

July/August 2022

Alleviating mounting pressures

- Road transport's twin crises
- Germany accelerates power transition
- Energy verticals fuel airfreight growth
- Revitalising the talent pool



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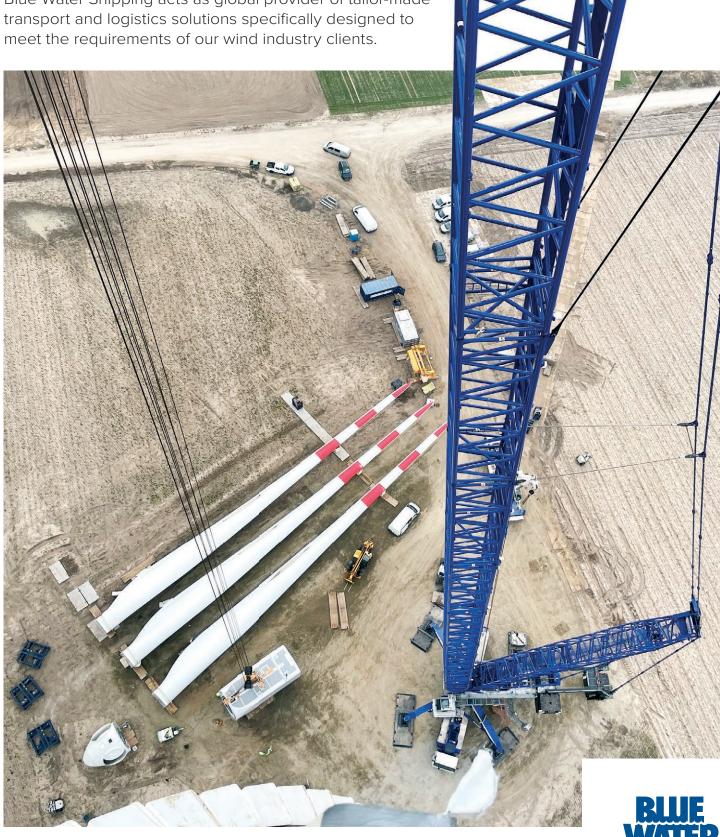


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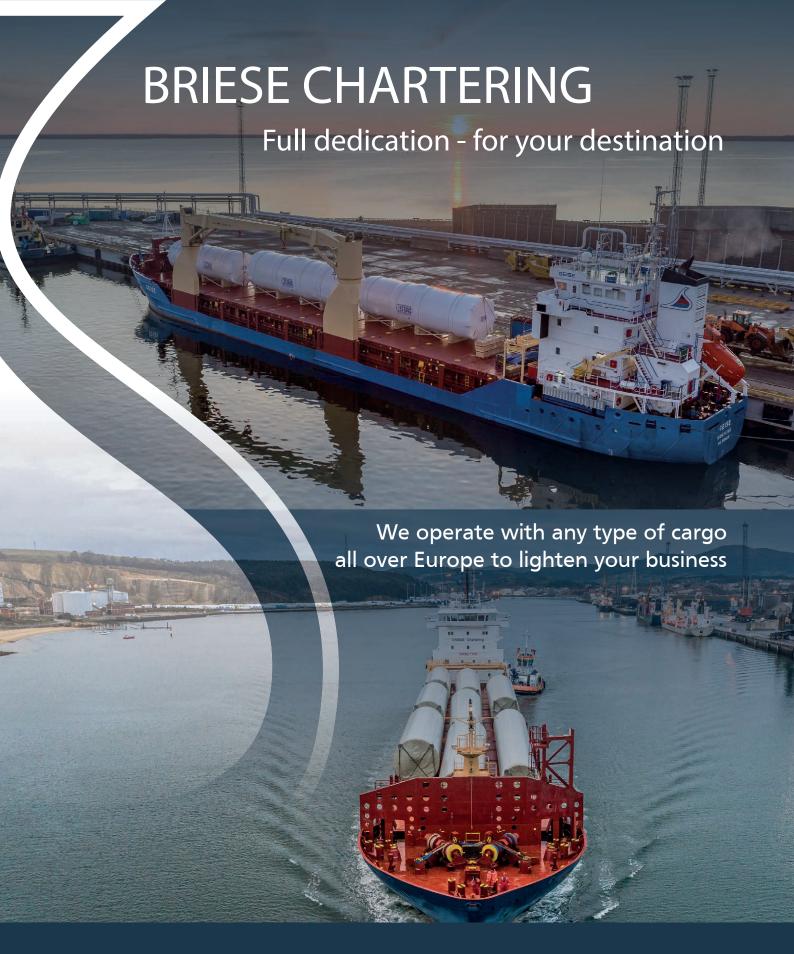
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Alleviating mounting pressures

onsumer confidence is central to economic growth and the former has taken a battering this year. Price inflation is pressurising budgets; since Russia invaded Ukraine, energy and other commodity prices have surged, while food prices have hit historically high levels. Supply chain disruption is compounding the issue. Interest rates have been ratcheted up to try to control the runaway train, concurrently increasing the cost to service debt. A rising tide lifts all boats, and the reverse is also, unfortunately, the case.

There has been a steady slew of bleak economic forecasts, although few countries are officially in recession (yet). But, at some point, something is going to give out. Analysis of 159 developing countries globally indicates that price spikes in key commodities are already having immediate and devastating



impacts on the poorest households, with clear hotspots in the Balkans, countries in the Caspian Sea region and Sub-Saharan Africa (in particular the Sahel region), according to United Nations Development Programme (UNDP) estimates.

"Unprecedented price surges mean that for many people across the world, the food that they could afford yesterday is no longer attainable today," said Achim Steiner, UNDP administrator. "This cost-of-living crisis is tipping millions of people into poverty and even starvation at breathtaking speed and with that, the threat of increased social unrest grows by the day." Scenes that played out in Sri Lanka at the start of July are unlikely to be a discrete event.

Companies active in the niche business of heavy lift and project cargo logistics are not immune to the pressures, although the majority of those spoken with in this issue of *HLPFI* remain bullish on the prospects – even if executing work is creating a few sleepless nights. Concurrent growth of oil, gas and renewable energy markets are creating handling and lifting opportunities internationally. China's reopening should help it to rebuild industrial output (pp28-30). Offshore wind energy continues its steady growth, albeit hampered by a lack of port infrastructure and installation vessel capacity (pp32-44). Brazilian projects in all verticals are benefiting our sector, but concerns abound relating to rising prices, political disruption, and curtailed access to Russian fertilisers (pp46-52).

Among the myriad reasons affecting reliable project execution, recruitment concerns continue to hamper activity. Increasing demand for project logistics services has resulted in a spike in demand for operational and desk-level talent. It is near impossible to source. The issues, and some solutions, can be found on pp78–82.

Once again, the Heavy Lift Awards has attracted a large number of entries across its 12 categories – something that *HLPFI* is hugely grateful for. A word of thanks to our judging panel, who have been busy reviewing submissions and preparing for final adjudication. With the aforementioned disruption making all of our days just a bit longer, the *HLPFI* team extends its thanks to all those involved in supporting the event. Our shortlist will be announced imminently.

David Kershaw, Editor

Our front cover image shows: Land transportation and load-out of 26 modules in Io-Io and ro-ro shipment in Mundra (Gujarat), India, for Thermax modules to Nigeria. See more about this transport executed by Lift & Shift, which was recently acquired by JM Baxi, on p.26 of this issue.

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NEWS in **BRIEF**

Bolloré wins EACOP role

Bolloré Logistics has been appointed to provide main logistics contractor (MLC) services for the East African Crude Oil Pipeline (EACOP) project. TotalEnergies' EACOP project comprises a 1,443 km buried pipeline that will transport Uganda's crude oil from Kabaale to the Chongoleani peninsula on the Tanzanian coast.

Osprey expands in the UK

Osprey Group is opening a facility in Stockton — the company's sixth location in the UK. The location has been opened in response to increased demand for its services.

Rhenus adds in Denmark

Rhenus Air & Ocean has opened offices in Copenhagen and Aarhus, Denmark. The offices enable Rhenus to expand its network in North West Europe, strengthening its connections with the Netherlands, Belgium, Ireland, Norway and the UK.

Hansa Meyer and ROLI Projects form JV

ansa Meyer Global Transport and Rohde & Liesenfeld (ROLI Projects) have formed a joint venture to serve the North American project logistics market and the related project owners, EPCs and suppliers.

Hansa Meyer Global Transport has had a legal entity in the USA since 2010. During 2021, the company sold its shares in its operational and asset-based companies. ROLI Projects - the registered trademark of Rohde & Liesenfeld - has been serving the North American market for more than 20 years.

Previously, Rohde & Liesenfeld worked as agents for



the Hansa Meyer Global network outside the USA and also executed a number of US-based industrial projects for the group.

"We feel thrilled about our strategy to combine both our groups' know-how, capacity and contacts to set up a brand new company in Houston, Texas, the heart of the US industrial project market and to jointly participate to a maximum extent, simply by combining and growing our

deugro has opened a further

office in Gothenburg, Sweden,

which will provide the full scope

of its project freight forwarding

The company has bolstered

the deugro (Sweden) team with

office as head of operations, and

Joakim Malm joining as head of

development. Both have 20-year

Magnus Olsson, leading the

and logistics services.

sales and business

forces," said Jan-Dirk Schuisdziara, managing shareholder at Hansa Meyer Global.

The joint venture's business development in the USA will be led by Julie Shafer, who has over 25 years of project logistics leadership experience and has held various project management roles at GE Transport, Geodis and Rohde & Liesenfeld.

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- Shipping
- **SPMTs**



Kuehne+Nagel (K+N) is

backgrounds in the Swedish project forwarding market. Niclas Stockfisch has also joined deugro as project manager.

deugro added that it has strengthened its position on the Swedish project logistics market by successfully completing various projects over the past years, especially for the pulp and paper and the sustainable energy sectors.

K+N to support biofuel project

deugro grows in Sweden

organising the heavy lift logistics and module transportation for Shell's hydroprocessed esters and fatty acids (HEFA) biofuels project in Rotterdam, the Netherlands.

K+N said that the plant will be one of the largest commercial production facilities in Europe to produce sustainable aviation fuel (SAF) and renewable diesel made from waste.

www.osprey.group

hello@osprey.group +44 (0) 1275 460 608

Sarens partners with PSG in Scotland service

arens has formed a joint venture with PSG Marine & Logistics to serve the offshore wind and renewables sector across Scotland.

Based at the port of Cromarty Firth, PSG Marine & Logistics provides support services to a diverse range of energy industries. The joint venture will offer heavy lift and transport solutions, load in/out, assembly and port marshalling services.

Carl Sarens, director technical solutions, said: "We are looking forward to making this joint venture a success in the fast-growing offshore market, where the combination of our heavy lifting and heavy transport expertise, together with PSG's marshalling capacity and access to deepwater quaysides, will bring an added value to the market."

Steve Clark, Sarens PSG's managing director, added: "Having access to Sarens' market leading heavy crane and SPMT



fleet, engineering capability and the Sarens giant ring crane fleet, will enable Sarens PSG to provide clients with the most comprehensive offering of heavy lift, transport, assembly, load in/out and port marshalling services currently available in Scotland.

"Sarens PSG has been specifically incorporated to support the rapidly developing offshore wind market and assist in solving some of the current issues around heavy lift capacity, deployment and wind turbine generator integration, as the Scottish market scales up to floating wind commercialisation and the Scotwind project build out."

NEWS in **BRIEF**

Xodus opens in Melbourne

Energy consultancy Xodus has established an office in Melbourne to support the energy transition across the east coast of Australia. The decision to open a second base in the country was driven by the expected rise of offshore wind on the east coast, with the energy firm looking to support both operators and investors.

LP launches in Vietnam

Logistics Plus has opened an office in Ho Chi Minh City, Vietnam. LP Vietnam said it will primarily focus on business with the USA, China, Europe and the Middle East.

Saipem partnership

Saipem, Havfram Holding and HVAS Invest Kappa (a holding company controlled by HitecVision) have signed a non-binding agreement to evaluate and potentially collaborate in the development and construction of offshore wind farms.

Fagioli sets up Australian JV with Monadelphous

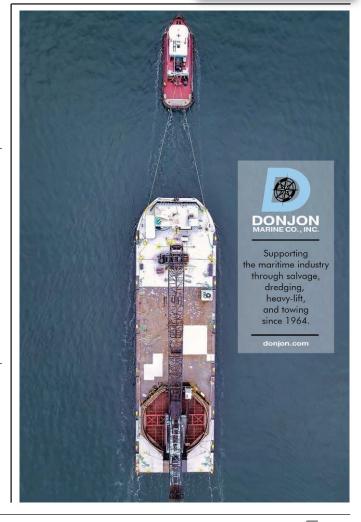
Fagioli has formed a joint venture with Australian construction and engineering company Monadelphous.

Named Alevro, the joint venture will bring "more lift and shift expertise and capability to Western Australia", according to a report in the Kalgoorlie Miner.

The two companies are already collaborating on handling modules for Fortescue Metals Group's USD3.8 billion Iron Bridge magnetite project in the Pilbara.

UTC grows in Guyana

UTC Overseas has established a joint venture with Guyana Shore Base Inc (GYSBI), expanding its operations and service offering in the country. Guyanese-owned GYSBI has a large facility on the Demerara River, and serves as the preferred service provider for ExxonMobil and other oil and gas operators in the country.



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Harren & Partner buys HeavyLift@Sea stake

arren & Partner Group has acquired a major stake in Hamburg-based ship design and engineering service provider HeavyLift@Sea.

Martin Harren, ceo of the Harren & Partner Group, said: "Heavy lift and multipurpose shipping has always been a cornerstone of our business. In the next few years, we will successively expedite the development and addition of the fleet towards a new generation of carbon-neutral heavy lift carriers. This requires extensive ship design and engineering capacities. Our new colleagues have invaluable knowledge and experience in the field of building new and converting heavy lift vessels and deck carriers.

"Personally, I find it extremely gratifying that, from now on, the engineers will be in direct contact with the respective operators. This will allow them to see, inspect and constantly improve their work in a purposeful way. We did this for many years during SAL's formation and development, and it is one of the reasons why SAL's ships are technologically superior today."

Hendrik Gröne, managing director of HeavyLift@Sea, added: "We see enormous potential for newbuildings. I am sure that with our expertise in this area, we can further advance both



Hendrik Gröne, managing director of HeavyLift@Sea, and Jakob Christiansen, head of research and development, retrofit and newbuilding at the Harren & Partner Group.

our engineering capabilities and the flexibility of the group."

Jakob Christiansen, head of research and development, retrofit and newbuilding at the Harren & Partner Group, is taking on the role of managing director of HeavyLift@Sea alongside Hendrik Gröne.

NEWS in **BRIEF**

Knud E. Hansen wind pact

Knud E. Hansen has signed an agreement with Wallenius Marine that will see it support the development of a wind-powered ro-ro vessel — Orcelle Wind — as naval architect.

G2 Ocean calls on StormGeo

Norway-based G2 Ocean has signed an agreement with StormGeo for weather routing and voyage performance services.

Heavy transporter design

Vallianz, Ulstein Design & Solutions, Shift Clean Energy and Bureau Veritas will collaborate on the design and construction of a DP2 hybridpropulsion heavy transport vessel.

One World venture

Hamburg-headquartered One World Shipbrokers has established One World Sale & Purchase.

Allseas line launched

Following the success of its China Xpress service, Allseas Global Logistics has launched a shipping line — Allseas Shipping Company.

Marguisa Atlantic formed

United Marguisa Lines (UML) and SaDi Chartering have established Marguisa Atlantic as the operating company for joint multipurpose services within the Atlantic Basin. The venture will support customers involved in the trade of bulk, general and project cargo.

EasyMax construction

Construction of Royal Wagenborg's third EasyMax vessel has started at the Royal Niestern Sander shipyard in the Netherlands. It is slated to enter service in 2023.

Newbuild supervision

United Heavy Lift (UHL) has tasked Zeaborn Ship Management to supervise the construction of its latest two F900 Eco-Lifter newbuilds. UHL took delivery of the 17th ship in the series, UHL Felicity, during May. The further two vessels were ordered during the same month and will be built at the CSSC Hudong shipyard in Shanghai, China.

dship adds multipurpose ships to fleet

dship Carriers has added three F300-type multipurpose vessels to its roster, boosting its fleet to 23 ships.

Lars Feller, president at dship Carriers, said that the 13,000 dwt ships, fitted with two 150-tonne capacity cranes, are a complementary fit to the company's fleet profile. One has already been delivered and the others will enter service in the third or fourth quarter of this year.

The additional vessels are joining dship's fleet at a time when capacity is at a premium. They also benefit from having ice-class certification, which means they can be deployed on Baltic trade lanes.

dship has steadily grown its fleet in recent years, adding the general cargo vessels Eemslift Dafne and Eemslift Nadine during September last year and completing its newbuilding programme during February 2022 with the arrival of the newbuild F500-type vessel Charlie.

dship's vessel Charlie concluded a newbuilding programme initiated back in 2018, comprising sisterships Mick, Keith and Ronnie.

RMS Projects and J. Poulsen partnership

RMS Projects and Denmark's J. Poulsen Shipping have started a cooperation that will see RMS set up a representative office at J. Poulsen's premises in Korsør.

The J. Poulsen-owned multipurpose vessel Thunder

Bird, which is equipped with two 250-tonne cranes, will join the RMS fleet. Its roster now consists of 24 vessels ranging from 7,600 dwt to 14,000 dwt, with combined lifting capacities from 400-800 tonnes.

RMS said that, through this cooperation, it is responding to the steadily growing business.

Mads Bo Jørgensen and Anders Poulsen will become members of the RMS Projects chartering team.

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Osprey orders SPMTs from Scheuerle

K-based Osprey Group has placed a multi-million-pound order for Scheuerle SPMTs. The transporters will be deployed for the UK's renewables and infrastructure sectors. The order includes 4 x 4 axle Scheuerle SPMTs powered by Z390 power pack units (PPU).

Neil Hopkins, commercial director, said: "We are delighted to invest in our SPMT fleet. The manoeuvrability of the smaller four-axle units complements our existing fleet and provides wider configuration options. The additional capacity this

investment brings further enhances our ability to deliver super-scale projects that are entirely engineered and executed in-house."

The Z390 PPU will use AdBlue exhause gas cleaner. Dean Graham, Osprey's QHSE manager, explained: "This addition to our fleet does more than provide extra capability for our clients – it helps us all contribute to our collective ESG agenda. AdBlue reduces engine emissions, measurably, which is better for the environment."

configuration options. The additional capacity this The SPMTs will be delivered later this year.

Astra mobile motorway bridge inaugurated

The Astra mobile bridge has been inaugurated in Switzerland, marking the launch of an innovative solution that minimises public disruption during motorway maintenance activities.

The bridge was built by a consortium of Senn together with Marti Technik, in cooperation with trailer

manufacturer Cometto and the Swiss Federal Roads Office. It measures 240 m long and is built above the roadway to be resurfaced. Traffic is diverted onto the bridge in two lanes, with motorists able to travel at 60 km/h. Around 100 m is available under the bridge for actual construction work.

The bridge itself consists of a

drive-on ramp, 18 portals, 19 intermediate sections and a departure ramp. Cometto and Faymonville supplied power packs, valve packs, control cabins, MSPE bogies for the gantries, SPMT bogies for the ramps, ModulMAX SP-E bogies for the ramps, and the satellite navigation system for the complete bridge.

NEWS in **BRIEF**

Bolk takes Uddevalla stake

The Netherlands-headquartered Bolk Transport has acquired a 50 percent stake Sweden's Uddevalla Specialtransporter. The companies said they would work closely together on wind energy projects in Scandinavia, drawing on each other's equipment, knowledge and personnel.

Sarens Siba ups footprint

Sarens Siba has opened its latest depot in Cape Town, South Africa, which will service the Western Cape region.
Stationed on the 1,260 sq m site are trucks, 14 axles lines of SPMTs, nineaxle modular trailers from Scheuerle, two-three standard tri-axles, extendable lowbeds, a six-axle extendable trailer, rigging containers, a jacking and skidding system, load cells and gantry sections.

