

Issue 31 | May 2021

EUROPEAN PORTS UNITE IN GREEN INITIATIVE

Reducing emissions is high on the agenda as an international consortium of 46 — the Pioneers consortium — led by the port of Antwerp is set to take the lead on making European ports greener.

The consortium will receive a grant of €25m from the European Horizon 2020 programme. It will include leading ports, terminal operators, carriers, forwarders, knowledge institutions, technology developers, innovators and government agencies and have the aim of developing concrete solutions to reduce greenhouse gas emissions in ports while maintaining competitive position. The project will run for five years and will start at the end of 2021.

Pioneers will examine all aspects of port activities, from terminal activities and concessions, through to mobility, fuels and connectivity, to models for collaboration and the production, storage and consumption of energy. A series of 19 ambitious demonstration projects in the field of production and delivery of green energy, sustainable port design, modal shift, optimisation of flows and digital transition are part of the mix.

Projects will include the generation of renewable energy and the introduction of vehicles that run on electricity, hydrogen and methanol; adapting buildings and heating networks for energy efficiency; a circular economy approach to infrastructure works; automation; and the roll out of digital platforms to promote modal shift and optimise movements of vehicles, vessels and containers.

Antwerp will act as a pioneer port, where most of the demonstration projects will take shape to demonstrate what a real green port looks like. The ports of Barcelona, Constanta and Venlo will be taking an active role to transfer solutions to their environment as much as possible and are involved in applying the best practices of the project.

ABP BOOSTS TROON FACILITIES

Associated British Ports (ABP) has invested around £140,000 to enhance facilities at the Port of Troon.

As part of improvement works, several new projects have been completed. These include refurbishment of the port's main entrance lighthouse and West pier link span, and the installation of two new automatic access control barriers and security fencing to enhance health, safety and security at the port.

In addition, works have been undertaken to construct several waste bays to support local fishermen. New signage and nature information boards for the public visiting Troon have also been installed.

Stuart Cresswell, ABP Port Manager for Troon, Ayr and Silloth, comments: "While 2020 was clearly a hugely challenging year for all businesses, ABP has continued to make active investments in and around the harbour with the port remaining fully operational throughout the pandemic."

"Moving forward into a post-pandemic world, it is my genuine belief that Troon's easily accessible location from both the sea and from the land in terms of road and mainline rail services, North-East-facing entrance and great onward transport links will see the port continue to not only continue to be a safe haven for seafarers during storms, but also play an increasing role in a UK-wide renaissance of its maritime sector," he says.

For further information about ABTO

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ORGANISATIONS SEEK HYDROGEN SUPPLY CHAINS

German steel companies Thyssenkrupp Steel and HKM and the Port of Rotterdam are jointly investigating setting up international supply chains for hydrogen.

In the course of their transformation paths towards climate-neutral steel making, Thyssenkrupp Steel and HKM are going to require large and increasing quantities of hydrogen to produce steel without coal. For decades, both companies have been importing coal, iron ore and other raw materials via their own terminal in Rotterdam, using inland barges as well as rail to transport it to their blast furnaces in Duisburg, Germany.



Together, the partners will explore hydrogen import opportunities via Rotterdam, as well as a possible pipeline corridor between Rotterdam and Thyssenkrupp Steel's and HKM's steel sites in Duisburg. The partnership may serve as a framework for additional initiatives, as well as supporting existing initiatives and projects the partners are involved in.

The Port of Rotterdam is already investigating the import of hydrogen from a large number of countries and regions all over the world. Green hydrogen is a sustainable alternative to coal, oil and natural gas and vast imports of hydrogen are necessary if Europe and Germany want to reduce CO₂ emissions and become climate-neutral by 2050, while maintaining a strong industrial backbone.

Rotterdam is also setting up a carbon transport and storage system, Porthos, which is also being considered as a CO_2 storage site for the production of blue hydrogen by the "H2morrow steel" project, which includes Thyssenkrupp Steel as partner.

PUBLICATION HIGHLIGHTS SEAFARER ABANDONMENT

Charity Human Rights at Sea has partnered with global law firm Reed Smith to help tackle the growing problem known as seafarer abandonment, an issue that has seen cases rise dramatically over the past 12 months.

Seafarer abandonment occurs when a shipowner abandons a ship and its crew, failing to cover the cost of repatriation or payment of wages. This often results in the crew being left to live on board the vessel in inhumane conditions, with no food, clean water, medical help or financial support — sometimes for years.

