

LOGISTICS PILOT

Magazine for Ports, Shipping and Logistics

October 2017



Environment & Rethinking

Focus Topic: Green Logistics

Where To? 18 | Sustainability As A Driving Force 24



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12 October 2017

■ *logisticstalk* »

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6 pm: Vienna, WOLKE 21, Saturn Tower
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EDITION OCTOBER 2017



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“Better conditions for shipping”

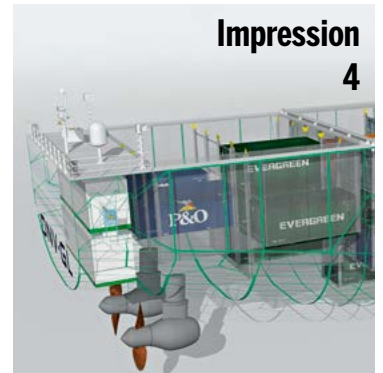
Georg Ehrmann,
Managing Director of Maritime LNG Platform

Dear readers,

Green logistics cannot be successful without “green shipping”. Over recent years there has been a continual improvement in emissions on the road, and in this field it is now possible to speak of environmentally-friendly transport in terms of pollutants released into the air (NO_x, fine dust particles). However, this is largely still not the case when it comes to shipping: the burning of heavy oil out at sea, the use of diesel generators to generate electricity during lay time and the use of diesel engines in tugs and working ships are far removed from the Euro 6 emissions standard. Shipping is one of the main sources of emissions in port cities. But this is now changing: stricter limits, the availability of alternative propulsion techniques and fuels, improved conditions and new ways of thinking in politics and in industry are the drivers of green shipping.

A sector rocked by crisis is seeing better general conditions, allowing it to invest in going green. Use of LNG as a fuel plays an important role in this as it will lead to a considerable improvement in air quality. The government’s funding program will compensate for the significant additional costs involved, making a changeover feasible from an economic point of view. Work is currently underway to create standards and achieve uniform approval management in German ports – all positive signs for green shipping.

Yours, Georg Ehrmann



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PHOTOS: VON BEUST UND COLL., DIVV GL., CHRISTIAN O. BRUCH – LAIF, WESSELS, PIXABAY, EMS AG

The future is autonomous

With the 60 metre-long, 14.5 metre-wide “ReVolt”, the research team from classification company DNV GL has developed a battery-operated short-distance container ship that can operate without a crew and represents one of the most pioneering green shipping projects. It will reportedly be able to transport up to 100 standard containers, cars or other goods inside it.



A model on a scale of 1:20 will be running on a test phase along the Norwegian coast up until 2018. DNV GL believes that unmanned ships will not come overnight, as there is not yet a legal framework for such technologies.



The battery in the “ReVolt” should allow a range of up to 100 nautical miles. The straight, vertical bow reduces the water resistance of the feeder ship, which is designed for a travelling speed of six knots.



SUMMARY NEWS

BREMEN. At the end of June, **EUROGATE published its first ever sustainability report** under the title “Consciously into the future”. Spread over 42 pages, it presents the container terminal operator’s understanding of sustainability as “giving equal consideration to economic efficiency and environmental and social responsibility based on long-term stable economic development”. EUROGATE compiled the sustainability report voluntarily based on the G4 International Reporting Guidelines issued by the Global Reporting Initiative (GRI). It can be accessed on the company’s website at www.eurogate.eu/Nachhaltigkeit.

BREMEN. The **ports of Bremen** introduced the Environmental Ship Index (ESI) to their port fee system back in 2012 in order to reward sustainable practices in shipping. On 1 June, the rating and incentive system, developed under the leadership of the International Association of Ports and Harbors (IAPH), was expanded to include efforts to **reduce the emission of greenhouse gas by ships**. Until now, the index has primarily rated the environmental performance of ships based on emission of air pollutants (NO_x and SO_x).



Renovation programme launch party

BREMEN. Port management company bremenports **heralded a decade of infrastructure optimisation** with a “construction site party” at the Kaiserhafen on 28 August. A new quay has been under construction at the site since July because the stability of the old quay is at risk and restoring the existing structure is not possible. In December 2015 the Senate and Deputation made the decision to provide the funds for the restoration of this section, measuring just under 500 metres in length. Martin Günthner, Bremen’s Senator for Economics, Labour and Ports, also sees the restoration of the Westkaje

as the launch of a decade of improvement to the port infrastructure: “Many of the quays are structures that have now been in use for 100 years. This means that there is a whole range of extensive investment measures coming up over the next few years.” Some of the examples that he mentions are a rebuild of the Columbuskaje, the rebuild of the Nordmole, and prospective plans to replace the swing bridge. Because the new quay will stretch nine metres inland, the rebuild will involve an expansion of the harbour basin, simultaneously improving the nautical conditions in the port.

Repair of Bremen’s lock gate

BREMERHAVEN. The **reserve gate of the lock at Oslebshausen** is currently being **routinely serviced and repaired** by German Dry Docks in the Fischereihafen. The 36 metre-long, 800-tonne gate is also being equipped with additional protection against high tides and storm floods – which are expected to arise much more frequently over coming decades – in the form of a metre-high metal “cap”. This is one way in which bremenports is reacting to the predicted rise in sea levels.



Construction begins on expanded quay in port of Norddeich

NORDDEICH. Further berthings are required in the port of Norddeich due to an increase in ship traffic. To create the necessary capacity, a 68 metre-long section of the **eastern breakwater at the entrance to the port is being repurposed as a quay**. Lower Saxony’s Minister for Ports, **Olaf Lies** (centre), at the start of the construction measure in August: “I am delighted that we are going to be gaining four more berthings as part of the expansion of the north-eastern quay, further strengthening the port of Norddeich as a service location for offshore supply.”



Lower Saxony's seaports see an increase in handling

OLDENBURG. The seaports of Brake, Cuxhaven, Emden, Leer, Nordenham, Oldenburg, Papenburg, Stade and Wilhelmshaven jointly **handled eight per cent more goods** in the first half of 2017 than in the same period in the previous year: The new figure was **25.8 million tonnes**, as compared with 23.9 million tonnes in the first half of 2016. They managed to achieve growth in both general cargo (up four per cent at 5.9 million tonnes) and in bulk goods (up nine per cent at 19.9 million tonnes). Seaports of Niedersachsen is also predicting an upward trend in the statistics for 2017 as a whole.



"Welt der Logistik" attracts several thousand visitors

BREMEN. "More than a job and a career" was the promise of the sixth VIA BREMEN job fair in September in the Überseestadt area of Bremen. **The successful format of trade fair stands, presentations, a stage-based programme and interactive events was well received** among the, mostly young, visitors. Alongside topics such as professional drivers or warehouse logistics experts, this year the organisers teamed up with the German Research Centre for Artificial Intelligence to focus on digitisation. The approx. 40 exhibitors were largely happy with the discussions that they had with potential future logisticians.



New terminal management system for Cuxport

CUXHAVEN. Cuxport is currently developing a **new digital management system for its multi-purpose terminals** in Cuxhaven. It is working with company dbh Logistics IT to adapt the existing basic modules of "Advantage portos" software series to meet the specific requirements of the terminals. The new terminal management system encompasses the organisation and control of all handling and storage processes, and facilitates electronic exchange of data with shipping companies, carriers and forwarders, as well as the authorities and the owner of the seaport, Niedersachsen Ports.

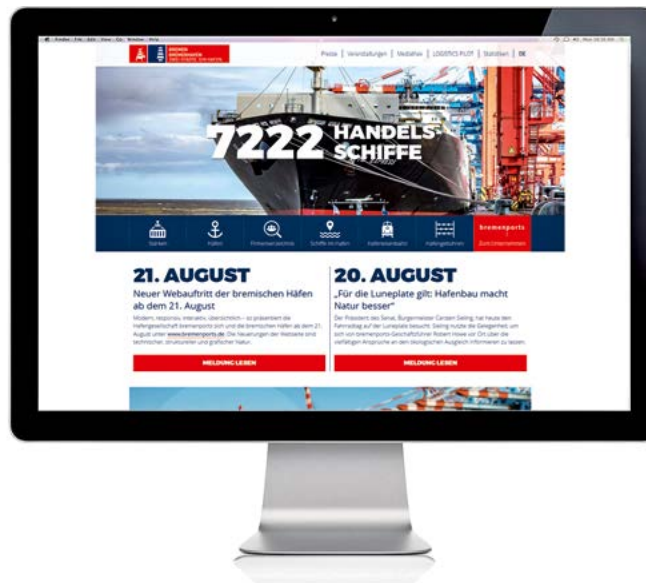
Responsive, interactive and easy to use – new web presence for the ports of Bremen

BREMEN. As of 21 August, visiting the bremenports website is even more informative than before. At www.bremenports.de, the port management company is now presenting itself and the ports of Bremen in a completely new format, with technical, structural and graphical changes. Thanks to the responsive design, the pages automatically adapt to suit the needs of the device being used – whether a smartphone, tablet or PC. Access has also become easier due to the fact that it is no longer necessary to choose between the site of Bremen/Bremerhaven and the company bremenports on the home page. Instead, the visitor is

taken straight to the site page, where they can find out about the company, its divisions and its training opportunities. "In doing this, we have

made handling much better for users and created a clearer and more straightforward structure," says bremenports' Managing

Director, Robert Howe. The simplified, optimised navigation makes it easier to maintain an overview and switch between the individual pages and pieces of content. Vivid, large-scale images bring the activities of Bremen and Bremerhaven to life. Interactive content – such as "Ships in Port" and the directory of companies in the ports of Bremen, which has been completely overhauled – has also been given a bigger role. The "Port Stories" section is new, regularly providing exciting stories from the port.