Mammoet opens Cocoa yard

Mammoet has opened a full-service 2-acre (0.8 ha) yard in Cocoa, Florida, that will act as a hub for its equipment, including a fleet of crawler cranes (up to 300-tonne capacity), transporters, jack and slide equipment, gantries and rigging.

Laso picks MAX Trailers

Laso Transportes in Portugal is expanding its fleet with 15 three-axle flatbeds from MAX Trailer. The vehicles — MAX200s — will be delivered in the coming months. Laso has also opted for six extra low telescopic MAX200 platforms, as well as six three-axle semi low loaders type MAX100 with extendable platform and integrated wheel recesses.

Brown, Son & Ferguson Ltd.



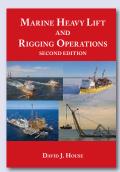
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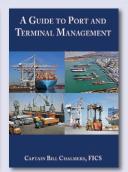
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Cargolux and Bolloré sign SAF agreement

argolux and Bolloré Logistics have signed an agreement for the use of sustainable aviation fuel (SAF) in joint operations.

Domenico Ceci, executive vice president for sales and marketing, said: "Cargolux is strongly committed to the development and use of SAF and has foreseen investment in SAF-related projects over the coming years. The agreement we signed with our long-term partner Bolloré Logistics is a significant achievement, one we hope to build on in the future. Taking this step with a trusted customer is important for Cargolux and it highlights both our companies' engagement for

environmentally sound operations."

Pierre Houé, deputy chief operating officer, added: "SAF is a key solution for Bolloré Logistics to decarbonise transportation and reach our carbon reduction targets set up in our CSR programme – powering sustainable logistics. Building a strong partnership with a crucial partner like Cargolux is critical to enable the aviation industry to operate a transition towards a more sustainable future."

The development and availability of SAF rank high on Cargolux's agenda. The airline has a dedicated SAF programme, securing the acquisition of current and next generation sustainable fuels.

Antonov flies power plant to Kano

Antonov Airlines, in cooperation with Chapman Freeborn
Germany, has completed three
AN-124 flights to transport a
mobile gas power plant
generator and associated
equipment from Ljubljana,
Slovenia, to Kano, Nigeria.

The cargoes weighed around 200 tonnes in total.

Eugene Gavrylov, acting director general of Ukraine's Antonov Company, added: "We continue to operate despite the challenges we have faced after the Russian invasion and the damage they caused to our Gostomel home base and some of our aircraft.

"The services responsible for

planning the transportation and maintenance of aircraft have been temporarily relocated to Leipzig, Germany. This allows us to ensure the further safe operation of Antonov fleet aircraft."

Read more about the transfer of operations to Leipzig in our airfreight report on pp70-74.

NEWS in **BRIEF**

Emirates adds freighter

Emirates SkyCargo has taken delivery of a Boeing 777 freighter. This delivery increased the airline's B777F fleet to 11 aircraft, with plans for further expansion. The aircraft headed to Hong Kong to pick up its first load of electronics, consumer goods and general cargo before touching down in Dubai World Central.

Maersk acquires Senator

A.P. Møller - Mærsk has acquired freight forwarding company Senator International, which has a well-developed airfreight network comprising own controlled flights and long-term partnerships, as well as a full container load (FCL) and less than container load (LCL) network. Maersk said the acquisition enables it to ramp up its airfreight capacity, network and know-how.

Cargolux adds Shannon

Cargolux has added Shannon, Ireland, to its airfreight network, with the inaugural flight connecting the town with Seattle, USA. The weekly frequency is Los Angeles-Seattle-Shannon-Luxembourg.

ABC to return freighters

Volga-Dnepr Group-owned
AirBridgeCargo (ABC) plans to return
14 out of 16 Boeing 747 freighters, all
of which are stored at Sheremetyevo
Airport, according to Russian media
reports. HLPFI's sister title Air Cargo
News contacted Volga-Dnepr for
comment on the developments,
however, the company said that it
would not be issuing a response.

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German North Sea ports to boost links

ore than 100 attendees gathered in Berlin recently to discuss closer cooperation between German North Sea ports.

The meeting covered future strategies of the ports, including new port development plans for Bremen and Hamburg. Lower Saxony, meanwhile, presented a paper that outlines the prospects for the ports over the next decade.

One of the primary concerns was the competitiveness of German ports in relation to the ports in Belgium, the Netherlands and France. Another focus was upgrading infrastructure.

Over the course of the event, it emerged that the key topics of energy security, climate neutrality, digitisation and automation will be central aspects of future port policies.

The participants agreed that the National Port Strategy would have to provide far more support for the ports to cope with these tasks. At the same time, the ports



themselves were called upon to cooperate closely to address the forthcoming challenges.

Dr Claudia Schilling, Bremen's senator for science and ports, said: "The development of a new National Port Strategy is absolutely essential to address

the present situation. Ports will be able to ensure supply reliability and energy independence in Germany only if the politicians at national and federal land level, as well as the port and transport industry, all work in close cooperation."

Jaxport completes berth enhancements

The USA's Jacksonville Port Authority (Jaxport) has completed the final phase of the USD100 million berth enhancement project at the SSA Jacksonville Container Terminal (JCT) at Blount Island.

The SSA JCT now features a

47 ft (14.3 m) channel depth with 2,400 linear feet of newly rebuilt berthing space.

The rehabilitation project began in 2016 with the installation of a high-voltage electrical system which was equipped to power up to 10

container cranes.

The berths also offer ondock rail for cargo handling and feature heavy lift capabilities, including one of the nation's highest weightbearing capacity docks, said Jaxport.

ABP offers Grimsby logistics opportunities

Associated British Ports (ABP) has released an 89-acre (36 ha) site at the port of Grimsby that can support 1.16 million sq ft (107,767 sq m) of development.

Grimsby is one of the UK's leading automotive ports and a major hub for the offshore wind energy industry.

The site is aimed at manufacturing and logistics firms, and low-carbon energy

Simon Bird, ABP regional

director for the Humber, said: "We are looking to partner with businesses that can benefit from our financial commitment and experience of creating designand-build bespoke accommodation."

NEWS in **BRIEF**

Boskalis plans shore power

Boskalis is collaborating with the Port of Rotterdam Authority and Eneco to construct shore-based power facilities at its site in the Waalhaven so that its moored vessels can run on green electricity instead of fossil fuels. There are two berths on the quay at this location, where vessels come for maintenance and for mobilisation for offshore projects.

Bremerhaven auto JV

BLG and Hyundai Glovis have formed a joint venture at the AutoTerminal in Bremerhaven, Germany. It plans to develop the terminal into a European hub for automobile transport between Asia and Europe, with an aim of handling high and heavy cargo.

Blyth e-crane delivered

The port of Blyth in the UK has taken delivery of its first fully electric crane, a Konecranes 125-tonne capacity Gottwald ESP.6. The port will utilise the mobile harbour crane at its relaunched Bates Clean Energy Terminal, itself a major low-carbon redevelopment scheme.

Massachusetts invests

The governor of Massachusetts (USA), Charlie Baker, has committed USD100 million in funds to support the development of offshore wind ports in Salem, New Bedford and Somerset. Other investments in the pipeline include USD235 million for transportation projects and USD200 million for Cape Cod water and sewer initiatives.

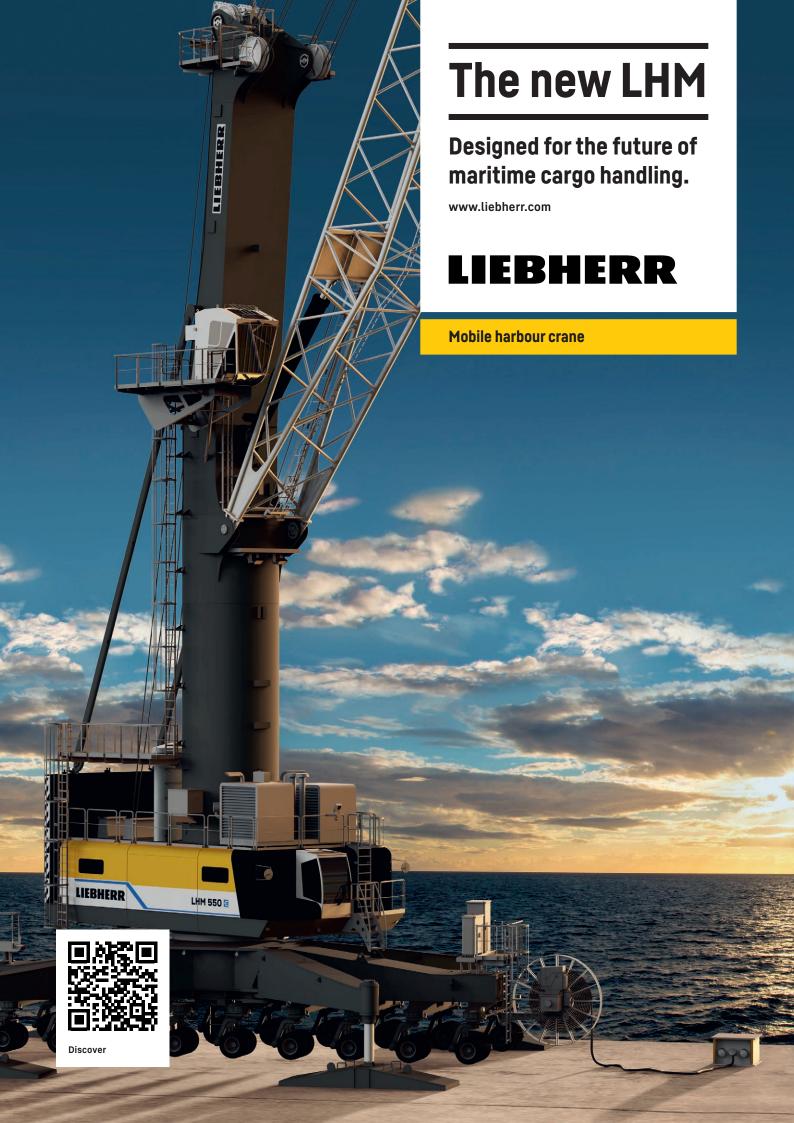
First ship at Lekki port

The first vessel has berthed at Nigeria's Lekki deepsea port, delivering three ship-to-shore (STS) cranes and 10 rubber-tyred gantry (RTG) cranes. The vessel Zhen Hua 28 arrived at the port from Shanghai, China. The equipment will be used at the container terminal, which will be operated by Lekki Freeport Terminal.

AD Ports expands in Egypt

AD Ports will buy a 70 percent equity stake in International Associated Cargo Carrier, which owns two Egypt-based maritime companies.

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Marr plans switch to renewable diesel

ustralia-based Marr Contracting will transition from fossil-fuel diesel to HVO100 – a diesel made from renewable raw materials.

The initiative is part of Marr's commitment to reduce its carbon emissions and impact on the environment as part of its 2021 social impact strategy. It comes after significant consultation with Marr's clients and leaders within Australia's construction industry on the best solution for transitioning away from fossil fuels.

After investigating alternative power sources and taking the time to understand the issues associated with currently available options, Marr's research and development team searched for a better solution. "We have looked at the alternatives and believe this is the most sustainable fuel source currently available for the work that we are doing," said managing director Simon Marr.

"That is because it allows us to transition away from fossil diesel and maintain the speed, power and reliability of our cranes to drive productivity and cost-efficiencies on the projects we are working on – while at the same time helping our clients achieve their sustainability goals."

Neste's renewable diesel is a high-performing fuel known as drop-in diesel as it is suitable for existing diesel vehicles. It is produced from 100 percent renewable raw materials, such as waste



and residue oils and fats (including used cooking oils, animal and fish fat from food waste and industry food processes).

Lankhorst produces recycled plastic slings

Lankhorst Ropes is supplying Heerema Marine Contractors with LankoForce heavy lift slings manufactured with Dyneema SK78 fibre made using post-consumer plastic waste as a feedstock. DSM is producing recycledbased Dyneema using ethylene from mixed plastic waste as a pilot project.

The slings will be used on a four-point lifting frame for an offshore project.

This recycled-based fibre used for the LankoForce slings in this specific offshore lifting project has the same assured performance as conventional and bio-based Dyneema SK78 fibro

Nordic Crane takes over Kran-Kompagniet

Nordic Crane has acquired a 70 percent stake in Danish crane company Kran-Kompagniet.

Kran-Kompagniet was established more than 10 years ago by brothers Morten and Mikkel Eriksen and Casper Petersen. The acquisition expands Nordic Crane's presence in Scandinavia, which already included operations in Norway and Sweden.

"We have had 10 very good years with great success, but to take part in larger-scale projects

we need increased volume. We are looking forward to this partnership with Nordic Crane, which will give us an opportunity to develop further, and make it possible for us to have a larger share of the Danish market," said Morten Eriksen.

NEWS in **BRIEF**

Cordeiro adds Tadano crane

Cordeiro Group in Brazil has acquired a 500-tonne capacity AC 8.500-1 all-terrain crane from Tadano. The crane features a 90 m luffing jib, a patented sideways superlift (SSL) system and the fall protection system.

Liebherr unplugged boost

Liebherr-Werk Nenzing has expanded its unplugged range of machines. In addition to piling and drilling rigs, the range now includes the battery-powered LR 1130.1 unplugged and LR 1160.1 unplugged. It has also updated its mobile harbour crane product line to be more digital and efficient, with innovations such as the 'Master V' crane control system.

BMS ring crane work starts

Huisman has kicked off construction of BMS Heavy Cranes' 3,000-tonne capacity ring crane at its production facility in the Czech Republic. Delivery is scheduled for Q2 of 2023.

Royal status for Van Beest

Van Beest, the Netherlandsheadquartered manufacturer of lifting, lashing and mooring fittings, has been granted a 'Royal' title as it celebrates its 100th anniversary. Consequently, Van Beest Group is changing its name to the Royal Van Beest Group.

Bower's to buy Hogan

Australia's Bower's Heavy Haulage plans to acquire Wynong-based Hogan's Heavy Haulage, which will give the company a major stake in the region's coal mining and civil industries. The news follows two previous acquisitions in the Hunter Valley for Bower's over the past seven years, with the purchase of Boom Logistics' Hunter Valley transport fleet in 2015 and Tutt Bryant Heavy Lift and Shift's division in 2018.

G4 put to work

Steil Kranarbeiten has used its fourth generation (G4) rotor blade adapter from Scheuerle, part of the TII Group, to transport blades measuring up to 79 m long in Germany. It was used along with an InterCombi self-propelled vehicle combination.

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IFLN and LARGO+ form new alliance

project freight forwarder networks IFLN Global Projects and LARGO+ have joined forces to form Project Logistics Solutions – an alliance of more than 100 forwarders specialising in project cargo.

Through the alliance, members will gain access to new business opportunities, capacity and resources. Both networks will also continue to exist independently.

Michel Vanlerberghe, president of IFLN, said that LARGO+ has a growing territorial coverage that is complementary rather than overlapping with that of IFLN Global Projects. He added: "Only qualified forwarders that have been vetted for their project experience are eligible to become a member of the alliance between LARGO+ and IFLN Global Projects."



Michael von Loesch, ceo of LARGO+, also emphasised that the quality of network membership is critical. Having launched in 2020, he said: "We are always on the lookout for new, capable members, building on the success we have already

achieved. Our goal with the alliance is to share member listings, capabilities and success stories within both networks."

Future conferences will bring together members from both IFLN Global Projects and LARGO+.

NEWS in **BRIEF**

Network additions

Project Cargo Network (PCN) has gained several members: Kronoz Internacional in Mexico; Salamatak Private Limited in Pakistan; Glaube Logistics in Saudi Arabia; Istamco in Senegal and Gambia; Martin Bencher Projects Spain: ABC Special Transport in Romania: Seatrans Maritime in Spain; Goodrich Logistics as a member in Bangladesh and Ukraine; FTGV Transport Logistics Cargo as a representative in Mexico; Shodesh Shipping & Logistic in Bangladesh; Remant Africa Logistics in Belgium; A&E Freight Logistics in Costa Rica; Global Cargo Line in Lebanon; Aprojects Belgium; Ocean Shipping in Poland; and Autospectrans in Ukraine.

XLProjects (XLP) has added Magzi Shipping & Logistics Services as a member in Oman, NYS International Freight as a representative in Malaysia, and Shenship (Singapore).

The National Pilot Car Association (NPCA) has joined the Specialized Carriers & Rigging Association (SC&RA).

World Shipping Council (WSC) has welcomed Singapore-based Swire Shipping to its roster.

Overseas Project Cargo Association (OPCA) has welcomed several new members, including KRS Logistics from the UAE; Multipro Freight from Bulgaria; Point Global Logistics from the USA; Vector Global Logistics, also from the USA; as well as CTO Germany and CTO Global Logistics (Malaysia).

Networks resume annual meetings

May 2022 saw a return of annual general meetings for freight forwarder networks.

Members of the Worldwide Project Consortium (WWPC) gathered in Vienna from May 10-14, as the network held its 20th annual conference. During the event, members selected Toronto, Canada, as the location for the next conference, which will be held during September 2023.

Both the WCA Projects network and The Heavy Lift Group (THLG) held their respective annual meetings in the Netherlands prior to the Breakbulk Europe exhibition. Following the show, the Global Project Logistics Network (GPLN) held its annual conference in Rotterdam, while Project Partners met in Amsterdam.



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NEWS in **BRIEF**

Combi Lift delivers boiler

Combi Lift's Forwarding Solutions division has moved a gas boiler across Europe. The boiler, built by Arvos and Schmidtsche Schack, weighed 91 tonnes and measured more than 16 m in length. Combi Lift's scope was to move the unit from the client's factory in Lohfelden, Germany, to Antwerp, Belgium.

Protranser moves trucks

Protranser has coordinated the delivery of 21 mining trucks from the port of Shanghai to a jobsite in the Democratic Republic of the Congo. The shipment had a total volume of 2,685 cu m, with each mining truck weighing up to 31.7 tonnes. Protranser collected the cargo at the port of Shanghai, chartered a breakbulk vessel to transport the equipment to Durban, South Africa, and delivered the trucks to the jobsite using lowbed trailers.

Roll loads substation

Roll Group has loaded a cooling tower substation onboard BigRoll Bering in Singapore. The unit, built by Siemens in Batam, measured 88.4 m long, 29 m wide, and 13 m tall, and weighed 1,908 tonnes. After loading onboard BigRoll Bering, it departed for Canada.

Bolloré in GTA work

Bolloré Transport & Logistics Senegal shipped a large metal structure on behalf of Eiffage GC Marine Senegal for the Greater Tortue Ahmeyim (GTA) project. The work took place in April with a combination measuring 14.1 m long, 4.6 m wide and 6.9 m high departing the ro-ro terminal in Dakar to the customer's site at the Autonomous Port of Dakar.

Hareket handles turbines

Seven sets of wind turbines and accompanying equipment have been transported from İzmir to Pozantı, Turkey, by Hareket Heavy Lifting & Project Transportation. It deployed 12 axles of SPMTs, six-axle lowbeds, two heavy haulage trucks and four mobile cranes for the project. The cargoes had to move along a 14 km mountainous road, with the operation taking place at an altitude of 2,200 m.



Martin Bencher makes 'heaviest' road move

artin Bencher has transported a transformer, weighing almost 400 tonnes and measuring 12 m long, on behalf of Hitachi Energy in Sweden.

According to Martin Bencher, it is the heaviest transformer to be transported on public roads to date. The convoy weighed 762 tonnes, measured 5.5 m wide and 105 m long. Among the challenges, a section of road was lowered under three bridges, a belly trailer was added to cross five bridges, a flyover bridge was utilised, and five railroad

crossings had to be de-electrified. New roads also had to be built and barriers and lights dismantled.

Martin Bencher said: "In order to achieve this, countless man hours have been spent on engineering, geotechnical studies, permits from different authorities and meetings to coordinate with all stakeholders involved to ensure a smooth transportation."

Martin Bencher cooperated with Mammoet for the project, which saw the convoy move at 5-15 km per hour.

Sarens CC 2800-1 lifts Matarbari grinder

Sarens Bangladesh recently lifted a grinder at the Matarbari power plant. The load weighed 70 tonnes and measured 74 m high, with a 36 m radius.

