These antifouling biocides are also not without risk for the environment. The situation is aggravated by the discharge of polymer components from underwater coatings into the water, a problem which has not yet been sufficiently investigated.

The combustion of fossil fuels, the use of oils and lubricants containing contaminants and pesticides, illegal waste disposal and illegal underwater cleaning of ship hulls and propeller polishing also contributed to further contamination of the water at the ports.

To date, there are no water quality standards which apply to the manmade port waters, particularly those in the brackish water zone in Bremerhaven. Nevertheless, the port waters influence the water quality of adjacent and directly connected bodies of water. That is why we aim to minimise the negative impact of marine shipping and port operations on water quality and the resulting effects on humans and nature.

OUR OBJECTIVES

- To contribute to the objectives of the European Marine Strategy Framework Directive (MSFD)
- To establish a monitoring system for the port waters
- To endeavour to reduce the use of paints containing biocides in shipping and promote eco-friendly underwater hull cleaning

OUR PROCEDURES

Monitoring the port water

There is currently no systematic monitoring in place to classify the water quality at the ports in Bremerhaven and Bremen, but the use of these waters is monitored to check compliance with the permits granted by the water authorities. This is the responsibility of Bremen's Senator for Climate Protection, Environment, Mobility, Urban Development and Housing.

Permission for the discharge of waste water into port water areas is granted in accordance with the requirements of the Waste Water Directive. The water authority then monitors compliance with the approved limit values. The waste water in these cases refers to cooling water or waste water from the shipyard docks.

As a rule, the environmental authority regularly takes samples of precipitation that is discharged into the ports. Only general recommended figures have been issued, as no further requirements are imposed on the treatment of precipitation. Monitoring of directly discharged precipitation shows that the recommended values are generally observed. Sporadic incidents of non-compliance are frequently a consequence of accidents.

At the end of 2020 bremenports introduced a process for the sampling and chemical analysis of water at selected locations. There are plans to take samples of the port water regularly in future and test the samples for certain parameters which will be specified by agreement with the environmental authority.

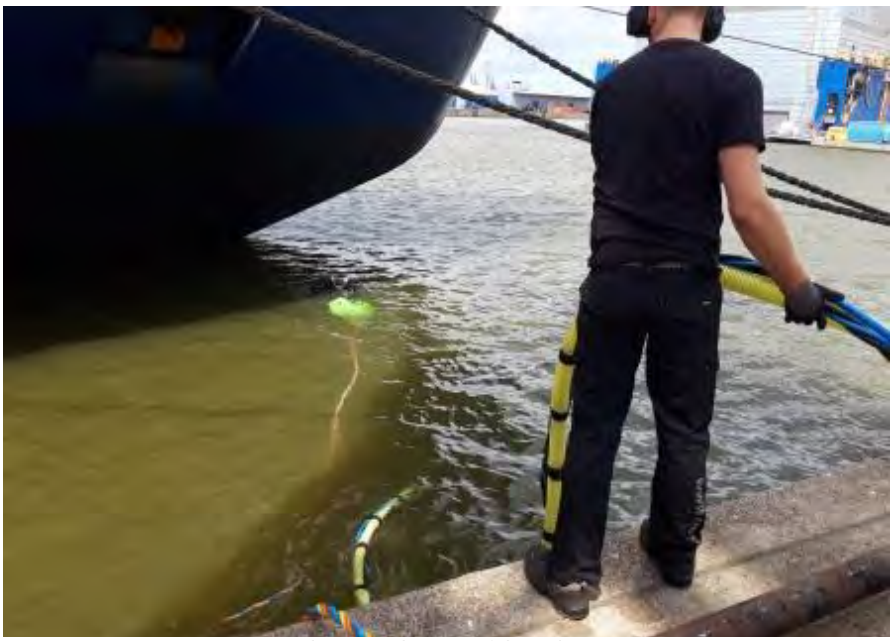
Management of biofouling, ballast water and waste water from ships

Eco-friendly underwater cleaning

Biofouling refers to the growth of microorganisms, plants, algae and animals on all structures that are in or under water. This applies in particular to ship hulls, but also to port facilities. Growth on ship hulls has various negative effects on the environment as well as the cost effectiveness of ship operations, above all on fuel consumption and thus on operating costs and the quantity of carbon emissions.

Following the ban on TBT, other underwater coatings to prevent biofouling have now become established in the market. These also contain biocides, usually based on copper. As these also have a negative impact on the water quality, current research is focussing on a strategy of completely waiving the use of antifouling systems containing biocides.

One alternative is controlled underwater cleaning of ship hulls with an abrasion-resistant coating which is cleaned when the vessel is in port. To date, however, there are no national or international regulations for granting licences for this type of underwater cleaning. To come up with a solution for the ports of Bremen, a number of business enterprises and institutions, under the overall coordination of the Senator for Climate Protection, Environment, Mobility, Urban Development and Housing, have set up a project entitled CLEAN to promote "freedom from hull fouling thanks to proactive cleaning on abrasion-resistant, biocide-free coatings for the shipping business". bremenports also participated in this project, to identify the fundamental requirements for obtaining approval and published the first Guidelines in Germany. Since the publication of these guidelines, ships laid up in the areas behind the locks at the ports of Bremen can be granted permission to carry out hull cleaning subject to compliance with the conditions set forth in the guidelines.



Underwater cleaning of the Polarstern

A summary of the "CLEAN" project is available here: https://www.youtube.com/watch?v=BMp6j0WUlt0&feature=youtu.be

A follow-up project is planned to establish how proactive cleaning on biocide-free coatings in ship operations and maintenance could be implemented for vessels operating in the North Sea and Baltic.

Avoiding the introduction of invasive species

In the course of international shipping, non-native, invasive species, pests and germs are spread throughout oceans the world over when they are carried as "stowaways" in ships' ballast water and on biofouling on the ships' hulls. 121 species were identified as non-native on the German coast in 2016 and at least another 14 species have been added since then.

For example, the Japanese shore crab (Hemigrapsus sanguineus), which is native to the Pacific, has spread throughout the entire oceans within just a few decades. The species has also proliferated in the German Wadden Sea and is now an active predator which is decimating the populations of invertebrates such as mussels and young indigenous shore crabs, which are then not available as food for other animals, thus disrupting or permanently changing the food web.

Combating invasive species once they have become established is an expensive undertaking which generally involves a great deal of effort. Prevention is therefore the most important measure. In order to restrict the introduction of invasive species, we support the IMO Ballast Water Convention which requires marine shipping to take appropriate precautions.

Dealing with waste water from ships

In addition to ballast water, shipping also produces waste water from flue cleaning systems as well as domestic waste water including sewage.

The treatment of this waste water at the ports is a complex matter, as international, EU and national regulations overlap. In order to manage this problematic area for the ports of Bremen, the port and environmental authorities have drawn up guidelines for the treatment of waste water from ships (ballast water, scrubber wash water and domestic waste water) which were published in November 2021 in a Leaflet for the treatment of waste water from ships at the ports of Bremen.

The Port Charges department encloses the above leaflet with each notification of port charges and requests the recipients to take note of the contents. This is intended to facilitate the work of the institutions concerned and is aimed primarily at shipowners and skippers, but also to provide clarity on the part of the ports and public authorities about the requirements.

On publishing this leaflet, the ports of Bremen assumed a pioneering role in Germany with regard to this subject.



Biofouling on bremenports service vessel "Seeadler"

Other relevant facts and figures about this topic

are provided in our **Key performance indicators** beginning on page 152.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Water quality				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
The following measures are intended to contribute to the objectives of the Marine Strategy Framework Directive (MSFD):				
To establish a monitoring system for the port waters	Taking regular water samples and testing them for certain parameters (e.g. salt content, temperature, PACs) in consultation with the environmental authority.		ongoing	in progress
To promote eco-friendly underwater hull cleaning	Participating in Bremen's working group on underwater hull cleaning		ongoing	in progress
	Participating in CLEAN project for the development of guidelines for granting licences for underwater hull cleaning at the ports of Bremen		2021	completed
To improve water quality at the ports of Bremen	Introducing regulations for dealing with waste water from ships (ballast water, waste water from scrubbers and domestic waste water)		2021	completed

AIR QUALITY





[STANDARDS: GRI 103-1, 103-2, 103-3, 305-7, 413-2, PERS NO. 7 AND NO. 10 AS WELL AS PSI 12]

THE GROUNDS FOR ACTION

Shipping emissions are highly significant for international port locations in terms of volume. As well as carbon emissions which are responsible for climate change, the use of marine fuel in shipping generates large quantities of sulphur oxides, nitrogen oxides and particulate matter, all of which have different adverse effects on our eco-system and on human health.

The primary sources of these emissions are shipping, feeder traffic on road, rail and inland waterways, the necessary transhipment and storage work at the terminals as well as all the other services and work provided by the public authorities to facilitate regular port operations. We believe that the emissions caused by marine shipping at the port account for a significant quantity. bremenports has no direct influence on marine shipping and does not have the necessary influence on the market to exert active control. We use incentive systems to encourage the development of low-emission propulsion systems in an effort to reduce the negative effects on the port and surrounding area.

OUR OBJECTIVES

- To record the quantity and quality of emissions at the ports of Bremen
- To promote and demand the reduction of greenhouse gas and air pollutant emissions by ocean-going vessels
- To promote the ongoing development and global rollout of the ESI Index as incentive for marine shipping to reduce emissions
- To reduce the emissions of bremenports' own fleet

OUR PROCEDURES

Monitoring air emissions and concentrations

Monitoring the legal limits for ship emissions

In July 2017, bremenports cooperated with the Federal Maritime and Hydrographic Agency (BSH) to install an air monitoring station at the northern end of the container terminal at the port of Bremerhaven. The station measures the chemical composition of the exhaust gas plumes of passing ships. The results are used to help prosecute infringements of the obligation to use low-sulphur marine fuels (MARPOL - Annex VI, EU Sulphur Directive). The observed rate of compliance with the regulations was over 99 % in 2019 and is comparable with the findings at other BSH measuring stations in Wedel (more than 99 %) and Kiel (98.7 %).

Monitoring compliance with the concentration limits for the population in the port vicinity

In the Federal Land of Bremen, monitoring air quality in the port environment is the responsibility of the Senator for Climate Protection, Environment, Mobility, Urban Development and Housing. Bremen's air monitoring system (BLUES) has collected data to monitor air quality at eight stationary measuring points in Bremen and Bremerhaven since 1987. The relevant measuring stations for the ports of Bremen are located at Hansastrasse in Bremerhaven and in Bremen-Hasenbüren. The evaluated data proves that the concentration limits for ambient emissions are observed and that there is no problematic pollution for the population. The data measured at each station in Bremen and Bremerhaven and for any given period of time is available on the website of the Federal Environmental Agency or via the app offered there.

Expertise to assess air quality at Überseehafen in Bremerhaven

bremenports commissioned an expertise to assess the pollution concentration situation at Überseehafen in Bremerhaven. This is intended to evaluate air quality in and around the port and also identify other potentially suitable measures or possible investments for the sustainable reduction of air pollutants for the port area. It will also assess the advisability of additional measurements of air pollutants and CO_2 at selected locations. The results are expected to be available in 2022.

Emission model for the ports of Bremen

The Institute of Shipping Economics and Logistics has designed a simulation tool called Vessel Traffic and the analysis tool ECOPAW which now enable the calculation and evaluation of emissions of the air pollutants nitrogen oxides, sulphur oxides and particulate matter as well as the greenhouse gas carbon dioxide generated by marine shipping, inland shipping and internal port traffic. These two tools were used to calculate the emissions for the port areas Bremerhaven and Bremen.

The evaluation of the emission data for 2018 and 2019 is shown in our Key performance indicators. The emission data has not yet been evaluated for 2020 and 2021. A comparison of the KPIs reveals that a further significant reduction of air pollutants can only be achieved by creating an appropriate legal framework which prescribes specific limits and the use of alternative fuels and propulsion systems by shipping. In future, emissions for the ports of Bremerhaven and Bremen are to be calculated at annual intervals and extended to include the land-borne transport modes of rail and truck.

To promote and demand the reduction of greenhouse gas and air pollutant emissions by ocean-going vessels

Shore power supply for marine and inland shipping

In June 2020, Bremen's Senate resolved to provide widespread shore power facilities for marine shipping at the ports of Bremen. In doing so, Bremen is following the current trend of offering shipowners an increasing number of shore power connections. It remains to be seen whether and to what extent the planned shore power facilities will actually be used in future and, if they are used, whether this will also impact on air pollution, where the situation is already critical.

Further information about this topic is provided in the chapter on Port development.

ZEROEMISSION@BERTH project

The nine German seaports endorse the introduction of a European limit for carbon emissions for all seagoing and inland waterway vessels at berth and at the beginning of 2021 resolved to cooperate in the "ZeroEmission@Berth" project, which aims to help reduce emissions by shipping to zero, especially when the vessels are in port.

Grid-connected shore power systems operated entirely with renewable energy offer a useful option to reduce emissions by vessels while at berth, but not for every port, not for every berth and not for every vessel. The number and types of vessel using a berth have to be taken into account. It should be also be ensured that the ship operators assume part of the costs.



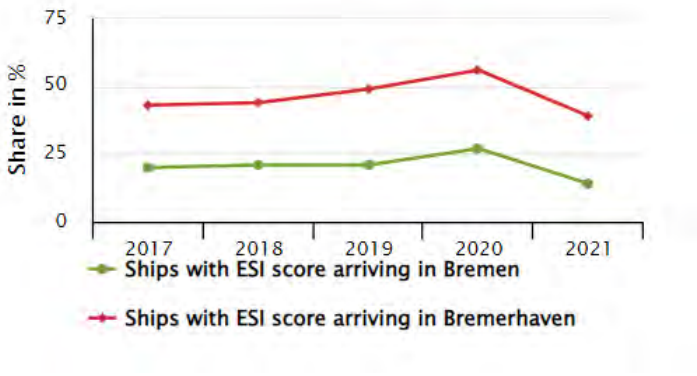
The German seaports have currently launched an innovation competition with the aim of identifying further solutions which could help to reduce emissions at berth and preferably also when the vessels are in operation. The innovation competition will run until 18 June 2022.

Further information is provided at www.zeroemissionatberth.com.

ESI discount for low-emission ocean-going vessels

By using the Environmental Ship Index (ESI), an international standard which was developed in cooperation with other ports in the North-West range as part of the World Port Climate Initiative (WPCI) and which is continuously revised in response to changing legal requirements, the ports of Bremen offer an incentive for shipping to use ships that are more eco-friendly than prescribed by law. Bremen Schedule of Port Charges has granted a corresponding discount since 2012.

The ESI breaks down into part scores for the emission of nitrogen oxides, sulphur oxides and carbon dioxide; vessels which have a ship-to-shore power connection are awarded additional points. The ESI score is a figure between 0 and 100, where zero corresponds to the limits prescribed by the International Maritime Organization (IMO). A score above zero therefore means that the vessel surpasses the legal requirements. After introduction of the stricter limits for the sulphur content of ship fuels in 2020, the number of ships that could report an ESI Score declined in 2021.



ESI score trend

Since the ESI was first introduced in 2012 there has been a positive trend in the share of vessels that could report an ESI score and the number of ships with an ESI score rose continuously until 2020. The percentage of ships arriving in in Bremen and Bremerhaven that reported an ESI score in recent years is shown in our Key performance indicators.

Presentation of the greenports awards 2021

In 2021, the greenports awards for the category "Most eco-friendly vessel" and for the category "Most eco-friendly fleet" both went to the shipping company Holwerda Shipmanagement. The MV Freya operated by the company has convincing technical solutions to avoid nitrogen oxides. The vessel is equipped with an SCR (selective catalytic reduction) which reduces the nitrogen oxide emissions in the exhaust gas. This earned the vessel an ESI score of 56.11 points. The hull design also helps to promote environmental protection.



Verleihung des greenports Awards an die Reederei Holwerda Shipmanagement

In addition to the public award presentation ceremony, bremenports also symbolically offsets the carbon emissions of the winning vessel for one call at the ports of Bremen. This year, bremenports offset 2 tons of CO2 for the MV Freya. The organisation "DER KLIMAFONDS" uses the climate protection payment to promote measures aimed at reducing carbon emissions in non-profit, social and cultural institutions.

The greenports awards winners are decided on the basis of the vessels' ESI score for the preceding year (2020). To qualify for the greenports award, a vessel has to call at the ports of Bremen several times in the course of a year. This condition was introduced as a token of appreciation for our regular customers, compared with shipping companies who only use the port once.

The winners of previous years are shown in our
Key performance indicators beginning on page 152.

Reducing emission of bremenports' own fleet

All bremenports vessels are already equipped with a shore power connection and operate with conventional ship engines or diesel-electric hybrid propulsion. As a rule, they use barge diesel which has a sulphur content of 0.001 % and is therefore classified as "sulphur free" pursuant to the statutory regulations.

The use of GTL (gas-to-liquid) as a substitute for diesel has already been successfully tested on a hopper barge. The GTL method is used to produce synthetic fuel on the basis of natural gas and is cleaner than conventional marine diesel during combustion and also produces fewer air pollutants. GTL fuel is also non-toxic, odourless, and readily biodegradable and has a low hazard rating because it contains practically no sulphur and no aromatic compounds. However the carbon emissions of GTL are similar to those of diesel, so that the use of this fuel can only be regarded as an interim solution.

We are currently drawing up a concept for an environmentally friendly fleet which specifies the target of reducing emissions. To achieve that target, we are also investigating alternative propulsion systems. Which propulsion and/or fuel systems are feasible depends on the specification of the individual vessel type. It has not yet been resolved to change over the entire bremenports fleet to GTL, but in view of the age of the vessels, this could potentially be an interim solution. The use of other fuels such as methanol, ethanol or hydrogen would require extensive refurbishment of the entire fleet. Moreover, these fuels are currently available only in limited quantities.

The long-term target is to use zero emission propulsion systems, such as fuel cell and hydrogen technology or e-fuels.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Air quality				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To record the quantity and quality of emissions at the ports of Bremen	Preparing an expert opinion for systematic air monitoring of pollutant emissions at Überseehafen, with the potential goal of installing effective measuring stations	 	2022	in progress
	Calculating emissions from ships for the emissions model of the ports of Bremen, optional extension to include further emission sources from the port environment		ongoing	in progress
To promote and demand the reduction of greenhouse gas and air pollutant emissions by ocean-going vessels	Participating in the "ZeroEmission@Berth" project: the nine German seaports aim to identify solutions from all fields of technology as an alternative to shore power supply to reduce greenhouse gases and the emission of air pollutants by ocean-going vessels at berth.	 	2022	in progress
	Participation in the "MaritElm" project to quantify emissions and concentrations in the entire maritime logistics chain with the aim of identifying measures to reduce the adverse impact of concentrations. This project is executed by the Institute of Shipping and Logistics (ISL), which models the emission and concentration situation on the basis of the ports of Bremen.		2023	in progress
To promote the ongoing development and global rollout of the ESI Index as incentive for lower emissions in marine shipping	Contributing to the ongoing development of the Environmental Ship Index (ESI) in our role as member of the World Port Sustainability Programme (WPSP)	 	ongoing	ongoing
	Calculating the share of ships with an ESI Index calling at the ports of Bremen		ongoing	in progress
	Presenting "greenports awards" to the most eco-friendly ocean-going vessel and the shipping company with the most eco-friendly fleet		ongoing	in progress

Goal	Measures	SDG	Timeline	Status 2022
To reduce the emissions of bremenports' own fleet	Opting for emission-free propulsion systems such as fuel cell and hydrogen technology or e-fuels when purchasing new vessels		ongoing	in progress

WASTE, SEDIMENT & CIRCULAR ECONOMY





[STANDARDS: GRI 103-1, 103-2, 103-3, 304-2, 306-1, 306-2, 306-3, 306-4, 306-5]

THE GROUNDS FOR ACTION

In view of the continuing rise in the global consumption of resources, the establishment of a circular economy is becoming increasingly important.