SUMMARY NEWS

BREMEN/EMDEN. Wind power experts REETEC, a subsidiary of the EDF Energies Nouvelles Group and EDF EN Services, **took over OWS Off-Shore Wind Solutions** in July. Both companies had already been successfully collaborating on the maintenance and operation of offshore wind farm BO1 in the North Sea since 2015. Together the partners want to set up an Operation & Maintenance (O&M) wind power competency centre in Emden and an O&M offshore wind service from Lower Saxony and Bremen. "This sale is a big step forward for both companies," says REETEC's General Manager Detlef Lindenau.

BREMEN. International logistics provider Röhlig is continuing on its growth trajectory with new sites in Asia and America, continually expanding its worldwide network of sites. In the USA, the company recently took over a 100 per cent share in a former joint venture. Röhlig has also been present in Mexico since the start of the year, and, in addition to its existing offices in southern China, has had branches in Shanghai, Ningbo, and Qingdao, as well as the Taiwanese capital of Taipei, since June. This was followed by a site in Vietnam in July and a branch in Indonesia in September.



Berth for offshore industry opened

CUXHAVEN. After just 14 months of construction, Lower Saxony's Economics Minister, **Olaf Lies** (2nd from left), opened the new berth 9.3 for the German-Offshore-Industry-Center in Cuxhaven in August. Lies explained that this was another milestone in Cuxhaven's development as an offshore base port. **Berth 9.3 is 115 metres long and 55 metres wide.** It has been renovated in such a way that a public ramp can now be used to load lorries carrying more than 1,000 tonnes to be loaded directly onto ro-ro vessels.

Port Sprinter enhances rail system for northern ports

BREMEN. Roland Umschlagsgesellschaft upped its rail service between Wilhelmshaven, Bremen and Hamburg at the end of August. Since then, a shuttle has been linking the EUROGATE terminals in Wilhelmshaven and Hamburg with one another and with the terminal in Bremen's freight village on a daily basis under the name "Port Sprinter". Overall, the partners Roland Umschlag (operator), LOCON (railway company) and EUROGATE (terminal operator) provide the market with almost 3,000 TEU of transport capacity on the rails each week.



Day of the Seafarer celebrated with a sporty party

BREMERHAVEN. The "Day of the Seafarer" was launched by the International Maritime Organization and the United Nations in 2010 – and is celebrated on 25 June each year. This year, the international seafarers' club "Welcome" in Bremerhaven, Bremen's Senator for Economics, Labour and Ports, Martin Günthner, and the terminal companies in Bremerhaven organised a **varied programme**, ranging from sporty competitions, to a cheerleaders' dance show from "Eisbären Bremerhaven", to a delicious barbecue. Students from the University of Bremen and Cuxhaven's seafaring school also celebrated with the seafarers from the ships berthed in Bremerhaven on the day.



Nordfrost invests further in site

WILHELMSHAVEN. Even before the commissioning of the new Nordfrost freezer warehouse in the Wilhelmshaven container port in January 2018, the logistics provider from Schortens has announced that it plans to inject another **80 million euros into the further development of its seaport terminal there.** According to Nordfrost boss Horst Bartels, the aim is to expand storage capacity on all temperature levels and drive the development of the site in light of growing handling volumes in Wilhelmshaven thanks to the commitment of Ocean Alliance.



Lower Saxony defends market share

OLDENBURG. Car handling at the ten most important North Range ports decreased by 1.2 per cent to some 9.3 million vehicles in 2016. That is the result of a study on the development of vehicle handling at the northern European seaports presented by Prof. Dr. Klaus H. Holocher, Professor of Port Management at Jade University of Applied Sciences, in August. Lower Saxony's car handling ports recorded a reduction of 9,000 vehicles, but managed to maintain their market share of around 20 per cent, whilst handling at the other German North Sea ports dropped considerably. **Emden took third place in Europe with around 1.3 million vehicles, and Cuxhaven took sixth place with almost 480,000 new vehicles.** The majority of cars were handled in Zeebrugge (2.8 million), coming in ahead of Bremerhaven at 2.1 million.



Sieling's conclusion from the cycling day: "Port construction is making the natural landscape better"

BREMERHAVEN. During the cycling day on the Luneplate on 20 August, numerous interested guests discovered the largest nature conservation area in the state of Bremen under the motto of "Tracking down nature". Bremen's Mayor Carsten Sieling (right) also got in on the action. He took the opportunity to ask bremenports Managing Director Robert Howe about the complex aims of ecological compensation as part of port construction projects, as well as the local flora and fauna. Sieling was impressed by what he saw during his visit: "With the cycling day, bremenports has created something that makes ecological issues easier to understand and appeals to those not familiar with the study of nature. The Luneplate shows: port construction is making the natural landscape better." The cycling day organisers had five different stations set up ready for the cyclists. There, biologists, landscape architects, farmers and experts from bremenports gave their guests informative and exciting talks. **For over 20 years now, the Luneplate has been serving the purpose of ecological compensation** for the impacts associated with the expansion of large port facilities. The 1,400-hectare area was declared protected in 2015.



Breakbulk Europe 2018 definitely coming to Bremen

BREMEN. Since July it has been official: Bremen will be hosting the logistics trade fair "Breakbulk Europe 2018" next year between 29 and 31 May. During a visit to the Hanseatic city, **Alli McEntyre** (left) and **Mark Rimmer** (right) from organiser Breakbulk Events & Media signed the host contract along with **Michael Skiba**, Head of Marketing at bremenports. Breakbulk Europe is one of the leading trade fairs for general cargo and heavy goods logistics. The organisers are hoping for up to 13,000 visitors.



SUMMARY NEWS

BREMEN. Harren & Partner expanded its heavy goods shipping in June by **acquiring SAL Heavy Lift**. The Bremen-based shipping company was already active in the heavy goods and project segment with Combi Lift. Together Harren & Partner and SAL are now operating a fleet of 26 heavy goods vessels.

WILHELMSHAVEN. Wilhelmshaven port association, WHV took the **visit of Bernd-Carsten Hiebing, Karsten Heineking and Burkhard Jasper** (members of the sub-committee for ports and shipping in the state of Lower Saxony) in August as an opportunity to discuss important maritime issues for the site. The head of WHV provided information on aspects such as the status of the possible development of an inland waterway link between the port of Wilhelmshaven and the river Weser and a feasibility study for an LNG import terminal.

BREMEN. The association **LogistikLotsen der Metropolregion Nordwest** campaigns for **more sustainability** and social entrepreneurship in logistics. Along with students and company representatives, work began in July on business ideas based around the United Nations (UN) Sustainable Development Goals. **The project will go a step further in Berlin on 24 and 25 November.** More information at: www.logistiklotsen.de



Transfer from north to south

WILHELMSHAVEN. The “**Hafen trifft Festland**” (“**port meets mainland**”) series of events organised by Container Terminal Wilhelmshaven JadeWeserPort-Marketing and Seaports of Niedersachsen in collaboration with Eurogate called into **Nuremberg** and **Kornwestheim** in June. The focus of both events was **the new schedule for the AlbatrosExpress network operated by TFG Transfracht**. The market leader in containerised seaport hinterland transport for the German seaports has integrated Wilhelmshaven

into its extensive rail network, and is now offering transport from here on 20 links in Germany, Austria and Switzerland three times weekly. Another connection with a fourth export run from Nuremberg starting in September was also announced. Further speeches and rounds of talks centred around current developments in the nine seaports of Lower Saxony, home to Germany's only deep-water container terminal in Wilhelmshaven, and the opportunities that these offer logistics firms in the regions of Nuremberg-Franconia and Stuttgart.



A boost for crane operations in Brake

BRAKE. In order to develop the site further, NPorts acquired a new “**Liebherr LH 150 M**” **material handling machine** in August. Eight transporters were required to get the 160-tonne machine from Bavaria to Brake. The new piece of equipment, which cost 1.9 million euros and is designed specifically for handling bulk and piece goods, will now help to ensure that Brake is able to live up to the growth in handling predicted in the 2030 shipping forecast. NPorts has already gained considerable experience with the machine's hydraulic load control at other sites.