Working on behalf of client Jurong Engineering, Sarens used its CC 2800-1 crane in a HSWSL 108 m + 60 m configuration with 60-tonne/180-tonne counterweight and auxiliary equipment.

The CC 2800-1 crane has been in continuous operation for eight months and will stay at the project site for another two months. It was delivered to Bangladesh by sea from India; 59 trailers transported the equipment to the remote project site location, where it was set up over five days.





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Road transport sector struggles with twin crises

There are two standout challenges facing the road transport sector currently: fuel prices and driver shortages. Sophie Barnes reports.

he latest survey by the International Road Union (IRU) of more than 1,500 commercial road transport operators in 25 countries in the Americas, Asia and Europe has reinforced concerns about a shortage of drivers.

It found that truck driver shortages increased in all regions in 2021 except Eurasia. It added that it expects shortages to increase at alarming rates across the globe.

Driver shortages

In Europe, driver shortfalls jumped by 42 percent from 2020 to 2021, with open unfilled positions reaching 71,000 in Romania, 80,000 in both Poland and Germany, and 100,000 in the UK. In Mexico, shortages increased by

30 percent to reach 54,000; in China by 140 percent to reach 1.8 million.

Drivers under the age of 25 remained a small minority, at 6 or 7 percent of the truck driver population, in most regions. In the USA and Europe, older drivers make up around onethird of the workforce.

Europe has the highest average driver age at 47.

Higher driver wages in 2021, especially in Europe and the

USA, have not addressed the issues, added the IRU.

A survey last year of more than 2,500 existing HGV licence holders in the UK by Pertemps shed some light on the factors impacting the driver shortage.

It found that 24 percent of those asked did not expect to be driving in three years' time; 68 percent of those said it was down to the poor conditions of life as a lorry driver.

Of all those surveyed,

Chronic commercial driver shortages are getting worse, with millions of positions remaining unfilled. This is putting already stressed economies and communities at higher risk of inflation, social mobility issues and supply chain meltdown.

Umberto de Pretto, IRU

92 percent said they did not feel their role was valued enough by the general public and 69 percent disagreed that pay and conditions were good.

"I literally was bowled over by the starkness of how these people feel," said John Poliquin, director of Pertemps Driving Academy.

Shocking stats

"Yes, I have always understood money, salary and earnings potential would be up there as a high point, but the other findings about how they are going to stay in the industry, how they are going to feel valued, those stats were shocking.

"What this survey shows is that we need to focus on the three Rs – reward, recognition and respect - to attract and retain drivers."

Looking ahead to 2022, while firms in Argentina and China forecast slight improvements, operators in most regions expect truck driver shortages to keep increasing: Turkey by 15 percent, Mexico by 32 percent, and Eurasia and



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Europe by 40 percent, according to the IRU's survey.

Umberto de Pretto, IRU secretary general, said: "Chronic commercial driver shortages are getting worse, with millions of positions remaining unfilled. This is putting already stressed economies and communities at higher risk of inflation, social mobility issues and supply chain meltdown.

"Road transport operators are doing their part, but governments and authorities need to maintain focus, especially to improve parking infrastructure, training access, and encourage more women and young people into the profession."

Another factor to consider is the war in Ukraine. While the most apparent effect has been an increase in fuel prices, the conflict has also worsened the driver shortage in Europe, pushing up labour costs and applying upward pressure on rates.

HLPFI reported back in April that the war in Ukraine and the subsequent restriction of oil supplies from Russia into Europe led to further upward pressure on road freight rates.

The EU-wide weighted average of a litre of diesel has risen sharply since the third quarter of 2021.

Compared with the pandemic-induced low during the second quarter of 2020, the weighted average cost of diesel was 52.7 percent higher in the first quarter of 2022.

Fuel prices

That report had yet to register the full effects of the fuel price increase, as the price spike did not occur until after the war started in Ukraine on February 24 (prices hit USD125 per barrel), and carriers were able to make use of fuel purchased in advance at lower prices through the end of February and early March. A barrel of Brent crude was trading at roughly USD106 in mid-July.

ESTA – the European association of abnormal road transport and mobile cranes is advising its members to use transport contracts that include valid fuel clauses that can be revised on a weekly basis as result of the hike in fuel prices.

Ton Klijn, ESTA's director, said the association has discussed the impact of the present geopolitical situation on fuel prices and the uncertainty this is causing.

He added: "It is obvious that we should all use transport contracts that contain a valid fuel clause.

"Fuel prices should be referenced at the time of contract closure and then adapted against the fuel price index.

"Previously this was usually done on a monthly basis, but ESTA is now advising members and companies to do so on a weekly basis. Failure to do this is extremely risky in current circumstances."

It is obvious that we should all use transport contracts that contain a valid fuel clause. Fuel prices should be referenced at the time of contract closure and then adapted against the fuel price index.

- Ton Klijn, ESTA

Various websites publish fuel prices and give guidance on adjustment factors, and the **European Commission website** also contains details of fuel prices in all member states.

In the USA, the national average price of diesel hit a record high of USD5.72 a gallon in mid-June – up 75 percent over the past year. The national average price of petrol, meanwhile, reached USD5 a gallon – a rise of 60 percent over the same period.

Protesting drivers

High fuel prices have also led to strike action by South Korean truck drivers who are protesting about the soaring costs and demanding minimum pay guarantees. Four rounds of negotiations with the government have failed to find a compromise.

The industrial action is bringing port operations to a halt and impacting major industrial and manufacturing operations in the country – just another in a long list of latest headaches for global supply chain players that are already under pressure.

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Lifting and shifting from India to Nigeria

arlier this year, J M Baxi group acquired Lift & Shift India's, heavy and over-dimensional cargo logistics business. The acquisition represents a major expansion of J M Baxi group's specialised engineered logistics services. Lift & Shift India's prowess in the field of heavy lifting was demonstrated when it handled one of its most complex projects where it assisted Thermax with the transportation of various oversized modules for a refinery project in Nigeria.

Thermax contract

Thermax was contracted to build eight Heat Recovery Steam Generators (HRSG), four utility boilers and two Flue Gas Steam Generators (FGSG) for the project in Nigeria, while assembling them at its modularisation yard at the Mundra special economic zone.

Lift & Shift worked with Thermax right from the bidding stage, to develop plans for the transportation of the modules to the port of Mundra, India and then onto ro-ro vessels for their journey to Nigeria. Since work at the jobsite in Nigeria had to be minimised, it was important to avoid modifying the equipment for transit as far as

Among other challenges, the roads at





Mundra Port were narrow, forcing the team to stop traffic so that the units could pass. By transporting them in several stages, the team minimised disruption to traffic and port operations.

The tallest pieces were the HRSGs, which stood at a height of 22 m and would have required the removal of a high-tension power line on numerous occasions to allow its passage. Instead, the line was permanently installed underground, reducing power

downtime and outages that would have inconvenienced the public.

In addition to their height, these modules were very slender; beams were used to widen them for safe transportation.

The heaviest pieces transported as part of this project were FGSG modules, which tipped the scale at 1,200 tonnes. At the time, these were the heaviest modules to cross the channel at Mundra port.

Load-out operations

Load out took place at two different sites; at the port's multipurpose terminal for side-on operations and at its container terminal for stern-on operations.

The equipment was stowed at a height of 1.5 m by using 300 mm high wooden blocks on top of the 1.2 m high axle units, so that it was easy to offload directly onto trailers on arrival in Nigeria.

The cargo was stored on stools at the port 10 days in advance of loading to expedite the ship's turnaround at the port.

In total, Lift & Shift used 120 selfpropelled axles with five power pack units, in various combinations, to move the modules.

Three ro-ro vessels were employed to move the cargoes in this complex project, which was a first for Lift & Shift India, Thermax and Mundra Ports. Thermax and Mundra Ports.









China bounces back with bullwhip effect

China's economy has felt the effects of strict Covid-19 lockdown restrictions, with productivity and output slumping. However, with the gradual lifting of restrictions and activity starting to ramp up, concerns now surround a barrage of cargoes hitting the market concurrently. *David Kershaw* reports.

t the beginning of June, China started lifting restrictions after a two-month Covid-19 lockdown. As the state continued its zero-tolerance policy to Covid-19 outbreaks, almost 400 million people were in some degree of lockdown at its height. In the manufacturing hub of Shanghai, 25 million residents were barred from leaving their homes.

Certainly, when the restrictions came into force during March, concerns were raised regarding the potential impact on a global supply chain that has chosen to live with and adapt to the virus. With the gradual reopening, the shipping industry is bracing for the potential bullwhip effect.

China is a manufacturing powerhouse and crucial exporter of heavy and project cargoes. When the lockdowns were in effect, industrial output took a hammering. The Caixin Manufacturing Purchasing Managers Index and the Manufacturing Purchasing Managers Index by the National Bureau of Statistics read below 50 for the second month running during May – indicating that the market is contracting.

There is a mixed outlook about how output levels will develop now that China is reopening. Martin Zhao, president at

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Topline Express Logistics (TEL), agreed with the prediction that there could be a surge in the export of heavy and oversized cargoes as restrictions ease, while Leo Liu, marketing manager at Protranser International Logistics, believes there will be a slower recovery. "It will take time to reconnect the supply chain," Liu explained.

Work restrictions

He added: "There are strict requirements to get back to work. Some have to live in the factories they work in – known as 'closed loop management'. Other companies in downtown [Shanghai], staff require a negative nucleic acid test report taken 72 hours before entering the buildings. Without that, the colour of the health code will turn from green to yellow or red, meaning that they cannot use public transport or enter the offices, etc."

The lockdown certainly contributed to widespread supply chain disruption. Output was, and still is, fluctuating and delays at ports – an issue that pre-dated the lockdown – are hard to gauge. For instance, Project44 said that the two-week period from April 7-21 saw import containers wait an average of

12.1 days, up 163 percent from the previous two-week period when average container wait times were 4.6 days.

Zhao noted: "The vessel delays are becoming more serious due to Covid-19 and lockdown situations in some places. As a project forwarder, we need to be more flexible than usual in order to adapt to this situation and try to keep the information flow transparent. The supply chain disruption is inevitable but can be minimised if the clients are kept informed of any delays."

Such flexibility is required, with lockdowns reimposed in Shanghai in mid-June, although congestion is now back within seasonal normal levels, according to data from VesselsValue.

The vessel delays are becoming more serious due to Covid-19 and lockdown situations in some places. As a project forwarder, we need to be more flexible than usual...

- Martin Zhao, Topline Express Logistics

In a similar vein, Liu highlighted the importance of having good relationships with partners and subcontractors, being flexible, and thinking outside the box in order to provide a good service to its clients.

"Of course, we keep our eyes on the changing local requirements, taking advantage of our nine offices across China. Through that we, firstly, find feasible solutions for customers and, secondly, choose the optimal one."

One project saw Protranser deliver a 1.2 MW wind power hub from Tianjin to Montevideo, Uruguay. For this shipment, there were several challenges, noted Liu. Not only was the cargo urgently needed to replace machinery at the site, but it also had to be shipped via Shanghai rather than Tianjin due to limited space and equipment. Within one month, Protranser was able to collect the cargo from Tianjin, transport it by road to Shanghai, arrange the stuffing survey and secure the space on a seagoing vessel.

Domestic wind energy

China's domestic wind energy market is also pressing ahead. Industry analyst Westwood studied Asia-Pacific offshore wind EPCI spending over a 10-year period. It estimates that USD199 billion will be invested across the region between 2022-2026, representing a 123 percent increase on the previous five years.

Mainland China made up 90 percent of those EPCI investments into offshore wind over the past five years, driven by an evolving policy landscape. In May 2019, the National Development and Reform Commission (NDRC) released a policy for the phase-out of national subsidies for wind energy. For offshore projects, this regulation meant projects already approved by 2018 would continue to receive the feed-in-tariff if fully grid-connected before the end of 2021. Projects approved in 2019 and 2020 receive a reduced tariff.

From January 1, 2022, the subsidy for offshore wind was completely terminated with projects to be built now on grid parity prices based on the regulated price for coal plants (varying by province and region, if no support is available from the provincial government). This resulted in the dramatic rush to install capacity in 2021, and consequently a spike in EPCI expenditure sanctioned in 2019, said Westwood.

Still, Mainland China is continuing its massive development of offshore wind farms, with an EPCI expenditure outlook between 2022-2026 of roughly USD130 billion.



In September 2020, President Xi Jinping said that Mainland China aims to see CO2 emissions peak before 2030 and achieve carbon neutrality before 2060. To that end, it aims to have 1,200 GW of solar and wind energy capacity installed by 2030.

TEL's Zhao is optimistic that the government will realise this target by the deadline. "Various forms of green energy are replacing fossil fuels gradually and they will play a big role in the reduction of CO2 emissions. China is building a lot of wind energy projects. By the end of 2021, the total installed capacity of wind power was 340 GW, which is about 40 percent of world wind capacity. In addition, many big solar energy farms are being built in the Gobi and desert areas of Northwest China."

Provincial targets

In terms of wind energy, by 2030, 18 GW should be installed in Guangdong, followed by Jiangsu with 15 GW and Fujian with 6 GW. "These provinces are very much on target with the majority of their projects in EPCI mode and a significant proportion are already operational," said Westwood, which noted that provincial policies have been slow to replace the expired central government subsidy - only Guangdong, Shandong and Zhejiang have some form of policy help towards offshore wind development. Guangdong, for instance, was the first to formulate subsidies that target projects that were approved in 2018 and online between 2022 and 2024.

As a result of withdrawn national subsidies and more limited provincial support, Mainland China wind developers

receive less for the wind power they produce. They face higher component costs that eat into their margins; the supply chain has responded to this challenge, resulting in a concerted effort to keep costs low. Recent turbine bid prices have dropped by an average 37.4 percent from 2019-2021 levels; some of these bid prices are for re-tenders of turbine contracts already fixed previously.

In contrast to its renewable progress, China has been an avid supporter of coalfired power projects internationally. According to market analyst Statista, China has been highly active in Indonesia where USD15.7 billion-worth of coal power projects have been financed, equating to total plant capacity of 9,724 MW. Bangladesh, Pakistan and Vietnam are also large investment destinations.

Protranser's experience in this sector saw it export project cargoes for a coal-fired power plant in the Punjab province of Pakistan during 2018. The shipment included two sets of 25 MW turbines.

China vowed stop funding new coal power projects overseas at the end of 2021, although an estimated 35 GW was already

Permitting [of new coal power projects] has been restarted in 2022 with a bang, with five coal power projects totalling 7.3 GW of capacity cleared for construction in just the first six weeks of the year.

- Global Energy Monitor

under development prior to the announcement.

Certainly, the world is slowly turning its back on coal; last year's COP26 saw 200 nations agree to phase down coal use. However, data from Global Energy Monitor suggests this is not being realised. A total of 171 GW of new capacity is under construction worldwide, 52 percent of which is in China. The figure is barely down from the 181 GW under construction in 2020.

Return to coal

Domestically, Global Energy Monitor said that 33 GW of new coal power plants entered the construction phase in China during 2021 - the most since 2016 and almost three times as much as the rest of the world put together - and 25 GW of new coal-fired capacity was added to the grid.

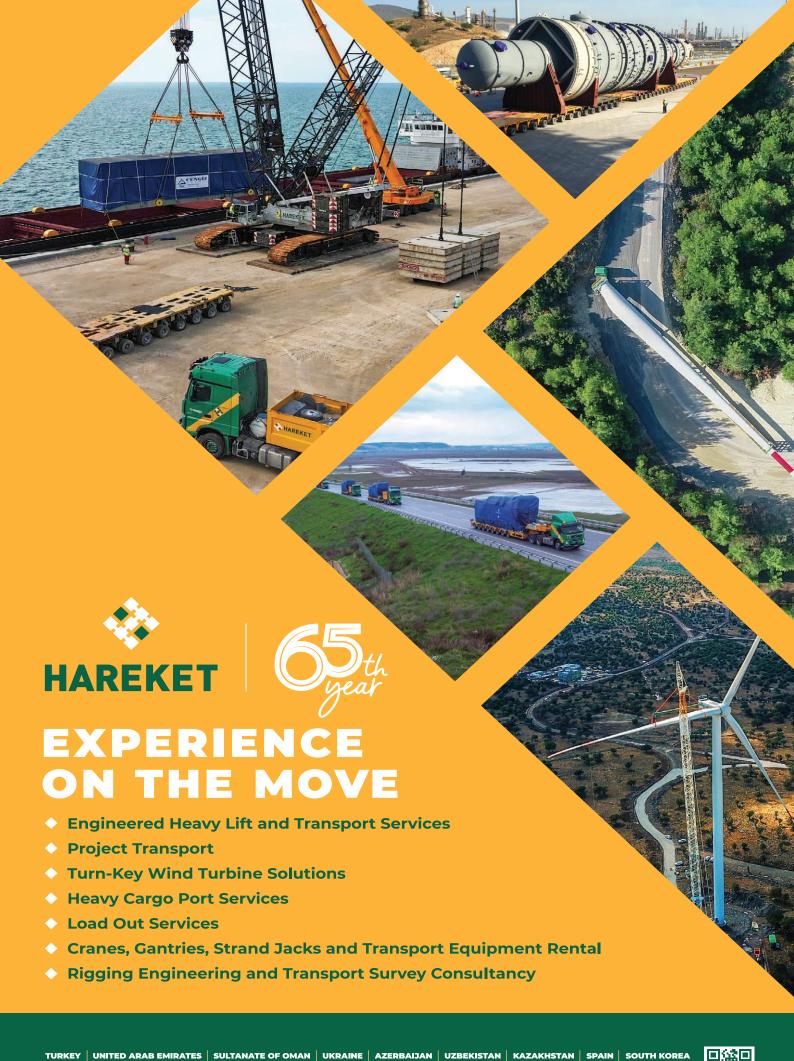
"Permitting new coal power projects was essentially frozen in 2021, as the leadership emphasised strictly controlling 'high emissions' projects.

"However, reflecting shifting political signals, permitting has been restarted in 2022 with a bang, with five coal power projects totalling 7.3 GW of capacity cleared for construction in just the first six weeks of the year," the analyst added.

For China, Liu said that coal-fired power is still very important. Although he believes that clean energy will play an increasingly prominent role.

Similarly, Zhao said: "As the green energy policy is being implemented in China, the coal-fired projects will be replaced by wind and solar power projects to a great extent."

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Renewables growth squeezed by installation capacity

A drive to substantially expand global offshore wind power over the next few years risks being slowed by a lack of suitable heavy lift/installation vessels and supporting port infrastructure, reports Phil Hastings.

hile offshore wind energy's supporting sectors have seen major investment in additional capacity and technological innovation, much more is needed if the potential significant shortages of vessels and handling facilities are to be avoided, warn industry observers.

The main factor driving the demand for that new capacity is the ever-increasing size of offshore wind turbine components, but others include the growing number and geographical spread of installations and the advent of floating turbines.

Transport challenge

Hans Henrik Groen, managing director of deugro Denmark, part of worldwide project forwarder deugro whose involvement with the offshore wind industry includes a longstanding logistics collaboration with OEM Siemens Gamesa, expanded on those points: "The rapidly increasing size and weight of turbine components is one challenge for the transport providers - it means logistics solutions need to be engineered for future generations.

"The handling operations are becoming more complex and the capacity of the vessels in terms of their maximum intake per shipment, terminals and general equipment currently being used all need to be reconsidered and potentially replaced by new designs suitable for the future.

Groen suggested that the development of floating offshore wind farms would boost demand for dedicated barges and heavy lift vessels, which could "challenge the supply chain of the future".

Sanne Wiegerink, commercial manager for the Netherlands-based BigLift Shipping which, together with sister company Spliethoff, transports large wind energy components internationally, delivered a similar assessment. "The capacity challenge relates to the whole supply chain, including shortages of fabrication facilities; marshalling locations in terms of sufficient storage, suitable quays, etc; installation capacity to cope with the growing number of projects worldwide and the increasing weight of turbine components; and transport vessels," she commented.

Wiegerink said that while suitable marshalling locations are being developed "at a rapid pace" to keep up with offshore

The rapidly increasing size and weight of turbine components is one challenge for the transport providers – it means logistics solutions need to be engineered for future generations.