The circular economy forms an integral part of the UN Sustainable Development Goals (SDGs) and can make an important contribution towards achieving the objectives of the Paris Agreement. It enables the circular management of resources and can thus play a significant role in replacing fossil energy carriers.

OUR OBJECTIVES

- To support circular economy concepts at the ports of Bremen
- To reduce conventional dredging wherever possible in order to minimise the occurrence of waste and the impact on protected European areas/protected species
- To increase the share of dredged sediment that can be returned to the water if possible
- To recycle treated dredging spoils which are suitable for recovery wherever possible

OUR PROCEDURES

The topic of a circular economy is also relevant for the ports of Bremen: a balance sheet for the resources at Überseehafen in Bremerhaven was drawn up for the year 2018 as part of a cooperative project between the Institute for Energy and Recycling and bremenports. The objective was to obtain fundamental data as a basis for improving efficiency at the Überseehafen port district. The Überseehafen district has sufficient potential for the practical implementation of a circular economy, as the waste flows deriving from industry, shipping and logistics provide a suitable basis for circular economy concepts in view of the good transport connections.

The project findings deliver information about the types and quantities of waste disposed of by the eight business enterprises at the port and where that waste ends up. The entire waste mass posted in the balance sheet for 2018 amounted to 244,000 megagrams or tons and breaks down into a total of 64 waste categories. Dredging spoils amounted to 176,400 tons (74 %), accounting for the largest share of the total waste mass. The second largest source of waste comes from shipping. Ship waste accounted for a total of 60,060 tons (25 %) in 2018, of which 57,780 tons referred to the disposal of bilge oil from ocean-going vessels.

The next phase of the project, again in cooperation with the Institute for Energy and Recycling of Bremen University of Applied Sciences, will involve drawing up a balance sheet for the resources at Fischereihafen in Bremerhaven to identify potential synergies for steering waste flows at the two districts in Bremerhaven.

Treatment of dredging spoils

The dredging spoils that occur in connection with maintaining the water depths at the ports of Bremen account for by far the largest waste flow at the ports of Bremen.

The objective is to minimise the share of conventional dredging and sediment removal from the water as far as possible in order to minimise the impact on nature and avoid negative effects (such as a change in the oxygen and nutrient content of the water, mobilising nutrients and contaminants from sediments, increased mortality of macrozoobenthos and changes in the composition of fish and fauna).

The sediment/dredging spoils management concept drawn up for the ports of Bremen focuses primarily on taking appropriate action to reduce sedimentation or, wherever possible, to transfer sediment to other locations in the marine environment.



Taking samples for the annual sediment tests

As far as the tidal quays are concerned, sedimentation can be kept at a low level by means of water injection (WI) and thus reduce dredging work to a minimum. In the port areas behind the locks in Bremen and at Fischereihafen in Bremerhaven, the occurrence of sediment is comparatively low, so that the use of WI makes it possible to minimise the need for conventional dredging here. However, the situation at the port area of Überseehafen in Bremerhaven behind the lock is different, as substantial sedimentation from the Weser estuary enters and settles in the port areas of Überseehafen. There is very little scope for influencing the occurrence of this sediment, which cannot be avoided or further reduced.

Different legal regulations apply to the treatment of sandy and silty dredging spoils. As a rule, sandy dredging spoils can be relocated to other water areas subject to compliance with the applicable legal requirements. The same fundamentally also applies to silty dredged material. However, the silty dredging spoils from some areas behind the locks at the ports of Bremen still fail to satisfy the requirements for relocation within the marine environment, so that the material has to be disposed of on shore.

The German Closed Substance Cycle and Waste Management Act (KrWG) defines "disposal" as recovery or disposal. In both cases, the dredged material first has to undergo treatment, i.e. dewatering, which takes place at the Integrated Disposal Facility for Dredged Material (IBE) in Bremen-Seehausen. If the dredged material does not satisfy the criteria for recovery, the dewatered dredging spoils are then disposed of at the mono-landfill site in Bremen-Seehausen in compliance with the legal regulations specified in the Landfill Ordinance (DepV). If the treated dredging spoils satisfy the recovery requirements, various options are available for recovery and further use. These are described in detail in the chapter on Port development.

bremenports endeavours to raise the share of dredging spoils that can be recovered. In recent years, a high recovery share could be achieved after suitable treatment. This is attributable to the continuous improvement in sediment quality.

Dealing with ship-generated waste

Another major waste flow at the port refers to ship-generated waste, for instance the large quantities of bilge oil that have to be disposed of. Monitoring the waste notifications submitted by the ships pursuant to MARPOL is the responsibility of Bremen Port Authority. The waste management plan for the ports of Bremen and Bremen Act on Port Reception Facilities specifies the regulations for dealing with ship-generated waste and cargo residues. The current Schedule of Port Charges for Bremen includes the obligation to pay a flat rate, depending on gross tonnage, for the disposal of plastic, food waste, domestic waste and contaminated absorbent materials.

Dealing with waste in the port waters

„Seabin" marine garbage collector

Seabin is the name of a marine "litterbin" that is intended to fish garbage out of the water at the port. It has been tested at Kaiserhafen in Bremerhaven since March 2021. It is attached to a pontoon and floats on the surface of the water, where it continuously takes in water through a filter system to separate plastic waste. The Seabin has a volume of 20 litres and can fish up to four kilograms of plastic a day out of the water. It filters particles with a size of two millimetres or more. This waste can then be correctly disposed of or recycled. It also has a non-toxic, highly resistant anti-fouling system to prevent the growth of a biofilm.

Seabin was developed by an Australian company that has marketed the garbage collector on a commercial scale since 2018. Approx. 860 Seabins are currently in use in ports, marinas and rivers all over the world. The target customer group for the Australian company includes business enterprises, governments, non-profit organisations and NGOs. In Germany, in addition to the one in Bremerhaven, there are another two Seabins in operation in Emden and Wilhelmshaven.

After the test phase, our Seabin is also to be used at other locations at the port.

The Seabin project is performed in cooperation with Geschwister Scholl school as part of the "Jugend forscht" competition for young scientists

In a cooperative project conducted by Geschwister Scholl School in Bremerhaven and bremenports, the pupils Danny Dolinski, Mohannad Sarha and Rebal Issa entered the 'Jugend forscht' contest for young scientists. Their entry "Pollution of the harbour basin in Bremerhaven with micro and macroplastics" won first prize in the Earth & Space Science category of the regional round of the competition as well as the special award "Reset Plastic".

In the course of the project, bremenports staff collected 11 samples of waste from the "Seabin" marine litterbin, which the pupils then washed and sorted. bremenports also supplied samples of mud, which the pupils tested for macro and microplastics.

Because of the type of waste, the pupils could prove that a large proportion of the pollution was caused by people who spent time in the immediate vicinity of the port, as most of the waste referred to plastic bags and plastic packaging.



The project team D. Dolinski, M. Sarha and R. Issa



The seabin in use at Kaiserhafen

Other relevant facts and figures about this topic
are provided in our **Key performance indicators** beginning on page 152.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Waste, sediment & circular economy				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To support circular economy concepts at the ports of Bremen	Drawing up a balance sheet of resources for Fischereihafen Bremerhaven and identifying potential synergies to steer waste flows (project in cooperation with the Institute for Energy, Recycling and Environmental Protection at Bremen University of Applied Sciences)		open	planned
	Drawing up a balance sheet of resources for the Überseehafen port district (project in cooperation with the Institute for Energy, Recycling and Environmental Protection at Bremen University of Applied Sciences)		2020	completed
To reduce conventional dredging wherever possible in order to minimise the occurrence of waste and the impact on protected European areas/protected species	Continuing the use of water injection equipment to reduce the need for dredging		ongoing	ongoing
	Continuing to top up the harbour basins with low-particulate surface water from the River Weser to reduce the need for dredging		ongoing	ongoing
To increase the share of dredged sediment that can be returned to the water if possible	Monitoring the contaminants in the sediment to identify external sources of pollution and develop proposals for addressing these pollution sources		ongoing	ongoing
To recycle treated dredging spoils which are suitable for recovery wherever possible	Using treated dredging spoils as a secondary raw material for our own construction and filling work		ongoing	ongoing
	Participating in specialist committees and a national working group with the aim of raising the share of external purchasers of treated dredging spoils		ongoing	ongoing
To reduce the occurrence of plastic waste in water with the help of a Seabin (marine litterbin)	Using the present two Seabins at different locations at the ports of Bremen		ongoing	in progress
	Supporting a project of Geschwister Scholl School for the young scientists contest "Jugend forscht" on the occurrence of plastic and microplastics in the port waters		2022	completed



SOCIAL RESPONSIBILITY

The port management company promotes employee satisfaction and its attractiveness as employer by offering job security, comprehensive employee rights and a family-friendly corporate culture which promotes health and skills. We also endorse good working conditions at the port and in marine shipping, encourage a frank and fair exchange of opinions with the local population and are actively involved in specific projects.

ATTRACTIVE WORKING CONDITIONS



[STANDARDS: GRI 102-8, 102-41, 103-1, 103-2, 103-3, 401-1, 401-2, 401-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10, 404-1, 404-2, 404-3, 405-1, 405-2, 406-1, 407-1, QM HR 1 AND 2 AS WELL AS PSI 14, 16, 17 AND 20]

ATTRAKTIVE WORKING CONDITIONS AT BREMENPORTS

THE GROUND FOR ACTION

In an age of growing demand for qualified personnel to perform increasingly complex tasks and the decline in skilled employees owing to demographic change, the attractiveness of bremenports as an employer is crucial for attracting and keeping qualified staff.

OUR OBJECTIVES

- To maintain a share of 30 trainees
- To counteract the shortage of skilled labour in certain occupations by training our own employees
- To keep the rate of employees who leave the company (of their own accord) at under 5 %
- To maintain a level of 15 hours of further training per employee and achieve an average grade of 3 (satisfactory) or higher for assessment of the qualification measures
- To achieve a quota of more than 95 % of healthy employees
- To encourage employees to do sports and maintain a figure of at least 100 users of company gym offers
- To raise the share of women at the company to 30 % by 2025
- To have no incidents of discrimination
- To use HR marketing to showcase our attractiveness as employer and attend a minimum of 7 job fairs per annum

OUR PROCEDURES

We offer our staff fair pay and secure jobs. Employees who are covered by the collective agreements in force at the company are entitled to various perks such as a supplementary company pension scheme, an annual bonus, payments into an employee savings scheme, a performance-based bonus as well as a deferred compensation pension plan.

Other benefits include reduced rate Job Tickets for local public transport as well as subsidised memberships of Hansefit and qualitrain gyms. These company perks are available to all members of staff, regardless of whether they are on a permanent or fixed-term contract or whether they work full or part time.

We offer our own staff a comprehensive range of further education and training courses and also run a "Talent Compass" programme, which offers support for junior staff in personal and working matters.



bremenports staff at a cookery course as part of nutrition education (Copyright Birgit Behnke)

All new recruits and trainees benefit from a wide range of induction events, including a guided bus tour of the ports. During the onboarding phase, they are given a mentor from a different department to support and assist them outside their actual area of work.

bremenports also offers a holistic health concept that covers "Medical check-ups – Nutrition - Exercise".



Trend in the share of healthy employees from 2017 to 2021

Our staff benefits from regular Health Days, nutrition education, company fitness and a wide range of sports events. Staff can help themselves to baskets of fresh fruit that are provided every week at the Sail City building and the building yard in Bremerhaven and at Hafenstrasse in Bremen.

„BerufundFamilie“ (work and family) certificate

bremenports pursues a family-friendly and health-conscious corporate policy which provides an excellent basis for achieving the optimum work-life balance.

bremenports has been certified by the ‘berufundfamilie’ audit since 2005 and offers, for example, flexible working hours, a choice of working time models, job sharing and mobile working from home, provided this is compatible with the employee’s job.

Working parents also receive additional support in the form of programmes for children during the Easter, summer and October holidays and there is also an in-house parent & child office.

A staff survey is conducted every three years to evaluate the success of these measures and to assess working conditions. This ensures that bremenports gears its company-wide offers, such as mobile work, further training options and preventive health care, to meet the needs of the workforce.



Robert Howe and Simone Oelze show the official documentation of the ‘berufundfamilie’ recertification

Further information about employment, training and education, diversity and equal opportunities, non-discrimination and occupational health & safety is provided in the **Key performance indicators** (beginning on page 152) and the **GRI content index** (beginning on page 119).

In search of the right employees - bremenports employer branding

The Jobs & Career section on the bremenports website contains our Employer portal, which was updated in 2021. Anyone looking for a suitable job there can watch videos of our own employees at work which provide an in-depth look at the field of work concerned. We have also designed a social media post especially for people in search of a placement as apprentice or trainee: this has been available on Instagram since the beginning of 2022.

Apart from this online range, we have also become more visible in the cityscape, with advertising posters featuring photos of our own crew members on poster pillars, billboards, roadside screens, lightbox posters and other large-scale advertising sites.

This was launched as a joint project by our Marketing and HR teams in order to anticipate future staff shortages, to find new employees before we have to look for them, so to speak. The campaign presents bremenports as an employer as seen and experienced by the company's staff every day. The aim is not only to attract as many job applications as possible, but to find exactly the right candidates to match the company and the colleagues.



Staff recruitment campaign in Bremerhaven city centre

Succession planning at bremenports

We believe that training and education are the key to succession planning. We offer work experience for school pupils, attend vocational training fairs and take part in the annual "Future Day" to interest young people in our company at an early stage. In cooperation with Bremen Vocational Education and Training Centre, we offer more traineeships than we actually need to meet our own staff requirements. bremenports also offers cooperative education programmes in mechatronics and civil engineering.



bremenports job fair stand is staffed with our own trainees

To give trainees an opportunity to get to know one another and find their way around the company better, we organised the first onboarding week for new trainees in summer 2020. During that time, they visited different parts of the port and acquired an overall idea of all the different areas of bremenports' work. In view of the extremely positive feedback, we plan to repeat this new scheme every year.

Sustainability project day for trainees

The "Sustainability in vocational training" project day is intended to inform our trainees about the impact on the environment and local population resulting from port operations and show them practical examples of how this is addressed by our environmental and sustainability management activities.

These project days have been carried out twice a year since 2016, last for a whole day and include both theoretical and practical elements on the topics of sustainable procurement, energy management & climate protection, eco-friendly shipping, efficient land use & biodiversity as well as the effects of maintaining the water depths.

The project day for our trainees is essentially intended to raise the next generation's awareness of the issue of sustainability and to encourage our trainees to look proactively for improvement potential in the use of energy and materials in their own area of work.

It also gives trainees the chance to get to know each other better and to share knowledge. The restrictions due to the pandemic unfortunately meant that it was not possible to organise project days in 2020 and 2021, but we hope that these events can take place again in 2022.



Results of the trainees' garbage collection campaign in 2016

WORKING CONDITIONS AT THE PORT

The port is a business location with highly diverse companies and jobs. Nevertheless, the following fundamental working conditions generally apply to most areas:

- Most of the jobs at the ports of Bremen are governed by collective agreements. GHB employees, i.e. employees of the authorised manpower services provider for the ports who are assigned to different companies at the ports as required, are governed by the framework collective agreement concluded with ver.di for the German seaports companies.
- The ports of Bremen have an above-average share of full-time employees.
- The ports employ a large share of skilled workers who have completed vocational training in a manual occupation and subsequently acquired further qualifications for their work at the port.
- Jobs at the port frequently involve physical exertion or working in noisy conditions. Shift work and stand-by duty are also common, so that occupational health & safety is an important aspect.

As in other sectors of industry, the working conditions at the ports of Bremen undergo transformation processes. The demographic trend, digitisation and automation as well as climate change all influence the general working conditions. In view of changing job requirements and qualification profiles, securing and qualifying skilled staff play an increasingly important role.

WORKING CONDITIONS IN MARINE SHIPPING

A total of 1.89 million seafarers work in in the marine shipping business worldwide. Owing to the common practice of sailing under flags of convenience, these employees are frequently not protected by national inspection provisions and therefore work under precarious conditions.

In recent years, there have been increasing demands for minimum global social and environmental standards for the growth and production of goods. Following the introduction of new supply chain legislation, these standards have become legally binding. Nevertheless, the working conditions at sea are still largely unregulated.

Various institutions campaign for an improvement in working conditions:

Since it was introduced in 2013, the Maritime Labour Convention (MLC) has served as a "charter of fundamental rights" for seafarers all over the world. The Convention of the International Labour Organization (ILO), a specialized agency of the United Nations, defines minimum standards for working on ships, e.g. in terms of minimum age, working and rest periods, accommodation, holiday leave as well as occupational health and social security. All ships in the ports of ratified states can be inspected for compliance with these standards, irrespective of which flag they sail under. In Germany, these inspections are carried out by BG Verkehr, the employers' liability insurance organisation for the transport industry.

The International Transport Workers Federation (ITF) campaigns for humane working conditions with the objective of raising standards and supporting seafarers in need of assistance. The ITF helps its affiliated trade unions with the negotiation of collective agreements for flag-of-convenience vessels, in order to secure for instance minimum wages, maximum contract lengths and medical care for seafarers. Approx. 24 per cent of all vessels worldwide are governed by the collective agreements of the ITF. At national level, the ITF cooperates with ver.di, the united trade union for the service sector in Germany. The ITF representatives are responsible for inspecting incoming vessels whose shipowners have signed a collective agreement.

The full interview with Sven Hemme, ITF Coordinator, will be available shortly in our media centre soon (www.bremenports.de/en).

The mission statement of the Mission to Seafarers states how important it is to regard seafarers and their needs as a human right and to respond to these needs – in the form of personal empathy and support with errands and problems. The focus is not on material aspects, such as providing a bar of soap or a SIM card for their mobile phone, but by offering someone to talk to. "First and foremost, Mission to Seafarers means providing pastoral care," says the Deaconess at the Mission to Seafarers in Bremerhaven. The members of staff not only visit the seafarers on board, but also run the Portside Hotel and Welcome club as well as a comprehensive range of leisure activities for seafarers.

The full interview with Christine Freytag, Deaconess of the Mission to Seafarers in Bremerhaven, will be available shortly in our media centre soon (www.bremenports.de/en).

The "Fair across the Sea" campaign wishes to improve working standards in maritime transport even further. Its demands include, for instance, basic legal rights such as permanent employment contracts, as well as continuing health insurance and social security for seafarers on leave, sufficient minimum crew numbers on vessels to ensure breaks and prolonged rest periods (sleep) to prevent damage to health, as well as further education and training, such as informing seafarers of their rights pursuant to the MLC. Supporters of the campaign include the Mission to Seafarers, the fair trade organisations and ver.di trade union.

The full interview with Matthias Ristau, Secretary-General of the German Mission to Seafarers and representative of the "Fair across the Sea" initiative, will be available shortly in our media centre soon (www.bremenports.de/en).

bremenports is currently considering the following measures to support the endeavours of the Mission to Seafarers and the International Transport Workers Federation to improve working conditions on board:

- Observance of the minimum standards of the ITF as a prerequisite to qualify for the greenports award.
- Introduction of a discount for voluntarily exceeding minimum social standards, similar to the environmental discounts on the port charges (ESI).
- Supporting the "Fair across the Sea" campaign.