Major project nears completion

BREMERHAVEN. The construction of **eight additional train-length tracks at the Imsumer Deich formation sidings** in Bremerhaven is now on the home straight. 120 masts are currently being erected for the electrical overhead lines. The new tracks are to go into operation upon the schedule change of DB Netz AG on 10 December 2017, preparing the site for increasing transport volumes. “The expansion of the rail facilities around the Kaiserhafen completed two years ago has led to an initial increase in the capacity of the port railway, and is already paying off,” says bremenports' Managing Director, Robert Howe. “The investment at Imsumer Deich represents another substantial improvement.”



EUROGATE increases staff at JadeWeserPort

WILHELMSHAVEN. Monthly container handling at JadeWeserPort has doubled since May thanks to the consolidation of major alliances in shipping. **This growth will see EUROGATE increase its staff levels at the site by 50 per cent** – from 400 to 600 employees. That was the announcement made by the container operator at the end of August. The new employees are apparently part of a future programme aimed to ensure that higher handling volumes will be able to be processed quickly and efficiently. The new members of staff – primarily salaried employees – are to be hired over the next two years.



Attractive prospects for NPorts' up-and-coming talent

OLDENBURG. 21 trainees from various disciplines began their training at Niedersachsen Ports (NPorts) on 1 August. The five young women and 16 young men are currently learning what they need to know in order to be able to work as industrial mechanics for repair, electricians for operations technology, draughtspeople or office managers. Since last year NPorts has increased the number of training contracts concluded by five, to a total of 56. **"Training is a key components of NPorts' success,"** emphasises Managing Director **Holger Banik** (centre).



Cuxport makes heavy goods transport easy

CUXHAVEN. Port services provider Cuxport **handled project loading** for the German representative of Japanese shipping company NYK Bulk & Projects via berth 3 in the Europakai for the first time at the end of July. The **several-tonne parts for two port cranes** were loaded onto the cargo ship "MS Imari" in Cuxhaven and shipped to Ho Chi Minh City in Vietnam. "As a multi-purpose port, we like to think outside the box and not restrict ourselves to just a few types of goods. Extremely long and heavy cargo can also be handled efficiently at the Cuxport terminal," says Oliver Fuhljahn, Head of Automobile Logistics at Cuxport, who was responsible for the project.

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All go in the green sector

The entire transport chain in the maritime sector is increasingly being optimised in terms of its sustainability as well as its logistical processes.

If logistics becomes greener, this will have an impact on the strategies, structures and processes of all involved. In the maritime sector, this transformation is influencing all routes and modes of transport – including seaways, of course.

“Shipping is facing massive changes in terms of fuel supply,” believes Dr. Gerd-Michael Würsig, Business Director for Alternative Fuels at classification company DNV GL. The key reason for this is the numerous stricter environmental regulations that will be coming into force in the near future or that are already in force. For example, the International Maritime Organization has stipulated that from 2020 onwards there will be a worldwide ban on the use of fuels containing more than 0.5 per cent sulphur. “This will affect up to 70,000 ships around the world,” predicts Würsig. In addition, since 1 January 2015 the North and Baltic Seas have had what are known as “Sulphur Emission Control Areas” (SECAs), in which the sulphur limit is 0.1 per cent. Ship owners are also expected to be forced into action by the European Union’s MRV (Monitoring, Reporting and Verification) Regulation, which will apply to ships with a gross tonnage of over 5,000 as of January 2018. The first intended step is for CO₂ emissions to be able to be evidenced by ship owners through comprehensive information concerning a vessel’s movements and fuel consumption. Experts believe that the MRV will become a kind of green environmental badge for shipping.

Individual solutions

With these developments in mind, when it comes to reducing emissions, hopes are being pinned on alternative propulsion systems such as liquefied natural gas (LNG) and methanol and on the use of scrubbers for exhaust gas treatment. “There is no one-size-fits-all solution. Individual answers have to be found for all of the different types of vessel – from container ships and cruise liners, to bulkers and tankers, to car carriers,” says Würsig. He refers to the study “Costs and benefits of alternative fuels”, which DNV GL published last year along with engine manufacturer MAN Diesel & Turbo and in which the use of various fuels was tested using the example of an LR1 tanker. Based on two different development curves concerning fuel prices, one of the conclusions that the study comes to is that LNG may be a sensible alternative to heavy fuel oil (HFO) and marine gas oil (MGO), whilst using methanol is less likely to pay off in the long term. “Because the supply infrastructure is still in the developmental phase, we do not expect LNG to prevail across the board as the primary fuel for shipping by 2020. However, in the long

term, its prospects are very good – both in the ferry segment, in which LNG is already more prevalent, and in the bulk, container and cruise segments,” states Würsig.

He believes that the market will make up its mind as to whether LNG is going to be a niche solution or a real alternative over the next five to seven years. According to research conducted by DNV GL, in May this year there were 106 ships running on LNG worldwide. At the same time, 115 new ships have been ordered with this type of propulsion system. Würsig also takes a positive view of the use of scrubbers: “The technology is being well received, particularly in the field of retrofits. We were aware of 350 scrubber projects in May 2017. Around 200 of these are conversions. Fewer than 20 of the 221 LNG projects are conversions.”

LNG in use

Emden-based shipping company AG Ems already has two ships that are run on environmentally-friendly liquefied gas: the “Ostfriesland” and the “Helgoland”. The “Ostfriesland” – Germany’s first ferry with an LNG engine – underwent a nine-month retrofit costing 13.5 million euros at the Fassmer shipyard in Berne, whilst the “Helgoland” was designed specifically to be run on liquefied natural gas, costing around 31 million euros and paid for with EU subsidies. It is also the first newbuild LNG ship to sail under the German flag. On both vessels, the LNG is cooled down to minus 162 degrees Celsius, turning it into a liquid. The fuel is made up of methane and, when burned, offers a considerably better environmental balance as compared with marine diesel as it produces 20 per cent less carbon

5 %
of ship owners
are using LNG,
19 % scrubbers,
74 % low-sulphur
bunkers.

SOURCE: SURVEY BY SWISS BANK
UBS IN JANUARY 2017

Shipping company AG Ems’ “Ostfriesland” is Germany’s first ferry to be run on environmentally-friendly LNG.

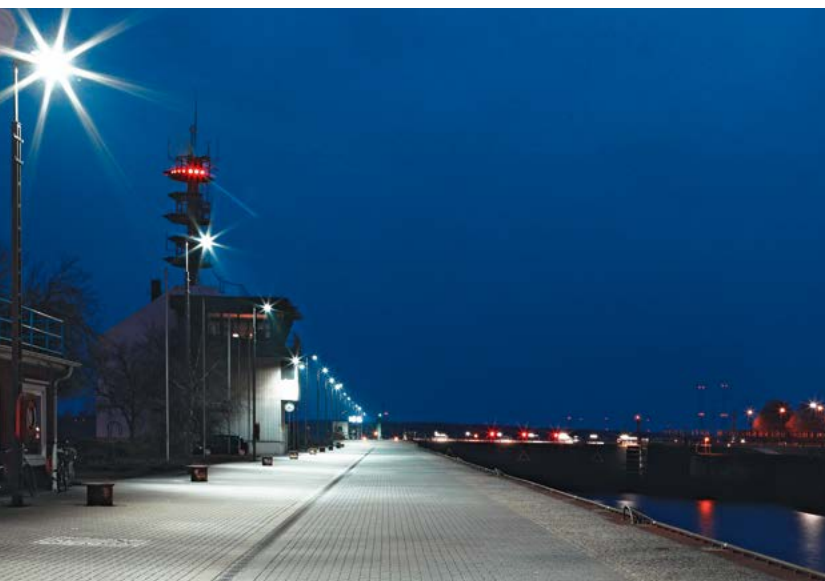


■ ■ ■ dioxide, 90 to 95 per cent less nitric oxide and sulphur oxide, and no particulate matter.

“We are very happy with both ferries,” says Claus Hirsch, Technical Inspector at AG Ems. “The ‘Helgoland’ has been running perfectly since it was commissioned, whilst the power management system in the ‘Ostfriesland’ had potential for even more improvement.” As a result, a programmable logic controller (PLC) with modified software was subsequently installed. This means that four generators can be used at the same time during travel, rather than just two. “This has a direct impact on speed and makes it possible to reduce fuel consumption even further,” says Hirsch.