- Hans Henrik Groen, deugro

wind industry development plans, there are still only a limited number of locations for the fabrication of turbines and foundations. "As a result, the distances and subsequent transport durations from the fabricator to the project locations and marshalling yards are growing significantly," she stated.

Size implications

Additionally, with vessel intake per trip decreasing, due to the growing sizes of the turbines and foundations, the number of transport vessels required per project is increasing substantially. "That may create challenges with regards to the availability of suitable tonnage in the market, specifically heavy lift and heavy transport vessels," she suggested.

Rystad Energy drew attention to the issue of vessel availability earlier this year, stating that demand will outpace the supply of capable vessels by 2024.

"Operators will have to invest in new vessels or upgrade existing ones to install the super-sized turbines that are expected to become the norm by the end of the decade, or the pace of offshore wind installations could slow down," the analyst explained.

Lars Feller, president of dship Carriers, part of the deugro group, which has a fleet of 23 multipurpose, heavy lift and tweendeck vessels, highlighted capacity shortages in the wider shipping market, noting that "with offshore projects picking

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up pace, that pressure and shortage will further intensify".

Demand pressure

That problem, he explained, is exacerbated by the fact that it takes time to install offshore turbines onsite. "With capacity tied up in offshore installations, large vessels are blocked out for quite a while. That then also increases the demand pressure on smaller tonnage."

Newbuilds alone could do "very little" to change that situation, suggested Feller, because there are too few of them on order and it takes too long for the vessels to be delivered. He pointed out that while dship had previously ordered four new F-500 multipurpose heavy lift vessels, the last of which was delivered earlier this year, it is also adding further second-hand tonnage to its fleet.

Concern about potential shortages of heavy lift and installation vessels to support future offshore wind projects comes at a time when the sector is seeing increasing participation by major oil and gas companies.

Heiko Felderhoff, managing director of German shipping and logistics group Harren & Partner and the executive responsible for its renewables division (SAL Renewables), said: "With current high oil prices, the offshore oil and gas industry is also seeing an upturn in activity so there is growing global competition for existing vessel capacity and a desperate need for more ships in both markets.

"The big challenge for the shipping industry when it comes to providing the scale of additional vessel capacity, which will

increasingly be required to support new and future offshore wind industry projects around the world, though, is the huge investment needed to provide that - it is a very capital-intensive business."

Harren & Partner's own investment includes developing a concept specifically to target the US East Coast offshore wind sector. Called Feederdock, the solution is based on the use of proven technology and that is compliant with Jones Act cabotage regulations.

"That solution incorporates big jack-up vessels with 3,000-tonne capacity cranes and a feeder operation using barges and tugs



The big challenge for the shipping industry when it comes to providing the scale of additional vessel capacity... is the huge investment needed to provide that.

– Heiko Felderhoff, Harren & Partner

built and flagged in the USA to guarantee independence from any market restrictions," explained Felderhoff.

Expanding on the new challenges facing vessel operators servicing the offshore wind industry, Rystad Energy said that while turbines larger than 8 MW had accounted for just 3 percent of global installations between 2010 and 2021, that share was forecast to surge to 53 percent by 2030. As a result, the need for installation vessels to handle turbines larger than 9 MW, which was non-existent in 2019, will grow significantly over the same period.

Replicated shortages

The looming global shortage of sufficient vessel capacity to support new projects may well also be replicated in the fields of maintenance operations, component exchange and the eventual decommissioning of existing offshore turbines.

That, at least, is the view of Harren & Partner, which is looking to service those markets through a joint venture with German companies OWS Off-Shore Wind Solutions and Wind Multiplikator. It recently added the DP2 jack-up installation vessel Thor to its fleet, bringing the number of installation vessels in its roster up to four.

"That fleet is designed to provide full turnkey major component exchanges for the offshore wind industry. We are also targeting the maintenance market and the decommissioning and upgrading of old existing wind parks," said Felderhoff.

Another potential capacity problem was highlighted by Francisco Rodrigues, global segment lead - offshore wind for

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Mammoet. "As the largest asset owner in the heavy lift crane market, we do see a bottleneck coming up in that sector from 2025 onwards," he commented.

Mammoet has three of its largest assets working on offshore wind energy sites, and that sector's demand is expected to continue growing. With new turbine designs emerging every year the requirement for more and bigger logistics assets is pushing Mammoet and other suppliers to invest in a similar way to that seen in the turbine installation vessel market.

New ring crane

As an example, Rodrigues pointed to Mammoet's investment in a new super heavy lift crane, the SK6,000 ring crane. Due to go into production in Q3 2022, it will service future fixed-bottom and floating offshore wind projects.

Looking at the overall industry picture, though, Rodrigues warned: "At the current pace of growth in the size of turbine components and with the increase in demand across the world, it is expected that a shortage of large, specialised assets will become a reality, especially ring cranes for the floating wind market."

Meanwhile, a potential shortage of the necessary port infrastructure to support the planned scale and pace of offshore wind industry growth is also becoming more apparent in some parts of the world.

One example is the USA where the Biden Administration last year announced a target goal of 30 GW of offshore wind energy by 2030 and 110 GW by 2050. According to a recent report by the University of Delaware, the pace of that development could be held back by inadequate port facilities.

"The nation's existing and planned marshalling ports, the assembly areas critical to building and deploying offshore wind turbines, will be insufficient by 2023 to meet state and federal commitments. Further, the available marshalling port area will meet less than half of projected demand through 2050," it warned.

The need for the USA to develop more port infrastructure to support the sector is apparent. Charles Dougherty, chief commercial officer of Atlantic Offshore Terminals (AOT), explained that his company is planning to construct a new staging and assembly facility to support the construction along the US East Coast. Construction of the Arthur Kill Terminal, as it will be called, is expected to commence in Q4 2023, with operations starting in Q4 2025.



"The most pressing infrastructure challenges presently being faced in the USA are insufficient port capacity and vessels qualified under the Jones Act for turbine transport and installation," stated Dougherty.

"As demand is crystallised through confirmed power purchase agreements and offshore renewable energy certificate (OREC) awards, the industry and governments are attempting to respond to those challenges, but it is still very much an evolving response." However, he added: "The first important step is recognition of the challenges, and much progress has been made with that over the past year".

In Europe, industry association WindEurope published a report last year



As the largest asset owner in the heavy lift crane market, we do see a bottleneck coming up in that sector from 2025 onwards

Francisco Rodrigues, Mammoet

arguing that "upscaling" the region's port infrastructure is "critical" for offshore wind development. It also claimed EUR6.5 billion (USD6.9 billion) worth of such investment is needed now "just to deliver the offshore wind expansion planned for 2030".

New mentality

The suggestion that availability of the right port infrastructure will become ever more important in the development of offshore wind was echoed by Dennis Jul Pedersen, director of the Danish port authority of Esbjerg which has to date been involved in 55 such projects.

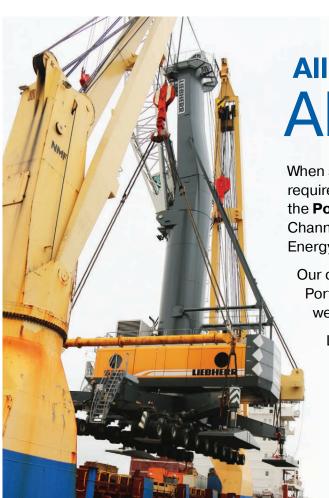
"A paradigm shift will be seen in the coming years, where major components for the offshore wind turbines can no longer be transported by road," he commented. "Consequently, certain ports will be sites for production activities, others may support installation operations and some will have a mix of activities."

One of the latest developments at the port of Esbjerg involves looking to construct a pre-assembly site, developed in consultation with Siemens Gamesa, "where wind turbine manufacturers and project developers can assemble turbine components on the dockside prior to being shipped out into the North Sea".

"That will become crucial as turbines grow bigger and bigger - and at the same time it will provide flexibility for project developers, who are only attached during the project period," explained Pedersen.

Two key issues currently hampering port development of additional infrastructure to support future offshore wind power





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Offshore wind energy setting records

Europe is expected to see a record increase in its offshore wind energy sector over the next three years, according to Rystad Energy. This year, offshore wind capacity additions are poised to hit more than 4 GW for the first time, more than doubling additions seen in 2021.

The UK will be the largest contributor, said Rystad, with a new annual high of 3.2 GW, followed by France with the commissioning of its first commercial offshore wind project totalling 480 MW. Germany, Italy, Norway and Spain are also expected to see new developments this year - in the case of the latter two, including floating offshore turbines. Rystad added that Europe will see further

growth in new offshore capacity over the next few years, with the figure almost doubling again in 2023 to 7.3 GW, then slowing in 2024 due to project timing before jumping to a projected record high of 8.6 GW in 2025.

Transformational year

In North America, 2021 is seen as a "transformational year", which "kick-started" the US offshore wind industry "sparking supply chain investment and transforming it into a national industry", according to the 2022 annual US Offshore Wind Market Report & Insights published by

Business Network for Offshore Wind.

Liz Burdock, ceo of that organisation, said: "States on three (US) coasts now have active wind programmes or interests, suppliers are located in more than 30 states, and nearly USD7 billion has been invested in the US offshore wind market to date, over USD2 billion alone in 2021."

Asia is also becoming an increasingly important centre for offshore wind industry development. In addition to China, which last year boosted its total offshore wind capacity to nearly 28 GW, other Asian countries now prominently involved include Taiwan, Vietnam, South Korea and Japan.

projects are the uncertainty over precisely what facilities/equipment are going to be required and the economic viability of any such investment.

Port planning

Lucile Héritier, director of ports for the Brittany region in north-west France, explained how those challenges can impact port development planning. She cited as an example the port of Brest, already an established centre for fixed installation offshore wind turbine fabrication activities. "where we are looking to work with the candidates to meet a national call for tenders for a commercial floating wind farm south of Lorient".

"The questions which have to be considered as far as the port is concerned include what kind of operations will need to take place - will they involve lifting or sliding the floaters and will the turbine parts be lifted for assembly?" she queried.

Each of those operations, explained Héritier, have different needs, depending on the technology and conception choices for the floater and the turbine. "The port is of course attentive to the requirements of the wind farm developers and constructors, but it cannot provide a unique solution which would encompass all those needs," she said.

"However, once the government selects a specific project, the port can invest in the additional ad hoc equipment to support that development if it is sure that equipment can be reused without becoming obsolete in only a few years."

That consideration is an issue for the logistics industry, said Björn Wittek, managing director of Rhenus Offshore Logistics, part of the Rhenus group. "The demand for new top-notch tailor-made facilities is always there. The question is, who is going to pay for them when you are building infrastructure to last



A large area in the port of Brest, France, is being used by the Navantia-Windar joint venture for the fabrication of parts.

half a century or longer, but an offshore wind construction project might only need it for two years," he said.

"Two years of utilisation is only a drop in the financial bucket when it comes to a return on major investment. Either there has to be a sufficiently large longer-term pipeline of projects coming through to make a business case, or one must use the facilities and equipment already available."

Either there has to be a sufficiently large longer-term pipeline of projects coming through to make a business case, or one must use the facilities and equipment already available.

– Björn Wittek, Rhenus Offshore Logistics

Neil Schofield, chief operations officer at Osprey, neatly summarised the situation facing the logistics industry: "It's true, there are concerns about how some forthcoming projects may be serviced. There are only so many vessels available, and - especially now, as assets are getting larger and need installing at greater height or depth - there are likely to be constraints on the availability of heavy lift equipment and port infrastructure. But that's why project managers need to get logistics providers involved early, so that these challenges can be mitigated well in

"The real wins for society are going to come not only with a transition to net-zero, but also through a move to pro-active planning that re-prioritises specialist logistics. Our appetite for innovation can overcome so many of these challenges, we just need to be involved as early as possible in the planning process."

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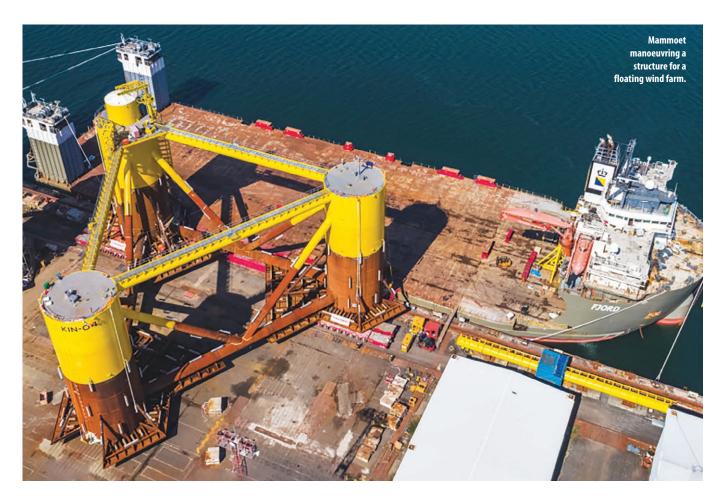
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Floating wind projects gather momentum

Stakeholders across the heavy lift supply chain are keeping an eye on floating offshore wind developments. The sector's commercialisation will provide future opportunities, but what the exact logistical requirements will be are still unclear, writes *Phil Hastings*.

his year is likely to see significant further expansion of an increasingly worldwide interest in the development of floating offshore wind power. Looking further ahead, that technology is set to play an enormous role in the world's long-term drive to reduce its reliance on fossil fuels such as gas, oil and

Those are two of the key points to emerge from recent research, analysis and reports covering anticipated trends in the global offshore wind sector.

As far as immediate prospects are concerned, Westwood Global Energy Group identified the commercialisation of floating wind concepts as one of the key offshore wind themes to watch in 2022.

"Despite being considered a nascent technology, there are numerous floating wind development proposals in both mature and emerging offshore wind jurisdictions, and this trend is expected to continue to expand in 2022," said Westwood.

One development likely to boost that expansion is identified in the Global Wind Energy Council's (GWEC) Global Wind Report 2022 - the increasing involvement of major oil and gas companies.

"Those companies have unparalleled

offshore engineering skills and financial strengths, which will take floating wind from the current demonstration stage into full commercialisation by the middle of this decade," said GWEC.

Dennis Jul Pedersen, director of the Danish port of Esbjerg, made the same point. "There is significant potential for a transfer of knowledge from the oil and gas industry, which has half a century of learning about floating structures."

Offshore wind markets

Another GWEC report, Floating Offshore Wind - a Global Opportunity, named the UK, South Korea, France and Japan as the most mature offshore floating wind markets at present but also identified a 'chasing pack' of five other countries - Ireland, Italy, Morocco, Philippines and the USA - which have "significant floating wind potential".

The growing potential in the USA is confirmed by Atlantic Offshore Terminals (AOT), which has designed its planned new Arthur Kill Terminal in New York to handle floating wind turbine generators.

"Over the next several years we expect all the US states with meaningful commitments to offshore wind will be significantly increasing their goals for that source of energy - and those goals will only



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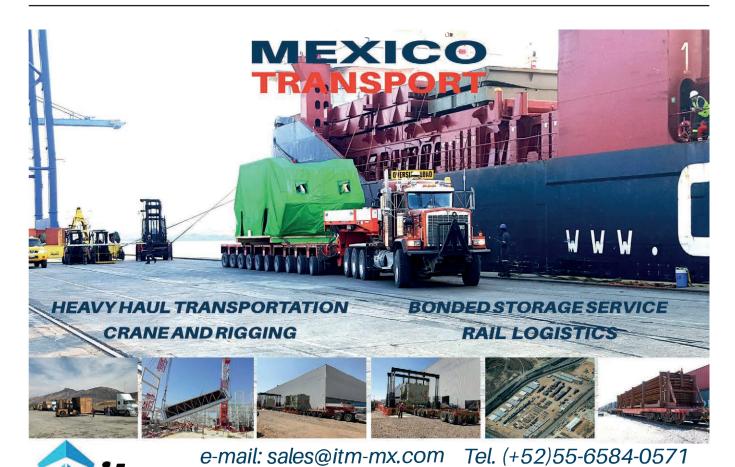






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be reached with the adoption of floating wind turbine generators," commented Charles Dougherty, AOT's chief commercial officer.

Growing interest

The anticipated development of floating offshore wind energy is also attracting increasing interest from leading international heavy lift, project forwarding and installation service providers. BigLift Shipping, for instance, has been looking into opportunities for transporting floating offshore wind turbine foundations, reported Sanne Wiegerink, the company's commercial manager.

"An interesting possibility for us is the transport of structures in sections, for example from the fabricator to an assembly yard, as well as the short transit movement of complete floating structures from quayside to quayside where no semi-submersible vessel is required," she said.

Generally, though, there is still some debate over exactly how the logistics requirements for floating offshore wind projects might differ from those associated with fixed installations.

"My guess is that the heavy lift/project forwarding market will not see much of a difference. The volumes for blades, wind turbine generators and towers will pretty much remain the same," commented Björn Wittek, managing director of Rhenus Offshore Logistics.

"What will be different will be the foundations – there will not be any monopile or transition piece shipments anymore. However, I think those will be replaced with quantities of sub-assemblies for the floaters, shipped to the port for final assembly."

The biggest changes, suggested Wittek, would involve the installation process. "I believe the majority of floating wind turbine generators will sail out to site fully assembled, which will result in a higher demand for really high crawler cranes in port. The offshore element will be handled by tugs and anchor handlers for the mooring part, with the jack-up requirement likely to drop."

Francisco Rodrigues, global segment lead – offshore wind for Mammoet, similarly suggested that with floating wind developing on the basis of limited large vessel or jack-up



I believe the majority of floating wind turbine generators will sail out to site fully assembled, which will result in a higher demand for really high crawler cranes in port.

– Björn Wittek, Rhenus Offshore Logistics

vessel utilisation, the demand for larger assets onshore, such as ring cranes, will increase.

"Those machines reduce the time that installation vessels are idle by allowing near-simultaneous load-in and load-out of heavy components – but of course there is heavy competition for these assets from oil and gas," he said.

Late last year, Mammoet completed the load-out of five floating wind platforms at the Navantia Fene shipyard in Spain for the Kincardine offshore wind farm. Because of the platforms weights, Mammoet prepared the quay by installing hundreds of steel plates to level the surface in places where it had previously been uneven. With that in place, the company mobilised 100 axle lines of SPMTs split between the three columns of the triangular structures, which were moved 100 m across the quay and loaded onto the seagoing vessel.

Range of challenges

Overall, concluded Rodrigues, with foundation weights likely to vary from 5,000-15,000 tonnes, floating wind projects will present several challenges for heavy lift and transport service providers.

That last point was echoed by Hans Henrik Groen, managing director of deugro Denmark: "The logistics requirements of this market will be different, with more extensive usage of heavy lift vessels and barge technology [to support a feeder concept linking installation ports and vessels] to perform the freight forwarding of either part-assembled, pre-assembled or fully mounted and assembled floating foundations."

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Tidal power makes early market ripples

The interest in tidal and wave energy is increasing, and could develop into a lucrative long-term opportunity.

evelopment of tidal and wave energy is still predominantly taking place in European waters and involves relatively small pilot projects. However, according to a recent report by Ocean Energy Europe (OEE), the rate, size and geographical spread of that development is now accelerating.

Europe saw a tenfold increase in installed tidal stream capacity last year compared with 2020, from 260 kW to 2.2 MW, and a tripling of wave energy capacity over the same period to 680 kW. Several projects postponed from 2020 subsequently went ahead in 2021. The next major capacity increase in tidal stream is expected around 2025, with a new generation of tidal arravs.

OEE said that within Europe, Scotland, the Netherlands and the Iberian Peninsula are becoming hotspots for development. New tidal stream capacity was also added last year by Canada and Japan, Australia, the USA and China.

OEE reported a 50 percent year-on-year increase in European public/private investment in the sector last year to EUR70 million (USD76 million) and a

number of significant new deals struck between ocean energy developers and industrial partners.

Longer term, significant new business opportunities for some ports and offshore logistics/installation service providers might arise. Those could include some of the ports in Brittany, northwest France, suggested Lucile Héritier, director of ports for that region: "Various small ports in the region could be of interest for related industrial development. There could also be an opportunity for certain ports to produce their own electricity from wave power."

Demonstration project

In fact, added Héritier, the small Brittany port of Esquibien has already been involved with a planned demonstration project for a wave energy production machine.