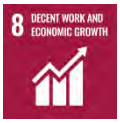
Vaccination campaign at the ports of Bremen

All organisations on shore work in close cooperation and offer a broad-based support network for seafarers. Just how well this works became apparent in June 2021 when a vaccination campaign was launched specially for seafarers. As we were aware that many seafarers would have no opportunity to obtain a COVID 19 vaccination in the near future, we promptly organised vaccinations at the ports of Bremen.



Until the end of November 2021, a "vaccination bus" run by the German Red Cross in cooperation with the port medical service regularly toured the ports and vaccinated seafarers with the Johnson & Johnson vaccine.

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Attraktive working conditions - Attractiveness as an employer				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To maintain a share of 30 trainees	Designing apprenticeships and traineeships to reflect our own requirements more accurately		ongoing	ongoing
	Enabling trainees to work as an intern abroad		ongoing	ongoing
To counteract the shortage of skilled labour in certain occupations by training our own employees (e.g. ship masters, divers)	Training our own personnel, e.g. ship masters, divers, supporting Bachelor / Master students		ongoing	ongoing
To keep the rate of employees who leave the company (of their own accord) at under 5 %	Continuously fostering high potentials		ongoing	ongoing
	Ongoing development of our corporate culture		ongoing	ongoing
	Conducting audits on the subject of work and family		ongoing	ongoing
	Organising a "Family Day"		ongoing, every 2 years	ongoing
	Continue internal mentoring programme for onboarding new recruits		ongoing	ongoing
To maintain a level of 15 hours of further training per employee and achieve an average grade of 3 (satisfactory) or higher for assessment of the qualification measures	Encouraging the return of more feedback on training courses (also for external courses)		ongoing	ongoing
	Organising a "Talent Compass"		ongoing	ongoing
	Offering in-house management training as well as general training in methodological and social skills		ongoing	ongoing
To achieve a quota of more than 95 % healthy employees	Organising "Health Days"		ongoing	ongoing
	Conducting a staff survey on health and mental stress		2020	ongoing
	Extending the promotion of health at the workplace		ongoing	ongoing

Goal	Measures	SDG	Timeline	Status 2022
To encourage employees to do sports and maintain a figure of at least 100 users of company gym offers	Taking part in the annual "Cycle to work" campaign (organised by AOK/ADFC).		ongoing	ongoing
	Promoting staff sports events		ongoing	ongoing
	Offering Hansefit and Qualitrain gym subsidies permanently		ongoing	ongoing
To raise the share of women at the company to 30 % by 2025	Updating the plan of action for women every two years		ongoing	ongoing
To have no incidents of discrimination	Offering entry qualification schemes for vocational training		ongoing	ongoing
	Ensuring barrier-free access		ongoing	ongoing
To use HR marketing to showcase our attractiveness as employer and attend a minimum of 7 job fairs per annum	Attending job fairs		ongoing	ongoing
	Updating job adverts		ongoing	ongoing
	Updating employer portal		ongoing	ongoing
	Social media (Instagram, Xing) posts for employers		ongoing	ongoing

Attraktive working conditions - Occupational health and safety				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To keep our staff healthy	Preventive medical check-ups pursuant to Ordinance on Preventive Medical Health (examination by our in-house doctor)		ongoing	ongoing
To have zero accidents at work	Analysing the causes of accidents		ongoing (on a case-by-case basis)	ongoing
	Instructing staff in health and safety matters in general and for specific tasks		ongoing	ongoing
	Drawing up an organisational instruction for the performance and documentation of inclusive risk assessments		2022	currently being rolled out
	Updating and completing risk assessments		ongoing	ongoing
	Training our own health & safety officer to optimise performance of safety engineering and work environment design tasks (managed by one single source)		by end of 2022	under implementation
	Digitising health and safety instructions – general and outside companies		2022	under implementation

COOPERATION WITH THE LOCAL POPULATION







[STANDARDS: GRI 103-1, 103-2, 103-3, 305-7, 413-1, 413-2]

THE GROUNDS FOR ACTION

We believe that a frank and fair exchange of opinion is essential to ensure that we continue to enjoy good acceptance from the local population in the area around the ports.

All projects for the construction or expansion of port facilities have to undergo legally prescribed approval procedures, depending on the extent and scale of the project concerned. Which procedures apply has to be determined with the competent approval authorities for the individual project. These procedures examine both the impact on the environment as well as on the local population. The planning approval procedure for major infrastructure projects always involves broad public participation.

When regular port operations cause adverse impact for the local population, such as traffic, noise or restricted use of the port areas, we seek solutions in consultation with the parties who are affected. At the same time, we make sure that the port infrastructure is a tangible experience for the general public and show the influence that the port has on our region.

We also plan and implement various projects and measures which benefit the local population in close cooperation with our partners and members of staff who are committed to resolving these aspects. Our activities in this sector focus on projects which promote the development of Bremerhaven-Lehe, a deprived urban area near the ports.

OUR OBJECTIVES

- To identify solutions to mitigate impact on the local population on a basis of mutual trust and make the port a tangible experience for the population, despite access restrictions
- Engagement in tangible projects to make a contribution to the development of Bremerhaven-Lehe, a deprived urban area near the ports

OUR PROCEDURES

Currently identified impact from regular port operations

In addition to numerous positive economic effects, regular port operations also entail adverse effects for the local population. These are fundamentally not the responsibility of bremenports GmbH & Co. KG, but of the parties who cause them, i.e. the terminal operators as well as providers of water and land transport services. However, we endeavour to help the affected residents in dialogues with all the stakeholders. We are currently aware of the following negative effects which were of relevance during the period under review. Affected residents can report their concerns at any time by sending an e-mail to the general bremenports address office@bremenports.de.

Access and usage restrictions

There are access and usage restrictions owing to the security regulations of the ISPS Code. However, we have not as yet received any complaints from the population with regard to these restrictions. To enable access to the port premises, Erlebnis Bremerhaven GmbH offers, for instance, guided tours on the port bus. On the annual Logistics Day various business enterprises at the ports in Bremen and Bremerhaven open their doors to the general public. bremenports also takes part in this event and offers a number of special activities. The public has access to various spectator areas such as the container observation platform and the visitors' terrace at Columbus Cruise Center Bremerhaven when cruise ships are in port. Many public streets in Bremen afford good views of the ports and the activities there, e.g. Industriehäfen from Kap-Horn-Strasse, Holz- und Fabrikenhafen from Fabrikenufer and Neustädter Hafen from Lankenauer Höft. Guided tours of Luneplate compensatory mitigation site are available at regular intervals and have proved popular with the public.

Noise emissions

Noise emissions result from terminal operations, cargo handling, freight and passenger traffic and from the other business activities at the ports. Since 2018, there have been complaints from some individual residents near the ports in Bremen (TSR Recycling at Industriehafen and at the Neustädter Hafen areas). According to the Trade and Industry Inspectorate in Bremen, the population appears to be increasingly sensitive to this kind of environmental pollution. Diverse noise mitigation measures have been implemented at the Container Terminal in Bremerhaven and have proved effective: the number of complaints about noise received on our designated hotline for portside residents in Weddewarden has gradually decreased to practically nil since the beginning of 2013. The noise map for the seaport of Bremerhaven was last updated in 2018 and will next be updated in 2023 after the prescribed 5-year interval.

The level of noise emissions on the outskirts of Bremerhaven Container Terminal and the neighbouring residential areas in Bremerhaven in relation to container throughput is recorded in dB(A)/million TEU. Since 2011 the figure has been lower than 50 dB(A)/million TEU. The noise emissions trend is shown in our Key performance indicators.

Impact of traffic

The carriage of freight by rail and truck and the ensuing side effects, such as congestion, lack of parking spaces and emissions, place a noticeable strain on the population in Bremerhaven and Bremen. The traffic takes place on approved and designated traffic infrastructure. The current impact remains high. In addition to capacity bottlenecks, however, extreme weather events (storm, heat and sea fog) also cause traffic delays. A "Railway Noise Initiative Bremen" has been formed to campaign for the reduction of noise from freight traffic. There are also various initiatives in the individual municipalities along the Bremerhaven-Bremen railway line, which lobby for overpasses or tunnels instead of level railway crossings. This is intended to reduce delays caused from waiting at level crossings and to increase traffic safety. There are also demands for a third track, which would enable better organisation of parallel passenger and freight traffic and thus help to reduce delays in rail passenger traffic

Capacity planning is an ongoing part of the port development process. Innovative approaches for the areas inside or immediately next to port areas are intended to reduce negative impacts from rail and road traffic. A slot management system organised by the terminal operators and a parking area for trucks as well as various optional services are intended to permit efficient management of incoming road freight traffic to the terminals and to reduce urban environmental pollution in Bremerhaven.

Engagement in specific projects

Because of the Covid pandemic, it was unfortunately not possible to execute the planned cooperative projects with Ernst-Reuter-Platz School in the period under review. These projects were intended to help develop Bremerhaven-Lehe, a deprived urban area near the ports. Instead, however, bremenports could help in emergency situations following the flood disaster in Bad Neuenahr-Ahrweiler and provided financial support for the acquisition of a photovoltaic system for the Mission to Seafarers in Bremerhaven. A joint cultural project with a drama group entitled "Das letzte Kleinod" (The last gem) could also be implemented.

Our cooperation with ERNST!

For years, bremenports has cooperated closely with Ernst-Reuter-Platz School ("ERNST!") in Bremerhaven's Lehe district. The project entitled "The port comes to Lehe" is our contribution to bringing about positive changes in this highly challenged urban district. The idea of making the port an integral part of the curriculum at ERNST! dates back to the year 2016 and a number of ideas have been initiated or put into practice since then. One of the core principles of our cooperation with ERNST! is continuity, which means we do not perform sporadic individual activities, but follow a structured approach. The bremenports management team and representatives of the school hold regular meetings twice a year. The minutes are taken by the school management and document the support that the school needs and what activities can be performed. There were 2 reasons why we chose ERNST! as the school we wished to support:

- *because of the location: the school is situated close to the ports in the Lehe district*
- *owing to the social background of the pupils: the percentage of families on social security in Lehe is comparatively high.*



Wrought ironwork done by the pupils decorates the school grounds

bremenports helps the school achieve its policy of offering manual projects to encourage pupils to start learning again and feel part of a team. Activities such as the conversion of a disused container into a bicycle repair shop play a key role. Meeting up at the workshop in Brückenstrasse every Friday for six months to work on a useful project together helps the youngsters in many respects. bremenports hopes that "The port comes to Lehe" will make a small but useful contribution towards promoting structural change in this district.

Owing to the pandemic it was unfortunately not possible to organise any activities in 2020 and 2021, but there are already various ideas in the pipeline which we hope to tackle in the near future.

Help for the flood victims

The horrendous floods in North Rhine-Westphalia and Rhineland-Palatinate caused a high number of deaths and destroyed much of the infrastructure in many districts. To support the rescue work, Bremen's port community promptly launched a relief campaign in July 2021 on the initiative of the Tiemann company. bremenports also supported the campaign and two members of staff spontaneously agreed to accompany the convoy to the disaster area. Together with Tiemann employees, they drove a truck and a van carrying pallets of shovels, protective clothing and cleaning rags, as well as large quantities of technical equipment, such as pumps, chain saws and generators, from Bremen to the disaster scene. The supplies were destined for a paint factory in Bad Neuenahr-Ahrweiler, where the floods had caused particularly severe damage. Nearby bungalows were completely flooded and some residents had died trying to save their lives. The relief supplies were unloaded, the generators set up and put into operation. The employees returned to Bremen around midnight with lasting impressions of the scene: "When you are right there on the spot, the damage seems far worse than it does when seen on TV."



Members of the flood relief team

„Das letzte Kleinod" drama group tells the history of emigration

It is a building that stands for departures and arrivals, for wistful farewells and joyful reunions, the scene of glittering celebrations and moments of pure loneliness: Columbus railway station is truly a historic site in Bremerhaven. At the same time, it is a building that seems to belong to another era.

It is not possible to put it to different use because the technical equipment is completely dilapidated and there are plans to demolish the station now that the port committee has approved funds for planning a new building on this site. But before the wrecking ball starts work, the old station deserves to be commemorated – and who could do so better than the drama group "Das letzte Kleinod" (https://www.das-letzte-kleinod.de/en/)?

Over the last 30 years, the independent drama group from Cuxhaven rural district has performed at a large number of historical sites to bring the past back to life. Before this engagement, for instance, the players performed in the lignite mining area of Lausitz. In October 2021, Erwin Siemssen, who founded the group, and his actors were presented with a cultural award by Lower Saxony's Minister of Culture.



Scene from "Passenger Processing": the concert from the port was broadcast on Radio Bremen (Copyright Das Letzte Kleinod, photography Finigan Willem)

bremenports was sure that "Das letzte Kleinod" was the ideal team to bid farewell to Columbus station and commemorate the part it played in emigration, a subject which features prominently in the history books. "Das letzte Kleinod" was equally pleased to receive the request from bremenports. Because of the wide spectrum that this topic involves, the originally planned play ultimately evolved into an entire festival that will be performed until 2023.

The play entitled "Passenger Processing" premiered in October 2021 and turned Columbus station into a type of walk-around theatre. The play was performed in various parts of the station, moving from the passenger departure area to the waiting rooms and foyers. Four groups of 40 spectators could follow the scenes around the building every evening.

Outlook: in the course of 2022 the drama group's "Blue Train" will perform a play on the subject of emigration at various stations along the former America railway line from Berlin to Bremerhaven. In May 2023, a play about the Queen Elizabeth will be performed together with an independent American drama group on the quayside in Bremerhaven and in Philadelphia.

Photovoltaic system for the Seamen's Club Bremerhaven

In 2020, bremenports won the Nordwest Award presented by North-West Metropolitan Region in recognition of its consistent sustainability policies. bremenports used the prize money of 10,000 euros to have a photovoltaic system with battery storage installed by the Wehmann Elektrotechnik company at the Welcome Club at Überseehafen in Bremerhaven.The system was officially put into operation right on time to mark the Day of the Seafarer in 2021.

The new system means that the Mission to Seafarers can now generate a large proportion of its own electricity. In addition to the ecological effects, the new photovoltaic system also relieves the pressure on the Welcome Club's budget.

Welcome Club at Nordschleuse lock in Bremerhaven is a popular meeting place for seafarers when their ships are in Bremerhaven. Every year, the club is visited by between 20,000 and 30,000 people.



Pleased with the joint undertaking: R. Howe, Managing Director bremenports, Dr A. Meinecke (North-West Metropolitan Region), H. Wehmann (Elektro Wehmann company), L. Ehlers (bremenports), T. Reinold (Welcome Club)

OUR PORTFOLIO OF MEASURES REGARDING THIS TOPIC

Cooperation with the local population				
Goal	**Measures**	**SDG**	**Timeline**	**Status 2022**
To draw up solutions for addressing adverse impact on the local population on a basis of mutual trust and make the port a tangible experience for the population despite access restrictions	Establishing a company-wide complaints management system		2022	planned
	Providing ongoing support for terminal operators, trade and industry inspectorate and Senator for Science & Ports in the dialogue with local residents on the subject of noise at Neustädter Hafen and Industriehafen in Bremen		ongoing	ongoing
	Helping to make the port a tangible experience, e.g. by offering bus tours of the port, Columbus Cruise Center and the container observation platform		ongoing	ongoing
	Documenting and analysing cycle track structures at Überseehafen in Bremerhaven with regard to safety, traffic flows, user friendliness		2020/2021	completed
	Extending plans for cycle tracks at Überseehafen in Bremerhaven		planned	planned
	Installing 6 public charging points for cars and e-bikes at Überseehafen		2022	in progress
Engagement in specific projects to promote development of Bremerhaven-Lehe, a deprived urban area near the ports	Supporting organisers of local cultural activities		ongoing	ongoing
	Cooperation with Ernst Reuter Platz School		ongoing	ongoing

GRI CONTENT INDEX

[GRI-STANDARD: 102-55]

With the exception of the updated "GRI 403: Occupational health and safety 2018" and "GRI 306: Waste 2020", the report is in accordance with the GRI standards which were revised in 2016 (as indicated by the year stated after the individual GRI indicators in the content index).

GRI 100: FOUNDATION AND GENERAL DISCLOSURES

GRI Foundation and disclosures		
References and notes	**Omissions**	**External audit**
GRI 101 – Foundation 2016 GRI 102 – General disclosures 2016		
Organisation profile		
102-1 Name of the organisation		Audited by TÜV NORD CERT GmbH
bremenports GmbH & Co. KG		
102-2 Activities, brands, products, and services		Audited by TÜV NORD CERT GmbH

Consulting and engineering company that is responsible for the ports of Bremen. Since January 2002, the company has managed the die infrastructure of the ports of Bremen on behalf of the Free Hanseatic City of Bremen with the exception of shoreside infrastructure at Fischereihafen.		
102-3 Location of headquarters		Audited by TÜV NORD CERT GmbH
The company headquarters are in Bremen. Further information: Imprint p. 191		
102-4 Location of operations		Audited by TÜV NORD CERT GmbH
bremenports is represented at locations in Bremen and Bremerhaven. The exact address is stated at: our website at: Sites (www.bremenports.de/en)		
102-5 Ownership and legal form		Audited by TÜV NORD CERT GmbH
The ports of Bremen are organised as a "landlord model", i.e. they distinguish between publicly funded port infrastructure and privately organised transhipment activities. The infrastructure of the ports of Bremen belongs to the Free Hanseatic City of Bremen, which has hived off the port infrastructure assets into the Special Assets Port and the Special Asset Fischereihafen (Waterside). The management of these special assets in the capacity of trustee was entrusted to bremenports GmbH & Co. KG, which was founded specifically for that purpose, by the competent ministry at that time. The "Special Asset Fischereihafen (Shoreside)" is managed by a separate operating company Fischereihafenbetriebgesellschaft mbH (FBG). Further information is provided on our website at. About us (www.bremenports.de/en)		
102-6 Markets served		Audited by TÜV NORD CERT GmbH
bremenports is a consulting and engineering company which manages the infrastructure of the ports of Bremen, with the exception of shoreside infrastructure at Fischereihafen, on behalf of the Free Hanseatic City of Bremen (FHB). The regular tasks of bremenports refer primarily to the operation and maintenance of the port infrastructure, inclusive of the terminal railway, the dykes and compensatory mitigation sites, the storm surge warning service, management of real estate, landscaping tasks in Bremerhaven that fall within the remit of the FHB, financial management of the budget for the regular tasks of FHB, location marketing and port development for the ports of Bremen. Special tasks are commissioned separately by Bremen's Senator for Science and Ports and refer to the implementation of individual projects. Over and above its regular and special tasks,		

bremenports offers a range of project and consultancy services to outside customers all over the world. Further information is provided on our website at: About us www.bremenports.de/en)		
102-7 Scale of the organisation		Audited by TÜV NORD CERT GmbH
2020 Annual Financial Statement (www.bremenports.de/en)		
102-8 Information on employees and other workers		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103, Key performance indicators, p. 152		
102-9 Supply chain		Audited by TÜV NORD CERT GmbH
bremenports does not have a traditional supply chain, but procures a large variety of goods and services for the management, construction and maintenance of the ports of Bremen. In 2021 our central purchasing department placed orders with approx. 1200 suppliers amounting to approx. EUR 5.3 million for goods and EUR 110 million for services. Key performance indicators, p. 152		
102-10 Significant changes to the organisation and its supply chain		Audited by TÜV NORD CERT GmbH
There were no significant changes to the supply chain during the period under review.		
102-11 Precautionary principle or approach		Audited by TÜV NORD CERT GmbH
Sustainability management S.6, Adaptation to climate change p. 47		
102-12 External initiatives		Audited by TÜV NORD CERT GmbH
The following codes, principles, directives and regulations apply at bremenports: quality management pursuant to DIN EN ISO 9001:2015, energy management pursuant to DIN EN ISO 500001:2018, environmental management pursuant to Ports Environmental Standards (PERS), beruf & familie audit. bremenports has also signed the Diversity Charter, the World Port Climate Declaration and the Arctic Commitment.		
102-13 Membership of associations		Audited by TÜV NORD CERT GmbH
Cooperation & networks p. 19		