AG Ems obtains its LNG from the Netherlands, with one lorry usually travelling to Cuxhaven once a week. In a similar way to normal marine diesel, the fuel is bunkered, which takes some two hours. Because the LNG is cooled to a very low temperature, special regulations have to be observed in order to avoid cold burns. The environmentally-friendly ships are popular with passengers: “Many of them are giving us extremely positive feedback, particularly in the context of projects with a focus on alternative propulsion systems or environmental protection,” reports Hirsch. For this and other reasons, the shipping company is planning to also upgrade the “Münsterland”. Hirsch adds: “The plans are already underway, however it is still unknown whether the project will be implemented as planned or completely turned on its head.”

19 lamp posts were fitted with LEP lighting at the Oslebshäuser lock in Bremen as part of a research project.



Environmental and climate protection in the seaports

Ports are also making progress in terms of sustainability: one way to reduce energy consumption and lower emissions of carbon dioxide is to use new lighting technologies such as LED (light-emitting diode) and LEP (light-emitting plasma). These have been undergoing tests conducted by bremenports, NPorts and BLG as part of a research and development project since January 2016.

After an assessment of the current situation conducted last year, spring 2017 saw the lighting being upgraded on three test sections. There is now one LEP lamp post and one LED lamp post in Brake, 19 LEP lamp posts at the Oslebshäuser lock in Bremen and one LED lamp post at BLG in Bremen. “We won’t have final results until the end of 2018, but we do have interim results,” reports bremenports Project Manager, Katja Dorschel. “By using LED lighting in Neustadt port, BLG has managed to reduce energy consumption by almost 70 per cent as compared with sodium-vapour floodlights.” The new lighting is also apparently having a positive effect at NPorts: “Our performance measurement is just coming up in the autumn, but according to the data sheets, using LED will allow for a reduction in energy consumption of 40 to 60 per cent, and LEP up to ten per cent,” explains Dorschel. “At the Oslebshäuser lock we are not using less energy, but we are getting considerably better light quality and effectively meeting the requirements as a working area.” This element is actually another important aspect of the tests thus far: “The LEP light is very bright, spreads over the area well and provides good colour rendering because of its daylight-like spectrum, meaning that the edge of the quay is better illuminated than with the sodium-vapour lamps,” says Dorschel.

In addition, the project is being used to develop an energy efficiency network. Twice a year, companies from the entire port sector meet up for this purpose. “The first meeting was about sustainable lighting technologies, the second was about energy management and audits among port operators and users, and in November we will be meeting in Brake to talk about digitisation in the ports,” informs Dorschel. The involved parties hope that the cross-state network will provide impetus for the application of LEDs in ports and support the introduction of LEP technology.

Optimising traffic management

There are two important points when it comes to reducing both peak consumption and vehicle emissions in ro-ro handling: first, optimising routes at the car terminal and

second, the vehicles themselves. “We implemented traffic management in Bremerhaven two years ago,” reports Wolfgang Stöver, Head of Marketing and Sales at BLG. “We have now optimised processes to such an extent that autonomous driving would be the only way to extract more potential.” Because the car terminal is private land, Stöver expects the go-ahead to be given considerably earlier here than on public roads. BLG is already working on specific projects with car manufacturers. With its 1,300 waggons, BLG is already well placed in terms of transporting vehicles to the terminal for export: over 90 per cent of passenger cars get to the ports by rail. “We are also using modern, low-emission equipment on the side of the working vehicles,” says Stöver. He explains that the vehicles available on the market with electric drives are unfortunately still too limited in their range at present for use in two-shift operation – with the high level of exertion that this brings. “The charge would have to be sufficient for one shift at least,” says Stöver.

“We have had very positive experiences with the ‘truck notification app,’” emphasises Stöver. Similar to online check-in, this makes it possible for lorry drivers to signal their arrival in advance using their smartphones, with the information being transmitted to the port via Bluetooth. As a result, drivers and their lorries can travel directly to the gate, without long queues or waiting to register. This boosts the traffic flow, and fuel consumption and CO₂ emissions are reduced – in the past, the engines soon began to heat up during stand-by, particularly in winter.

Cross-border collaboration

The maritime sector has been receiving support in the transformation towards more environmentally-friendly and sustainable shipping from Dutch-German research project “MariGreen”, run by the University of Emden/Leer, since January 2016. The project is receiving money from the European Regional Development Fund (ERDF) as part of the Interreg-V-A Germany-The Netherlands programme as well as national co-financing from Germany and the Netherlands. It has a term of three years and involves a variety of individual projects on the core topics of ancillary wind-powered drives, LNG, green logistics, alternative supply chain projects for the transport of orange juice and optimisation of logistics for offshore wind farms.



The project load ship “E-Ship 1” has Flettner rotors as well as a diesel engine. It is the world’s first commercial rotor sailing vessel.

Alternative drive technologies

As part of the “MariGreen” project (see info box), Michael Vahs, Professor at the University of Emden/Leer, is investigating how shipping can be supported through the use of Flettner rotors. “Given that they are 18 metres tall and three metres in diameter, Flettner rotors are very challenging from a technical and organisational point of view, but do offer a lot of potential,” reports Vahs. “We want to demonstrate what the technology can do. We have already completed the rotor prototype on a test rig on land. All that is required is a few small optimisations.” In a second step, the rotor is to be tested on the “Fehn Pollux” for an expected period of a year. Installation onboard the multi-purpose cargo vessel is scheduled for October. Vahs is convinced by the technology, which provides a ten per cent saving in fuel and a corresponding reduction in CO₂ emissions. However, he does also say that: “The technology comes at a price.” How quickly such an investment pays off depends on the wind and other conditions: “In good wind conditions, it can pay for itself in under give years; in moderate wind conditions the period is more like five to eight years.” However, he believes that it is necessary to think long-term “if we want to solve the climate problem in shipping. “In the cruise industry, pressure from end consumers is high, which means that greater efforts are being made to become more eco-friendly.” In container ships, he notes, the most difficult thing is the space taken up by the rotors on deck, which is then no longer available for cargo. Nevertheless, this is to be contrasted with the many advantages of the Flettner rotors: “They are robust, can be fully automated, and have a long service life,” highlights Vahs.

The use of Flettner rotors is expected to achieve a

10 %
fuel saving.

SOURCE: UNIVERSITY OF EMDEN/LEER



One of the aims of the “MariGreen” research project is to investigate how the procedure of installing offshore wind farms can be improved.

Simulation models for analysis

As part of another MariGreen sub-project, Stephan Kotzur, Director at the institute of logistics (HILOG) at the University of Emden/Leer – along with the University of Groningen in the Netherlands and three other industrial partners – is working on developing, simulating and optimising an innovative “green” alternative for the transportation of orange juice (NFC) within Europe. “A generic simulation model has been developed to play out and analyse different transport scenarios,” reports Kotzur. In terms of the point of focus, the orange juice market, the current logistical set-up – distribution solely by means of lorry – is being compared with a multi-modal approach involving ships, trains and lorries. The market – and therefore also the transport volume – is based on orange juice consumption in Great Britain over recent years. The simulation model also offers the option of investigating future scenarios, particularly the influence of

“If you can't measure it, you can't manage it”

Interview with Andreas Schruth, Head of Energy and Environmental Management at EUROGATE

You have been managing the energy and environmental management department at EUROGATE for seven months now. How are things placed now?

ANDREAS SCHRUTH:

Our department, which has a total of four employees, is part of the corporate strategy division. We take care of energy management and coordinate all of the associated activities within the holding's eleven companies. I am responsible for the 50.001 energy management system and the sustainability report. Each company also has an energy coordinator. We regularly meet up for workshops, where we discuss current consumption and ongoing projects.

Who initiates new projects?

This is something that everyone can, and should do – that means the energy coordinators as well as myself and my colleagues. We always investigate whether a project can be transferred from one company to another. There are also special projects initiated from management level.

In which areas are you currently most active?

One focus point is the lighting at our container terminal in Bremerhaven – which is, incidentally, an idea that was initiated there. As part of a test, we fitted the four lamp posts at the quay with LED lights for a period of six months in order to measure the power requirements and examine the operational feasibility. This showed that we can reduce our annual energy consumption by 75 per cent – and therefore also reduce emissions. Based on these results, we will be upgrading the entire terminal by the end of 2017.

Is this transferrable to other terminals?

Yes. Bremerhaven will be the first terminal of the North Range ports to be completely lit using LEDs. And we are in the process of addressing this at our terminal in Hamburg. I am especially pleased by the positive side-effects: The white light is brighter than the yellow light of the previous sodium-vapour lamps, and therefore means increased safety for employ-

various parameters, such as fuel prices. This makes it possible to form statements as to the conditions under which changes to logistical processes would be both ecologically sensible and economically feasible.

Optimising logistics for offshore wind farms

“The current logistical processes are now approaching their limits on the modern offshore wind turbines in the 6 to 8-megawatt class at sites at greater water depths and distances from the coastline, particularly in terms of the installation of foundations,” says Marcus Bentin, Professor at the University of Emden/Leer. With this in mind, he and his team are investigating how the procedure of installing offshore wind farms can be improved.