Human Rights at Sea and Reed Smith have published Abandonment of Seafarers: Background, Legal Status, Remedies & Practical Advice, a new and independent publication that comprehensively covers the pernicious issue of seafarer abandonment, of which, according to the International

Labour Organization, there are more than 250 active cases around the world.

To assist seafarers who maybe find themselves in difficulty, the drafting team has produced a draft alert letter to send to owners, operators, managers, flag states and Port State Control. Furthermore, the publication includes a comprehensive list of support organisations with current contact details.

Legally reviewed by a pro-bono team of Reed Smith lawyers who volunteered a total of 272 hours, the information contained can be relied upon to be current and correct, with the aim for it to be widely and internationally disseminated for use across the maritime industry stakeholder groups.

The publication may be downloaded free from Human Rights at Sea by clicking here.

INSEE VIETNAM SIGNS UP BEUMER

Cement manufacturer INSEE Vietnam has commissioned Beumer to supply an automatic truck-loading Beumer autopac 3000 series. This enables the operator to work more ergonomically, while increasing personnel safety.

Driven by the change in market requirements and the overall business climate, cement plants are targeting higher levels of automated plant operations in order to ensure the health and safety of their employees while optimising costs. The advancements in automation and technology are supporting these initiatives.

Beumer will supply a BEUMER autopac 3000 automatic truck-loading machine to INSEE Thi Vai plant.

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SEAFARERS VACCINATION BOOST

A resolution for a global seafarers vaccination programme proposed by the Cyprus Shipping Deputy Ministry (SDM) has been officially adopted by the International Labour Organization (ILO).

The resolution calls for a mapping exercise to identify the number of vaccines required for seafarers ashore at seafarer supplying countries. It builds upon the proposal for a global seafarers vaccination programme presented by Cyprus earlier this year to the International Maritime Organisation Secretary-General, the International Chamber of Shipping and the European Union.

It is a concrete step in identifying the magnitude of the vaccination challenge and then proceeding collectively with more decisive action, working with the World Health Organisation and pharmaceutical companies to secure sufficient vaccines for seafarers.

The approach requires social partners, in consultation with shipowners' and seafarers' organisations and in co-ordination with governments and the IMO to undertake a mapping exercise to identify the number of vaccines required for seafarers ashore.

In addition, governments and shipowners' and seafarers' organisations are invited to formulate a resolution, communicating to all relevant UN bodies the need for a collective approach to secure the number of vaccines identified.

Regarding the adoption of the resolution, Vassilios Demetriades, Cyprus Shipping Deputy Minister, comments: "The challenge of facilitating crew changes has had a significant impact on the mental and physical well-being of seafarers and safety of vessels over the past year. Cyprus has always been dedicated to social responsibility and taking a proactive approach to the global challenges faced by shipping. We were determined to find a realistic approach to a global seafarer vaccination program and are extremely pleased to see our draft resolution accepted by the ILO."

For more information on this resolution, please visit the ILO website here.

COARSE GRAIN REACHES RECORD US HIGHS

Record high US seaborne exports of coarse grains in March of 9.2m tonnes took total first quarter exports to 21.3m tonnes. This is the highest ever first quarter on record and a 120% increase from the same period in 2020, according to BIMCO statistics.

Of the total 21.3m tonnes exported so far this year, 68% have gone to Asia, an increase of 208.7% from the first quarter of last year. "For years, the trade war has lowered US exports to China, but exports are now rebounding with a vengeance and China is becoming the largest buyer of US coarse grains," BIMCO says.

Coarse grains include corn, grain sorghum, oats, barley and rye, with corn accounting for 89.4% of the total. Accumulated exports so far this year to China stand at 6.2m tonnes, an almost 10-fold increase from approximately 650,950 tonnes exported in first quarter 2020, according to the trade association. The two other large buyers of US coarse grains are also in Asia, namely Japan and South Korea. These have seen exports in the first quarter of this year rise to 4.3m tonnes (from 2.9m tonnes in first quarter 2020) and 1.7m (from 0.6m tonnes) respectively.

Though exports to the rest of the world, excluding Asia, are also up at the start of this year compared to 2020 (by 116.3%), exports to Asia have grown by an impressive 208.7% and the region is gaining market share, BIMCO

says. Because the average sailing distance from the US to Asia is much longer than to the rest of the world, tonne mile growth has been even more impressive than the growth in absolute volumes.