Some shipping companies have also already dipped their toes in the ocean energy sector, including dship Carriers whose transport of the main components for a tidal turbine project at the end of last year helped highlight the future wider potential of that sector as a heavy lift/outsize cargo market.

"A foundation of 20 m x 16 m x 11 m

with a weight of 175 tonnes, ballast blocks with a weight of 205 tonnes and further components were transported from Nigg, Scotland, to Nagasaki, Japan. The cargo encompassed several heavy lift and oversized units and weighed a total of 1,714 tonnes," reported Lars Feller, the shipping company's

Some still see ocean energy as a market of future potential rather than current business opportunity, one being Björn Wittek, managing director of Rhenus Offshore Logistics, which has to date only been involved with such projects "on a very limited scale".

"The industry is still in its infancy and very much at a research and development level, with some limited-scale industrial testing. A commercial roll-out with huge volumes of equipment to be installed, which will make an impact on shipping volumes, still seems years away."

UK-based Osprey Group had success with the load out of Orbital Marine Power's tidal turbine, the Orbital O2 2MW, during 2021. Neil Schofield, chief operations officer, believes that tidal energy's contribution to the net-zero agenda is going to accelerate significantly. "Right now is the time for logistics providers to step up and start delivering even more consultation and support to emerging players in the industry. We need to be at the table, not just the top table, but the first table - the scoping and planning stages of each project."

Schofield said ocean energy providers have their own insights but investors want to see evidence of proven expertise and applications of that experience. Osprey's work on the Orbital Marine Power's tidal turbine is an example of this.

The company had to "invent a new way" of launching the turbine, said Schofield, managing the submersion of its own vessel to a depth of 13 m – "while that plan took time on both parts, it proved that project managers can manifest the tangible savings from that planning phase".

Other potential barriers facing the sector's development are concerns about future availability of heavy lift equipment, vessels or port infrastructure.

"But for project managers or owners with an eye on what is happening at the forefront of logistics today, those concerns could be unfounded," said Schofield. "The key to success is timing. Getting logistics specialists involved as early as possible, so that resources can be secured well in advance or, innovation can drive even better plans for transportation and installation."

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Optimism prevails despite uncertainties

Brazil's economy appears to be picking up as Covid-19 fades. While the country's revival is threatened by numerous uncertainties, the general mood in the project logistics community is positive, writes *Megan Ramsay*.

report from Brazilian bank
Bradesco in May said that
underlying services prices have
risen 7.8 percent over the last year,
"presenting a rapid acceleration
after the very contained dynamics during the
height of the pandemic and returning to
levels similar to those observed before 2015.

"After a considerable period in which they were either closed or operating with restrictions [implemented in response to Covid-19], service activities have been able to broadly reopen in recent months... Now, with the return of demand and an accumulation of repressed costs during this period, it is natural that services inflation should accelerate.

Rising inflation

"Notwithstanding, the movement has been more intense and widespread than expected in an economy where monetary policy has become more restrictive."

Indeed, in May 2022 Brazil's inflation was estimated at 11.75 percent, according to Trading Economics. The central bank has

been raising interest rates in order to reduce consumption and bring inflation down – but food and fuel prices continue to apply upward pressure.

In terms of project logistics work, things are looking positive overall.

According to Dominik Keller, head of global development/director and member of the global executive board of Fracht Group, "there are several notable projects" moving ahead "in almost all sectors". He pointed to the Parnaíba VI thermoelectric power project in the energy sphere; port terminal



developments; the revamp of steel mills; and opportunities in mining and oil and gas sectors. He also noted pulp and paper industry work, such as Suzano's Cerrado project – a USD2.8 billion eucalyptus pulp plant in the Mato Grosso do Sul state of Brazil. Production is set to begin in late 2024, with an annual production capacity of 2.6 million tonnes.

Suzano noted that the plant, which will be able to sell approximately 180 MW of surplus energy back to Brazil's power grid, will also contribute to the supply of renewable energy and is "set to become Brazil's first fossil fuel-free pulp plant".

Port infrastructure

Meanwhile, developments relating to port and logistics infrastructure in Brazil have increased demand for items such as shore cranes and building equipment, which has strengthened the import market.

As elsewhere, the continuing container shortage is making breakbulk vessels a more reliable alternative for shippers of general cargoes to and from Brazil. Marcelo Braga, managing director of Belo Horizonte-based transport provider Over Projects, said: "This is creating competition for space on heavy lift/multipurpose vessels, already in demand for other projects, while fleet sizes remain



This [the container shortage] is creating competition for space on heavy lift/ multipurpose vessels, already in demand for other projects, while fleet sizes remain unchanged...

– Marcelo Braga, Over Projects

unchanged or may even shrink in the coming years due to ageing vessels and fewer newbuildings."

It is no surprise in this context that despite some projects, such as wind turbine production in northern Brazil, having come to an end of late, multipurpose carriers are seeing an uptick in demand from shippers seeking alternative vessels due to the lack of tonnage – container vessels in particular.

While the economy is growing again, political issues – including Brazil's presidential election set to take place in October this year – are making the near future "a little blurry", pointed out Thiago Soares, sales and project manager at Belo Horizonte-based forwarder Axis Shipping.

Debt burden

Ahead of the vote, the present government is taking popular measures such as environmental deregulation in order to encourage growth in agriculture and mining. But some of the treasury's aggressive monetary policies, aimed at attracting investors, are increasing Brazil's debt. Bradesco anticipates that Brazil's gross public debt will remain at around 80 percent of GDP in 2022, climbing to 83.7 percent in 2023.

But the country's weak currency and





market size make Brazil attractive to foreign investors, despite the political uncertainties, Braga said.

Brazil has around USD40 billion in committed foreign investment for 2022, mainly related to the energy, transportation and telecommunications areas, through privatisations and concessions.

Government spending

"The current government is projecting about USD180 billion in investments for the next 10 years and this number is expected to increase," said Intermarine ceo Svend Andersen, citing the Investment Monitor of the Ministry of Economy.

Keller is also optimistic: "Recently it was confirmed that the Brazilian economy is 8th in a global rank of GDP growth in 2022. The unemployment rate is also the lowest since 2016, hence there is confidence that the economy will keep growing. Market wise, there is a high level of investment announced for the industrial sector and a clear policy of public concessions, which is also helping to bring more investment."

Nevertheless, he too referenced

uncertainties, "caused mainly by the high inflation rates that are currently hitting the market globally and also the presidential elections to take place end of this year".

The conflict in Ukraine is also taking its toll in various ways. For projects, Keller said: "The main impact is related to the sea and inland freight costs, already very inflated due to the pandemic, suffering an additional boost due to oil prices rising."

Bradesco also noted Brazil's exposure to the upward shock on commodity prices and that impact on food and fuel prices, but added that "the region has benefited from terms of trade gains and exchange rate appreciation".

On the one hand, lower global growth, rising inflation, and potential fertiliser import problems suggest lower growth and higher prices in the medium term.

– Bradesco

For Brazil itself, the bank said: "On the one hand, lower global growth, rising inflation, and potential fertiliser import problems suggest lower growth and higher prices in the medium term. On the other hand, the gain in terms of trade in a context of low solvency risks favours currency appreciation, improved public finances and lower risk aversion, which act toward higher growth and mitigation of inflationary risks. In this context, the net effect should be higher growth, inflation and interest rates."

The issue of fertiliser imports is no small matter, given the preponderance of agricultural produce among Brazil's exports. The country obtains up to 70 percent of its fertilisers from Russia and it may not be easy to find alternative sources, noted Thomas Weitmann (director) and Aline Marinho (commercial) of freight forwarder Brasil Projects, which has offices in Sao Paulo and

As well as suffering negative consequences of its dependence on Russian (and Ukrainian) fertilisers, Brazil has been unable to benefit from Europe's need for alternatives to Russian oil and gas owing to



its distance from that region.

Brazil is almost self-sufficient when it comes to oil. It is the largest oil producer in South America and could stand to profit from increased demand from nearby countries such as the USA, but Braga said that while Petrobras is benefiting from higher spot prices, it is sticking to its mid-to-long-term strategy rather than cashing in.

In March, the US government asked Petrobras to increase production after the Ukrainian invasion – but according to Andersen, Brazilian lawmakers declined, stating that "Petrobras' short-term business strategy is not a diplomatic matter".

At the time of writing, Petrobras stocks were at a five-year high. "Since the pre-salt discovery, the government has not stopped exploring oil and gas in Brazil," Andersen pointed out. "Huge investments have been and are being made in the area, making the country the seventh-biggest oil producer and the 30th-largest natural gas producer in the world."

Keller said that oil and gas has been a remarkable sector for the Brazilian market. The focus has been on production over the last few years, he added, driven mainly by the pre-salt field exploration by several new FPSOs.

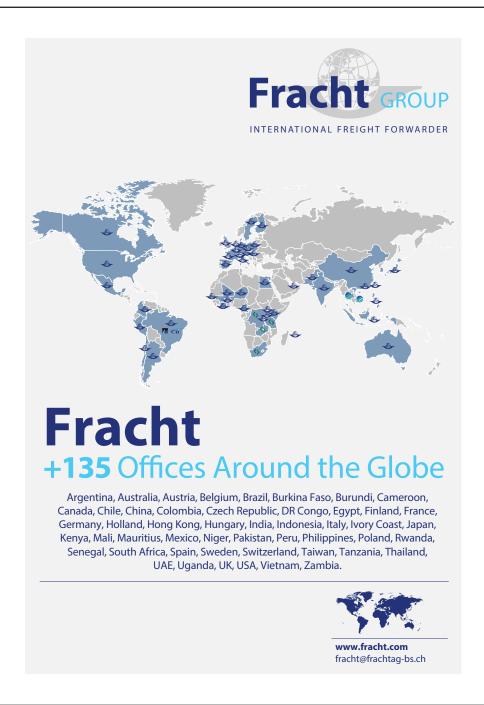
One of the latest big investments confirmed by Petrobras is the construction of platform modules that will be assembled at the Estaleiro Brasil shipyard located in São José do Norte (Rio Grande do Sul State) and installed on the FPSO P-79. The construction of the platform will generate financial, engineering and technological work in Brazil, Europe and Asia. The shipyard has

been contracted to supply seven modules in total, creating thousands of jobs in the region. The estimated date of completion is 2025, and the total contract value is USD2.3 billion.

FPSO P-79 will be installed in the Santos Basin – at Buzios Field – and is being constructed through a joint venture between Saipem and DSME. It will have a processing capacity of 180,000 barrels of oil and 7.2 million cu m of natural gas per day.

Petrobras investment

Overall, Petrobras intends to increase production to 500,000 barrels per day by 2026 at the site. The company's strategy executive manager, Eduardo Bordieri, said that the recent pre-salt oil



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discoveries in the Central Alto de Cabo Frio and Aram areas open up new extraction opportunities, and Petrobras plans to invest USD5.5 billion there over the next five years.

During the same period, it will commence operating 15 FPSOs: 12 in the pre-salt and three in the post-salt. The company also intends to start a new deepwater exploration campaign in the Barreirinhas Basin – if it can obtain the necessary licence to drill in this environmentally sensitive area.

Shortly after Petrobras raised fuel prices in May, Brazil's President Jair Bolsonaro appointed a new energy minister. Former economy ministry adviser Adolfo Sachsida replaced Bento Albuquerque in the role. The change reportedly comes hot on the heels of Bolsonaro's request that the state-run oil company – which posted first-quarter profits of USD9 billion earlier this year – refrain from increasing fuel prices following Russia's invasion of Ukraine. Petrobras refused, instead adhering to its policy of pegging prices to international rates.

Renewables growth

Solar, hydro and wind power are already quite well developed in Brazil, where renewable energy accounts for almost 50 percent of the energy mix.

Solar power plants are spreading fast all over the country as a result of government tax benefits. Domestic solar power association Absolar confirmed in March that total production across Brazil had exceeded 14 GW. Besides new solar parks, existing ones such as Sao Gonçalo (Brazil's largest) are being expanded.

Large-scale hydropower projects have suffered from droughts and environmental licensing issues (one example being the Tapajos project in Pará state, which was halted several years ago).

There are still massive investments in wind energy, especially in northeastern Brazil. These are causing disruption to domestic transportation. Braga explained: "The nacelles, which used to be transported on lowbeds, are getting bigger and require multi-axle trailers, drawing on significant capacity from heavy haulers' fleets."

Keller also noted this issue: "Several wind and solar projects running in parallel changed the market prices dynamics, impacting industrial sectors that demand the same resources, like transport equipment, cranes and specialised manpower etc."

Andersen added that plenty of wind energy projects were predicted for 2022, but hinge on the wind power auction expected to take place in July.



Murilo Caldana, project director at Sao Paulo-based forwarder FOX Brasil, highlighted that Brazil is now beginning to develop its substantial offshore wind potential, with a framework for regulation and permitting having entered into force in June. According to estimates from Empresa de Pesquisa Energética (Brazil's Energy Research Office), there is a technical potential of around 700 GW in sites of a depth up to 50 m.

At the time of writing, the government's latest update indicated that 55 offshore wind projects amounting to over 133 GW were in the process of applying for permission to undertake environmental studies.

Shell is among the companies intending to install turbines; the oil giant is reported to be planning six wind farms offshore Brazil, with a combined capacity of 17 GW.

There are also numerous thermoelectric plants and transmission lines coming up, said Weitmann and Marinho. Here again, several projects – like the huge UTE Rio Grande thermoelectric plant planned for construction in the port region of Rio

Brazil is now beginning to develop its substantial offshore wind potential, with a framework for regulation and permitting having entered into force in June.

- Murilo Caldana, FOX Brasil

Grande – have been hampered by environmental licensing issues.

There are questions over the future of renewable energy developments in Brazil, given the upcoming elections. In October, current President Bolsonaro will run against former incumbent Luiz Inácio Lula da Silva (who has been cleared of corruption allegations), among other candidates.

At the UN General Assembly in September 2021, Bolsonaro pledged that Brazil would achieve climate neutrality by 2050. However, his presidency has seen a rise in deforestation, illegal mining and unauthorised logging as well as increased encroachment on indigenous territories.

If returned to office, Lula could offer a 'green new deal' including initiatives like reforestation, agroforestry and the transition to a low carbon economy. Lula's environmental record is mixed, too, though: during his previous term, while reducing deforestation, he also gave the green light to the construction of controversial hydroelectric dams in the Amazon.

Mining strength

Another strength for Brazil is its mining sector, Caldana noted. The country has reserves of various materials including iron ore, copper, nickel and gold, with the industry enjoying increased political support under the current president.

Total production reached 1.150 billion tonnes last year, an increase of 7 percent over the 1.073 billion tonnes extracted in 2020, Andersen said. Alumina shipments from

northern Brazil have been moving steadily, as evidenced by Alunorte, a division of Norse Hydro, which has had a constant outflow of cargo translating into back-toback shipments.

"Nickel has also maintained export volumes given demand for production of lithium batteries. Brazil holds the thirdlargest nickel reserves on the planet and with demand strengthening for car batteries, wind farms and thermo-solar power plants, Brazil was already well situated before the Ukraine war. Now many specialists in the sector believe that the uncertainties concerning Russian supply could accelerate some projects related to nickel exploration in Brazil," he said.

Indeed, nickel prices have reached an alltime high since the outbreak of war in Ukraine. In addition, said Braga: "The prices of our most abundant commodity - iron ore - although lower than 2021, are still well above the average for the past five years."

In total, the Brazilian mining sector's income rose from USD44 billion in 2020 to USD71 billion in 2021.

While commodity prices are rising, a problem for the export of metals from Brazil is the lockdown policies in China (Brazil's main buyer), which are dampening demand and thus impinging on that upward trend, Soares observed.

Political concerns

Given the political situation and lack of "real alternatives for an adequate government", Weitmann and Marinho are concerned about the coming years.

"The economy does not look very good," they said. "Inflation is increasing, inland debts are rising and there are no real investments in sight. We are facing high interest rates and political chaos.

"We believe that the world is turning back from globalisation, which means that every country has to take care of itself as far as it can or find new alternatives. Trade lanes will change a lot and countries will aim to be more independent. All will get more complicated and there will be a general economic downturn."



On the other hand, Intermarine exudes optimism. Andersen said: "This year we have moved a lot of material that had historically moved on containerships or in bulk vessels. Many normally containerised cargoes spilled over to the project cargo sector. This change, coupled with the



Many specialists in the sector believe that the uncertainties concerning Russian supply could accelerate some projects related to nickel exploration in Brazil.

Svend Andersen, Intermarine

existing project and breakbulk cargoes which remained steady, actually increased the overall market for us.

"In terms of scope and range, historically Intermarine moved cargoes between the US Gulf and Brazil. This year, we have also moved cargo across the Atlantic, connecting Brazil with Europe and Africa, and also up the East coast of the USA to Canada."

Fundamentally, Caldana added, Brazil still has a long way to go in terms of its development. "There are always projects and things to do here," he said.

Besides the continuing rise in demand for energy and upgrades to infrastructure, Soares highlighted several reasons for the project logistics community to be cheerful.

"The agricultural sector is growing and seeing investment in equipment and technology; mining companies are finding more sites to explore and will expand; the largest energy company is on its way to being privatised and more than USD30 billion in growth is expected for the next 10 years [if all goes well]; when the US dollar is strong our goods get cheaper worldwide and we export more; and when the US dollar is weak our industries tend to sell more internally and make more investments in capital goods.

"So, there is no reason to be pessimistic," he concluded.

7 HLPFI

Port problems

Investment in ports, roads and other infrastructure is far from ideal in Brazil. While it appears that the worst of the disruption directly related to the pandemic is now a thing of the past, there is still congestion and many storage facilities are full. Longer waiting times for berths result in

detention of vessels; in some cases, overland transport is a better option. FOX Brasil has moved some large pieces of mining equipment from Brazil to Peru via road, for instance - a distance of over 3,000 km.

Efforts are under way to ease congestion, though. Both private and public terminals are investing in port infrastructure to enable a larger number of

vessels to be berthed simultaneously. There is also investment in new warehouses to increase storage capacity in bonded areas, and in infrastructure outside port areas to improve cargo flows.

Many of the more important ports and terminals in Brazil are being or have been privatised or leased by private companies and it is hoped that this will lead to investment where it is needed.



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Risks may lie in existing shipping contracts

Gregory DL Morris provides his bi-monthly round-up of developments pertaining to risk management.

he conflict in Ukraine saw businesses scramble to understand and navigate the rafts of new international sanctions which were rapidly introduced by individual states and international bodies," said Hyun Woo Kang, a transportation lawyer with global firm Reed Smith.

"Alongside the challenge of sanctions, the world has felt the further impacts of the war," he added. "Disruptions to grain exports led the UN to announce at a recent Security Council meeting (SC/14894) that the 'global food crisis already impacted by

the Covid-19 pandemic and climate change, is being driven to famine levels worldwide by the war in Ukraine'. Global car manufacturing has also suffered setbacks because a key component, electrical wiring, is made in Ukraine."

The global landscape has changed in many ways, Kang noted, citing as an example that South Korean shipbuilders recently agreed to an 8 percent increase in prices for steel plate. That has delayed their anticipated return to profitability despite increased orders and higher prices for new ships.

"Against this backdrop, risks may lie in existing contracts, particularly those signed

before February, which demand future performance," Kang warned. "Does your contract require future performance by a party? Are there elements of your contract in which a party stands to suffer as a result of the new economic landscape, for example pricing of raw materials? Does your contract contain any provisions which allow for adjustments in price to take account of fluctuating global markets or other changing circumstances?"

Charter rates have been "sky-high, but are expected to soften", Kang said. "Bunker prices have been pushed up. Shipping and other commercial contracts concluded some

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time ago and filed away for safe-keeping, but requiring ongoing performance, would benefit from a fresh look to understand where any enhanced, or completely new, risks may lie."

Changing risk profiles

Certainly, there has been a range of disruptive economic, societal and geopolitical influences that are altering global supply chain risk profiles. That is the view of TT Club – a provider of insurance and related risk management services to the international transport and logistics industry.

The organisation said that the erosion of traditional buffer mechanisms to ensure the

continual supply of goods means that a new assessment of potential risks is required.