“Until now, installation vessels have been shuttling between the loading port and the construction site; they are limited in terms of their load and crane capacity, and are no longer suited to implementing this step because of turbine size, water depth and the increasing weight of foundations,” says Bentin. “In addition, journeys with small loads to far-flung construction sites are leading to a dramatic increase in logistics costs.” As part of the “MariGreen” project, researchers are investigating an installation procedure that

saves time, money and fuel, maximises the utilisation of equipment, personnel and weather windows, and aims to integrate the individual sub-sections into the process. Real-time simulation is being developed for this purpose. A core element of optimisation is the division of installation and transport tasks into two units: a jack-up platform and a “High Efficient Windfarm Installation System” (HEWIS). The platform remains stationary at the wind farm and is supplied with parts by the HEWIS, which also completes construction tasks alongside the jack-up platform. So that several steps can run in parallel, the pile driving work is carried out by the jack-up platform and all other assembly steps are done by the HEWIS. The aim is to halve the time involved in installing the foundations, which will also mean a significant reduction in CO₂ emissions. The saving is 35 per cent compared with an installation platform and as much as 75 per cent compared with a large installation vessel. The project is also being used to investigate the savings that can be achieved by running an installation vessel on natural gas. The aim is to prove that regenerative energy can easily be tapped into with pioneering vessels and low-pollutant propulsion concepts. As a whole, there is some way to go, but the German seaports have begun to make inroads into the green sector. (cb/bre)

More information:
www.marigreen.eu

PHOTOS: HALBERG - FOTOLIA, EUROGATE



Andreas Schruth,
Head of Energy and Environmental
Management at EUROGATE

ees. In addition, LED light doesn't spread as far, which has a positive effect on the surrounding environment. Another plus point is that it attracts much fewer insects.

What proportion of the energy consumption is accounted for by the gantry cranes, and what kind of projects do you have in this area?

The gantry cranes are the second biggest consumer of energy at our terminal. They use a lot of individual devices, such as motors and heating elements. We are currently analysing consumption and will then investigate which of these devices can be replaced by energy-efficient ones.

Is that not really time-consuming?

Yes, we're talking about different series and years of construction. But without consumption data we have no basis for improvement measures. It all comes back to the old adage: “If you can't measure it, you can't manage it.”

Speaking of measuring, how much energy did EUROGATE consume last year?

437.1 gigawatt hours – 1.8 per cent less than in the previous year.

And how much power do you generate yourselves?

We have four solar power systems in Bremerhaven, Wilhelmshaven and Hamburg, as well as our two wind power plants in Bremerhaven and Hamburg, which jointly cover around 14 per cent of our power requirements. We also run two cogeneration units and three wood chip-fired systems.

By 2020 EUROGATE aims to use 20 per cent less energy per container and to reduce CO₂ emissions by 25 per cent as compared with 2008. Will you achieve that?

I believe so. In any case, we're definitely on the right track.



Where To?

Speaking to LOGISTICS PILOT, Hans Gudenschwager, Professor of Naval Engineering at the University of Bremen, explains the challenges and potential of traditional and alternative ship propulsion systems.

In light of increasingly strict limits and a variety of other drive technologies, does the marine diesel engine still have a future or will it have had its day within the foreseeable future?

GUDENSCHWAGER: The diesel engine is the best and most efficient thing that we have at the moment. There is currently no other system that is as effective. Due to the extremely high engine power, using super fuel as in cars is not possible on ships. Steam turbine systems do generate a lot of power, but their level of efficiency is lower, as with gas turbines. To demonise the diesel engine is short-sighted, and ignores the possibilities that the technology holds. Electric engines run on batteries are not an alternative for the large amounts of power required in cargo shipping.

Admittedly, in shipping – apart from in the Emission Control Areas (ECAs) – it is still often heavy fuel oil that is used. Why?

Low cargo rates are forcing shipping companies into reducing their spending. The majority of overheads are fuel, and heavy fuel oil is the cheapest. It is more or less a byproduct of refinement. It is beneficial for the refineries to be able to sell their heavy oil to the shipping industry.

Slow steaming has become popular, not least because of the shipping crisis. What effect is this having on climate and environmental protection?

Looked at purely in terms of physics, the theory is that the faster a vessel travels, the more fuel it consumes. Fuel consumption increases with the cube of speed. So if a ship doubles its speed, it requires roughly eight times as much power, or fuel. However, a ship is designed for a certain speed, so actually, reducing speed of travel will not necessarily result in using less fuel. If a ship travels more slowly over a long period, it should be adapted – particularly around the bow and propeller – which is often not the case.

So slow steaming can contribute towards reducing CO₂ emissions?

Yes. The Energy Efficiency Design Index (EEDI) of the IMO (International Maritime Organization) prohibits the trend of designing fast ships. However, nitrogen oxide, NO_x, is still generated. The only option here is to use filters or mechanical measures. The design of the engine and the combustion process influences the formation of NO_x. As with cars, it is in the interest of ship owners to reduce engine sizes in order to free up more cargo space. An increase in power density has

an unfavourable effect on the combustion process. Filtering is, of course, also possible, using technical measures such as scrubbers.

In which areas would you say these exhaust gas filters are of use?

Exhaust gas purification systems need an operating state that has few load changes over an extended period. This is not the case in short-distance transport, but does apply to the engines in cargo ships. However, this solution gives rise to the problem of how to dispose of the residue caused by the exhaust gas cleaning. Disposal in the sea is bad from an environmental point of view. Installing filters increases the weight of the ship and takes up space, which then cannot be used for cargo.

And what is the situation like with regard to the development of propellers?

The technology is also very mature, with its potential more or less exhausted. The level of efficiency is already at 70 per cent. There is currently no better technology for converting engine power into propulsion.

But there are alternatives, aren't there?

In theory, the paddle wheel would be more effective, but it doesn't function reliably at sea. Water or jet propulsion is also not suitable for larger ships, and only works well at

“To demonise the diesel engine is short-sighted, and ignores the possibilities that the technology holds.”

**Hans Gudenschwager,
Professor of Naval Engineering
at the University of Bremen**





There is a variety of concepts for using wind as an additional form of propulsion: on the “Vindskip”, the hull is designed to assume the function of the sail; SkySails, on the other hand, use fully automatic towing kites.

■ ■ ■ certain speeds. In Japan they tested an electrically-driven pump. However, the level of efficiency was very poor.

What is the situation with diesel-electric drives?

With this technology, there are a lot of transfer losses through generation and conversion. Such drives are less favourable than a directly powered propeller on cargo ships and over long distances. It’s a bit different with passenger vessels; they have the advantage of being able to use the electrical energy in parallel between hotel operations and the ship’s travel.

There are also a number of other propulsion systems, such as the “ReVolt” – a design study for a driverless container ship with an electric drive.

What do you think of this?

Such a thing is currently only conceivable for smaller ships.

And what about hybrid engines that use LNG (liquefied natural gas)?

LNG as a replacement fuel is a good alternative option for getting away from harmful pollutants. The technology is being used and developing. One problem to be solved is the “methane slip” – the escape of methane. LNG does require more operative effort and tank space than diesel, and is subject to other safety provisions. It is used on ferries, for example.

The 1,000 TEU container ship “Wes Amelie”, owned by Reederei NSB, was also recently put into operation.

Yes, it’s also an option for smaller ships in the short-distance sector. However, running large container ships on LNG becomes difficult because of the large volumes of fuel. The tanks for storing the cooled LNG on board take up a lot of space, and a preparation system is also required. The systems are also more prone to maintenance than traditional diesel engine systems, and call for a qualified crew. In addition, the engines’ operation is more sensitive to changes in load.

How do you view the prospects of hull-sail vessels such as the “Vindskip”, the hull of which is in the shape of an upright aircraft wing and that can apparently save up to 60 per cent fuel?

There must have been an error in the calculation as compared with the figures from the patent. I see the saving as being more around six per cent. The ship – which originally was supposed to have been in service for a long time – is

PHOTOS: SKYSAILS, FRAUNHOFER OML – LADE AS

advertised as having a load capacity similar to that of a car transporter. However, I'm not sure how a load corresponding to the comparison vessel could be stowed.

SkySails and towing kites have also been popular for some time now. How would you rate their prospects?

The handling of giant kites is complicated. The usual crew of 15 to 20 people on a container ship is not enough. Schedules planned by the hour cannot be met with sails and without an engine, however sail-based propulsion systems could be an alternative for non-time-sensitive goods. Additional drives and sails are, of course, definitely a sensible idea.

What about sail rotors? Flettner rotors appear to be becoming established in this area.

The principle works. That said, because the rotors sit on

deck, they take up loading space. If rotors are retrofitted, this has an effect on the stability of the vessel, its propulsion and its performance – you more or less have a different ship in the end. And the efficiency is not as good as that of diesel propeller systems. One reason for this is that the rotors cannot run in all wind directions. Whether a fuel saving of 25 per cent is actually possible depends on the travel profile and the size of the ship. It is important to know what the comparison is based on.