Strategy		
102-14 Statement from senior decision-maker		Audited by TÜV NORD CERT GmbH
Foreword p. 2		
Ethics and integrity		
102-16 Values, principles, standards, and norms of behavior		Audited by TÜV NORD CERT GmbH
Compliance p. 27		
Governance		
102-18 Governance structure		Audited by TÜV NORD CERT GmbH
bremenports has a supervisory board and an advisory board on a voluntary basis. Information about the members is provided at About us (www.bremenports.de/en). The Managing Director Robert Howe is in charge of the company. He develops the corporate strategy, which is then adopted in consultation with the Supervisory Board, and is responsible for its operative implementation.		
Stakeholder participation		
102-40 List of stakeholder groups		Audited by TÜV NORD CERT GmbH
Stakeholder engagement p. 14		
102-41 Collective bargaining agreements		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103, Key performance indicators p. 152		
102-42 Identifying and selecting stakeholders		Audited by TÜV NORD CERT GmbH
Stakeholder engagement p. 14		
102-43 Approach to stakeholder engagement		Audited by TÜV NORD CERT GmbH
Stakeholder engagement p. 14		

102-44 Key topics and concerns raised		Audited by TÜV NORD CERT GmbH
Stakeholder engagement p. 14		
Reporting procedures		
102-45 Entities included in the consolidated financial statements		Audited by TÜV NORD CERT GmbH
The Sustainability Report publishes financial and non-financial information on the port management company bremenports GmbH & Co. KG and the port infrastructure which it manages in the capacity of trustee, i.e. the "Special Asset Ports" and the "Special Asset Fischereihafen (Waterside)". There have been no significant changes in terms of size, structure or ownership since the previous year.		
102-46 Defining report content and topic Boundaries		Audited by TÜV NORD CERT GmbH
Stakeholder engagement p. 14, Sustainability management p. 6		
102-47 List of material topics		Audited by TÜV NORD CERT GmbH
Our sustainability topics p. 12		
102-48 Restatements of information		Audited by TÜV NORD CERT GmbH
Sustainability management p. 6		
102-49 Changes in reporting		Audited by TÜV NORD CERT GmbH
Presentation of the report contents is based on our 5 areas of action, which we amended as follows in 2021 as a consequence of our stakeholder dialogue: Sustainability, Market presence & port development, Climate Protection, Environmental management and Social responsibility. Sustainability management p. 6, Stakeholder engagement p. 14		
102-50 Reporting period		Audited by TÜV NORD CERT GmbH
This Sustainability Report refers to reporting years 2020 and 2021 (1 January 2020 – 31 December 2020 as well as 1 January 2021 – 31 December 2021). Internal organisational changes have enabled us to publish up-to-date data from the preceding year. In cases where it was not possible to obtain data prior to the editorial deadline, we have resorted to estimated figures or state the reasons for the lack of data in the overview of		

our Key Performance Indicators. The status of the reported qualitative information and measures is currently reported at the time of the editorial deadline (28 February 2022) and consequently extends beyond the time-line of the reported Key Performance Indicators.		
102-51 Date of most recent report		Audited by TÜV NORD CERT GmbH
The most recent Sustainability Report was published in July 2021.		
102-52 Reporting cycle		Audited by TÜV NORD CERT GmbH
The Sustainability Key Performance Indicators which serve as the basis for reviewing, compar-ing and evaluating our sustainability performance are recorded every year. The Key Perfor-mance Indicators and the updated Sustainability Report are published every year or every 2 years.		
102-53 Contact point for questions regarding the report		Audited by TÜV NORD CERT GmbH
Imprint p. 191		
102-54 Claims of reporting in accordance with the GRI Standards		Audited by TÜV NORD CERT GmbH
The presentation of our sustainability performance is consistently geared to the requirements of the Global Reporting Initiative (GRI). This report was drawn up in compliance with the GRI standard: “Core option”.		
102-55 GRI content index		Audited by TÜV NORD CERT GmbH
GRI content index p. 119		
102-56 External assurance		Audited by TÜV NORD CERT GmbH
To ensure the plausibility and quality of reporting, our Sustainability Report 2022 will also undergo an external audit. The management endorses this procedure, provides the necessary budget and attends the audit meetings. There are no further business relationships between the organisation and the auditors over and above the scope of the audit. TÜV NORD CERT GmbH conducts an audit to obtain a moderate level of assurance based on AA1000APS:2008. The GRI indicators covered by the scope of the audit are indicated accordingly in the GRI content index. Information on the au-dit procedures and findings are presented in the audit certificate. External audit p.181		

GRI 200: ECONOMY

GRI Standards and disclosures		
References and notes	**Omissions**	**External audit**
Economic performance		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Adaptation to climate change p. 47		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Adaptation to climate change p. 47 **Objectives and measures**: Adaptation to climate change p. 47 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 201: Economic performance		
201-2 Financial implications and other risks and opportunities due to climate change		Audited by TÜV NORD CERT GmbH
Adaptation to climate change p. 47	No financial assessment of the indiv. risks & opportunities of our port location in respect of climate change is as yet available.	

Indirect economic impacts		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Market presence p. 33, Port development p. 38		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Market presence p. 33, Port development p. 38 **Objectives and measures**: Market presence p. 33, Port development p. 38 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 203: Indirect economic impacts 2016		
203-1 Infrastructure investments and services supported		Audited by TÜV NORD CERT GmbH
Port development p. 38		
203-2 Significant indirect economic impacts		Audited by TÜV NORD CERT GmbH
Market presence, p. 33		
Procurement practices		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH

Negative impacts on the environment and society can occur in the course of our supply chain owing to the purchase of "non-sustainable" products and services. We accordingly endeavour to reduce potential adverse impact on the environment and society by taking environmental and social standards into consideration in our procurement practices.		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: In order to further reduce adverse impact on the environment and society we introduced "Guidelines for sustainable, energy-efficient procurement" in 2018. These contain clear specifications for numerous product groups, such as working clothes, wood products, natural stone, office equipment, electric motors and pumps. The guidelines were updated in February 2021 (amongst other things owing to Bremen legislation) and now essentially specify recognised seals of approval which guarantee compliance with social, ecological and energy-efficient criteria. The contract award department has also developed "Guidelines for sustainable contract award" which enable the integration of further sustainability criteria in contract award procedures. In 2018 we introduced the "Pioneering fleet" guidelines for the purchase of new vehicles. These guidelines stipulate clear objectives for the gradual reduction of emissions by changing over our fleet to electric drive systems and hybrid vehicles. **Objectives and measures**: Stakeholder engagement p. 14, Cooperation with the local population p. 113 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 204: Procurement practices 2016		
204-1 Proportion of spending on local suppliers		Audited by TÜV NORD CERT GmbH
As a public awarding authority we are not permitted to give preference to suppliers because they are located in certain regions. This means that we are always obliged to invite Europe-	The disclosure of a percentage of the procurement budget spent on suppliers who	

wide tenders for services which exceed certain threshold values. We are therefore not at liberty to deliberately procure goods and services from regional suppliers in order to support the economic strength of the region and simultaneously exploit the ecological benefits of short supply routes. Nevertheless, in our capacity as port management company for the ports of Bremen we contribute in a different way to strengthening regional added value: the ports are an essential factor for attracting new businesses and for the operations of numerous business enterprises which have a significant effect on the local and regional labour market, cf. Market presence. p. 35	are located in the local region would not be helpful in view of the currently applicable contract award regulations.	
Anti-corruption		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Compliance p. 27		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Compliance p. 27 **Objectives and measures**: Compliance p. 27 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 205: Anti-corruption 2016		
205-1 Operations assessed for risks related to corruption		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152		

205-2 Communication and training about anti-corruption policies and procedures		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	Business partners do not receive any information. 205-2 is therefore not relevant.	
205-3 Confirmed incidents of corruption and actions taken		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152		

GRI 300: ECOLOGY

GRI Standards and disclosures References and notes	Omissions	External audit
Energy		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Energy & climate protection in port infrastructure p. 73 **Objectives and measures**: Energy & climate protection in port infrastructure p. 73 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 302: Energy 2016		
302-1 Energy consumption within the organisation		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	No renewable energy carriers are reported for the direct energy sector, as none exist. To enable better comparison, energy consumption is reported in MWh; no figures	

	are reported in joule.	
302-4 Reduction of energy consumption		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152		
Biodiversity		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Biodiversity p. 64		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Biodiversity p. 64 **Objectives and measures**: Biodiversity p. 64 **Dealing with complaints**: Stakeholder engagement p. 16, Cooperation with the local population p. 115		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 304: Biodiversity 2016		
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152		
304-2 Significant impacts of activities, products and services on biodiversity		Audited by TÜV NORD CERT GmbH

Biodiversity p. 64, Port development p. 38, Water quality p. 85, Waste, sediment & circular economy p. 97		
304-3 Habitats protected or restored		Audited by TÜV NORD CERT GmbH
Biodiversity p. 64, Key performance indicators p. 152		
304-4 Species on the Red List of the International Union for Conservation of Nature (IUCN) and national conservation list species with habitats in areas affected by operations		Audited by TÜV NORD CERT GmbH
No impact of direct bremenports activities on endangered species of fauna and flora is to be expected. The only measure in that respect refers to protective measures for terns, which are severely endangered in Germany (German Red List of Breeding Birds 2015).		
Emissions		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73, Air quality p. 90, Cooperation with the local population p. 113		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Energy & climate protection in port infrastructure p. 73, Air quality p. 90, Cooperation with the local population p. 113 **Objectives and measures**: Energy & climate protection in port infrastructure p. 73, Air quality p. 90, Cooperation with the local population p. 113 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113 GHG Protocol balance sheet method: operational control		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The find-		

ings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 305: Emissions 2016		
305-1 Direct GHG emissions (Scope 1)		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73, Key performance indicators p. 152		
305-2 Energy indirect GHG emissions (Scope 2)		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73, Key performance indicators p. 152		
305-3 Other indirect GHG emissions (Scope 3)		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73, Key performance indicators p. 152		
305-5 Reduction of GHG emissions		Audited by TÜV NORD CERT GmbH
Energy & climate protection in port infrastructure p. 73, Key performance indicators p. 152		
305-7 Nitrogen oxides (NOX), sulphur oxides (SOX) and other significant air emissions		Audited by TÜV NORD CERT GmbH
Disclosures on noise emissions as well as disclosures on the emissions model (simulation tool) for the ports of Bremen which show the emissions of the air pollutants nitrogen oxides, sulphur oxides, particulate matter and the greenhouse gas carbon dioxide generated by marine shipping, inland shipping and internal port traffic are shown in our Key performance indicators. Air emissions in the port environment (measuring stations at Hansastrasse in Bremerhaven and in Bremen-Hasenbüren) are published by Bremen's Senator for the Environment on a daily basis at the following link: https://bremen.luftmessnetz.de/station/overview/active Our procedures for monitoring air emissions and concentrations are described in the chapter on Air quality and for monitoring noise in the chapter Cooperation with the local population.	The emissions of nitrogen and sulphur oxides are no longer published for bremenports' fleet of vehicles and vessels as these emissions are marginal compared with the nitrogen and sulphur oxides generated by marine shipping at the ports of Bremen and consequently classified as insignificant. Persistent organic pollutants, volatile organic compounds and hazardous air pollutants are not relevant.	

Waste		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Waste, sediment & circular economy p. 97		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Waste, sediment & circular economy p. 97 **Objectives and measures**: Waste, sediment & circular economy p. 97 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 306: Waste 2020		
306-1 Waste generated and significant waste-related impacts		Audited by TÜV NORD CERT GmbH
Waste, sediment & circular economy p. 97		
306-2 Management of significant waste-related impacts		Audited by TÜV NORD CERT GmbH
Waste, sediment & circular economy p. 97		
306-3 Waste generated		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	The quantities are stated in m³ and not in tons.	
306-4 Waste diverted from disposal		Audited by TÜV NORD CERT GmbH

Key performance indicators p. 152	The quantities are stated in m³ and not in tons.	
306-5 Waste directed to disposal		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	The quantities are stated in m³ and not in tons.	
Environmental compliance		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Knowledge of and compliance with environmental laws and regulations are documented at the ports of Bremen as part of our PERS Environmental Management System and reviewed by Lloyds Register as part of the certification procedure.		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: cf. current version of the PERS Environmental Report in the bremenports media centre **Objectives and measures**: cf. current version of the PERS Environmental Report in the bremenports media centre **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: cf. current version of the PERS Environmental Report in the bremenports media centre		
GRI 307: Environmental compliance		
307-1 Non-compliance with environmental laws and regulations		Audited by TÜV NORD CERT GmbH
There were no regulatory offences and/or charges pressed during the period under review, so that no fines and/or non-monetary penalties were imposed during that period.		

Environmental supplier assessment		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Negative impacts on the environment and society can occur in the course of our supply chain owing to the purchase of "non-sustainable" products and services. We accordingly endeavour to reduce potential adverse impact on the environment and society by taking environmental and social standards into consideration in our procurement practices.		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: In order to further reduce adverse impact on the environment and society we introduced "Guidelines for sustainable, energy-efficient procurement" in 2018. These contain clear specifications for numerous product groups, such as working clothes, wood products, natural stone, office equipment, electric motors and pumps. The guidelines were updated in February 2021 (amongst other things owing to Bremen legislation) and now essentially specify recognised seals of approval which guarantee compliance with social, ecological and energy-efficient criteria. The contract award department has also developed "Guidelines for sustainable contract award" which enable the integration of further sustainability criteria in contract award procedures. **Objectives and measures:** Sustainability management p. 6 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 308: Environmental supplier assessment 2016		
308-1 New suppliers that were screened using environmental criteria		Audited by TÜV NORD CERT GmbH
Internal guidelines on sustainable energy-efficient procurement and for a pioneering fleet en-	bremenports does not have a traditional	

sure the implementation of the applicable regulations for sustainable procurement pursuant to the Collective Bargaining and Public Procurement Act, Bremen Climate Protection- and Energy Act, Bremen Ordinance on Core Labour Standards, Bremen Budget Ordinance as well as the Administrative Regulation on Purchasing for the Free Hanseatic City of Bremen – Federal Land of Bremen and Bremen Municipality.	supply chain, but procures a large variety of goods and services for the management, construction and maintenance of the ports of Bremen. Our purchasing department places orders with approx. 1200 suppliers every year. We accordingly do not believe that the assessment of individual suppliers would be helpful in this connection.	
308-2 Negative environmental impacts in the supply chain and actions taken		Audited by TÜV NORD CERT GmbH
No significant actual or potential negative ecological impacts in the supply chain are known for the period under review.		

GRI 400: SOCIAL

GRI Standards and disclosures		
References and notes	**Omissions**	**External audit**
Employment		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Attractive working conditions p. 103 **Objectives and measures**: Attractive working conditions p. 103 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 401: Employment 2016		
401-1 New employee hires and employee turnover		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	There were minor deviations in age groups (younger than 35, between 36 and 55, and 55 or over) in accordance with our annual HR statistics drawn up for the management	

	and supervisory board. In the interests of clarity, these statistics state primarily absolute figures.	
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		Audited by TÜV NORD CERT GmbH
As a fundamental principle, all benefits are always offered to all employees (regardless of whether fixed-term or permanent contract, full or part time). In addition to the statutory regulations which apply specifically to the Federal Land of Bremen, working conditions are based primarily on the collective agreements negotiated for civil servants (TVöD). Amongst other things, employees are entitled to additional pension insurance and provisions for surviving dependents, severity allowances and a performance-based bonus. Employees also receive an annual bonus, continued payment in case of sickness, contributions to an employee savings scheme, long-service bonus and death benefit. bremenports has taken out group accident insurance for all employees. Employees working abroad receive additional accident insurance for the period concerned as well as baggage insurance. Employees are further entitled to reduced-rate "Job Tickets" for local public transport as well as subsidised membership of Hansefit and qualitrain gyms. There is also a deferred compensation pension plan.		
401-3 Parental leave		
All bremenports employees are entitled to parental leave pursuant to the Federal Parental Benefits and Parental Leave Act. Cf. Key performance indicators (p. 152) for number of claimants.	In view of diverse parental leave models (different duration, splitting parental leave) and the statutory protection against dismissal and/or right to continued employment, we do not report on the proportion of employees who remain and/or return. We protect the job as well as career opportunities for employees returning after parental leave.	