Higher prices of energy and food, shortages and delays in delivering manufactured goods, dynamic changes in markets and sourcing regions are all challenging international trade and the supply chains that service it.

Further still, the ongoing effects of the pandemic – with its associated lockdowns – and the war in Ukraine are proving catalysts to ignite underlying economic and environmental trends that will continue to fuel long-term changes in global supply and demand.

TT Club said that a thorough understanding of the practical risks is vital in mitigating the dangers to safety and security that are a consequence of these factors.

"We are suffering from a disappearing ability to absorb short-term shocks to the supply chain because of fundamental societal and geopolitical changes to the global equilibrium," commented Dorota Jilli, a senior underwriter at TT Club, speaking at the annual conference of the European Sea Ports Organisation (ESPO) in Valencia. "Yes, Covid-19 and the war are disruptive and are driving up prices but the longer-term trends of production cost increases in Asia and stricter demands of environmental, social and governance (ESG) mean that cheaper goods and transport services are features of a past global economy."

In her presentation, Jilli explained some of the prevalent risks that operators face in

Shipping contracts concluded some time ago, but requiring ongoing performance, would benefit from a fresh look to understand where any enhanced, or completely new, risks may lie.

– Hyun Woo Kang, Reed Smith

this changed environment. Abandoned cargo is more prevalent with delays through port congestion and lockdown closures meaning the incidence of consignee bankruptcy or goods being unwanted due to loss of markets is higher. This is particularly concerning when dangerous good are left in storage for excessive periods as the tragic incidents in Beirut last year and in Chittagong more recently attest.

Cargo theft

"Trends in cargo theft are also in flux with more essential goods such as food and beverages being targeted and luxury goods and electronics not so much as in the past," commented Jilli. "Cargo at rest, either at ports or inland staging areas, some of which have been hurriedly pressed into service as overflow facilities, is increasingly subject to theft. With shippers looking for 'workarounds' to reduce costs or avoid congestion, thieves have been quick to adapt their methodologies and the use of online means of deception and insider recruitment are now both more common."

TT Club sees the correct use of data to analyse these trends as being of crucial importance and is utilising its own claims experience along with theft reporting agency information to maintain and expand the all-important industry awareness of the evolving dangers. This, in addition to the developing technologies to support the supply chain and offer predictable and resilient sourcing without the geopolitical risks of foreign suppliers and other disruptions, is seen as a primary mitigator in the management of the developing, modern, longer-term risk profile.

Jilli concluded: "It is important to ensure that adequate risk assessments are undertaken across the full breadth of your operation in order to understand thoroughly the various risks and, where appropriate develop mitigating actions and controls, together with effective continuity plans to protect your business."

7 HLPFI

Intact Insurance buys Tokio Marine Highland unit

Intact Insurance Group USA has made a definitive agreement to acquire Highland Insurance, the US construction division of Tokio Marine Highland, from Tokio Marine Kiln.

Highland is a managing general agent specialising in builders' risk. The transaction is expected to be completed before the end of the year, subject to regulatory approval and other closing conditions.

Based in Naperville, Illinois, outside Chicago,

Highland provides primary and excess builders risk insurance in the USA. Highland will operate as a standalone managing general agent, working through its current select markets and though Intact.

Intact writes coverage in both ocean and inland marine, commercial and contract surety, environmental, excess property, financial services, management liability and technology, among others.

Intact Ocean Marine coverages include commercial

hull and marine liabilities at both the primary and excess levels; ocean and air cargo with coverage extensions such as inland transit, warehousing and processing; yachts; and several marine package policies with comprehensive property, auto and liability coverage.

Intact Specialty Property provides a broad range of commercial property and inland marine coverages and focuses entirely on excess placements.

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Indian renewables investments surge

Despite accelerating investment in renewables, India is continuing to fall far short of the spending it needs to meet its targets for renewable energy capacity, writes David Kershaw.

nvestment in renewable energy in India reached a record USD14.5 billion in the last financial year (FY2021-22), an increase of 125 percent compared with FY2020-21 and 72 percent over pre-pandemic FY2019-20, finds a new report by the Institute for Energy **Economics and Financial** Analysis (IEEFA).

"The surge in renewables investment comes on the back of the revival of electricity demand from the Covid-19 lull and commitments by corporations and financial institutions to net-zero emissions and to exit fossil fuels," said the report's author Vibhuti Garg, energy economist and lead India, IEEFA.

"After falling by 24 percent from USD8.4 billion in FY2019-20 to USD6.4 billion in FY2020-21 when the pandemic curbed electricity demand, investment in renewable energy has made a strong comeback."

The report highlighted the key investment deals made during FY2021-22. It finds the majority of the money flowed through acquisitions, which accounted for 42 percent of the total investment in FY2021-22. Most of the other big deals were packaged as bonds, debt equity investment and mezzanine funding.

The largest deal was SB Energy's exit from the Indian renewables sector with a sale



of assets worth USD3.5 billion to Adani Green Energy Limited (AGEL).

Other key deals included Reliance New Energy Solar's acquisition of REC Solar holding assets and a host of companies like Vector Green, AGEL, ReNew Power, Indian **Railway Finance Corporation** and Azure Power raising money in the bonds market.

Capacity additions

India added 15.5 GW of renewable energy capacity in FY2021-22, which brings the total installed renewable capacity (excluding large hydro) to 110 GW as of March 2022 – a long way off the target of 175 GW of renewable energy capacity by the end of this year.

Even with the surge in investment, renewable capacity will have to expand at a much faster rate to reach the target of 450 GW by 2030, said Garq.

"The Indian renewable energy sector needs about USD30-40 billion annually to meet the 450 GW target," she said. "This would require a more than doubling of the current level of investment."

Rapid growth in renewable energy capacity will be needed to meet India's increasing electricity demand. To move to a sustainable pathway and reduce reliance on expensive

fossil fuel imports, Garg said the government needs to act as an enabler by rolling out 'big bang' policies and reforms to accelerate the deployment of renewable energy.

Creating an ecosystem

"This means not only increasing investment in wind and solar power capacity, but also in creating an entire ecosystem around renewable energy," she said.

"Investment is needed in flexible generation sources such as battery storage and pumped hydro; expansion of transmission and distribution networks; modernisation and digitalisation of the grid; domestic manufacturing of modules, cells, wafers and electrolysers; promoting electric vehicles; and promoting more decentralised renewable energy such as rooftop solar."

7 HLPFI

The Indian renewable energy sector needs about USD30-40 billion annually to meet the 450 GW target. This would require a more than doubling of the current level of investment.

– Vibhuti Garq, Institute for Energy Economics and Financial Analysis

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OIL AND GAS

Chariot signs Nour pact

The government of Mauritania and Chariot said a pre-feasibility study (PFS) for the Nour green hydrogen project has been completed. A framework agreement has been signed, mapping out the next phases of development. With up to 10 GW of electrolysis installed, Nour could become one of the largest green hydrogen projects globally.

McDermott LNG design

Abu Dhabi National Oil Company (ADNOC) has awarded a design contract to US engineering firm McDermott for its planned Fujairah LNG terminal. The export terminal will initially comprise two trains, each with a 4.8 million tonnes per annum (MTPA) of LNG capacity.

UK windfall tax slammed

The new taxes imposed on the UK's offshore oil and gas operators are a backward step by a government that pledged to build a greener and more energy-independent nation, Offshore Energies UK (OEUK) said. The Energy Profits Levy (windfall tax), will discourage UK offshore energy investments, meaning declines in oil and gas exploration and production, and so force an increase in imports. This is the exact opposite of what was promised in the British Energy Security Strategy published last month, warned Deirdre Michie, OEUK ceo. She said investor confidence depended on taxes being predictable, so the introduction of a new one, without any formal consultation, would also undermine investment in offshore wind and other low-carbon energies – whose expansion was another key element of last month's

Texas LNG project awards

Technip Energies and Samsung Engineering have been awarded a pre-FID engineering contract for the Texas LNG project in Brownsville, Texas, USA. The proposed 4 million tonnes per annum LNG export facility site is located on the port of Brownsville's deepwater ship channel close to the Gulf of Mexico.

China and India grab cheap Russian crude

he expectation that Russian crude would cease to be traded on international markets has not transpired, and instead the steep discount on Russian crude has seen vessels redirected to alternative markets.

Almost four months after Russia's invasion of Ukraine, Russian crude oil, Urals, has seen a switch in flow from its traditional market of Europe to Asia.

Since the start of the war, based on the average of March to May 2022, Indian imports of Urals crude have picked up by 658 percent compared with 2021 levels, while for China the increase is 205 percent and for Asia as a whole 347 percent, Rystad Energy research showed.

Indian refiners have swapped Middle Eastern

crudes in favour of Urals for their refinery processing. So long as the Urals discount is maintained, it will have a huge margin advantage over alternative crude grades, meaning Indian refiners are likely to maximise Urals imports.

Since European refiners started shunning Russian oil in late February, Russian crude oil imports to Europe saw a drop of 554,000 barrels per day (bpd) from 2.04 million bpd to 1.49 million bpd between March and May.

Russian-origin oil imports by Asian refiners (including China) saw a corresponding 503,000 bpd increase from the January-February 2022 average of 1.14 million bpd to a March-May average of 1.517 million bpd.

OIL & GAS

Saipem wins Middle East contracts

Saipem has been awarded several contracts, both onshore and offshore, in the Middle East worth approximately USD1.25 billion.

The first group of contracts concerns the extension of onshore drilling contracts in the Middle East for an overall amount of approximately USD600 million.

The awards relate to the 10year extension of existing contracts regarding four landrigs located in the Middle East.

Saipem also landed four contracts encompassing the



engineering, procurement, construction and installation of several offshore jackets, decks, subsea pipelines, subsea composite cables, umbilicals, fibre optic cables and brownfield modifications.

The combined value of these four contracts is approximately USD650 million. upstream, midstream and downstream business needs. The agreement can be used by Chevron's business units.

Indian green hydrogen plan

TotalEnergies has entered into an agreement with Adani Enterprises Limited (AEL) to acquire a 25 percent interest in Adani New Industries Limited (ANIL). ANIL will target a production of 1 million tonnes of green hydrogen per year by 2030, underpinned by around 30 GW of new renewable power generation capacity.

PetroChina divestments

PetroChina is to divest its interests in natural gas projects in Australia and oil sands in Canada to stem losses and reallocate funds to lucrative sites in the Middle East, Africa and central Asia. Reuters said the state oil and gas major hopes to sell some of these assets, which have incurred

billions of dollars of losses and are in areas where the company cannot easily compete.

Worley signs Chevron pact

Worley has entered into a global master services agreement with **Chevron Corporation** covering

Saipem lands **Brazil LNTP**

Saipem has been awarded a limited notice to proceed (LNTP) by BW Offshore for the earlystage engineering services for the supply of an FPSO. It will be provided to **Shell** and its partners for the development of the Gato do Mato oil and gas field.

Statkraft ups targets on renewable energy

Statkraft has updated its growth strategy within renewable energy with new, more ambitious targets towards 2030. The strategy increases the annual growth rate for onshore wind, solar and battery storage from 2.5-3 GW in 2025 to 4 GW in 2030.

Concurrently, growth ambitions for hydropower, offshore wind and green hydrogen are increased. In total, Statkraft aspires to have developed 30 GW of new renewable capacity by 2030. That could increase Statkraft's annual power generation by up to 50 percent from today, to around 100 TWh per year by the end of the decade.

The goal is to start at least five major Norwegian hydropower projects by 2030. Within green hydrogen, Statkraft aims to be a leading developer in Norway and Sweden, and to broaden its geographical scope outside the Nordics.



The target is to develop 2 GW of green hydrogen by 2030.

POWER GENERATION

Ocean Winds targets Brazil

Ocean Winds, the 50-50 jointventure between Engie and EDP Renewables, has launched **OW Brazil**, which will focus on offshore wind projects in the country. As much as 700 GW of offshore wind could be installed off Brazil, according to a study by the **Energy Research** Company (EPE). OW aims to develop 15 GW of projects in Brazil and is currently seeking environmental authorisation for the following projects: Vento Tupi (1 GW), Maral (2 GW), Ventos do Atlântico (5 GW), Tramandaí offshore (700 MW), and Ventos do Sul (6.5 GW).

RWE to explore floating wind

RWE has entered into a new partnership with **Tata Steel** to explore the production of steel components that could be used in high-tech floating wind



foundations and structures for projects in the Celtic Sea.

Med floating wind bidders

RWE Renewables France and **Bourbon Subsea Services** have signed a partnership agreement to jointly bid for the Mediterranean floating offshore wind auction.

Siemens wins turbine order

Siemens Gamesa has landed a 913 MW (83 turbine) firm order from **Ørsted** for the Borkum

Riffgrund 3 project. A total 913 MW of capacity will be installed 50 km off the coast of Lower Saxony in the German part of the North Sea. Installation is expected to begin in 2024, with commissioning due to be completed in 2025.

Germany backs onshore wind

Germany has approved a draft law that obliges federal states to allocate 1.8-2.2 percent of their land area for wind energy projects by the end of 2032 (0.5 percent for city-states).

'Green' nuclear label rejected

The German government will vote against the European Commission's plan to classify some nuclear projects as green investments.

POWER NEWS

CNNC adds Sanmen unit

China National Nuclear
Corporation (CNNC) said construction
has started on the third unit of the
Sanmen nuclear power plant, marking
the start of the project's second phase.
Located in the Zhejiang province, the
new power unit will have a capacity of
1 GW.

Petrobras 4GW wind farm

Petrobras is evaluating the environmental feasibility of a 4 GW offshore wind project in Aracatu, in the Campos Basin off Brazil, in partnership with **Equinor**.

EU faster renewables plan

The European Union executive wants to speed up the bloc's green transition by allowing some renewable energy projects to receive permits within a year, according to Reuters.

Croatian auctions

Croatia is planning a round of auctions for 2 GW of renewable energy projects, including 1,050 MW of wind, 856 MW of solar and 33 MW of biomass.

Ajban PV bidders sought Emirates Water and Electricity

Company (EWEC) has invited developers to submit an expression of interest (EOI) in a new solar photovoltaic (PV) independent power project (IPP) with a capacity of 1,500 MW to be located in the Ajban area in Abu Dhabi, UAE. The successful developer or consortium will own up to 40 percent of the entity, with the remaining equity held indirectly by the Abu Dhabi government.

Aurora permit filed

0X2 has applied for a construction permit to build for the 5.5 GW Aurora offshore wind project in the Swedish Exclusive Economic Zone between the islands of Gotland and Öland.

Carolina lease winners
TotalEnergies and Duke Energy

provisionally won the Carolina Long
Bay offshore wind lease sale in the
USA. The Bureau of Ocean Energy
Management (BOEM) offered two
lease sites which could accommodate
at least 1.3 GW of installed capacity.

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MINING NEWS

Epiroc wins large mining equipment order

Sweden's Epiroc has won a large order from Boliden for mining equipment, including battery-electric and automation solutions, for use at some of the company's underground mines in Sweden, Boliden, one of Europe's largest mining companies, has ordered battery-electric versions of the Boomer face drilling rig, Boltec rock bolting rig, and Epiroc's largest automated Scooptram loader ST18. The machines will be used at the Rävliden Kristineberg and Renström mine sites in northern Sweden. Boliden is mining zinc, copper, lead, gold, silver and tellurium at the mines.

Mt Arthur mine to close

BHP has abandoned plans to keep mining coal at Mt Arthur in New South Wales until 2045. Having failed to sell the project, it will close the mine in 2030.

OIL & GAS NEWS



Texan CCS plan

bp and **Linde** plan to advance a major carbon capture and storage (CCS) project in Texas that will enable low-carbon hydrogen production at Linde's existing facilities. The development will also support the storage of carbon dioxide captured from other industrial facilities – paving the way for large-scale decarbonisation of the Texas Gulf Coast industrial corridor. As part of the project, bp will appraise, develop and permit the geological storage sites for permanent sequestration of the CO2. Linde will use its proprietary technology and operational expertise to capture and compress the CO₂ from its hydrogen production facilities for the project.



Egyptian high-speed rail contract agreed

iemens Mobility and its consortium partners Orascom Construction and The **Arab Contractors** have signed a contract with the Egyptian National Authority for Tunnels (NAT) to create the sixth largest high-

speed rail system in the world. The Siemens Mobility share of the combined contract is EUR8.1 billion (USD8.7 billion) and includes the initial contract of EUR2.7 billion (USD2.9 billion) for the first line signed in September 1, 2021.

CIVIL ENGINEERING

Kutch Copper financial close

Kutch Copper, a subsidiary of Adani Enterprises Ltd (AEL), has reached financial close on the first phase of a greenfield copper refinery project at Mundra, Gujarat. The two-phase project aims to produce 1 million tonnes of refined copper per annum.

HEB lands Penlink work

Waka Kotahi NZ Transport **Agency** has appointed **HEB Construction** – a Vinci Construction subsidiary based in New Zealand - as part of a consortium formed for the design and construction of the

Penlink project in north Auckland. The NZD510 million (USD314.5 million) project will include the construction of a 7 km two-lane highway with a separate shared path for pedestrians and cyclists, as well as six bridges, including New Zealand's first extradosed bridge.

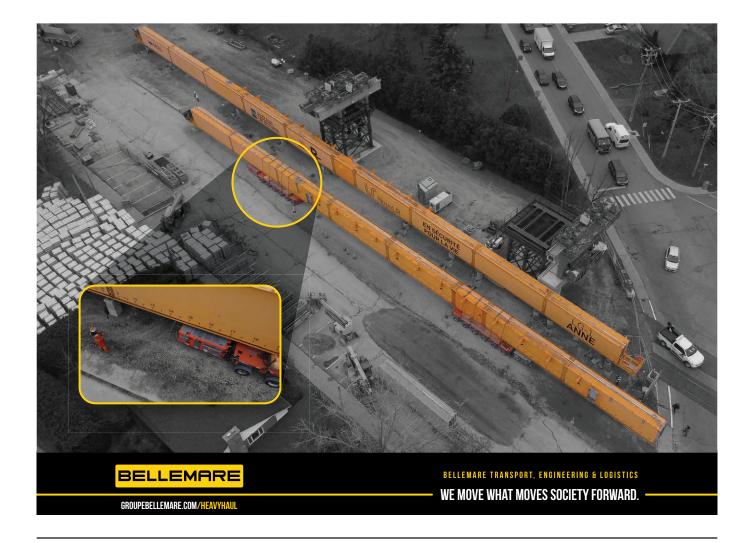
Burrup urea plant contract

Clough and Saipem, in an equally shared joint venture, have reached a new agreement with Perdaman Industries for the development of a USD2.7 billion urea plant on the Burrup Peninsula, northwest of Karratha, on the coastline of Western Australia.

Stonehenge bidder named

The More JV, comprising Italy's Webuild, Spain's FCC Construcción, and Austria's BeMo Tunnelling, was named preferred bidder to build a road tunnel bypass near Stonehenge in southern England.

The EUR1.5 billion (USD1.53 billion) contract is for the tunnel and main construction work for the A303 Amesbury to Berwick Down scheme, past the prehistoric monument. The main works contract covers the construction of the tunnel's civil, structural, mechanical, electrical and technology components, including the tunnel boring machine, along with the approach roadworks and structures and environmental components.





Security concerns drive green agenda

A focus on energy security by the German government is accelerating the country's green transition, with ambitious aims for offshore and onshore wind development. *Sophie Barnes* reports.

roject forwarder deugro has four offices in Germany. Mirko Menge, president Western and Southern Europe, India and Africa, said that from these offices it targets crosstrade for mid-size and large European-based companies, coordinating shipments from all over the world.

He said: "The outlook overall is positive, but it depends on how you look at it. Out of those offices, one had been focused on Russian business so naturally we will have to wait and see what the long-term impacts on the market will be and where the business will come up from again."

Power industries

Sector-wise, Menge added, the opportunities are coming from different industries, including renewable energy, "which has been a focus, especially since the creation of our sustainable energy division. There is a greater focus on low carbon projects to reach the 2050 climate goals."

The division was launched last year, providing a dedicated global team to lead the company's long-term investment and



Within renewables, offshore wind is perhaps the most prominent... the European Commission is looking at the transmission of electricity, especially cross-border.