What is the potential of fuel cells in shipping?

The technology has been introduced and works, particularly in the case of marine vessels. It also offers many advantages from an ecological point of view. However, achieving a large amount of power – as is required by cargo ships – is difficult. Large quantities of hydrogen have to be stored safely on board.

More information:
www.hs-bremen.de



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International solidarity in sustainability

The European port sector has recognised the signs of the times, and with the DUAL Ports project, it is setting the course for a cross-border environment strategy.



Dr. Matthäus Wuczkowski,
Sustainability Manager
at Niedersachsen Ports

The European DUAL Ports project was officially launched in the Danish town of Præstø on 3 November 2016. Behind it are numerous ports, companies and scientific institutions from Germany, Belgium, the Netherlands, Scotland and Denmark. Their aim is to sustainably reduce the CO₂ emissions and environmental strains caused by the port sector.

“The effects of climate change are being felt around the world, and urgently call for solutions. DUAL Ports is an effective trans-national approach to targeting these global challenges,” says Dr. Matthäus Wuczkowski, Sustainability Manager at Niedersachsen Ports (NPorts). “The fascinating thing about the project is that each of the partners do not have to concern themselves with coming up with climate protection measures and looking at all of the different aspects of solutions in detail. Instead, various sites are looking into specific topic areas, and will then share their findings with one another – like everyone working together on solving a puzzle.”

Eight sub-projects in three fields

The project, which was launched and is being managed by the Belgian port of Oostende, comprises a total of eight work packages with the three focus areas of “Utilities”, “Abilities” and “Potentials” (see info box). The project is being financed by the Interreg North Sea Region Programme, which is part of the European Union’s structural and investment policy.

“Small and medium-sized ports are an important part of a green supply chain and want to step up to their social responsibilities. However, the introduction of new technologies is often associated with risks for them – and their staff, technical and financial capacities are often limited,” says Wuczkowski, summarising the current situation. This is where DUAL Ports is intended to come in, bringing added value for all involved. Key benefits that the partners can expect include reduction of risks, utilisation of synergies, exchange of knowledge and trans-national transferability of developed approaches.



Efficient handling facilities need modern lighting concepts. The results of pilot projects such as that in Emden should be transferrable to other areas.

NPorts active in two areas

In Germany, DUAL Ports is being implemented through two projects, for which NPorts is responsible. First, a sustainable lighting system is being set up and tested in the port of Emden. This is to illuminate a group of six tracks for shunting and parking, as well as for loading and unloading, car trains. The concept is based on an energy-saving, low-maintenance LED technology, which, thanks to the integration of a modular-structure control system, facilitates the programming of various lighting scenarios, remote control and largely automated regulation, using motion detectors and track sensors. With the help of this technology, NPorts can ensure that light is only provided where it is needed, helping to further the reduction of CO₂ and light emissions in the port.

Second, NPorts has appointed a Green Port Officer, the role of which Dr. Wuczowski has taken on alongside his

existing tasks. Here his remit is to develop and implement a sustainability strategy and sustainability management for 15 NPorts sites and initiate best practice measures. “Regardless of the environmental issues for which I have already initiated processes, I feel a great level of enthusiasm and support among all NPorts employees, from trainees up to the executive management,” says Dr. Wuczowski, explaining his first experiences of the project. “They are all interested in taking responsibility and introducing concrete measures to avoid superficial greenwashing and create real added value for our ports, the project partners and the environment.”

Activities in neighbouring countries

This range of DUAL Ports measures is complemented with six further projects outside of Germany. For example, in Skagen (Denmark), experts are carrying out a project to investigate the potential of economical use of liquefied natural gas (LNG), whilst in Vordingborg (also Denmark), the aim is to show how contaminated soils can be treated and rendered useable for port expansion. In Orkney (Scotland) they are examining the capabilities of sailing freighters for transport of goods between ports and developing a business case study for the storage and use of hydrogen in the port environment. On top of that, the DUAL Ports scheme involves a package of measures to reduce CO₂ emissions in Zwolle in the Netherlands and development of a sustainable port settlement strategy in Oostende, Belgium.

“The project will bring practical knowledge and experience that will be helpful not only on local level but on international level,” states Wim Stubbe, Business Development Manager in the port of Oostende. “Because each of the participating ports is different in terms of both size and strategic orientation, I am expecting a wide variety of solutions, which is sure to contribute to better assessment when it comes to future investment measures. Small and medium-sized ports have had numerous political stipulations to comply with in the recent past, but lack the financial means to invest in highly qualified staff or use expensive consultants. Therefore, exchange as part of DUAL Ports is a valuable aid in strengthening ecological and economic decision-making.” (bre)

FACTS

DUAL Ports

An Interreg North Sea Region project involving partners from five countries

Term: from December 2015 to June 2019

Total budget: over 5.2 million euros

Project partner ports: Niedersachsen Ports and Emden branch (Germany), Port of Vordingborg (Denmark), Port of Skagen (Denmark), Port of Oostende (Belgium), Orkney Islands Marine Services (Scotland), Port of Zwolle (Netherlands)

Other project partners: Fair Winds Trust, ITM Power, Business Vordingborg, Hamburgisches Welt-Wirtschaftsinstitut

The three DUAL Ports fields

“Utilities” is aimed at developing and setting up a CO₂-reducing infrastructure in the ports, whilst “Abilities” brings together programmes, processes and skills that will support the ports in managing environmental aspects better as part of their daily activities. In the “Potentials” field, the partners are concentrating on tools for recording environmental effects and on the transferability of best practice examples to other ports.

Sustainability as a driving force

Wessels Reederei is honing in on sustainability and innovation with its retrofit of the “Wes Amelie”. A look at the history books shows that tradition and modernity have always been, and still are, a firm part of how the Wessels family runs its business.

From the construction of an oak cable ferry to the conversion of the world’s first container ship to have a dual-fuel system, in 100 years Wessels Reederei has transformed from a traditional shipping company to a specialist in ship management. Throughout this time, the experts from Haren on the river Ems have always managed to innovate. Particularly in the recent past, this has involved focusing on the fields of energy efficiency and environmental protection. “We are continuing my father Gerhard’s tradition of always looking out for optimisation and improvement,” says Gerd Wessels, the firm’s Managing Partner.

Gerhard Wessels took over management of the company after the Second World War. During his era, shipping changed dramatically: the introduction of the container in the 1960s, in particular, posed new challenges for cargo transport. It was at this time that Gerhard Wessels had the courage

to take the step from a ship owner to a shipping company. As part of the associated expansion, he founded Cargo-Liner Bereederungs-gesellschaft in 1972, which focused on building new types of ship. This led to the creation of the “Cargo Liner” – a sea-going river barge with a retractable forecastle and a moveable bridge. It was primarily used to transport iron to eastern Europe on the European inland waterways and could also be used on the open sea, thanks to the aforementioned properties. At the same time, Gerhard Wessels’ qualities as a mediator between east and west helped to ensure that at the start of the 1990s the firm was the first German shipping company to cooperate with a Czechoslovakian shipyard. The result of this cooperation was the sea and river-going multi-purpose cargo vessel “Rheinfels”, followed by numerous other multi-purpose ships that could be described as pioneering in the sector.

A large range of services under one roof

Gerd Wessels has been at the helm of the company since 2004. The shipping company currently has a fleet of 36 ships, with around 550 crew members. The portfolio of container ships ranges from mini-bulkers to multi-purpose cargo vessels. The company now covers almost all shipping-based activities. These range from organising ship insurance, to operating ships, to chartering and crewing, to developing, financing and finally constructing floating technology. “With all of our projects, efficiency and optimisation of ships’ operations are the focus,” says Wessels. “Under this premise, our aim is to actively shape development and not simply run after it. We dare to take on challenges that not everyone has the courage to take on,” adds Christian P. Hoepfner, Authorised Representative at the shipping company.

In light of this, Gerd Wessels has established a corporate



At the helm of Reederei Wessels: Gerd Wessels (left) and Christian P. Hoepfner

One of the companies that Wessels commissioned to convert the propulsion system was German Dry Docks (GDD) in Bremerhaven. The following partners were also on hand during the project: MAN Diesel & Turbo for engine retrofitting, TGE Marine Gas Engineering as the gas system supplier and SMB Naval Architects & Consultants in the capacity of design agency.



philosophy based primarily on the fundamental principle of sustainability. This is reflected, for instance, in the firm's decision to be the first shipping company to use a towing kite system in a cargo vessel, the "Michael A.," at the end of 2007. "Unfortunately this technology has not yet caught on," summarises Wessels. Another innovative project was the commissioning and technical management of a ship using Flettner rotor technology. Here, Wessels Reederei also provided support and advice in the development of the propulsion concept, which made it possible to reduce fuel consumption and CO₂ emissions.