Occupational health and safety		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Occupational health and safety enjoys high priority in Germany and is enshrined in a number of legal provisions. We are also well aware that our employees and their health are an important factor for the success of our company. Assuming responsibility for our employees and their working conditions is an important part of our identity.		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: The organisation of occupational health and safety at bremenports and assignment of the resulting duties to our own staff as well as external service providers are explained in the Organisation of Occupational Health and Safety process description as well as the other applicable document "Operating instruction on the organisation of occupational health and safety". **Objectives and measures:** Attractive working conditions p. 103 **Zuständigkeit:** The duties of in-house doctor, fire officer and company social advice centre are handled by Performa Nord. The duties of the health & safety officers for non-industrial staff are performed by Performa Nord, for industrial employees by BLG Logistics Group. Responsibility for health & safety duties is always assigned to executives with staff responsibility and to project managers on construction sites. The assignment of duties and expertise of the dutyholders are reviewed at regular intervals (at least every 12 months or as necessary) by the service team management to ensure that they comply with the latest requirements and standards. The results are documented. **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		

GRI 403: Occupational health and safety 2018		
403-1 Occupational health and safety management system		Audited by TÜV NORD CERT GmbH
Guaranteeing occupational health and safety for our own and external employees is managed on a company-wide basis. A designated OHS officer was appointed in 2021. Remit: Supporting the teams on site, together with the occupational health service, safety experts and officers. The BFG steering committee organises the topic of occupational health. All statutory requirements relating to occupational health and safety are implemented.		
403-2 Hazard identification, risk assessment and incident investigation		Audited by TÜV NORD CERT GmbH
Introduction of a generally binding "Operating instruction for the performance and documentation of risk assessments" in 2019, incl. standard template. All existing risk assessments are updated or initial risk assessments performed on the basis of a study to ascertain the status quo and identify further requirements. Risk assessments are reviewed every 36 months for the non-industrial sector and every 24 months for the industrial sector and updated if necessary. Additional introduction of an organisational instruction "Performance and documentation of inclusive risk assessments". The objective is to assess the risks at workplaces for employees with a severe disability and to enable the implementation of measures to minimise risks. These risk assessments enable bremenports to identify and eliminate potential hazard sources in advance. Employee recommendations are recorded centrally as part of the IMS. Suggestions for improvement for all work areas are submitted and collected on the intranet, discussed with the management and implemented where appropriate.		
403-3 Occupational health services		Audited by TÜV NORD CERT GmbH
We offer our staff preventive medical check-ups (mandatory, optional and elective health care) during working hours. This is handled by Performa Nord. The occupational health service performs regular preventive health check-ups which are required by statutory regulations (e.g. Ordinance on Preventive Occupational Health Care, Maternity Protection Act). We are planning to conclude a works agreement on "Aptitude tests" to ascertain employees' aptitude for high-risk work.		
403-4 Worker participation, consultation and communication on occupational health and safety		Audited by TÜV NORD CERT GmbH

The Occupational Health and Safety Committee (ASA) provides a platform for co-determination and participation. It comprises 15 members of staff who represent all company employees and meets at quarterly intervals to discuss health and safety issues and accident prevention. All employees have the opportunity to raise their concerns or file any complaints with the ASA Committee through their representatives on the committee or through members of the works council, the disabled employees' representative, the women's representative or the spokesperson of the safety officers. Key performance indicators p.152		
403-5 Worker training on occupational health and safety		Audited by TÜV NORD CERT GmbH
The occupational health and safety officers regularly instruct staff in health and safety matters and inspect workplaces as necessary. In cooperation with the assigned dutyholders they draw up / update risk assessments for all work groups and workplace categories which provide the basis for identifying the necessary technical, organisational or personal measures to minimise risks. These measures are implemented by the company and their effectiveness reviewed. Regular fire drills to practise evacuation of the buildings and fire control inspections are performed as fire prevention measures. Fire wardens have been trained and appointed for each storey of our buildings or for the individual work areas. These wardens attend regular refresher courses. To ensure that first aid is available at the company, we regularly train a sufficient number of first aiders and subsequently provide the necessary refresher courses. Automatic external defibrillators (AED) are available at six operating locations with a particularly high headcount and on board two of our service vessels. Our first aiders receive additional training in the use of these AEDs. The appointed equipment officers check that the AEDs are in good working order and are responsible for punctual replacement of any components with an expiration date. A software support system has also been introduced to monitor expiration and other inspection dates. The AEDs undergo regular safety inspections by a specialist company. Safety officers have been appointed at all operating locations to advise and assist the management and workforce with the implementation of occupational health and safety measures..		
403-6 Promotion of worker health		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		Audited by TÜV NORD CERT GmbH

We are further responsible for the safety of our customers, service providers or subcontractors who perform work on our premises, in our buildings etc. If construction and maintenance work is performed by outside companies, we ensure, for instance, that a Health and Safety Coordinator is appointed to coordinate and supervise the necessary occupational health and safety measures if several subcontractors are involved in the performance of one contract.		
403-8 Workers covered by an occupational health and safety management system		Audited by TÜV NORD CERT GmbH
The focus of these activities is prevention. The objective is to ensure in-house implementation of occupational health and safety standards in effective and fair cooperation with all involved parties and to permanently ensure the safety and health of our staff. This means that we already endeavour to avoid risks by conducting risk assessments of the workplaces. In the event of accidents which occur despite the implementation of preventive and safety measures, we subsequently debrief everyone involved to identify how the incident could have been prevented. Wherever possible, measures are initiated to improve the situation in order to avert similar situations in future. The workplace is reviewed in the course of the internal audits which bremenports conducts regularly for the management and divisions, departments, teams and staff units. These take place as part of the Integrated Management System and are supplemented by external audits. This ensures their application in practice and the participation of all employees. The management system applies to 100 % of our employees.		
403-9 Work-related injuries		Audited by TÜV NORD CERT GmbH
Key performance indicators p.152	Pursuant to the German Act on Temporary Agency Work, it is not legally permissible to publish injury data on outside companies. That data is therefore not reported here.	
403-10 Work-related ill health		Audited by TÜV NORD CERT GmbH
The success of our occupational health and safety measures is evident from the lost days rate (LDR) and the absenteeism rate (AR) (Key performance indicators, p. 152). The different types of injuries are also presented in a table. The persons involved in a work-related accident are subsequently debriefed to identify the causes and circumstances. Wherever possible, measures are discussed and initiated to avert similar situations in future. This applies to both our own staff as well as outside workers, depending on the case concerned. In view of the sensitivity of the data, the data relating to our own staff is disclosed only to our HR team. It is not possible for third parties to deduce the causes of lost days. We use our own in-house systems to collect this data. Unless otherwise stated, no other assumptions are made.	Pursuant to the German Act on Temporary Agency Work, it is not possible to access the data on work-related ill health of staff of outside companies.	

Training and education		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Attractive working conditions p. 103 **Objectives and measures**: Attractive working conditions p. 103 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 404 : Training and education 2016		
404-1 Average hours of training for training per year and employee		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152		
404-2 Programmes for upgrading employee skills and transition assistance programmes		Audited by TÜV NORD CERT GmbH
Individual scope for development and further training requirements are discussed in the course of structured annual staff appraisals. Interested employees can take part in our "Talent Compass" programme (one-year training programme for the promotion and development of fundamental methodological and social skills). We systematically address the shortage of qualified staff in some occupation groups by providing further training for our own staff. In response to the Coronavirus situation our management and non-executive employees were offered training on virtual management and virtual working. In addition to our in-house programme for management staff, we have also offered in-house training for all employees since	There are currently no plans to offer a separate transition assistance programme. Employees receive support when applying for partial retirement schemes.	

September 2020, focussing on communication and occupational health. Employees in the Federal Land of Bremen have a legal right to educational leave of a total of 10 days in a two-year period (Bremen Act on Educational Leave). Educational leave is intended to promote professional, cultural, political or personal education.		
404-3 Percentage of employees receiving regular performance and career development reviews		Audited by TÜV NORD CERT GmbH
bremenports offers all employees the option of an annual appraisal, which is intended to identify the employee's opportunities for development at bremenports. It is based on management responsibility for the employee which focuses on dialogue, participation and support. The procedure is governed by a works agreement on the performance of annual employee appraisals which applies to all bremenports employees. There is also a works agreement on performance-based bonuses, which applies to all employees who are covered by collective agreements and whose jobs are governed by the TVöD. The executive rates the employee with the help of a systematic performance appraisal in the fields of professional skills, work results, manner of working, powers of analysis and judgement, and cooperation. The performance bonus is calculated on the basis of this assessment and paid to the employee.		
Diversity and equal opportunity		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Attractive working conditions p. 103 **Objectives and measures**: Attractive working conditions p. 103 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The find-		

ings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 405: Diversity and equal opportunity 2016		
405-1 Diversity of governance bodies and employees		Audited by TÜV NORD CERT GmbH
Key performance indicators p. 152	The slight deviation in age groups (younger than 35, between 36 and 55, and 55 or over) corresponds to the annual HR statistics drawn up for the management and supervisory board. In the interests of clarity, these statistics state primarily absolute figures.	
405-2 Ratio of basic salary and remuneration of women to men		Audited by TÜV NORD CERT GmbH
Equal opportunity is governed by numerous statutory regulations, such as the Act to promote the Transparency of Pay Structures, which became law in 2017. Our "eg-Check" project which was concluded in 2014 did not reveal any discrimination of women or part-time employees. We intend to maintain this equal pay situation. To date no employees have submitted requests to check their own salaries pursuant to the new Pay Transparency Act. There is a consensus between the management, women's representative and works council to advance gender equality at bremenports.		
Non-discrimination		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Attractive working conditions p. 103 **Objectives and measures**: Attractive working conditions p. 103		

Dealing with complaints: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 406: Non-discrimination 2016		
406-1 Incidents of discrimination and corrective actions taken		Audited by TÜV NORD CERT GmbH
There were no incidents of discrimination and consequently no need to take corrective action. Depending on the nature and the extent of the discrimination, employees who suffer discrimination can contact their supervisor, the works council, the women's or disabled employees' representative, the HR department, the appeal body pursuant to Section 13 German Equal Opportunities Act or the company's social advice office.		
Freedom of association and collective bargaining		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Attractive working conditions p. 103 **Objectives and measures:** Attractive working conditions p. 103 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH

Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 407: Freedom of association and collective bargaining 2016		
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		Audited by TÜV NORD CERT GmbH
Attractive working conditions p. 103		
Local communities		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Cooperation with the local population p. 113		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Cooperation with the local population p. 113 **Objectives and measures:** Cooperation with the local population p. 113 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 413: Local communities 2016		
413-1 Operations with local community engagement, impact assessments, and development programmes		Audited by TÜV NORD CERT GmbH
Cooperation with the local population p. 113		

413-2 Operations with significant actual and potential negative impacts on local communities		Audited by TÜV NORD CERT GmbH
Cooperation with the local population p. 115, Air quality p. 92, Water quality p. 87		
Supplier social assessment		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Negative impacts on the environment and society can occur in the course of our supply chain owing to the purchase of "non-sustainable" products and services. We accordingly endeavour to reduce potential adverse impact on the environment and society by taking environmental and social standards into consideration in our procurement practices.		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: In order to further reduce adverse impact on the environment and society we introduced "Guidelines for sustainable, energy-efficient procurement" in 2018. These contain clear specifications for numerous product groups, such as working clothes, wood products, natural stone, office equipment, electric motors and pumps. The guidelines were updated in February 2021 (amongst other things owing to Bremen legislation) and now essentially specify recognised seals of approval which guarantee compliance with social, ecological and energy-efficient criteria. The contract award department has also developed "Guidelines which enable the integration of further sustainability criteria in contract award procedures. In 2018 we introduced the "Pioneering fleet" guidelines for the purchase of new vehicles. These guidelines stipulate clear objectives for the gradual reduction of emissions by changing over our fleet to electric drive systems and hybrid vehicles. **Objectives and measures:** Sustainability management p. 6, Energy & climate protection in port infrastructure p. 73 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		
103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The find-		

ings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 414: Supplier social assessment 2016		
414-1 New suppliers that were screened using social criteria		Audited by TÜV NORD CERT GmbH
Internal guidelines on sustainable energy-efficient procurement and for a pioneering fleet ensure the implementation of the applicable regulations for sustainable procurement pursuant to the Collective Bargaining and Public Procurement Act, Bremen Climate Protection- and Energy Act, Bremen Ordinance on Core Labour Standards, Bremen Budget Ordinance as well as the administrative regulation on purchasing for the Free Hanseatic City of Bremen – Federal Land of Bremen and Bremen Municipality.	bremenports does not have a traditional supply chain, but procures a large variety of goods and services for the management, construction and maintenance of the ports of Bremen. Our purchasing department places orders with approx. 1200 suppliers every year. We accordingly do not believe that the assessment of individual suppliers would be helpful in this connection.	
414-2 Negative social impacts in the supply chain and actions taken		Audited by TÜV NORD CERT GmbH
No significant actual or potential negative social impacts in the supply chain are known for the period under review.		
Socioeconomic compliance		
GRI 103: Management approach 2016		
103-1 Explanation of the material topic and its boundaries		Audited by TÜV NORD CERT GmbH
Compliance p. 27		
103-2 The management approach and its components		Audited by TÜV NORD CERT GmbH
Handling: Compliance p. 27 **Objectives and measures:** Compliance p. 27 **Dealing with complaints**: Stakeholder engagement p. 14, Cooperation with the local population p. 113		

103-3 Evaluation of the management approach		Audited by TÜV NORD CERT GmbH
Procedures and findings: Evaluation of the management approach takes place in the form of an annual appraisal after the data has been collected for the Sustainability Report. The findings of the appraisal are documented internally and taken into account in the next Sustainability Report.		
GRI 419 – Socioeconomic compliance 2016		
419-1 Non-compliance with laws and regulations in the social and economic area		Audited by TÜV NORD CERT GmbH
There were no regulatory offences and/or charges pressed during the period under review, so that no fines and/or non-monetary penalties were imposed during that period.		

KEY PERFORMANCE INDICATORS

KPI SUSTAINABILITY

KPI MARKET PRESENCE & PORT DEVELOPMENT

KPI CLIMATE PROTECTION

KPI ENVIRONMENTAL MANAGEMENT

KPI SOCIAL RESPONSIBILITY

KEY PERFORMANCE INDICATORS SUSTAINABILITY

SUSTAINABILITY

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
GRI 102-9		**Supplier management**						
		Expenditure on goods	EUR	5.255.329	3.601.615	3.803.620	5.761.408	6.738.019
		Expenditure on services	EUR	109.783.967	67.763.100	56.755.912	59.372.497	41.868.221
GRI 205-1	TÜV NORD	**Business units that were assessed for corruption risks**	per cent	0[1]	0	0	100	0
GRI 205-2	TÜV NORD	**Anti-corruption training** [2]						
		Number of staff that have received the Anti-corruption Code of Conduct [3]	per cent	100	100	100	100	100
		Jobs at risk of corruption[4]	number	218[5]	213	191	191	191
		Number of trained staff with management responsibility[6]	number / per cent	0 / 0,0	0 / 0,0	27 / 14,1	18 / 38,3	5 / 13,0
		Number of trained staff without management responsibility[7]	number / per cent	0 / 0,0	0 / 0,0	44 / 23,0	8 / 2,3	104 / 32,2
		Number of trained supervisory board members[8]	number / per cent	0 / 0,0	0 / 0,0	3 / 27,3	0 / 0,0	2 / 16,7
GRI 205-3	TÜV NORD	**Confirmed cases of corruption**	number	0	0	0	0	0

[1] The last assessment of the risk of corruption at the business units was conducted in 2018, the next is planned for 2023.
[2] Potential business partners receive a copy of our Compliance guidelines as part of the tender procedure.
[3] Each new recruit receives a copy of the Code of Conduct as part of the onboarding folder.
[4] Training is provided primarily for all employees who are identified by the risk assessment as at risk of corruption. The percentages are therefore stated in relation to the number of jobs which are classified as at risk of corruption. The 2017/2018 risk assessment identified 191 jobs as being at risk of corruption.
[5] Adjusted in line with the present headcount.
[6] No training was provided in 2020 or 2021 owing to the Covid 19 pandemic.
[7] No training was provided in 2020 or 2021 owing to the Covid 19 pandemic.
[8] No training was provided in 2020 or 2021 owing to the Covid 19 pandemic.

KEY PERFORMANCE INDICATORS MARKET PRESENCE & PORT DEVELOPMENT

MARKET PRESENCE & PORT DEVELOPMENT

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
PSI 10		**Top 4 ranking within the northwest range for container traffic** [9]						
		Rotterdam	million TEU	15,3	14,3	14,8	14,5	13,7
		Antwerpen	million TEU	12,0	12,0	11,9	11,1	10,4
		Hamburg	million TEU	8,7	8,5	9,3	8,7	8,8
		Bremerhaven	million TEU	5,3	4,8	4,8	5,4	5,5
PSI 11		**Top 4 ranking of European ports with automobile throughput**[9]						
		Zeebrügge	million units	2,3	2,2	3,0	2,8	2,8
		Bremerhaven	million units	1,9	1,7	2,2	2,2	2,3
		Emden	million units	1,0	1,0	1,4	1,4	1,5
		Antwerpen	million units	1,0	0,9	1,2	1,3	1,2
PSI 13		**Shore power supply**						
		Number of shore power connections for inland shipping	Number	20	20[10]	21	21	21

[9] Source: Data provided on the websites of the relevant ports.
[10] The number varies depending on the hire of individual units or set-up of temporary power distributors for construction sites.

KEY PERFORMANCE INDICATORS MARKET PRESENCE & PORT DEVELOPMENT

Indicator	External assessment	Item	Unit	2020	2015	2010
GRI 203-2	TÜV NORD	**Indirect economic effects of the ports of Bremen**[11]				
		Port-dependent jobs	number	38.800	77.250	75.700
		of which jobs dependent directly on the ports	number	32.900	59.350	58.300
		> of which in the maritime transport business	number	6.400	33.050	32.500
		> of which in the port-related business sector	number	26.500	26.300	25.800
		of which jobs indirectly dependent on the ports	number	5.900	17.900	17.400
		Gross value added of directly and indirectly port-dependent business in the Federal Land of Bremen				
		Value added	Mio. Euro	3.315	6.900	6.200
		Share of gross value added of total industry	per cent	11,0	25,1	25,7
		> of which share of industry directly dependent on the ports	per cent	90	19,8	20,3
		> share of industry indirectly dependent on the ports	per cent	10	5,3	5,4

[11] Source: Analysis by Bremen Institute of Shipping and Logistics (ISL). The survey takes place every 5 years. Owing to the new standardised national method applied for the first time by ISL for 2020, the effects shown are not comparable with the figures from the previous studies in 2015 and 2010.

KEY PERFORMANCE INDICATORS MARKET PRESENCE & PORT DEVELOPMENT

Indicator	External assess-ment	Item	Unit	2021	2020	2019	2018	2017
QM Port		Port availability - IT > 98 %[12]	per cent	99,82	no data available			

GRI 304-1[13]	TÜV NORD	**Protected area**	**Adjacent port areas**	**Type of habitat**	**Relevance for protected species**
		Weser Flora-Fauna-Habitat near Bremerhaven [DE2417-370]	Überseehafen district and Fischereihafen district, Bremerhaven	Estuarine [tidal river estuary]	Migration area and adaptation zone for migratory fish such as shad, river and sea lamprey
		Luneplate nature reserve (large parts of the Weser FFH area [DE2417-370]) and Luneplate bird sanctuary have been designated as a nature reserve since 17.02.2015)	Überseehafen district and Fischereihafen district, Bremerhaven	Tidal lower course of the river with tidal inlets and brackish flats, reedbeds, wet fallows, salt marsh with flooding in winter, seasonally flooded grassland, ditches, ponds and woodland	Migratory fish (shad, river and sea lamprey), waterfowl and waders, meadow and reedbed birds, plant species found in brackish reedbeds and salt marshes

[12] The new indicator QM Port was added in 2021.
[13] Sources:
https://www.bauumwelt.bremen.de/umwelt/natur/ffh-gebiete-24146 (Weser FFH area near Bremerhaven, Weser between the Ochtum estuary and Rekum),
https://www.bauumwelt.bremen.de/umwelt/natur/vogelschutzgebiete-24122 (Luneplate, Niedervieland bird sanctuaries),
https://www.nlwkn.niedersachsen.de/natura2000/eu_vogelschutzrichtlinie_und_eu_vogelschutzgebiete/eu_vogelschutzgebiete_in_niedersachsen/eu-vogelschutzgebiet-v01-niedersaechsisches-wattenmeer-und-angrenzendes-kuestenmeer-132472.html (Lower Saxony Wadden Sea National Park),
https://www.bauumwelt.bremen.de/umwelt/natur/naturschutzgebiete-23904 (NSG Luneplate, flood polder Weserportsee nature reserves)

GRI 304-1[13]	TÜV NORD	**Protected area**	**Adjacent port areas**	**Type of habitat**	**Relevance for protected species**
		Lower Saxony Wadden Sea National Park Bird Sanctuary [DE2210-401]; Flora-Fauna-Habitat [DE2306-301]; UNESCO World Heritage Site	Überseehafen district, Bremerhaven	mostly: estuarine [see above], vegetation-free mud, sand and mixed flats, Atlantic salt meadows	Breeding ground and partial habitat for a particularly high number of rare bird species; migratory route for sea lampreys; habitat for porpoises
		Weserportsee nature reserve	Überseehafen district, Bremerhaven	Different types of closely interlinked habitats (ponds, wet hollows, valuable reedbeds, woodland, open sandy areas and infertile grassland)	Habitat for various species of fauna and flora, some of which are endangered
		Weser Flora-Fauna-Habitat between the Ochtum estuary and Rekum [DE2817-370]	Klöcknerhafen, Bremen	Inland water (tidal lower course of the Weser with strong bank reinforcement)	Spawning grounds and larvae / fish nursery habitat for shad, migratory area for river and sea lamprey
		Niedervieland bird sanctuary [DE2918-401]	Dredged material treatment facility, Bremen - Seehausen	Large extensively farmed wet grassland ditch area with alluvial forest, reedbeds, large and small ponds	Breeding area for bluethroat, marsh harriers, short eared owl, spotted crake, corncrake, stork; habitat for visitors such as wood sandpiper, golden plover, ruff, hen harrier, smew, Bewick's swan
		Flood polder nature reserve	Neustädter Hafen, Bremen and dredged material treatment facility, Bremen - Seehausen	Flood plains with sporadically flooded wet grassland, alluvial forest, reedbeds, ruderal areas and small ponds	Habitat for bluethroat, sedge warbler, bittern, marsh harrier, black-necked grebe, gadwall, shelduck, amphibians and dragonflies as well as purple loosestrife, flag iris and willow

KEY PERFORMANCE INDICATORS MARKET PRESENCE & PORT DEVELOPMENT

Indicator	External assess-ment	Item	Unit	2021		2020		2019		2018		2017	
GRI 304-3	TÜV NORD	**Port compensatory mitigation sites**											
		Protected or safe habitats created by bremenports	hectares	1.269		1.216		1.213		1.214		1.203	
		of which port compensatory mitigation sites which are in the targeted development phase	hectares	597		546		554		567		658	
		of which port compensatory mitigation sites which have passed into the maintenance phase after successful development	hectares	672[14]		670		659		647		545	
		Status of port compensatory mitigation sites											
		fully functioning	hectares I per cent	917	72%	901	74%	901	74%	901	74%	901	75%
		functioning well	hectares I per cent	243	19%	204	17%	204	17%	200	16%	194	16%
		functioning	hectares I per cent	64	5%	89	7%	81	7%	86	7%	82	7%
		functioning conditionally	hectares I per cent	45	4%	22	2%	27	2%	27	2%	26	2%
		functioning to a very limited extent	hectares I per cent	0	0%	0	0%	0	0%	0	0%	0	0%

[14] In addition to the 672 hectares, 6 individual measures have been successfully developed and are now in the maintenance phase (woodland plantation, housing for bats etc.).