- Mirko Menge, deugro

commitment in delivering logistics solutions to support the global energy transition. The team will support deugro's involvement in sustainable energy projects, including but not limited to biomass, carbon capture, energy-from-waste, geothermal, hydrogen, on and offshore wind, solar, and wave and tidal developments.

"Within renewables, offshore wind is perhaps the most prominent," said Menge. "Looking at Europe, the European Commission (EC) is looking at the transmission of electricity, especially cross-border."

Infrastructure work

Aside from those sectors, Menge also pointed to infrastructure work and projects in the oil and gas industry. A recent project for deugro saw the company coordinate the transport of three reactors weighing up to 663 tonnes to Kelheim for Bayernoil Raffineriegesellschaft.

The reactors were destined for an oil refinery where they will be used to produce sulphur-free diesel fuel. During the first phase of this project, deugro shipped the



first reactor from Koper, Slovenia, to Kelheim. The unit measured 25.7 m \times 5.2 m \times 4.3 m and weighed 343 tonnes.

deugro Netherlands arranged for the loading of the reactor, the journey from the port of Koper to the port of Rotterdam, and the onward voyage on a barge from Rotterdam to the port of Kelheim.

The second phase of the project saw deugro transport the other two reactors from Italy. One of the units was a 663-tonne hydrocracking reactor, which measured 32.8 m x 6.6 m x 6.6 m, and the other a 597.6-tonne hydrotreating reactor with dimensions of 29.7 m x 6.4 m 6.3 m.

The hydrocracking reactor was loaded in

Ortona while the hydrotreating reactor was loaded in Porto Marghera. The complete shipment took a sea voyage route from Porto Maghera to Rotterdam.

Upon arrival in Rotterdam, both reactors were directly discharged onto a coupling barge for the onward barge shipment to Kelheim. From there, heavy transport specialist Schmidbauer was on hand with its Tadano CC 8800-1 crawler crane to handle the components and move them to Neustadt an der Donau using SPMTs.

Much like deugro, sustainability is also a focus for Schmidbauer, which is celebrating its 90th anniversary this year. Werner Schmidbauer, ceo, said: "Commitment in the context of climate protection and the energy transition is high on our agenda. With our experience and expertise, we are helping to ensure that things move forward with a reorientation in energy supply and that our corporate social responsibility strategy works."

Based in Gräfelfing near Munich, the company has been involved in several

projects that advance the energy transition, including work for Siemens Gamesa's floating offshore prototype for the Provence Grand Large in France and supporting turbine manufacturer Steelwind's factory in Nordenham.

"Wind power and renewable energy in general have already become a hobbyhorse of ours," said Schmidbauer. "We have shown that we can do this and would like to push this area. Of course, this also includes the SuedOstLink project."

Electricity highway

The SuedOstLink is one of the two 'electricity highways' that will transport electricity from the coast to the south of Germany. deugro Germany and deugro Italy were jointly awarded the handling and storage of more than 300 cable drums, weighing up to 83 tonnes each, for a four-year period on behalf of Prysmian Group.

The actual construction phase is expected to begin in 2024, but the components must be delivered before then; the gigantic cable drums are being shipped from Gron, near Paris, to Regensburg, Germany. Schmidbauer, as subcontractor, is unloading and storing them there. Later, in-house special transporters will deliver the material to the corresponding construction sites.

Another notable project for Schmidbauer is its involvement in RWE's offshore wind Kaskasi project – a 342 MW project that will be the first offshore wind farm to come online since 2020.

At the time of writing, more than 50 percent of the foundations had been

deugro and Schmidbauer handle drums for the SuedOstLink project – one of the two 'electricity highways' that will transport green electricity from the coast to the south of Germany.

eugro





installed, using Buss Terminal Eemshaven as a base port.

It certainly seems that offshore wind activity is returning in Germany. "Green electricity, especially that produced by offshore wind in water depths beyond 60 m, will play a major role in producing green hydrogen for a climate-neutral industry. Photovoltaic will also be key in that mix," added Schmidbauer.

Another boon for the renewables sector in Germany is the declaration signed with neighbouring North Sea countries during May 2022 to install at least 150 GW of offshore wind by 2050, with an interim target of 65 GW by 2030, added Kyriacos Panayides, ceo at AAL Shipping.

"With hard targets for offshore wind being set, we do expect a boom in this sector in Europe. However, the permitting process needs improvement to translate the mandate into action," he continued.

Onshore wind boom

Similarly, onshore wind is also experiencing something of a renaissance. Panayides explained: "The years from 2014-2017 were the heydays for Germany's wind sector as new capacity boomed, after which it entered a period of slump from 2018 onwards due to insufficient new permits for wind farms.

"The renewed vigour from the German government in renewable energy and energy security is turning the dreaded situation around. They are taking action to streamline the permit process and increasing the manpower. The new legislation to set aside

2 percent of land for onshore wind farms will greatly improve the development of onshore wind projects.

"All these efforts are showing results as recent wind auctions are over-subscribed, a clear contrast from the under-subscribed situation back in 2018-2020. The huge range of companies bidding in recent auctions clearly reflects the strong interest from investors in the onshore wind farms in Germany."

He added: "In Germany, the two main focuses for the next five years are on



With hard targets for offshore wind being set, we do expect a boom in this sector in Europe. However, the permitting process needs improvement to translate the mandate into action.

- Kyriacos Panayides, AAL Shipping

renewable energy and transmission and distribution of the new capacity."

Plans for liquefied natural gas (LNG) terminals are also picking up speed. Berlin has now leased four floating storage and regasification units (FSRUs) and chosen the North Sea port of Wilhelmshaven as its first LNG handling hub, ahead of additional sites that will also be able to handle deliveries of low-carbon gases and clean hydrogen.

Diversification

Of course, a major factor in pushing these types of projects forward is the need for Germany to diversify away from Russian gas.

"The accelerated green energy transition for Germany came after the invasion of Ukraine by Russia," said Panayides. "Ever since 1970, the signing of the first Russia-Germany gas pipeline, Germany has been increasing its energy dependency on Russia over the years. On the eve of the Ukraine war, Germany was importing one third of its oil from Russia, about half of its coal, and more than half of its gas imports.

"Therefore, to drastically reduce its energy dependency on Russia, the German government revealed a new energy package. In this package, it revised the goal to have green energy accounting for 80 percent of the power mix by 2030 from a previous 65 percent. Furthermore, the country's Renewable Energy Sources Act (EEG) has now laid out a target for offshore to hit 30 GW by 2030 and 70 GW by 2045."

This was echoed by Manfred Müller, ceo EMS-Fehn-Group, which consists of 18

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companies of which EMS Chartering, EMS Log, EFG Heavy Haulage, EFG Port Papenburg, Fehn Ship Management, Northwest Competence and Global Boat Shipping are based in Germany. He said: "With Europe shifting away from Russian energy, we expect an acceleration of growth in the renewables sector.

"EMS-Fehn-Group's companies across Europe, and particularly in Germany, have been reliable partners to leading players in this sector for several decades. They value our top-notch services, our experience, and the enthusiasm with which our professionals tackle challenges - whether it comes to customised crane solutions, port operations, heavy haulage trucking or sea transports. At the same time, we can always rely on our own assets. Both will help us tremendously to benefit when the number of energy projects starts to soar," he added.

EMS Chartering sees significant potential for growth in this sector, deploying a range of ships - including coasters, barges, multipurpose and heavy lift vessels - to handle the wind energy cargoes.

EMS Log, meanwhile, is already busy transporting more than 50 wind turbine towers - divided into segments - from the manufacturer's premises in northern Germany to four separate wind farm sites in northern Finland. The EMS Log team came up with a solution that minimised the need to intermediately store cargoes at the port transporting the components gradually using a regular ro-ro service.

Flow of components

Deploying trucks of its Lübeck-based sister company EFG Heavy Haulage, the tower sections are taken from the manufacturer's premises to the ports of Lübeck and Kiel. The ro-ro ships then deliver the cargo to several ports in Finland. From there, the tower segments are simultaneously delivered to the four wind farm construction sites. This way, EMS Log ensures a steady flow of incoming components while matching the customer's schedule and avoiding the use of vast storage facilities.

When it comes to erecting the towers and completing the turbines, another one of EMS-Fehn-Group's companies comes into play: Norwegian EFG Scandinavia, which has been supplying customised crane solutions to the wind industry for several years and is involved in one of the projects in Finland.

EFG Heavy Haulage (formerly named Europatrans) has also been busy. After rebranding during October 2021, the special transport company moved into the port of



Lübeck, offering warehousing, handling operations and assembly facilities. The location has inside and outside storage areas as well as a 350 m long quay.

According to Müller, heavy haulage remains the company's core business - "and demand has been noticeably rising over the past couple of years". To better serve customers in Germany, as well as in nearby Netherlands, EFG Heavy Haulage has expanded its team of logistics professionals and opened an office at EFG Port Papenburg's premises in early 2022.

This EMS-Fehn-Group company operates a multimodal terminal in the seaport of Papenburg in the northwest of Germany. The company has its own berth where two seagoing vessels can moor simultaneously. Its premises cover roughly 160,000 sq m, and while it typically handles peat, wood, steel fertiliser and alternative fuels, it demonstrated its heavy cargo expertise last year when handling a 50 m-long section of a defunct railroad bridge. The cargo arrived by barge and weighed several hundred tonnes; it was

With Europe shifting away from Russian energy, we expect an acceleration of growth in the renewables sector.

- Manfred Müller, EMS-Fehn-Group

lifted using a floating crane and positioned onto self-propelled trailers.

Port congestion has been an ongoing issue over the past year. The situation for general cargo/multipurpose terminals, according to AAL's Panayides, "is disparate and the level of delays very much depends on the country itself". For example, "in Hamburg general cargo terminals are indeed congested, but certainly not at the same level as its container terminals, which are gridlocked. The strategy proposed by local port authorities to reduce the number of container vessels waiting on anchorage also seems to be problematic, considering that many ports in Germany are now facing port worker union strikes as well".

Port challenges

In general, however, German ports seem to be faring better than other European multipurpose cargo main hubs. Panayides noted that in the Netherlands and Belgium, "there is quite severe congestion across the

He believes the main problem is the lack of available terminal workers and truck drivers. "There are main ports in the EU with a huge list of open vacancies for such positions. Under such circumstances, it is extremely difficult to efficiently manage current multipurpose cargo volume demands and plan scheduling accordingly and most likely containerships will also continue to queue up."

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How to cope with construction delays

Reports indicate that construction delays are on the rise across all industries. Engineered Rigging shared ways in which it mitigates maintenance and construction project delays.

ccording to the construction backlog indicator by US trade organisation Associated Builders and Contractors (ABC), the average backlog increased to nine months during May 2022. A year ago it stood at eight months.

The worst 12-month net change occurred in heavy industrial construction backlogs, which increased 2.3 months over the last year. Commercial and institutional construction backlogs rose by 1.1 month over the past 12 months, while infrastructure construction delays were the most modest, up 0.6 months from May 2021.

"Every day that a project is stalled adds to the overall project costs," said Eddy Kitchen, co-founder and principal for USA-based Engineered Rigging.

"Construction expenses are on the rise due to inflation and high demand for materials, tools and equipment. When you combine that with the extra expenses created by a project delay, you have got a real budget crisis."

Reasons for delays

Delays can occur for myriad reasons: supply chain issues; material and labour shortages; permitting; safety concerns; changes in product scope; scheduling errors; or even the weather could cause missed deadlines and prolonged schedules.

Given the volatility of supply chains and labour issues, the situation is not expected to improve anytime soon. For Engineered Rigging, there are ways in which it mitigates maintenance and construction project delays.

"I encourage clients to tackle any delay with the three p's: patience, practicality and a plan," said Kitchen. "There is one p that

We approach delays by being flexible and dynamic in our deliverables and working to identify alternative sources for parts, tools and materials.

- Eddy Kitchen, Engineered Rigging

is best avoided: panic."

Contractors and project managers are sometimes tempted to cut corners to make up time, he continued, but warned that this rarely pays off and can backfire, leading to even longer delays and higher costs. For example, eliminating safety meetings and training can dramatically increase the risk of injury; the statistics around workplace safety are sobering.

According to the Bureau of Labor Statistics, in 2020 there were 174,100 cases of construction injuries which equates to one in every 10 workers. The costs associated with a workplace injury can be staggering including workers' compensation, medical treatment, lost productivity, project delays and OSHA penalties.

When faced with a delay, a contractor is best served by having open and honest communications with everyone involved, including the project manager, suppliers and project engineers, added Engineered Rigging.

Schedule adjustments

Ideally, the group will revisit the project plan to adjust the schedule in the most efficient manner, identify alternative sources for time-lagged products and scarce materials, and collaborate on time and cost-saving opportunities.

"At Engineered Rigging, we understand project delays happen, and we strive to be part of the solution. Fostering frequent communications enables us to know about a problem early. We approach delays by being flexible and dynamic in our deliverables and working to identify alternative sources for parts, tools and materials," said Kitchen.

"By offering engineering services, fabrication capabilities and heavy lifting and specialised equipment rentals under one roof, we can streamline the construction process and deliver synergies that others cannot."

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Energy verticals fuel airfreight growth

The general consensus in the airfreight market is that the pressure from governments, consumers and campaigners to end the use of fossil fuels will not significantly impact their business just yet. *Yvonne Mulder* reports.

s long as I can remember, people used to talk about the supply of oil running out – and then they keep finding new wells," said Neil Dursley, chief commercial officer at UK-headquartered Chapman Freeborn

Airchartering. "And it will continue to be important until there is a viable alternative. The world economy will continue to require fossil fuels for many years to come."

He does, however, also see business opportunities in energy produced from other sources. "There is always a

requirement for airlift – wind turbines, for instance, or in relation to nuclear power plants being constructed. There is a lot of oversized equipment and so the requirement stays for flying them. I am not at all concerned about a decline in business in this sector."

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Justin Lancaster, group commercial director at another UK-brokerage, Air Charter Service (ACS), believes the oil and gas market "is not going anywhere in the immediate future. We heard about 'peak oil' years ago, but cargo still has to get from A to B now, even if there is no doubt that in the long-term oil and gas will be less."

Oil and gas market

This was echoed by Or Zak, commercial vice president of Challenge Group, which comprises three airlines (Challenge Airlines IL, Challenge Airlines BE, and Challenge Airlines MT); Challenge Handling in Liège; Challenge Aircargo; Challenge Logistics which provides pan-European and US road feeder services; Challenge Aviation to manage its different assets; and Challenge Technik for maintenance activities.

He said: "Oil and gas has always been an important vertical sector for Challenge Group. In the years leading up to the

pandemic, we saw a steady increase in the movement of oil and gas across all our regions. This trend obviously stopped with the onset of the pandemic, but recently we have started to see an increase again. With the current upward pressure on oil and gas prices around the world, we expect the growth trend to continue, although there will obviously be a counter-pressure due to the development of green legislation."

When it comes to the supply of oil and gas equipment, Zak continued, there have always been certain regions which are known for their production of those cargoes, such as Italy or China, which has become the world's largest energy producer.

"The demand for oil and gas equipment is somewhat more complex," he said. "In some parts of the world, oil and gas shipments, drilling and refineries have been underway for years, and the flow from these regions is fairly steady. However, with the development of new drilling techniques and technologies, oil and gas companies are extending their reach into new areas in search of new deposits."

Lancaster said that the state of the oil and gas market created by the situation in Ukraine has raised the profile of the industry. "This crisis shows us how reliant we still are on oil and gas and fossil fuels in general. We have to look at how we get to wind and solar. This crisis has speeded things up."

He also sees potential in the nuclear sector, which "includes lot of outsize which we would be involved with". The opportunities in wind and solar are not as prominent, "though we have seen plenty of AN-124 charters carrying blades for wind turbines when needs must".

For Zak at Challenge Group, "whether it is an oil rig in the Gulf of Mexico, a gas plant in Norway, a wind turbine in the North Sea or a solar power plant in Australia, they all share the same characteristics. All are made up of bulky parts and all are subject to the same malfunctions. All will need new parts transported by airfreight".

He added: "Although it is difficult to predict in the long term, what is certain is

There is a lot of oversized equipment and so the requirement stays for flying them. I am not at all concerned about a decline in business in this sector.

– Neil Dursley, Chapman Freeborn

that airfreight will always play a key role in the energy sector as it is now the most efficient mode of transport in terms of speed in particular. The sector itself is set to evolve with the green transition."

deugro group is involved in a wide array of projects for various industries representing all aspects of the energy market, including oil and gas upstream projects, LNG and processing plants, and power generation projects based on conventional energy sources. Pavel Kuznetsov, head of air chartering at deugro, said the Russian invasion of Ukraine has not only affected the price of oil and gas, but it has also severely impacted heavy lift freighter capacity as sanctions against Russia have taken the Volga Dnepr fleet of 11 Antonov AN-124s and AirBridgeCargo's (ABC) 18 Boeing 747-8s out of the market.

"Russian carriers used to have a fair share of the international airfreight market, but the niche of heavy and oversized airfreight has been impacted the most," said Kuznetsov.

Furthermore, Antonony's AN-225 Mriya, the world's largest cargo aircraft, has been destroyed "and there will be no substitute with comparable capabilities for this aircraft in the near future," he added.

"With these developments, finding a suitable solution for heavy lift airfreight has certainly become more challenging. Throughout the painful landscape changes, we have maintained very close contact with our partners and were able to identify alternative options for our clients.

"Of course, when there is only a handful of aircraft in the whole world that can do the job of transporting certain out-of-gauge equipment, you need to be able to make decisions quickly to secure the required aircraft," Kuznetsov explained.

As this issue went to press, Russian media reported that ABC applied to the Russian Ministry of Transport with a request to return 14 B747 freighters to foreign lessors, all of which are stored at Sheremetyevo Airport. *HLPFI* will update on developments as and when they occur. This capacity certainly would be welcomed back into the market.

Dursley agreed that there is a challenge in terms of availability of aircraft. "Only five of the AN-124s are still operating and, rightly, most are working on behalf of humanitarian programmes. In fact, the majority of the Antonov fleet in the past 18 months has been dedicated to movement of PPE and Covid-19 test kits."

His team was forced to resort to unusual measures very soon after the invasion. "We had an AN-124 booked for us to fly in

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February out of Prestwick into Australia, carrying what is known in the business as 'the Christmas tree' [a custom-built large oversize piece sitting on top of the oil well head]. Only the AN-124 or the AN-225 can carry it.

"Because of the situation in Ukraine, we had to cancel that flight and an ocean vessel was chartered instead - which was double the cost of the AN-124. But the piece was urgently required, so there was no alternative."

Nose-loader capability

He is pleased that Avia Solutions, Chapman Freeborn's parent company, acquired a B747-400 freighter with nose-loader capability in 2020. "This aircraft is critical for the oil and gas industry as it can load long oversized pieces of cargo. It shows the strength of the group that we have significant assets that we can work with."

Lancaster said that ACS "probably used the AN-225 in a charter about 10 times a year. Mostly for oil and gas projects or for ships spares. It was even used to fly PPE during the pandemic. It is a real shame that it seems to have been destroyed."

He believes that most cargo can probably fly on the AN-124 "but it will be interesting to see if we hear about problems in the future. Sometimes you cannot move pieces by road and sea. Air is a vital part of the supply chain and some manufacturers build parts that they know will fit inside an AN-124."

He noted that about a decade ago he was

having conversations with oil and gas suppliers about the AN-124s coming to the end of their life. "Antonov did a really good job extending the life of the AN-124 - and making sure they were being used mainly for outsize cargo to help preserve the hours for cargo that really needed them."

deugro's Kuznetsov said: "If we talk about the demand side of the energy market in the current situation, of course we saw



We find that outsize cargo aircraft are now used for consumer goods such as electronics from China and Japan, and for consolidated cargo – which is unusual.

– Justin Lancaster, ACS

the reduction of activities involving airfreight in the projects related to Russia; but at the same time, we have seen strong demand in other regions – for example for projects in the Middle East and India.

With energy resources being a hot topic in the world, I am sure we will continue to see steady need for airfreight solutions to transport equipment to support the dynamic market needs."