On course for the future with the "Wes Amelie"

The shipping company's sights are currently set on the concept of LNG retrofitting: the 153 metre-long "Wes Amelie" was converted, ready for dual-fuel operation, at the end of August. This makes the container feeder ship the world's first container vessel to be run on both environmentally-friendly liquefied natural gas (LNG) and traditional marine diesel. "The Federal Ministry of Transport is funding this innovative project as part of its mobility and fuel strategy," says Hoepfner. He explains that the decision was made in favour of this type of ship because the "Wes Amelie" has a good multiplication effect. There are

23 sister ships – 16 of which are identical in construction – to which the findings and experience gained from this project can easily be transferred.

"The knowledge gained from the 'Wes Amelie' project will not only be used in our own newbuilds in future. Given the current number of companies planning conversions to LNG, we are considering providing our expertise to third parties in an advisory capacity," says Wessels. However, he believes that over the coming years the top priority will go to renewing the company's existing tonnage in European coastal shipping operations. The focus is on units between 3,000 and 4,500 tdw. "At the same time, however, we want to establish new types of ship in this market segment, the design and engine power of which meet the individual requirements of customers and their travel areas." Also at the very top of the future agenda lies the intensification of collaboration with other shipping companies and load customers, as Wessels already practises in the purchase of spare parts and consumables. Hoepfner sees similar potential in terms of flag state administration and dealings with classification societies. Wessels has a clear maxim: "Saving energy is the best form of environmental protection. As such, we are happy to assist in getting established land-based technology into on-board operations – and giving economic and ecological aspects equal consideration." (bre)

FACTS

Wessels Reederei

Founded: 1912

Headquarters: Haren on the river Ems

Fleet: 36 ships with around 550 crew members

More information: www.wessels.de

SUMMARY NEWS

APPOINTMENT. As of 1 March next year, **Carmen Schwabl** will be the new Managing Director of Landesnahverkehrsgesellschaft Niedersachsen (LNVG). She will succeed **Hans-Joachim Menn**, who has chosen to step down from his post prematurely. Schwabl will sit with **Klaus Hoffmeister** to form the usual dual leadership at LNVG. Schwabl has been Head of the Central Services Group and the Staff and Organisation Department at Lower Saxony's Ministry for Economics since 2013. Before that she spent seven years in charge of the rail transport and railway legislation departments.

CHANGING OF THE GUARD. As of the turn of the year 2017/2018, Hansa Meyer Global Holding (HMGH) and Hansa Meyer Global Transport (HMG T) in Bremen will be under the management of a new leadership team. The first step was completed in 2016 with the appointment of **Henrique Wohltmann** as Managing Director of both companies. **Marc-Oliver Hauswald** then joined as the second Managing Director in September 2017. The pair will manage HMGH and HMG T alone from 2018. **Jörg Knehe**, who founded the company and still runs it, will hand over his executive responsibilities at the turn over the year and move to the group's advisory committee.

Port construction under new management

CUXHAVEN. Niedersachsen Ports' Cuxhaven branch has a new Head of Technology: in June, **Knut Kokkelink** assumed responsibility for all newbuild projects at the port sites of Cuxhaven and Stade. The 42-year-old civil engineer was hired by the Cuxhaven port office, the predecessor organisation to the Cuxhaven branch, in the year 2000, straight after his degree. Since then, as Team Leader, he has worked with his team to maintain the infrastructures and supra-structures in the port. "This year we will be driving forward important construction projects with berths 4 and 9.3. For this, we need proactive and experienced managers. We are delighted to have Mr Kokkelink on board in this role," explains Hans-Gerd Janssen, Head of the Cuxhaven Branch.



Change of management on the Ems

OLDENBURG. After seven years at the head of Schiffsmakler-Verband EMS, Torsten Meinke has left the management body at his own request. At the association's annual general meeting in July, **Jan Remmers** – as the first chairman – and Heinrich Smidt were unanimously appointed to the board for three years. The items on their agenda include the widening of the shipping channel on the Ems and tide control at the Ems flood barrier in Gandersum.



Girl power for offshore wind energy

HANOVER. In the capital of Lower Saxony, the Board of Trustees has appointed **Dr. Ursula Prall** as the new Chair of the Executive Board of the German Offshore Wind Energy Foundation. Prall, who took over this voluntary role from long-standing Chair Jörg Kuhbier on 1 July, is a lawyer and has been fighting for the development of offshore wind power in Germany since 2004. For many years she was Managing Director of Offshore Forum Windenergie (OFW), holding the role of Chair since 2014.

Möhring succeeds Colberg

BREMERHAVEN. Following Jörg Colberg moving to the executive board of Gesamthafenbetriebsverein Bremen/Bremerhaven, **Ferdinand Möhring** took over executive management of container terminal MSC Gate Bremerhaven in August. Möhring, a qualified nautical expert, has been in the container industry for just under 30 years, and spent eleven years working at sea himself. Before beginning at MSC Gate Bremerhaven, he held various roles with EUROGATE shareholder BLG Logistics Group over a period of 29 years.





Wagner heads up expert stevedoring firm

BREMEN/BREMERHAVEN.

Matthias Wagner has been at the helm of D. Heinrichs Stauereibetrieb, headquartered in Bremen and Bremerhaven, since 1 July. He succeeded previous Managing Director Olaf Schwemer, who had worked for the company for over 23 years and is now dedicating himself to new challenges in seaport forwarding. The stevedoring company, which was founded around 150 years ago, is considered the nucleus of the Heinrichs group, and is a full-service provider for shipping companies, forwarders and industry.

Rösener joins Lübcke Marine

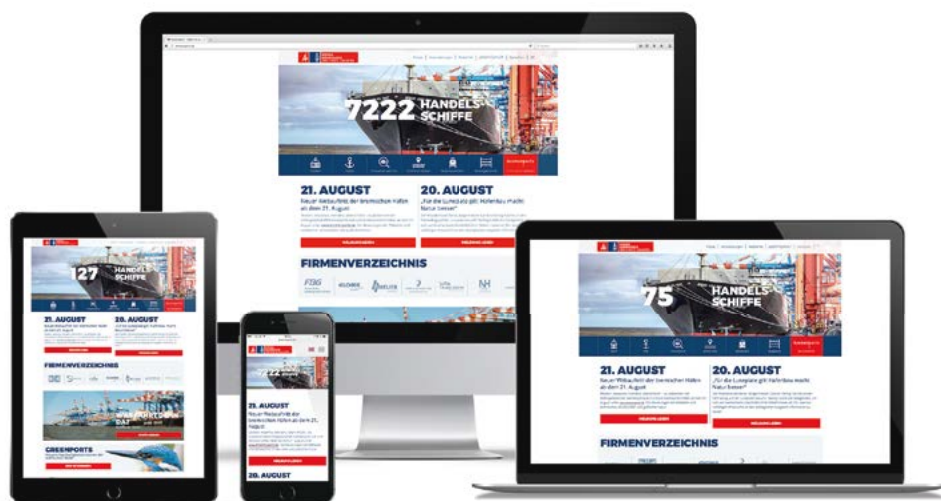
BREMEN. On 1 July, **Burkhard Rösener** joined Lübcke Marine Assekuranzmakler as Managing Director. The trained banking expert and business graduate was Managing Director of shipping companies Hanseatic Lloyd and Norddeutsche Reederei H. Schuldt between 2001 and 2016. As the successor of Stefan Rogge, who has left the board at his own request, he plans to work with Holger Warrelmann to drive the realignment of the Bremen-based insurance specialist for companies engaged in marine and inland shipping.



Breuch-Moritz elected as Vice President of IOC

HAMBURG. The general assembly of UNESCO's Intergovernmental Oceanographic Commission (IOC) elected **Monika Breuch-Moritz**, the President of the Federal Hydrographic and Maritime Agency of Germany (BSH), as its Vice President in June. The meteorologist had been leading the IOC's German delegation for eight years. "I am delighted that the importance of the oceans has become known in the public and political consciousness around the world. Knowledge about the world's seas and measures to assess their condition and protect them must be developed on an international level," said Breuch-Moritz upon her election.

THANKS BREMENPORTS!



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Did we arouse your interest?
Give us a call.



closer GmbH & Co.KG
Werbeagentur
Sielwall 54, 28203 Bremen
T 0421 696180-0, F -29
hallo@clsr.me, www.clsr.me



Save the Date

Here you will find an overview of selected events in the maritime and logistics sector. Simply take a note of the dates that interest you.

Trade fairs

Whether in Houston, Mumbai, Shanghai or São Paulo, there are numerous exciting trade fair events coming up around the world over the next few months, which will be interesting not only for the maritime industry in northern Germany. The northern German coastal states will be exhibiting on a joint stand under the umbrella brand of “German Ports” for the twelfth time at “Intermodal South America”. At the same time, preparations will be in full swing for “Breakbulk Europe”, which will take place in Bremen in May.