KEY PERFORMANCE INDICATORS MARKET PRESENCE & PORT DEVELOPMENT

GRI 304-3	TÜV NORD	**Status of individual measures at specific locations[15]**						
		fully functioning	hectares I per cent	2	2	no data available		
		functioning well	hectares I per cent	3	3	no data available		
		functioning	hectares I per cent	1	1	no data available		
		functioning conditionally	hectares I per cent	0	0	no data available		
		functioning only to a very limited extent	hectares I per cent	0	0	no data available		
PERS No. 11	Lloyds Register	**Habitat-Index[16]**	per cent	37,83	36,84	36,79	36,56	36,41

[15] The new item "Status of individual measures at specific locations" was added in 2020.
[16] Habitat sites which are the responsibility of the ports of Bremen / total port area. 290 hectares of the total 1506.5 hectares of compensatory mitigation sites of the ports of Bremen are sites which are the responsibility of FBG, over which bremenports has no influence. Minor corrections have been made for the years 2015 - 2108 owing to an adjustment of the calculation method.

KEY PERFORMANCE INDICATORS CLIMATE PROTECTION

CLIMATE PROTECTION

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
GRI 302-1	TÜV NORD	**Direct energy consumption**						
		Petrol	MWh	151	161	125	49	35
		Diesel[17]	MWh	515	515	700	794	792
		Marine diesel	MWh	4.229	5.223	4.858	5.151	5.259
		Heating oil	MWh	340	669	645	1.009	1.187
		Propane	MWh	136	177	175	162	166
		Natural gas	MWh	1.951	1.532	1.649	1.922	1.750
		GTL (Gas to liquid)	MWh	473	335	209	0	0
		Total direct energy consumption	MWh	3.566	3.390	3.502	9.088	3.930
		Indirect energy consumption						
		Electricity	MWh	7.888	7.567	7.768	8.194	6.955
		> of which electricity mix	MWh I per cent	883 11	768 10	1.031 13	1.146 14	54 1

[17] Marine diesel and diesel are presented separately as from this report. The figures for the previous years have been adjusted accordingly.

KEY PERFORMANCE INDICATORS CLIMATE PROTECTION

		> of which renewable	MWh I per cent	7.004	89	6.799	90	6.737	87	7.048	86	6.901	99
		District heating	MWh	559		473		555		550		553	
		Total indirect energy consumption	MWh	8.447		8.040		8.323		8.744		7.508	
		Total energy consumption	MWh	**12.013**		**11.430**		**11.826**		**17.832**		**11.438**	
GRI 305-1, GRI 305-2, GRI 305-3	TÜV NORD	**Total GHG emissions**		**1.905**		**2.168**		**2.445**		**2.703**		**2.377**	
		of which Scope 1	t CO_{2e}	1.745		1.968		1.956		2.242		2.257	
		of which Scope 2 Market based [18]	t CO_{2e}	155		163		218		369		17	
		of which hypothetically Scope 2 Location based [19]	t CO_{2e}	*3.289*		*3.190*		*3.291*		*3.884*		*3.380*	
		of which Scope 3[20]	t CO_{2e}	5		37		73		92		103	

[18] The calculation satisfies the requirements of GHG Protocol Scope 2 Guidance. Emission factor according to the utility company swb. The figure was subsequently rectified in 2019.
[19] The calculation satisfies the requirements of GHG Protocol Scope 2 Guidance. Since financial year 2015, the calculation has been based on the emission factors of the Federal Environment Agency [UBA]; the figures for the previous years were adjusted accordingly. The figure for 2019 was subsequently rectified.
[20] The assessment methods for Scope 3 were changed in financial year 2014 and follow the recommendations of DEFRA to include the effect of radiative forcing (RF) for air travel as from 2014. The figures for this KPI for the years 2012/2013 are therefore not directly comparable with the figures as from 2014. Since 2021 business trips also include travel for work performed by private car.

KEY PERFORMANCE INDICATORS CLIMATE PROTECTION

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
GRI 305-5	TÜV NORD	**Reducing GHG emissions**						
		Avoided GHG emissions due to the purchase of electricity from renewable sources	t CO_{2e}	3.134	3.027	3.073	3.515	3.363
		Avoided GHG emissions due to electricity generation (photovoltaic system) [21]	t CO_{2e}	14	15	14 [5]	18	17
		Company fleet	kg CO_{2e} /km	0,1963	0,1939	0,2256	k.A.	k.A.
		Emissions offset due to the purchase of climate certificates[22]	t CO_{2e}	790	843	660	706	341
PERS No. 5	Lloyds Register	Degree of use of green power for port infrastructure & management	per cent	88	90	87	86[23]	99

[21] The data for 2016 - 2019 was subsequently adjusted owing to an improvement in the available data. The reduction in the avoided GHG emissions resulting from the generation of electricity with our own photovoltaic system is due to the reduction in the emission figures for the German average electricity mix.
[22] All non-avoidable emissions (company fleet, heat generation, business travel) are offset for bremenports every year. Since 2016, all non-avoidable emissions by the company fleet have also been offset for the Special Asset Ports. Since 2018, emissions from non-renewable energy have also been offset. Since 2019, all non-avoidable emissions (heat generation, plants operation) have also been offset for the Special Asset Fischereihafen (Waterside).
[23] The reduction since 2018 is attributable to an increase in the technical plant with conventional power generation.

KEY PERFORMANCE INDICATORS CLIMATE PROTECTION

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
PSI 18	TÜV NORD	**Electric vehicles**						
		Motor vehicles in company fleet	number	84	83	83	81	80
PSI 18	TÜV NORD	of which hybrid	number	3	3	3	0	0
		of which plug-in hybrid	number	2	2	0	0	0
		of which electric vehicles	number	10	8	8	4	3
		Share of hybrid and electric vehicles in the annual fleet mileage	%	16,5	16,9	2,4	no data available	no data available
		E-bikes	number	8	7	7	5	4

KEY PERFORMANCE INDICATORS ENVIRONMENTAL MANAGEMENT

ENVIRONMENTAL MANAGEMENT

Indicator	External assessment	Item	Unit	2021	2020	2019	2018	2017
PERS No. 7	Lloyds Register	**Environmental Ship Index[24]**						
		Ships with an ESI score calling at Bremerhaven	per cent	39[25]	(56)	(49)	(44)	(43)
		Ships with an ESI score calling at Bremen	per cent	14[27]	27	21	21	20
PSI 12		**greenports award[26]**						
		Vessel	name	Container ship "Freya"	Freighter "OLYMPIC ORION"	Car carrier "M/V AUTO ENERGY"	Container ship "MSC Anzu"	Product / chemicals tanker "Bit Okland"
		Owner	name	Holwerda Shipmanagement	Evergreen-Line	TERNTANK Reederi A/S	Yang Ming Transport Coop.	Tarbit Shipping AB

[24] The calculation is based on the data from the latest "Facts & Figures" and on bremenports' list of vessels for the year concerned. The data has only been calculated separately for the ports of Bremerhaven and Bremen since 2017. Until then, the data was collected for the ports of Bremen as a whole (subsequently calculated in 2020).
[25] After introduction of the stricter limit value for the sulphur content of marine fuels in 2020, the number of vessels reporting an ESI score fell from a total of 6365 to 4474 in April 2021. The figure for 2021 is therefore not comparable with the figures for previous years. The numbers are currently "recovering" and the figure has meanwhile risen again slightly to a total of 4684 vessels reporting an ESI score.
[26] The winners of the greenports award are calculated on the basis of the ESI score for the preceding year. In the past, the year to which the data referred was stated as the year in which the award was won. As from this Sustainability Report, the year in which the award was presented will be reported, so that the winners announced for the years 2017 - 2019 are deferred by one year in each case.

KEY PERFORMANCE INDICATORS ENVIRONMENTAL MANAGEMENT

Indicator	External assessment	Bezeichnung	Unit	2021	2020	2019	2018	2017
GRI 305-7 PERS No. 10	Lloyds Register	**Nitrogen oxides (NOX), sulphur oxides (SOX) and other significant air emissions [27]**						
		Noise level measured on the border of the container terminal and the nearest residential area in relation to container throughput	db(A)/ 1 million TEU	49,4	48,5	49	49,4	48,9
GRI 305-7	TÜV NORD	Emissions (air pollutants) calculated for the ports of Bremen per gt in Bremen and Bremerhaven (incl. Überseehafen and Fischereihafen) calculated with the emission model (simulation tool) excluding approach, transit and Blexen roads	SOx [g/gt]			0,08 (BHV) 0,14 (HB)	0,09 (BHV) 0,13 (HB)	
			NOx [g/gt]			10,8 (BHV) 19,4 (HB)	11,5 (BHV) 16,3 (HB)	
			PM [g/gt]			11 (BHV) 13 (HB)	11 (BHV) 12 (HB)	

[27] The emissions in the port environment previously presented here under GRI 305-7 are measured for the Federal Land of Bremen by the Senator for Climate Protection, Environment, Mobility, Urban Development and Housing. Bremen's air monitoring system (BLUES) has collected data for monitoring the air quality at eight stationary measuring stations in Bremen and Bremerhaven since 1987. The measured data proves that the concentration limits for ambient emissions are not exceeded and that there is no problematic pollution for the local population. The data measured at each station in Bremen and Bremerhaven for any given period of time is available on the website of the Federal Environmental Agency or via the app offered there.

KEY PERFORMANCE INDICATORS ENVIRONMENTAL MANAGEMENT

Indicator	External assess-ment	Item	Unit	Place of disposal, treatment and recovery	2021	2020	2019	2018	2017
GRI 306-3[28]	TÜV NORD	**Total weight of waste** [29]							
		Total volume of dredged mud (hopper volume, wet)	m³	area behind the lock: Überseehafen and Fischereihafen	213.415	204.135	123.912	181.061	214.466
		Total volume of dry dredg-ing spoils (dewatered, un-compacted) for recovery and disposal	m³	Integrated dredging spoils disposal site in Bremen-Seehausen	44.319	108.930	70.317	118.700	68.414
GRI 306-4[30]	TÜV NORD	**Waste relocated prior to disposal**							
		Treated for reuse							
		Volume of dredging spoils (dewatered, uncompact-ed) with recovery option	m³	Integrated dredging spoils disposal site in Bremen-Seehausen	35.234	82.703	51.815	81.982	52.748
Indicator	External	Item	Unit	Place of disposal,	2021	2020	2019	2018	2017

[28] The GRI Standard 306: Waste was revised in 2020. This report is based on the current version for the first time; the disclosures of previous years have been adjusted accordingly.
[29] The treatment / dewatering of the accepted waste / dredging spoils leads to a reduction in volume. Moreover, owing to the prolonged treatment / dewatering periods of approx. one year, there is normally a discrepancy in the year of acceptance at the dewatering facility and the year of internal / external use or acceptance at the dredging spoils landfill. It is consequently not possible to establish a direct correlation between the dredging spoils accepted at the dewatering fields and the dredging spoils which are recovered and / or land-filled.

	assess-ment			treatment and recovery					
GRI 306-4[30]	TÜV NORD	**Recycled**							
		Volume of dredging spoils (dewatered, uncompacted) used for internal construc-tion projects	m³		35.234	80.714	65.453	71.688	43.940
		Volume of dredging spoils (dewatered, uncompacted) for external use	m³		0	0	0	0	0
GRI 306-5[30]	TÜV NORD	**Waste transferred for disposal**							
		Volume of dredging spoils (wet), directly landfilled	m³	Slufter, Rotterdam	0	0	0	0	112.534
		Volume of dredging spoils (wet), directly landfilled	m³	Dredging spoils landfill in Bremen-Seehausen	9.085	26.227	18.502	36.718	15.666

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

SOCIAL RESPONSIBILITY

Indicator	External assessment	Item	Unit	2021			2020			2019			2018			2017		
				∑	w	m	∑	w	m	∑	w	m	∑	w	m	∑	w	m
GRI 102-8	TÜV NORD	**Total workforce**	number	**407**	116	291	**398**	114	284	**393**	114	279	**390**	110	280	**385**	105	280
		Full and part time																
		> full time[30]	number	338	64	274	332	64	268	334	68	266	330	64	266	327	59	268
		> part time	number	69	52	17	66	50	16	59	46	13	60	46	14	58	46	12
		Employment contracts																
		> permanent	number	394	109	285	384	107	277	378	106	272	380	103	277	367	95	272
		> fixed term	number	13	7	6	14	7	7	15	8	7	10	7	3	18	10	8
		> leased employees	number	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Area of work																
		> technical	number	162	47	115	152	44	108	148	42	106	149	42	107	148	41	107
		> commercial	number	102	60	42	104	62	42	103	63	40	100	60	40	98	58	40
		> industrial	number	143	9	134	142	8	134	142	9	133	141	8	133	139	6	133

[30] Based on full-time employment contract.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

GRI 102-41[31]	TÜV NORD	**Employees covered by collective agreements**	Number	395	112	283	385	110	275	379	110	269	376	106	270	370	100	270
GRI 401-1	TÜV NORD	**Staff fluctuation**																
		Total new recruits	number	38	11	27	31	10	21	36	11	25	29	12	17	34	11	23
		of which ≤ 35 years	number	22	7	15	24	10	14	18	4	14	16	9	7	21	6	15
		of which 36–55 years	number	13	4	9	7	0	7	17	7	10	13	3	10	11	4	7
		of which ≥ 55 years	Number	3	0	3	0	0	0	1	0	1	0	0	0	2	1	1
		Recruitment share	per cent	**+9,3**	+9,5	+9,3	**+7,8**	+8,8	+7,4	**+9,2**	+9,6	+5,0	**+7,4**	+10,9	+6,1	**+8,8**	+10,5	+8,2
		Total number of departures (initiated by the employee)	number	10	5	5	3	2	1	9	2	7	6	4	2	4	2	2
		of which ≤ 35 years	number	3	1	2	2	1	1	1	0	1	6	4	2	3	1	2
		of which 36–55 years	number	7	4	3	1	1	0	5	1	4	0	0	0	1	1	0
		of which ≥ 55 years	number	0	0	0	0	0	0	3	1	2	0	0	0	0	0	0
		Departure share [32]	per cent	**-2,5**	-4,3	-1,7	**-0,8**	-1,8	-0,4	**-2,3**	-1,8	-2,5	**-1,5**	-3,6	-0,7	**-1,0**	-2,1	-0,7
		Total number of departures (for other reasons)	number	19	4	15	23	8	15	24	5	19	24	7	17	23	7	16

[31] The figures differ from the total headcount as the number of civil servants and employees who are not covered by the collective agreements (non-tariff employees) has to be added. In 2021, this involved 5 non-tariff employees and 7 civil servants.
[32] Departures initiated by the employee in the year under review/headcount on 31.12 of the year under review.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

		Fluctuation share [33]	per cent	**-7,1**	-7,8	-6,9	**-6,5**	-8,8	-5,6	**-8,4**	-6,1	-9,3	**-7,7**	-10,0	-6,8	**-7,0**	-8,6	-6,4
GRI 401-3	TÜV NORD	**Parental leave**[34]	number	18	12	6	18	11	7	no data available								
GRI 403-4	TÜV NORD	**Staff participation, consultation and communication on occupational health and safety**																
		Employees represented by the Occ. Health & Safety Committee (ASA)	per cent	100			100			100			100			100		
GRI 403-2	TÜV NORD	**Occupational health and safety**																
		Fatal accidents at work	number	0			0			0			0			0		
		Notifiable accidents at work (involving at least one lost day) [35]	number	6			7			11			6			9		
		Lost working days owing to accidents	number	102			161			316			112			241		
		Lost time injury rate (LTIR)[36]	Quotient	10,1			12,7			20,2			11,1			16,8		
		Lost days rate (LDR)[37]	per cent	0,10			0,16			0,35			0,12			0,26		
		Illness rate																

[33] Departures initiated by the employee and employees who left for other reasons in the year under review /headcount on 31.12 of the year under review.
[34] This KPI was included for the first time in 2020.
[35] These injuries included bruises, cuts, lacerations, pulled ligaments, sprains, pulled muscles.
[36] Notifiable accidents at work per 1 million hours worked.
[37] Absenteeism due to accidents/planned working time = lost time due to accidents.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

		Reported occupational diseases	number	0	0	0	0	0
		Lost days due to illness	number	5.663	7.233	7.852	7.721	8.101
		Absentee rate (AR) [38]	per cent	5,6	7,3	8,7	8,4	8,9
QM HR 1		**Share of healthy employees[39]**	number	96,4	95,9	95,6	95,4	95,3
PSI 14		**Preventive medical check-ups[40]**	number	126	no data available			
PSI 20		**Employee participation in company offers[41]**						
		Fitness programme	number	136	141	no data available		
		Job ticket for public transport	number	27	23	no data available		
		Cycle to work [42]	number	12	12	no data available		
		Internship abroad (trainees)	number	0	0	no data available		
		Registration for children's programmes in school holidays	number	0	0	no data available		

[38] Absenteeism due to illness/planned working time = lost time due to illness.
[39] The indicator QM HR was included for the first time in 2020.
[40] The indicator PSI 14 was included for the first time in 2021.
[41] The indicator PSI 20 was included for the first time in 2020.
[42] This figure is an estimate, as no electronic records are kept of the employees who take part.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

GRI 404-1	TÜV NORD	**Further training**															
		Average number of further training hours per employee[43]	h	19	25	16	19	20	19	29	28	30	23	23	23	27	23	29
GRI 404-1	TÜV NORD	Average number of further training hours per employee without management responsibility	h	18	24	15	16	19	15	27	25	27	20	20	21	23	21	24
		Average number of further training hours per employee with management responsibility	h	26	35	23	36	26	39	47	53	45	39	51	36	56	47	59
		Vocational training																
		Trainee quota	per cent	8,1			8,8			9,7			9,2			8,6		
		Trainees kept on after training[44]	number	9	3	6	no data available											
QM HR 2		Rating of further education and training[45]	grade	3,44			no data available											
PSI 16		Attendance at job fairs[46]	number	9			no data available											

[43] The figure does not include educational leave.
[44] The number of trainees who were subsequently offered an employment contract was included for the first time in 2021. Trainees are generally given an employment contract for 3 months after completing their training and the contract extended if a vacancy is available.
[45] The indicator QM Human Resources was included for the first time in 2021. The target figure for this KPI is > = 3.0. This corresponds to the grade "good" in the German 6-tier grade scale from 1 = excellent to 6 = unsatisfactory.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

Indicator	External assess-ment	Item	Unit	2016			2015			2014			2013			2012		
PSI 17		**Total investments in relation to further training hours**[47]																
		Relation further training/investment year of data collec-tion	relation	206.459,51 / 174.500			no data available											
GRI 405-1	TÜV NORD	**Age structure / gender of total workforce**		∑	w	m	∑	w	m	∑	w	m	∑	w	m	∑	w	m
		≤ 35 years	number	95	36	59	96	38	58	84	33	51	74	30	44	68	26	42
		36–55 years	number	189	60	129	195	61	134	210	67	143	204	64	140	211	64	147
		≥ 55 years	number	123	20	103	107	15	92	99	14	85	112	16	96	106	15	91
		Share of women	per cent	28,5			28,6			29,0			28,2			27,3		
		Age structure/gender of executives																

[46] The indicator PSI 16 was included for the first time in 2021.
[47] The indicator PSI 17 was included for the first time in 2021. The expenditure on further training in 2021 was 1.18 times higher than the planned total investment figure for the following year.