In the first quarter of the year tonne miles generated by US coarse grains exports rose by 198.3%, compared to the same period last year, reaching 154.0bn tonne miles. This is already more than half of total tonne miles generated by US coarse grains exports in all of 2020 (305bn tonne miles).

The vast majority of exports are transported in dry bulk ships, although a small share travels as containerised goods.

"The dry bulk market continues its strong performance this year, supported in part by strong demand from grains trade, with the US providing plenty of support," says Peter Sand, BIMCO's chief shipping analyst. "After a record high start to the soya bean export season, these have now fallen to their usual out of season levels of around 2m tonnes a month, but higher exports of coarse grains ensure steady demand from the US for grain carrying ships

"In March alone, US coarse grain exports required 123 panamax ships, almost two thirds of which sailed to the Far East, one of the world's longest trades. At the peak of the US soya bean export seasons in October, 147 ships were needed," says Sand.

PORT AND TERMINAL OPERATIONS FOR BULK CARGOES – Short Course



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Next open course – March 2022

For anyone concerned about or responsible for the safe handling and storage of bulk materials in ports and on the sea

Course Leader: Mike Bradley, Professor of Bulk and Particulate Technologies and Director of The Wolfson Centre, University of Greenwich





The Wolfson Centre for Bulk Solids Handling Technology

To register an interest in attending and further course details, please contact Simon Gutteridge events@bulkterminals.org +33 (0)321 47 72 19 or see bulkterminals.org/events/courses-and-training.html

EMISSIONS PROJECT SUPPORTS ASIA

The International Maritime Organization (IMO) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany have signed an agreement to undertake the preparatory activities leading to the development of a project proposal to reduce maritime transport emissions in East and Southeast Asian countries.

The agreement, signed on 1 April, is the first step in an ambitious Asia Maritime Transport Emissions project (known as the Blue Solutions Project) that aims to support East and Southeast Asian countries in identifying opportunities to prevent and reduce transport emissions. The full project, once approved, will target reduction of greenhouse gases and other pollutant emissions from ships within ports, and from hinterland transport through energy efficiency improvements, optimised processes and innovative technologies (so-called blue solutions).

"Partnerships are essential in tackling the global issue of emissions that are harmful to the environment," says Jose Matheickal, Chief of the Department of Partnerships and Projects, IMO. "By identifying opportunities to reduce maritime transport emissions and demonstrating potential technological solutions in partnerships with various stakeholders in the region, this project will help developing countries in Asia to move closer towards a low-carbon future."

At the preparatory stage, IMO will work with the following focus partner countries to develop the full-size project proposal: China, Indonesia, Malaysia, the Philippines, Thailand and Vietnam. Efforts may also be undertaken to identify capacity building needs in other Asian countries. Japan, the Republic of Korea and Singapore are expected to be invited to serve as knowledge partner countries and their level of involvement in the project will be identified and confirmed during the appraisal stage.

CHARITIES LINK UP FOR SEAFARER SUPPORT FUND

Leading seafarer welfare charities and shipping industry players have launched an emergency relief fund to support seafarers and their families devastated by the rampant covid-19 pandemic in India and other countries.

Seafarers have been the invisible victims of covid-19, with hundreds of thousands marooned on vessels for months beyond agreed contracts, in some cases. Despite suggestions that the crew change crisis was near its end, the escalation of covid-19 cases in India to more than 400,000 per day has prompted some major ports to prohibit ship crew changes for seafarers with recent travel history to India, Bangladesh, Nepal, Pakistan, and Sri Lanka.

In response, the Seafarers International Relief Fund has set a target of US \$1m. It has been established by bringing together leading international seafarer welfare organisations — The Seafarers' Charity (formerly Seafarers UK) supported by The Mission to Seafarers, ISWAN, Sailors' Society and other charities — in a united appeal to the shipping industry to deliver urgent support to seafarers and their families in India.

To donate to the Seafarers International Relief Fund, please click here.

Alternatively, email keziah.cunningham@theseafarerscharity.org or call +44 (0) 20 7932 0000.

HST SIGNS UP TO SWANSEA

Associated British Ports (ABP) has signed a new contract with HST Marine at the Port of Swansea in support of the offshore energy industry.

The agreement covers the use of a one-acre, mixed-use site at the Port of Swansea, which contains open storage space and office accommodation. To prepare the location, ABP invested around £60,000 as part of work to install new fencing and gates to create a secure self-contained site.