“Intermodal South America” is very important for the seaports of Lower Saxony and Bremen because Brazil is Germany’s most important trading partner in South America.

Joint trade fair appearance under the umbrella brand of German Ports

Breakbulk USA www.breakbulk.com	17. – 19.10.2017 Houston, USA
CTL India www.ctl.net.in	23. – 24.1.2018 Mumbai, India
Intermodal South America www.intermodal.com.br/en	13. – 15.3.2018 São Paulo, Brazil
Breakbulk China www.breakbulk.com	26. – 29.3.2018 Shanghai, China
Transportation & Logistics Americas www.tl-americas.com	9. – 12.4.2018 Atlanta, USA
transport logistic China www.transportlogistic-china.com	17. – 19.5.2018 Shanghai, China
Breakbulk Europe www.breakbulk.com	29. – 31.5.2018 Bremen, Germany

Customer events

Want to get to know us better and discuss the latest market developments with industry experts? Good opportunities for this include our “logistics talk” and “Hafen trifft Festland (port meets mainland)” series of events. Whilst the “logistics talk” series will be calling into Vienna, Graz and Munich next, the “Hafen trifft Festland” experts await in Munich and Leipzig.



At the “logistics talk” in Bielefeld at the end of July, the participants enjoyed interesting speakers and informative discussions.

Hafen trifft Festland (port meets mainland) www.seaports.de , www.jadeweserport.de	10.10.2017 Munich, Germany
logistics talk www.bremenports.de/veranstaltungskalender	12.10.2017 Vienna and Graz, Austria
Night-before reception Logistics Conference www.bremenports.de/veranstaltungskalender	24.10.2017 Berlin, Germany
Hafen trifft Festland (port meets mainland) www.seaports.de , www.jadeweserport.de	8.11.2017 Leipzig, Germany
logistics talk www.bremenports.de/veranstaltungskalender	30.11.2017 Munich, Germany

Other highlights

Under the motto “Think Different – Act Digital”, BVL International will be extending an invite to the 34th German logistics conference (International Supply Chain Conference) in October.

German Logistics Conference www.dlk.de	24.10.2017 Berlin, Germany
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Review

The last few weeks have seen important events taking place in Cuxhaven, Bremen, Brake and Bremerhaven, with various maritime issues being discussed.

27th Niedersächsischer Hafentag

CUXHAVEN. Once a year, the Lower Saxony port day brings together experts from politics, administration, business and the media together to discuss the prospects of the state's seaports. On 1 September, Cuxhaven played host to the popular event, opened by Inke Onnen-Lübben, Managing Director of Seaports of Niedersachsen, and Dr. Ulrich Getsch, Mayor of the city of Cuxhaven. Then Lower Saxony's Minister for Economics, Labour and Transport, Olaf Lies, spoke about developments and perspectives of port policy in a keynote speech, followed by a panel discussion entitled "Offshore wind power up to 2030" and focusing on the opportunities and challenges for the ports of Lower Saxony.



From l.: Karsten Dirks (AG Niedersächsische Seehäfen), Peter Zint (Hafenwirtschaftsgemeinschaft Cuxhaven), Inke Onnen-Lübben (Seaports of Niedersachsen), Economics Minister Olaf Lies, Irina Lucke (EWE Offshore Service & Solutions), Dr. Carsten-Suennke Berendsen (Siemens Wind Power), Mayor Dr. Ulrich Getsch, Moderator Jan Rispens (Erneuerbare Energien Hamburg Clusteragentur)

53rd Kapitänstag (Captains' Day)

BREMEN. On 1 September, around 300 business partners from Germany and abroad took up their invitations to the 53rd "Captains' Day", organised by the Senate of the Free Hanseatic City of Bremen and Bremische Hafenvertretung, the representative of the ports of Bremen. The celebratory dinner in the old town hall is a symbolic "thank you" to all of the captains and crews of ships and aircraft that help link the two-city state with the world. Alongside Martin Günthner, Bremen's Senator for Economics, Labour and Ports, Hans-Joachim Schnitger, President of Bremische Hafenvertretung, Angela Titzrath, Chairwoman of the Executive Board of Hamburger Hafen und Logistik AG, and Captain Alfred Hartmann, President of the German Shipowners' Association, all spoke to the guests.



A festive setting for a traditional event: the 53rd edition of the Captains' Day took place in the upper chamber of the old town hall in Bremen as it has in the past.

Regional logistics conference

BRAKE. Green logistics was the focus of the 2017 regional logistics conference for the north west metropolitan region in Brake on 14 September. Companies and institutions from the region presented concrete solutions for achieving environmentally-friendly logistics. The practical examples illustrated numerous possible measures for everyday operations, particularly in terms of the necessary investments and training. The conference was rounded off with a presentation by Professor Dr. Marc Seifert from the University of Osnabrück, as well as excursions to the port of Brake and local company Rehaus.



From l.: Gert Stuke, President of Oldenburg Chamber of Industry and Commerce, Dr. Anna Meincke, Managing Director of Metropolregion Nordwest, Jens Wrede, Managing Director of Wirtschaftsförderung Wesermarsch, and District Administrator Thomas Brückmann opened the 6th regional logistics conference.

SUMMARY NEWS

HUSUM Wind

HUSUM. Together with around 650 other exhibitors, Seaports of Niedersachsen and bremenports presented their range of services with their own trade fair stands at "Husum Wind" from 12 to 15 September. The event is seen as a meeting point, workshop and showcase for the onshore and offshore wind power sector.

logistics talk

BREMEN. Over 140 guests took up bremenports' invitation to the "logistics meets art" special exhibition at Übersee-museum Bremen on 24 August. To mark the 15-year anniversary of the port management company, artist Lissi Jacobsen presented her work, which impressively shows the work of bremenports in Constructivist style. After the welcome from Martin Günthner, Bremen's Senator for Economics, Labour and Ports, and Robert Howe, Managing Director of bremenports, Bremen-based performance artist Wolfgang Hainke gave a performance under the title "Sounds of dislocated wooden hinges".



All editions are also available as an e-paper in German and English. Scan the code or go to www.bremenports.de/logistics-pilot

EDITION DECEMBER 2017

Focus topic

ro-ro

Trends, challenges and potential of ro-ro transport



Save the Space



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Focus topics of the upcoming editions:

December 2017

Ro-ro

Closing date for submitting applications
20.10.2017

February 2018

Container logistics

Closing date for submitting applications
15.12.2017

April 2018

Breakbulk

Closing date for submitting advertisements
23.2.2018

Your contact:

Ronald Schwarze, Marketing – bremenports GmbH & Co. KG,
Phone: +49 421 30901-612, E-mail: marketing@bremenports.de

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This magazine is a joint project of

- bremenports GmbH & Co. KG
- Bremische Hafenvertretung e. V.
- JadeWeserPort-Marketing GmbH & Co. KG
- Seaports of Niedersachsen GmbH
- VIA BREMEN Foundation

IMPRINT

LOGISTICS PILOT
ISSN 2195-8548

Publisher:

bremenports GmbH & Co. KG
Hafenstraße 49, 28217 Bremen
www.bremenports.de
Michael Skiba
Phone: +49 421 30901-610
Fax: +49 421 30901-624
E-mail: marketing@bremenports.de

Advertisement and project management:

Ronald Schwarze
Phone: +49 421 30901-612
Fax: +49 421 30901-624
E-mail: marketing@bremenports.de

Advertisement price list no. 15 applies, valid from 22 August 2017
www.bremenports.de/logistics-pilot

Publishing house:

DVV Kundenmagazine GmbH
Heidenkampsweg 73–79, 20097 Hamburg
www.dvv-kundenmagazine.de

Project management:

Karin Kennedy
Phone: +49 40 23714-338
E-mail: karin.kennedy@dvvmedia.com

Editor:

Thorsten Breuer (bre), responsible;
Claudia Behrend (cb)
E-mail: redaktion.logisticspilot@dvv-media.com

Layout, photos and illustrations:

Design: Christine Zander,
www.artl4design.de
main image: bremenports/BLG,
Christine Zander
other images: see image credits

Print:

müllerditzten^{AG}, Bremerhaven
www.muellerditzten.de

LOGISTICS PILOT is published six times a year in a run of 5,000 copies (German). An English-language e-paper can be found at www.bremenports.de/logistics-pilot

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THE ENERGY-EFFICIENT OPTION

Sabine Müller, energy manager
at bremenports in Bremerhaven

The port management company bremenports sets a good example when it comes to reducing carbon emissions. The changeover to green power, energy efficiency projects and a fleet of low-consumption vehicles are just as impressive as the use of electric cars.



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TWO CITIES. ONE PORT.