KEY PERFORMANCE INDICATORS SOCIAL RESPONSIBILITY

		≤ 35 years	number	1	0	1	1	0	1	1	0	1	1	0	1	0	0	0
		36–55 years	number	25	5	20	35	10	25	38	10	28	36	9	27	37	10	27
		≥ 55 years	number	22	4	18	16	1	15	15	1	14	10	1	9	9	0	9
		Age structure/gender of management																
		≤ 35 years	number	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		36–55 yerars	number	1	1	0	1	0	1	2	1	1	2	1	1	4	1	3
		≥ 55 years	number	6	0	6	6	0	6	7	0	7	7	0	7	5	0	5
		Supervisory board																
		Members of supervisory board	number	12	4	8	12	5	7	11	4	7	12	2	10	12	2	10
GRI 405-1	TÜV NORD	Share of women on supervisory board	per cent	33,3			41,7			36,4			16,7			16,7		
		Employees with a disability [48]	number	21	4	17	22	4	18	29	6	23	32	4	28	31	4	27
		Share of disabled employees	per cent	5,2			5,5			7,4			8,2			8,1		

[48] We also employee 4 people with a disability of less than 50 % who count as equal to disabled employees.

STAKEHOLDER CONCERNS

	Concerns raised by our stakeholders in the online dialogue, ranked in order of importance:	Information about these concerns is provided in the following chapters of the Sustainability Report:
1	**Maintaining competitiveness and market presence** Strengthening the port location by means of sustainable investments and innovative projects in, for example: • digitisation and automation • optimisation of traffic connections (in particular rail & inland shipping, also tunnel to port, A281 motorway), adjustment of Weser (controversial), cooperation with research institutes • establishing a hydrogen economy • strategies (HR marketing) to address shortage of skilled labour • holistic port development planning to ensure future viability	Market presence Port development
2	**Climate protection and carbon-neutral port** Help to address global challenges, for example by: • reducing GHG emissions • developing renewable energy sources • waiving use of fossil energy carriers • hydrogen concept • changing over bremenports' own fleet of vessels/vehicles to drive systems with alternative fuels • promoting climate-friendly staff mobility • life cycle assessments in port construction and maintenance • consider ecological footprint when assessing tenders for construction projects • zero carbon infrastructure • participation of shipowners in overall concept for carbon-neutral port	Energy & climate protection in port infrastructure Climate-neutral port location
3	**Digitisation** Make use of technology to manage future issues, for instance by means of: • efficient processes • automated logistics and traffic management • paperless port • better efficiency offers wider scope for more ecological management	Digitisation & smart port

	Concerns raised by our stakeholders in the online dialogue, ranked in order of importance:	Information about these concerns is provided in the following chapters of the Sustainability Report:
4	**Adapting infrastructure to consequences of climate change** The consequences of climate change pose a risk for the port location; ensuring operating capability after different climate incidents, for instance by: • adapting the infrastructure in response to forecasts of extreme weather incidents, droughts and rising sea levels • designing flood protection in accordance with forecast flood levels • flood polder • avoiding further deepening of the Weser • creation of flood plains • unsealing land	Adaptation to climate change
5	**Port cooperation between the German North Sea ports** Enabling more cooperation between the German North Sea ports, e.g. in the context of • vessel sizes: overall port concept for the German Bight, central handling of mega-vessels with large draughts at one offshore port • practising and promoting the "German Seaports" umbrella brand • cooperating to address international competition instead of regional mindset • the competition between the ports prevents full exploitation of the economic potential of the North German ports as a whole • cooperation between the ports avoids the creation of surplus capacities which harm both the environment and nature • cooperation between the ports can bundle resources	Cooperation & networks
6	**Fair pay for employees (focus on marine shipping & ports)** Fairness, participation, education and human dignity <u>In marine shipping:</u> • better lobby/fair pay for seafarers <u>At the ports:</u> • no subcontractor system (recruitment agencies) at the port. Protecting jobs which are covered by collective agreements • pre-school facilities at the port with opening hours to suit parents who work in shifts <u>At the port management company:</u> • cf. "Career – Family – Health"	Attractive working conditions

	Concerns raised by our stakeholders in the online dialogue, ranked in order of importance:	Information about these concerns is provided in the following chapters of the Sustainability Report:
7	**Innovative drive systems** Substituting fossil energy for instance by: • use of pioneering technologies based on hydrogen • synthetic fuels (Power-to-X) based on renewable energy sources • waive the use of interim technologies such as LNG and GtL (controversial) • promote the installation of mega electrolysers for H2 production in the port area	Energy & climate protection in port infrastructure Climate-neutral port location
8	**Political framework** bremenports should create framework conditions e.g. • as mediator between the conflicting interests of the port stakeholders • as driver of cooperation and pilot projects with the port business community • as a place for pooling ideas and interests of the port stakeholders vis-à-vis political actors • by paying attention to needs of SMEs (as drivers of ideas and innovations)	Stakeholder engagement
9	**Air quality at the port** Reducing negative impact on health by marine shipping, e.g. caused by: • particulate matter • sulphur and nitrogen oxides • SOx, NOx, CO2, PMs, VOCs and CH4 towards zero emissions.	Air quality
10	**Career, family & health** (focus on bremenports GmbH & Co.KG) Maintaining and expanding staff opportunities, for instance: • scope for combining family & career • working from home • attracting and keeping skilled staff • further education and training, promotion opportunities • opportunities to change job/change perspective • promoting interdepartmental knowledge sharing • creating interdisciplinary project teams	Attractive working conditions
11	**Water quality at the port** Protecting water / the oceans, for instance by means of: • cooperation on the development of new antifouling coatings • initiating individual projects (Seabin or Fishing for Litter) • sensor monitoring • graded prices for waste water according to particle count • restricting scrubbers/flue gas cleaning systems in marine shipping • maintaining biodiversity • reducing microplastics	Water quality

	Concerns raised by our stakeholders in the online dialogue, ranked in order of importance:	Information about these concerns is provided in the following chapters of the Sustainability Report:
12	**Engaging surrounding area in sustainable strategies** Promote cooperation and networking between the different federal states, e.g. in context of: • hydrogen strategy • heavy goods traffic • regional economic development • sustainability strategy for the region • upgrading and improving route layout of hinterland traffic (road, rail, inland shipping) • deepening the Weser	Stakeholder engagement
13	**Development and discussion of green (or innovative) business models** • paradigm shift in port development that delivers answers to present challenges such as decarbonisation, deglobalisation, digitisation • create incentives, locations and opportunities for innovative business models to set up a new long-term business base and remain competitive over the long term	Port development Climate-neutral port location
14	**Boosting image & PR** • maintain and develop location marketing, international reputation and image • raise brand awareness of the ports of Bremen and bremenports, also as employer • If no one knows about the services available at the ports, no one will ask for them • push media presence of greenports as competitive advantage	www.bremenports.de/en
15	**Introduce common good balance sheet** • To ensure its future viability, the company should focus exclusively on ecological sustainability aspects. Other issues such as solidarity, fairness, transparency, codetermination and human dignity are decisive factors for the future viability of the ports of Bremen.	The common good balance sheet is an assessment method which permits the analysis of the extent to which an organisation serves the common good. For the time being, our reporting will continue to be based on GRI standards and Sustainable Development Goals. We will investigate whether the introduction of a common good balance sheet is advisable in future.
16	**Regaining core competence** • Port, port, port – and no more additional activities. Abandon everything to do with marketing, greenports and unnecessary activities. The focus on our core competencies and therefore the attractiveness of the port for customers is increasingly declining.	This opinion is in conflict with the sustainability, innovation and future viability objectives of the ports of Bremen.

EXTERNAL AUDIT

TÜV NORD Certification

Independent Assurance Statement of bremenports' Sustainabilty Report 2022

To: Management of bremenports GmbH & Co. KG, Bremerhaven

Scope of engagement and criteria

bremenports GmbH & Co. KG (hereinafter referred to as "bremenports") commissioned TÜV NORD CERT GmbH with the independent third-party assurance on selected criteria of its Sustainability Report 2022 (hereinafter referred to as "the report"), the special asset "Port" and the special asset "Fishing Port" (waterside) in accordance with the Assurance Standard AA1000 v3 with Type 2 moderate level of assurance.

The assurance engagement covered the report's adherence to the requirements of the Global Reporting Initiative Standards (GRI, Core option) as well as to the principles of inclusivity, materiality, responsiveness and impact (AA1000 AccountAbility Principles) in relation to calendar years 2020 and 2021.

Responsibility

bremenports is solely responsible for preparing and presenting the report and any statements related.

TÜV NORD CERT GmbH is responsible for providing an independent assessment of the completeness and accuracy of the report in accordance with AA1000AS v3 and the criteria of the GRI Standards.

Methodology

The assurance engagement covers a wide range of activities, including:

- Review of data collection and data aggregation regarding accuracy, appropriateness, sources of error, limitations and assumptions made
- Conducting interviews as part of the site visit
- Assessment of the methodology and results of stakeholder and materiality analysis to determine the report content

Independence and competencies

Members of the assurance team were not involved in any activities or services that would cause a conflict of interest with regard to the assurance engagement.

TÜV NORD is an independent assurance provider, whose employees have extensive experience in the assessment and assurance of sustainability information and associated processes and systems for data collection. TÜV NORD operates a certified Quality Management System according to ISO 9001:2008, ensuring and actively managing the quality of all processes related to appointment of auditors and compilation of assurance teams.

Limitations and exclusions

The scope of this assurance covers information related to sustainability in the report. The assurance engagement does not cover any financial statements and information not related to the calendar years 2020 and 2021 as well as supplier specific information.

Adherence to AA1000 AccountAbility principles

Inclusivity

To find out the expectations and concerns of stakeholders and to enable them to participate in the development and design of sustainability reporting, bremenports conducted an online stakeholder survey in 2021. In addition, participation processes through cooperation and networking take place regularly.

Materiality

bremenports carried out a materiality analysis in 2021. The material topics and challenges (e.g. market presence, climate protection and climate adaptation) where determined taking external and internal factors into account.

Responsiveness

bremenports has set up communication channels for its stakeholders and reacts to concerns by bringing in interested parties and developing its own sustainability strategy.

In the course of the aforementioned materiality analysis, the sustainability strategy (greenports strategy) was updated in 2021.

Impact

bremenports has established processes to acknowledge, understand, measure, manage and evaluate its impacts on the environment and stakeholders, and has disclosed the impacts in the report.

Adherence to GRI Standards

General disclosures and topic-specific disclosures, which are shown in the report as "Geprüft durch TÜV NORD CERT GmbH" (see also GRI content index), correspond to the requirements of the GRI Standard (Core option).

Conclusions

Based on our independent assurance engagement, nothing came to our attention that causes us to suspect the reliability and quality of the general and additional disclosures of the report have not been prepared in accordance with the GRI Standards and the AccountAbility Principles.

Recommendations

No recommendations for improving the report could be identified during this year's independent assurance engagement.

TÜV NORD CERT GmbH

Bremen, 30.05.2022

i. A.
Büsran Grünenwald, Lead Auditor
TÜV NORD CERT GmbH
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GLOSSARY

Term	Explanation
AED	Automated external defibrillators
AGG	Equal Opportunities Act
AMD	Occupational Health Services
App	application software
ArbMedVV	Ordinance on Preventive Occupational Health
ASA	Occupational Health and Safety Committee
AÜG	Act on Temporary Agency Work
BetrVG	Works Constitution Act
BFG	Beruf-Familie-Gesundheit (Career-Family-Health)
binntelligent	R&D project (Intelligent Information Systems for Process Optimisation and Automation at Inland Ports)
BLG	Bremer Lagerhaus Gesellschaft
BLUES	Bremen's air monitoring system
BMWI	Federal Ministry for Economic Affairs and Energy
bp	bremenports GmbH & Co.KG
BPW	Business and Professional Women Germany – Club Bremen
BremBZG	Bremen Act on Educational Leave
BremKernV	Bremen Core Labour Standards Ordinance
BREsilient	R&D project (Climate-resilient future city Bremen)
BSH	Federal Maritime and Hydrographic Agency
CCCB	Columbus Cruise Center Bremerhaven
CO_2	carbon dioxide
CO_2-Scope 1,2,3	Scope of carbon emissions in categories 1,2,3
COVID -19	Coronavirus disease 2019
CT	Container Terminal
db(A)	unit of measurement of the sound pressure level according to frequency weighting curve A (international standard)
DepV	Landfill Ordinance

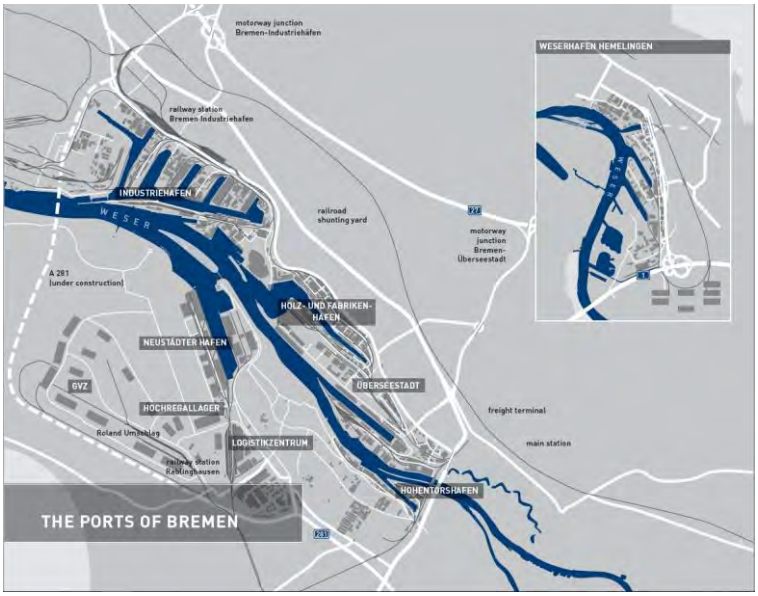
Term	Explanation
DIN	standard defined by the German Standards Institute
DSM	German Mission to Seafarers
E-Fahrzeug	Electric vehicle
EN	European standard
EntgTranspG	Pay Transparency Act
Equal Pay Day	International campaign day for equal pay for women and men
ERNST!	Ernst Reuter Platz School in Bremerhaven
ESI	Environmental Ship Index
FASI	Occupational health & safety officer
FBG	Fischereihafenbetriebsgesellschaft mbH
FHB	Free Hanseatic City of Bremen
FSC	Forest Stewardship Council
R&D projects	research and development projects
GHG	greenhouse gas
GIZ	German Organisation for International Cooperation
GRI Standards	standards for preparing a Sustainability Report in accordance with the Global Reporting Initiative
GtL	gas-to-liquid
h	hour
haneg	Hanseatische Naturentwicklung GmbH
HBH	Bremen Port Authority (Hansestadt Bremisches Hafenamt)
IBE	Integrated disposal facility for dredged material
IMO	International Maritime Organization
IMS	Integrated Management System
ISL	Institute of Shipping and Logistics
ISO	International Organization for Standardization
ISPS-Code	International Ship and Port Facility Security Code
ITF	International Transport Workers' Federation
k	one thousand times the unit of measurement
kg	Kilogram

Term	Explanation
kWh	kilowatt hours
KrWG	Closed Substance Cycle and Waste Management Act
LED	light-emitting diode
LNG	liquefied natural gas
Loco-Quote	local content percentage states the share of goods that remains inside the metropolitan region of the port concerned, rather than continuing their journey as seaport hinterland traffic. A high LOCO percentage can indicate high regional economic value
Modal Split	Distribution of the transport volumes amongst the different transport modes or means of transport
NABU	German nature conservation organisation (Naturschutzbund Deutschland e. V.)
PEFC	Programme for the Endorsement of Forest Certification Schemes
PERS	Port Environmental Review System
PFOS	perfluoroctane sulfonic acides
PFSO	Port Facility Security Officer
PM 10, PM 2,5	particular matter: particles which pass the size-selection air inlet of a measuring device with a collection efficiency of 50 per cent for particles with an aerodynamic diameter of 10 (PM10) or 2.5 (PM2.5) micrometres (µm)
PortKLIMA	R&D project (development and pilot phase implementation of education and training modules on the topic of adaptation to climate change in the planning, construction and operation of seaports in Germany)
PSI	Port Specific Indicator
QM	Quality Management
R&D projects	research and development projects
RoRo	roll on-roll off
Sail Bremerhaven	tall ships'parade in Bremerhaven
SDGs	Sustainable Development Goals
Sekt-VO	Utilities Contract Regulations (part of German contract award procedure which stipulates the award of public contracts in connection with activities relating to drinking water, energy supply or transport)
SHARC	R&D project (Smart Harbor Application Renewable Integration Concept)
Synchrolog	R&D project (technology-based service system for the synchronisation of transhipment and transport processes in intermodal logistics chains)
t	tons
TEU	1 TEU = 1 Twenty Feet Equivalent Unit
tide2use	R&D project (intelligent pump and lock management at the port)

Term	Explanation
TtVG	Bremen Collective Bargaining and Public Procurement Act
TU	technical university
TVöD	collective agreements negotiated for civil service employees with the Communal Employers' Association
ver.di	united trade union for the service sector in Germany (Vereinte Dienstleistungsgewerkschaft)
VKA	Communal Employers' Association
VOL/A	Procurement and Contract Procedures for Supplies and Industrial Services
VOL/B	Procurement and Contract Procedures for Construction Contracts
WI	water injection
WPCI	World Port Climate Initiative