Tom Nevin, Chief Executive Officer at HST Marine, comments: "We are extremely happy to have set up our headquarters at the Port of Swansea, where we will be working on some exciting projects in the region, utilising the facilities of the port and creating local jobs."

Over the past years, the port has continued to expand development opportunities available for the design and construction of bespoke business space. Together with ABP's Port Talbot, every year the port contributes £670m to the economy and supports almost 10,000 jobs. On its own, the Port of Swansea handles around £140m in trade.

FOR MAXIMUM AVAILABILITY

"TPI, the third largest cement manufacturer in Thailand, commissioned us in 2013 with the installation of a complex conveying system for transporting limestone from the quarry to the blending bed," says Alexander Unruh, project manager for conveying and loading technology at BEUMER Group. The BEUMER team designed an economically complete system made of several belt conveyors. In addition, the system provider supplied a system control (PLC), transfer stations and filter systems as well as foreign material separators. The system is dimensioned for a conveying capacity of 2,200 tons per hour. The core of the conveying system for limestone consists of two belt conveyors leading downwards, which are run in regenerative mode and are followed by a troughed belt conveyor with horizontal curves.

"The material is transported from the crusher discharge conveyor to the first two troughed belt conveyors," explains Unruh. "Afterwards. material transported is transferred via acceleration belt conveyor to an overland conveyor with a centre distance of 3,464m at a speed of four metres per second.

In order to remove the material from the blending bed and to feed the primary hopper of the raw mills, BEUMER Group supplied further belt conveying systems with an overall length of 989m. "That was in 2015, but the project was not yet finished for BEUMER Group," emphasises Unruh.

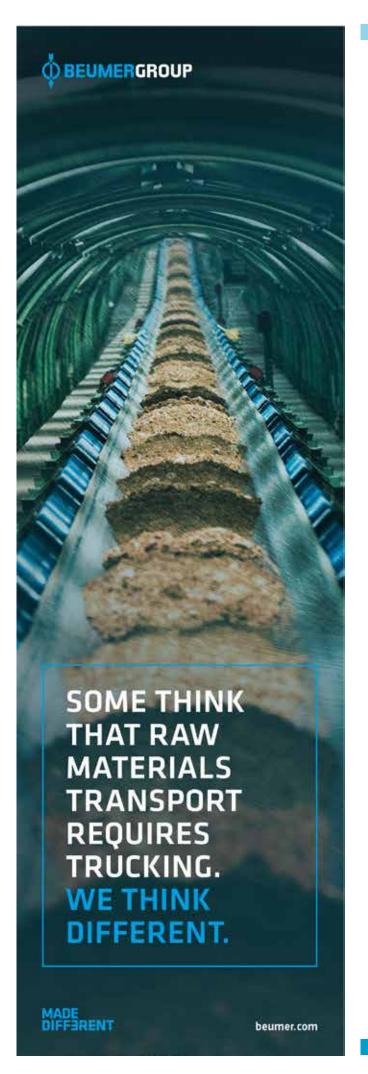
After four years in continuous operation, the risk of a failure increased due to the replacement state of wear of the belt. The conventional belt change method would mean for the service technicians to replace the belt by changing every belt section separately. Depending on the belt coil, this could imply eight to 18 belt sections. "Of course this would be very time consuming if the employees perform this work in one go," says Unruh. During this time, the complete system is stopped. Therefore, the cement manufacturer suggested to replace the single belt sections gradually, enabling to arrange the downtimes such to affect the working flow as little as possible. Nevertheless, the total downtime of the conveyor would still be very high and the risk of a failure would persist. "A belt change on a conveyor of this length is always critical," explains Unruh.

In order to keep downtime to a minimum, the BEUMER

technicians suggested a new concept that allows them to replace the entire belt at once. "During this process, the single belt coils are joint to form a long belt next to the conveying system and are then connected to the old belt," explains Unruh. "The existing drive technology and further auxiliary means are used to insert the new belt into the system, while the old one is pulled out at the same time".

The single belt coils are vulcanised to a long belt next to the conveying system and joint to the old belt. Photo credits: BEUMER Group GmbH & Co. KG pulled out at the same time".





Designed to help delegates identify and resolve common problems when handling various biomass materials.

This new course is aimed at the manufacturers and suppliers of biomass materials, at the users - particularly those responsible for maintenance and management on site – and at the manufacturers and installers of equipment used to transport and store biomass materials.



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- » Dust control and management
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- » Engineering of equipment for storage and discharge
- » Ship unloading
- » Biomass potential and possible future trends





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