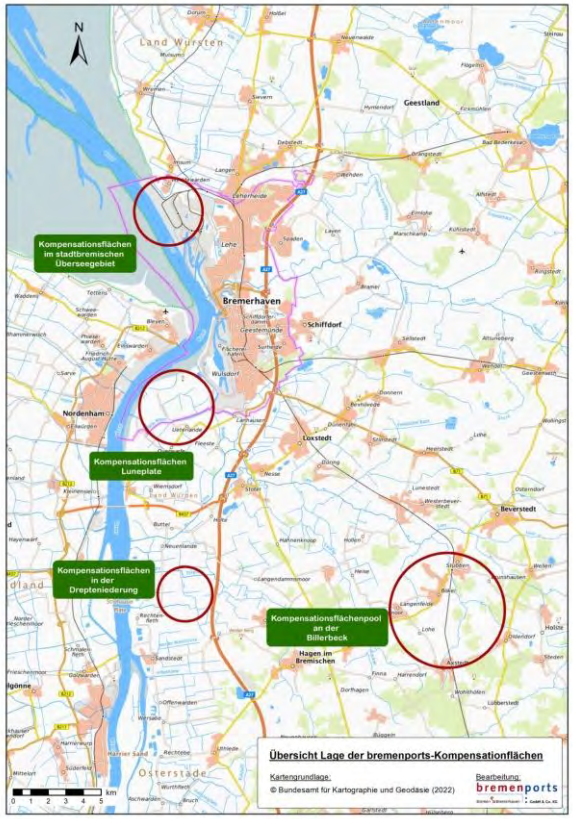
MAPS

MAPS OF THE PORT AREAS IN BREMEN / BREMERHAVEN

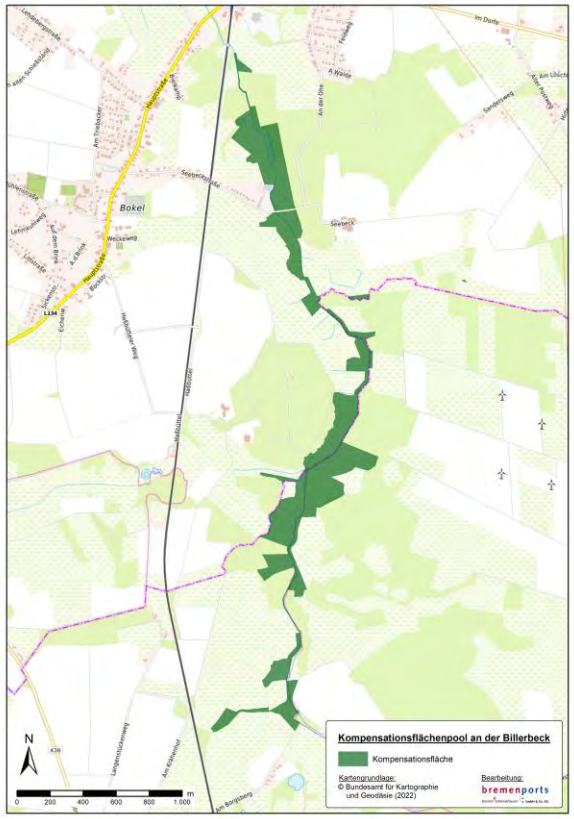




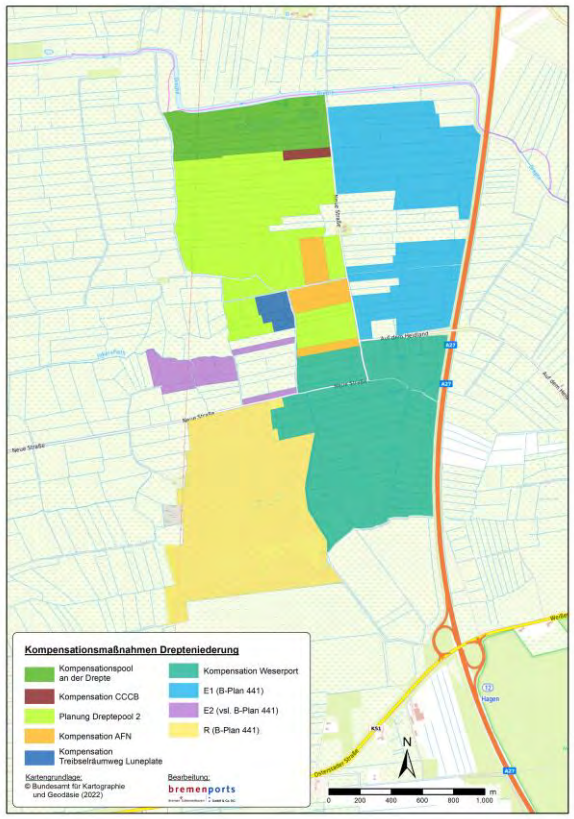
COMPENSATORY MITIGATION SITES IN THE PORT AREA IN THE CITY OF BREMEN AND CUXHAVEN RURAL DISTRICT



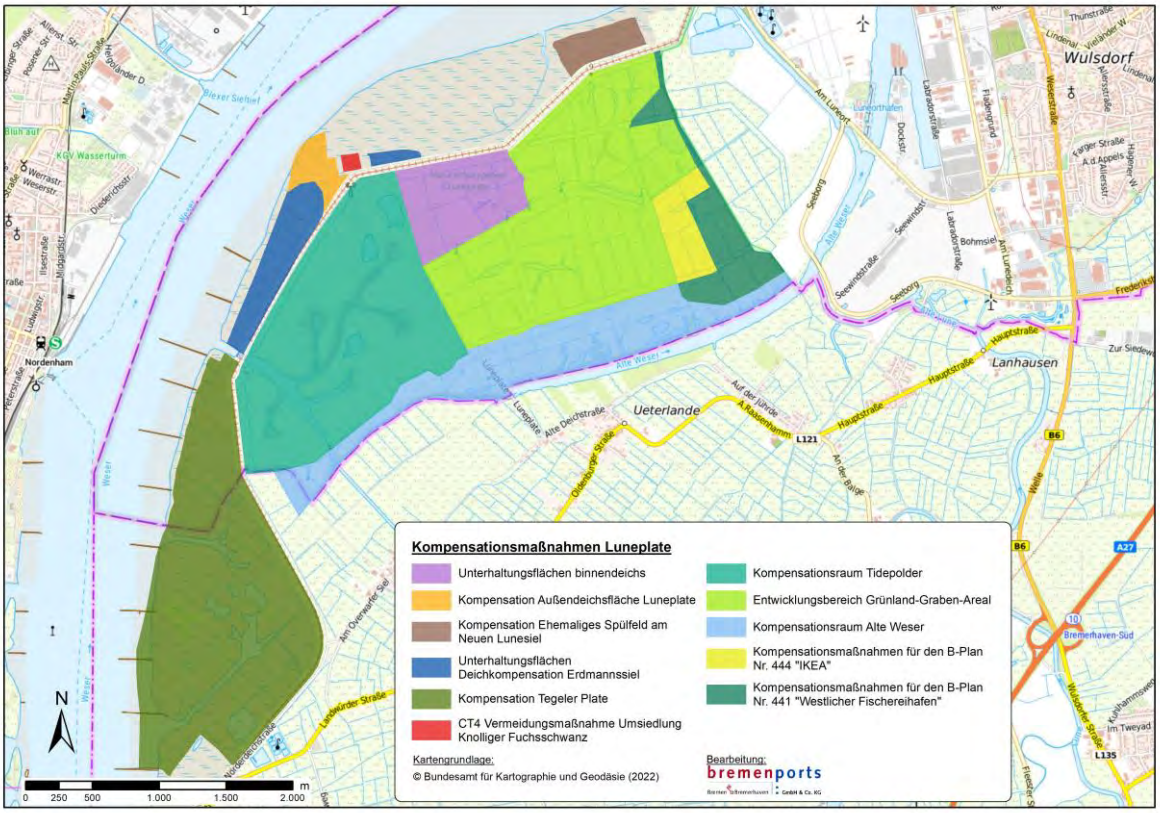
Map of bremenports compensatory mitigation sites



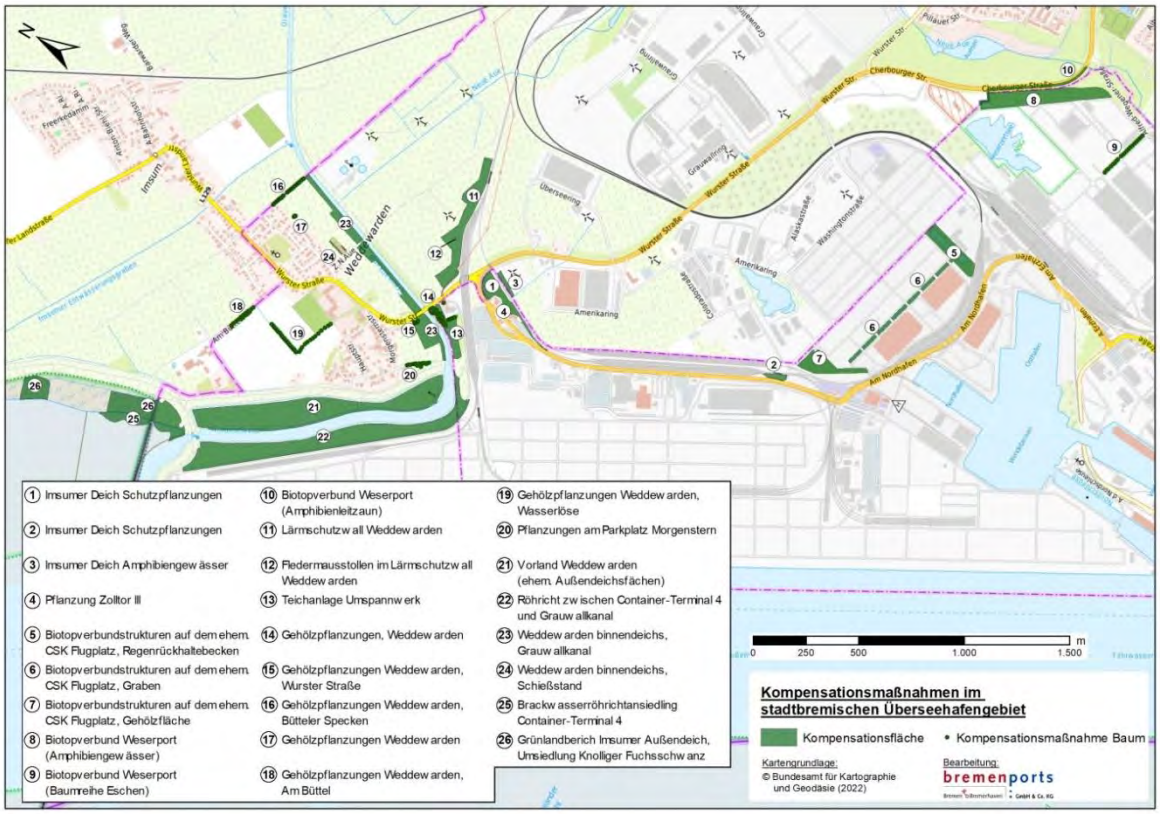
Billerbeck compensatory mitigation site pool



Drepte lowland compensatory mitigation measures



Luneplate compensatory mitigation measures



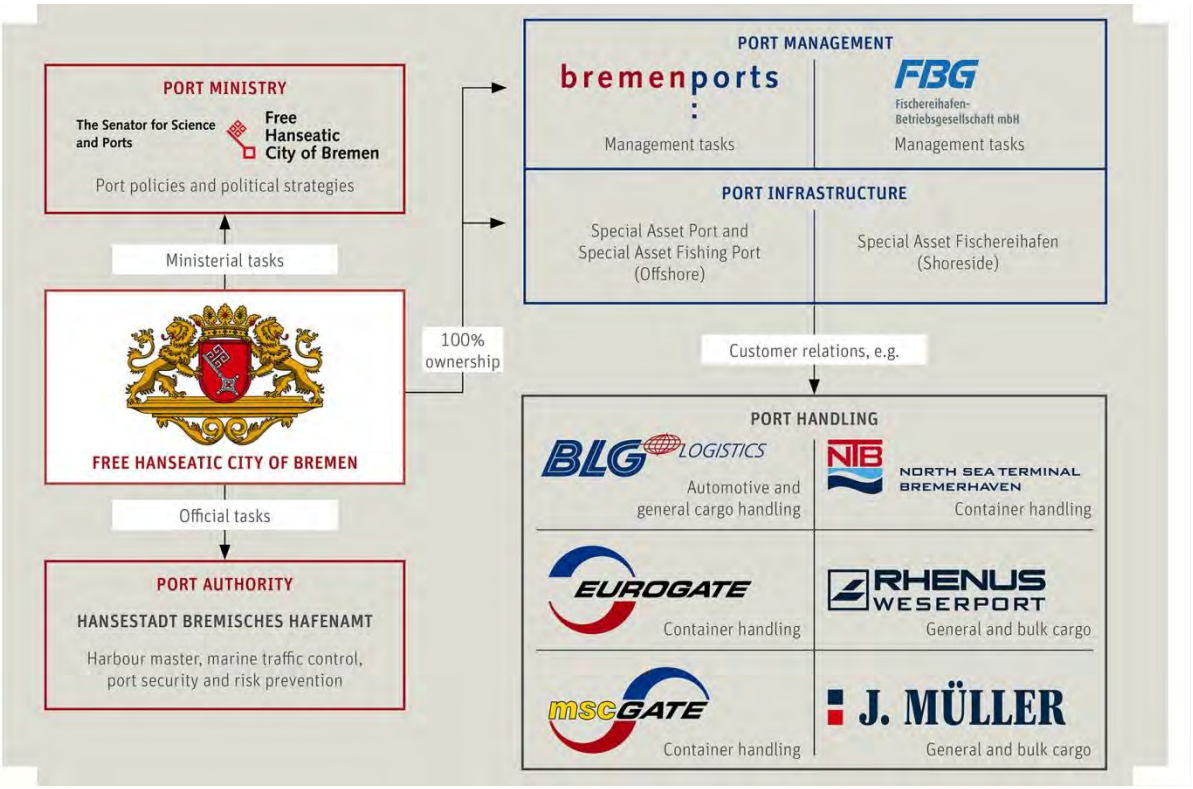
Compensatory mitigation sites in the Überseehafen district belonging to the city of Bremen

TASKS & ORGANISATIONAL STRUCTURE

THE PORTS OF BREMEN

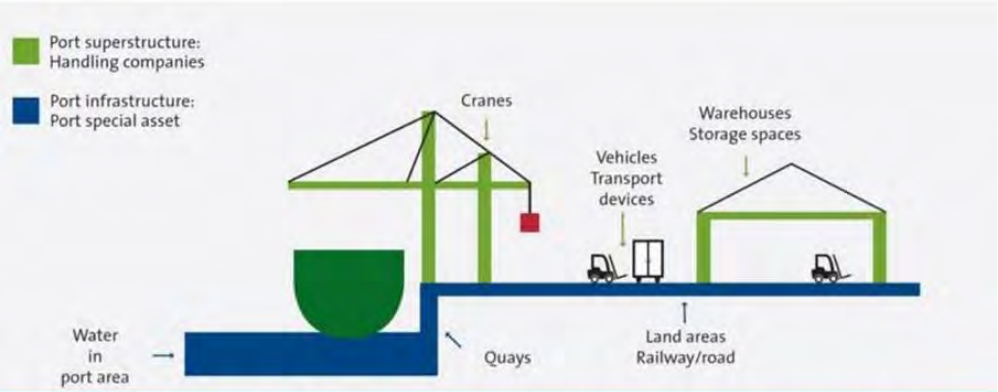
Containers, motor vehicles, project cargo as well as all kinds of general and bulk cargo are handled at the ports of Bremen. Their success is based on a systematic division of labour between the twin ports. Bremerhaven, situated just 32 nautical miles from the open sea, specialises in container ships, car carriers and ro-ro vessels (ro-ro = roll-on/roll-off). 60 kilometres further south, the terminals in Bremen concentrate primarily on the transhipment of general and heavy-lift cargo as well as handling bulk and breakbulk.

As is usual in most of Europe, the ports of Bremen are organised as a "landlord model", i.e. they distinguish between publicly funded port infrastructure and privately organised transhipment activities:



Organisational structure of the ports of Bremen

- The infrastructure of the ports of Bremen (blue sections) belongs to the Free Hanseatic City of Bremen, which has hived off the port infrastructure assets into the "Special Asset Port" and the "Special Asset Fischereihafen (Waterside)". The management of these special assets in the capacity of trustee was entrusted to bremenports GmbH & Co. KG, which was founded in 2002 specifically for that purpose, by Bremen's Senator for Economic Affairs, Labour and Ports, the competent ministry at that time. The "Special Asset Fischereihafen (Shoreside) is managed by a separate operating company, Fischereihafenbetriebsgesellschaft mbH. The port infrastructure is leased or sold to private users.
- The port suprastructure (green sections) is the responsibility of the users (terminal operations, transhipment and warehousing) which are organised as private-economy enterprises.



Task distribution in port infrastructure and port superstructure

THE PORT MANAGEMENT COMPANY BREMENPORTS & CO. KG

Since January 2002, bremenports GmbH & Co. KG has managed the infrastructure of the ports of Bremen, with the exception of shoreside infrastructure at Fischereihafen, on behalf of the Free Hanseatic City of Bremen. bremenports has a staff of 393 and in addition to the two administration buildings in Bremerhaven (Sail City) and Bremen (Überseestadt), also has workshops located in the Überseehafen district in Bremerhaven, in Bremen-Seehausen and in Bremen-City. Other employees work permanently at the four major sea locks and at various terminal railway locations. Construction site huts are also used temporarily for specific projects.

The tasks to be performed by bremenports are documented in agency agreements concluded with what was then Bremen's Senator for Economic Affairs, Labour and Ports. These tasks break down into regular tasks and special tasks which are provided on behalf of the Special Asset Ports, and third-party business which is organised as a private-economy company:

Regular tasks

Regular tasks refer to the operation and maintenance of the port infrastructure, inclusive of the terminal railway, the dykes, the compensatory mitigation sites and storm surge warning service, the management of real estate, location marketing for the ports of Bremen, landscaping tasks in Bremerhaven that fall within the remit of the Free Hanseatic City of Bremen, and financial management of the funds for the regular tasks within the remit of the Free Hanseatic City of Bremen.

Special tasks

Special tasks are commissioned separately by Bremen's Senator for Science and Ports.

Third-party business

As port, logistics and environmental experts, the employees of bremenports know how to plan, build and maintain port facilities, operating areas and coastal protection structures. In addition to performing its regular and special tasks, the port management company therefore also offers project and consultancy services as a privately organised company to outside customers all over the world.

Foreign business

Foreign business continues to play a significant role and international consultancy contracts are a firm element of the port management company's business. These orders are performed by bremenports' own staff as well as freelancers.

Governance

The Managing Director Robert Howe is in charge of the company. He develops the corporate strategy, which is then adopted in consultation with the Supervisory Board, and is responsible for its operational implementation. He is authorised to perform all tasks arising in the ordinary course of business. Any management activities which go beyond that scope are subject to a prior resolution by the competent management body.

In his absence, the managers of the four business divisions Port Construction, Port Maintenance, Commercial Affairs and Port Development & Innovation are authorised to represent the management, working in close consultation. The overall management group consists of the Managing Director, the four Division Managers and the Press and Port strategy management support units. This management group is used to discuss and adopt measures on a broader basis.

bremenports GmbH & Co. KG has a supervisory board and an advisory board on a voluntary basis, thus following the recommendation of the Public Corporate Governance Code of the Free Hanseatic City of Bremen. The Supervisory Board appoints, supervises and advises the management board. It consists of 12 members, with equal numbers of shareholder and employee representatives. The Advisory Board consists of up to 14 members who are appointed by the Free Hanseatic City of Bremen in its capacity of shareholder of bremenports.

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Precise designation of the legal form has essentially been waived in the name of reader-friendliness.

You will find the latest information at **www.bremenports.de**

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