During the pandemic, the number of passenger flights dropped dramatically. "In the energy market we do not deal with what fits in bellyhold so we were not affected directly," said Lancaster. "But ACS did feel the knock-on effect as all sorts of cargo, as well as PPE, started being flown in freighters.

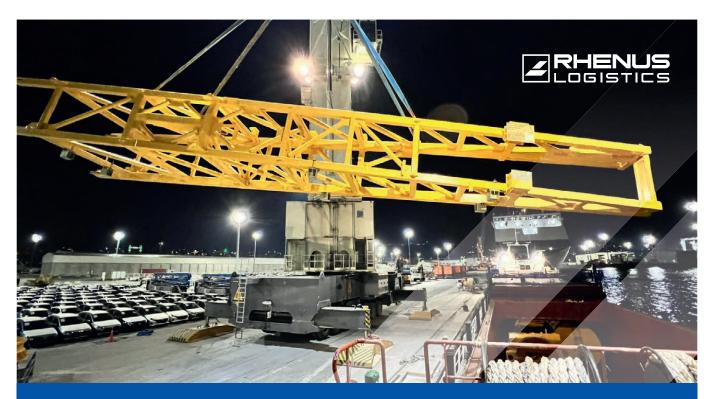
Consumer goods

"Later, as consumer demand increased, that dominated demand for capacity, especially with problems in seafreight. We find that outsize cargo aircraft are now used for consumer goods such as electronics from China and Japan, and for consolidated cargo - which is unusual."

All this means that prices "have gone through the roof – 150 percent higher than pre-pandemic rates is starting to feel normal. Two years ago, you would have fallen off your chair at the rates like USD1.5 million for China to USA - now you see quotes above that and people go for it."

Not surprisingly, demand for airfreight in this market is related to the price of oil.





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As a result of Covid-19 issues... we have seen a significant trend for a shift of critical equipment for the energy market moving from ocean to air.

– Pavel Kuznetsov, deugro

Crude prices plummeted in 2020 before recovering in 2022. As soon as prices start to increase, there is an urgent requirement to move equipment by air, including charters.

Chapman Freeborn Airchartering, which works with both freight forwarders and direct customers, is anticipating a busy year ahead.

"I think this year's peak season will be insane," said Dursley. "The issue is manufacturing - a lot of oil and gas equipment is made in China and production plants are affected by Covid-19. Also, all operators flying from Asia to Europe have to avoid Russian airspace - which adds to flight times and costs more. This is creating challenges all over the place."

Modal shift

Kuznetsov said: "It is well publicised that ocean freight has contended with significant disruptions over the last two years as a result of Covid-19 issues, meaning that traditional supply chain modes simply did not work as before. As a result, we have seen a significant trend for a shift of critical equipment for the energy market moving from ocean to air."

Of course, this shift results in problems of its own. "The situation with airfreight capacity in the last two years has been extremely difficult; we have never seen anything like this previously."

He added: "This turbulence and volatility provided significant operational challenges which the market needed to react to. We needed to monitor this dynamic situation by constantly staying in contact with the market and talking to our global airline partners leveraging the relationships we have built for years, coupled with our own in-house understanding of the airline business, helped us tremendously to successfully navigate and stay on top of the situation to secure both needed capacity and favourable conditions for our clients."

7 HLPFI

This article was first published in HLPFI's sister title Air Cargo News and has been updated.

Antonov Airlines resettles in Leipzig

Antonov Airlines has transferred its operations base to Leipzig, Germany, following the damage to some of its aircraft and its home base in Kyiv.

In a presentation provided to the Worldwide Project Consortium (WWPC), which held its 20th annual membership conference in Vienna during May, Antonov confirmed the scale of damage following Russia's invasion of Ukraine. The airline's home base at Kyiv-Antonov airport in Hostomel has been destroyed,

as has the AN-225, an AN-74 and an AN-26-100 aircraft. One AN-124 and one AN-22A are damaged at the airport, with their condition under evaluation.

The Antonov team has been able to relocate to Leipzig from where the company plans to continue the operation of the remaining five AN-124-100 aircraft. To do this, the airline said it needs to transfer a full-scale base to the airport; deliver the spare engines, parts and other special equipment

from Ukraine; source Western versions of the units where possible; and transfer technical specialists, flight personnel and key office employees to Leipzig.

At present, the airline is prioritising flights for the Ukrainian government, NATO/EU under the SALIS programme and humanitarian missions, but there is the possibility of handling commercial flights.

Antonov estimates that in the next 12 months it will conduct 385 flights, with 1,270 landings.

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New Zealand oilfield decommissioning provides contract work



Dave MacIntyre, our regional correspondent in

AUSTRALASIA



ecommissioning work on the Tui oilfield off the west coast of Taranaki, New Zealand, is being completed in phases. The latest stage will see Australia-based Shelf Subsea remove the subsea infrastructure on behalf of New Zealand's Ministry of Business, Innovation and Employment.

Port Taranaki is serving as the land base for the decommissioning project, providing berthing, pilot services, laydown areas and general wharf services, including the use of cranes, forklifts and specialist equipment.

About 40 km of flow lines and 3,500 tonnes of steel from subsea manifolds and mid-water arches are to be recovered by an underwater remotely operated vehicle (ROV) and stored at the port for later removal.

A 15-person New Zealand team of specialist deepsea divers undertook a twoweek preparatory operation at the field, at a depth of about 120 m.

Purpose-built diving support vessel Southern Star recently unloaded and tested emergency hyperbaric equipment and took on diving personnel, project staff and supplies. The ship is expected to make about five calls during the project.

The New Zealand government commenced work to manage the Tui oilfield assets and plan for the decommissioning of its wells in the wake of the financial problems affecting permit operator Tamarind Taranaki. This sparked new legislation - in the form of amendments to the Crown Minerals Act 1991 - that mitigates risk to the government

and other third parties of having to carry out and fund the decommissioning of petroleum infrastructure.

It imposes a statutory obligation on all current and future petroleum permit and licence holders to carry out and fund the decommissioning of their oil and gasfield infrastructure that is at the end of its productive life, and enables the regulator to periodically assess permit and licence holders' financial capability to meet their decommissioning obligations.

Over in Australia, investment is flowing into ports that have been earmarked as gateways for major export growth.

The Western Australian government has committed AUD508 million (USD365 million) to port infrastructure upgrade projects in its 2022-23 budget. More than AUD332 million (USD238.5 million) is being invested in the Mid West Ports Authority's Geraldton port maximisation project over the next four years to increase trade from 15 million tonnes per annum to 25 million tonnes by 2026. This includes berth upgrades and land acquisition.

The New Zealand government commenced work to manage the Tui oilfield assets and plan for the decommissioning of its wells in the wake of the financial problems affecting the permit operator.



Another AUD78 million (USD56 million) will develop Lumsden Point to grow the capacity at Port Hedland to diversify trade and support jobs in the region.

The state budget will also bring an additional AUD52 million (USD37.4 million) investment for a dedicated marine services hub in Broome.

This new funding is in addition to the AUD499 million (USD358.5 million) already allocated to the Westport project, which aims to build a new port at Kwinana, south of Fremantle.

Hydrogen boost

Meanwhile, the port of Newcastle in New South Wales has received AUD41 million (USD29.5 million) in government funding for its green hydrogen hub project.

The project is a joint venture with Macquarie Capital and Macquarie's Green Investment Group, and is currently progressing a feasibility study for green hydrogen to be used in areas such as bunkering, energy production and industry.

Craig Carmody, ceo of the Port of Newcastle, said that by 2025, the port hopes to have the first phase of the hydrogen hub complete.

A AUD2 billion (USD1.5 billion) pumped hydro and green hydrogen facility



has been proposed for Gladstone in central Queensland. Sunshine Hydro is behind the proposal, which would be built on around 303 ha of land, part of a larger 3,035 ha site purchased by project partner Burnett Mary Regional Group.

The land has its own natural water catchment to fill the proposed reservoirs (with desalinated water available as a top-up supply). Solar and wind power would also feed into the project.

A feasibility study is being undertaken with construction expected to begin in 2026, pending approvals, with energy generation starting in 2028.

Investment funds are helping fuel this burgeoning sector of work. Infrastructure giant IFM Investors intends to raise AUD4 billion (USD2.9 billion) by the end of next year for a new clean-energy focused fund.

IFM said the energy transition is creating significant new investment opportunities and there is enormous demand from fund managers to be part of the transition. It is now launching a dedicated Net Zero Infrastructure Fund to offer clients direct exposure to green projects, which will make its first acquisition this year.

New Zealand is seeing similar trends in energy infrastructure investment. Renewable

energy developers from the USA and New Zealand have formed a joint venture, called Helios Energy, to build grid-scale solar developments with an estimated cost of more than NZD1 billion (USD645 million).

The company has put together a list of grid-connected solar power sites across the country which would generate a total of 1 GW of power. Site development announcements and resource consent applications are expected shortly.

In another New Zealand development, a solar farm larger than the Auckland and Christchurch central business districts combined could start construction near the North Island town of Taupo next year.

Nova Energy has applied for two resource consents to construct the project in three stages over six or seven years. Nova already runs the country's largest solar farm

The energy transition is creating significant new investment opportunities and there is enormous demand from fund managers to be part of the transition.

- IFM Investors

connected to the electric grid – the 2.1 MW Kapuni plant in Taranaki.

The 400 MW project would be the largest solar farm in New Zealand, more than double the capacity of a 150 MW farm being constructed at Christchurch Airport.

On the traditional energy front, a major new oil project off Western Australia is being hailed as an important step for the nation's oil security. Santos and its partner Carnarvon Energy have obtained a production licence covering the Dorado oilfield, about 150 km north of Port Hedland.

Gas development

Also in Western Australia, Woodside Energy and its partners have received approvals from the Commonwealth-Western Australian Joint Authority to support the Scarborough gas development.

One approval is a licence to construct and operate the Scarborough pipeline in Commonwealth waters. The field development plan has also secured approval, which enables Woodside (as operator) to start petroleum recovery operations from two petroleum production licences.

The milestones follow final investment decisions taken in November 2021 to proceed with the Scarborough and associated Pluto Train 2 LNG developments.

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HLPFI writes regularly about the challenges facing the project logistics supply chain – be it infrastructure barriers, a lack of capacity, issues with financing and, in the not so distant memory, a dearth of projects in various parts of the world. While these problems ebb and flow, one recurring theme in conversations across the sector is the difficulty in finding and retaining talent. David Kershaw reports.

he past two years have shaken up all aspects of working life with furlough schemes in place in some countries, home working becoming the norm for many sectors and record numbers of people leaving their jobs, dubbed the 'Great Resignation'.

It is a known fact that the project logistics supply chain cannot afford to lose talent. It has been in desperate need of more personnel for many years already. And now, with projects picking up and

shipping lines at capacity, that need is becoming more apparent.

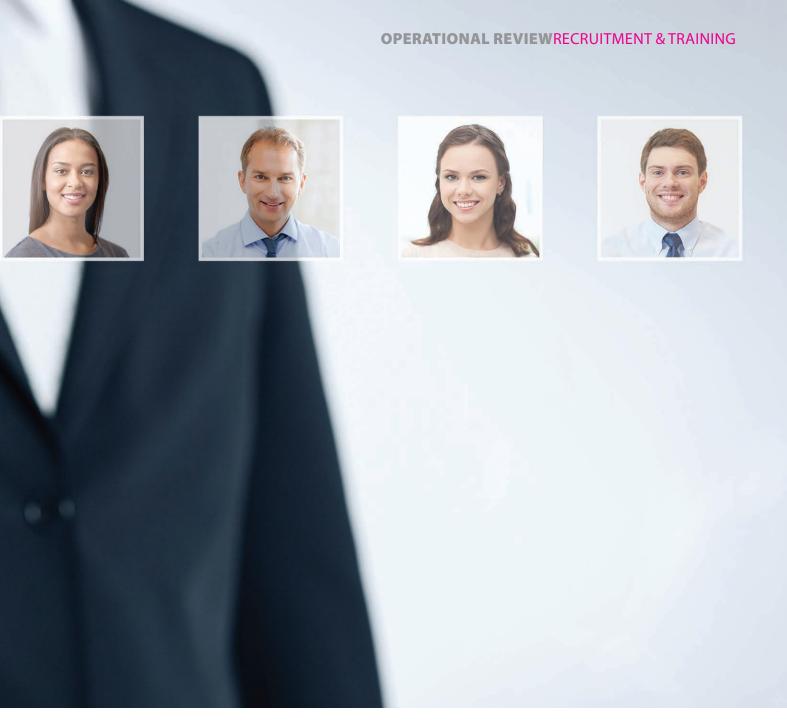
Jason Dickens, consultant at dedicated project forwarding recruiter Rockbottom Consulting, shed some light on the current situation. "Within the last 18 months we have seen a considerable increase in the demand for talent, largely due to the increase in rates and carrier capacity," he said

"The C-level has remained relatively stable and consistent, whereas we have seen a real spike for operational/desk level

talent. The demand at this level has never been so high; however, in most global locations securing experienced operational talent is extremely difficult, sorry strike that, near impossible right now."

He added: "With it so difficult to find and secure experienced operators the answer is clear: we need to bring new talent into our industry. This is a must, and we need to do more collectively for the sake of the future of the sector."

For those already in the industry, the



benefits are clear: it is an exciting industry with lots to offer. As Dickens noted: "It is a challenging, rewarding environment where no two days are the same, the learning curve available is steep and there is also a strong attitude to welcoming new talent into the sector."

Sexy sector

This was echoed by David Fisher, executive director of the Transportation Institute at the University of Denver (TSC Institute). He said: "The good thing about project logistics is that it is the sexiest part of the industry. It is the part of the industry where people are more likely to travel internationally and get involved with unusual engineering projects."

He continued: "The essential question relates to how we improve the capability of the industry. My world is to try to encourage higher education in our discipline. 20 years ago, everybody I knew in our industry

learned on the job and that was the nature of our trade for 2,000 years.

"I believe what is interesting from an educational standpoint is that the jobs of tomorrow in logistics are quite different from what they are today. Many are going to be around IT systems, the capability of writing code, writing algorithms, optimisation of systems, stacking of systems; jobs that are rare in our industry now are going to be commonplace in the next five years."

I believe what is interesting from an educational standpoint is that the jobs of tomorrow in logistics are quite different from what they are today.

– David Fisher, TSC Institute

So how can the sector attract talent? Dickens believes that, as a collective, it needs to engage talent at an entry level "whether this be through press, advertising, universities, schools or word of mouth".

Partnerships

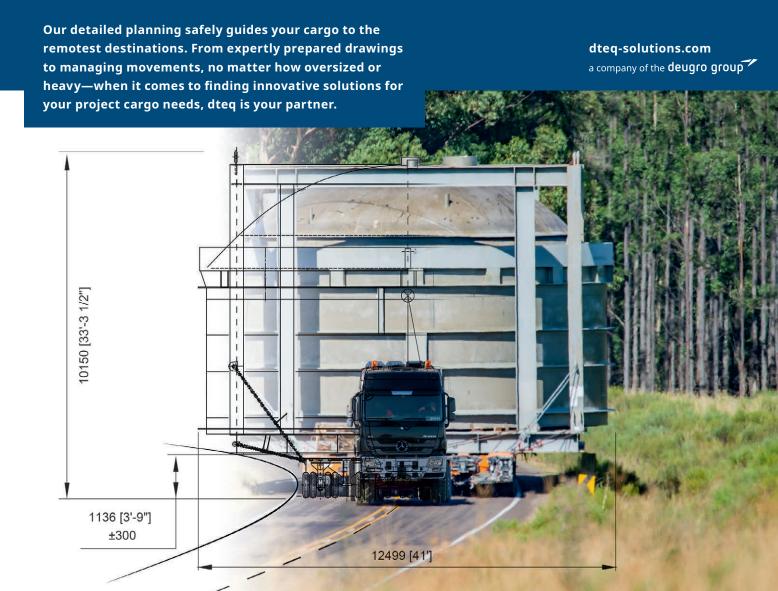
"Partnering with global universities who offer programmes closely linked to the heavy lift industry is the way forward, coupled with the ability to outline to young people their career path/journey within our industry. We must accept that talent coming into the sector will want to understand what is in it for them and what is the maximum to be achieved; this mentality should be embraced and nurtured."

One such programme has been a project logistics course – led by Marco Poisler, chief operating officer, global energy and capital projects at UTC Overseas – at the University of Houston. It has been running

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Making It Real.





for the past two years but has now been officially incorporated in the university's catalogue as part of the supply chain and logistics technology programme.

The Transportation Institute at the University of Denver (TSC Institute) is another example. "Our institute is celebrating its 25th anniversary this year and for 23 of those years, we only had one primary product – our executive graduate degree and a MSc in transportation.

"We still have our premier programme but in the last year we also stood up a BA completion programme and certificates, and a virtual supply chain degree (Masters). Our formula is a little different than most other educational formulas, in that we are an industry to academic pursuit. Our institute was stood up by industry companies," he explained.

Winning formula

"The home of the Institute is the prestigious University of Denver. It has been a strong relationship and the university has contributed incredible faculty to the programme. Most of our faculty are adjunct professors and most are not full-time academics, we pull practitioners from the transportation and supply chain industry itself to teach current and advanced management procedure.

"That has been a winning formula for us because we are not trying to fight the broader battle of attracting new people to industry, our benefit is that the people who come to our programmes are typically already in career, and this give us an advantage." explained Fisher.

"Having said that, I keep in touch with other academics around the world and the chronic problem for all of us is that it is very hard to attract young people into the industry in the first place, most of them are not exposed to the industry. And it is unusual to have someone come out of high school and want to go into transportation. This seems mostly due to a lack of knowledge and a lack of exposure to our industry, in my opinion."

That might be changing, however, as Fisher explained: "The one and only good thing coming out of the pandemic, perhaps, is that four years ago, it was a regular thing to be at a party and have to explain the science of supply chain to others. Now, everyone knows what supply chain means, including young adults. The other statistic that is really meaningful for us is that the two fastest-expanding industries right now are medical and supply chain.

"Those are encouraging stats and we have some interesting things going on. We have a lot more automation coming our way that should solve some of the issues," he said. "When we talk about driverless trucks

The attitude towards mentoring and passing on knowledge is second to none in our sector.

- Jason Dickens, Rockbottom Consulting

and trains, robotic shortlines or automated ports, this will help the project cargo area because it frees up manpower that is currently engaged in routine activities."

If the engagement with universities or training courses can pique the interest of young professionals, Dickens is confident that tried and tested techniques of the industry can provide them with the tools for success. "The attitude towards mentoring and passing on knowledge is second to none in our sector. This combination of demand, training, mentoring and exposure will offer motivated, young professionals the opportunity to develop their careers quickly and to a higher level than one in the general supply chain for example," he said.

Structured training

"Offering structured training programmes with an accompanied succession plan has always been the go-to, this is something the industry does extremely well. I certainly see that once trainees are onboarded into the sector the opportunities to learn, progress and develop into leadership/executive level positions are extremely strong. The industry has a fantastic approach when it comes to mentoring and ensuring knowledge flows from top to bottom."

And, if a theme of the project logistics sector is that no two days are the same, another is: the learning never stops.

Continuous professional development (CPD) has been a focal point for 4D Supply Chain Consulting – a logistics and supply chain consultancy that delivers market-

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leading supply chain and logistics trainings (both digital and classroom based) to students and working professionals around the globe.

4D's courses include Incoterms® 2020 Made Easy; Letter of Credit Made Easy; and Bill of Lading Made Easy. The portfolio will soon be bolstered by two further courses: Airfreight Essentials Made Easy and Lashing and Securing Made Easy.

After a pandemic-induced hiatus, 4D's in-person training made a return in the USA during March, with its two-day letter of credit classroom training course, led by Jolie Cosman who joined the team last October.

"The letter of credit courses are very well received, and they are looked for throughout the USA because there are not many people doing this training," said Cosman. "Letters of credit are precise instruments. You have to be in compliance with all the requirements to get paid - they are not a guarantee of payment. Typically, it will be a two-day class, which gives participants a chance to review what they have learned on the first day and come back with questions.

"It is always better to have a mix of attendees," Cosman added, who is often approached by export manufacturers on the topic. "Typically, 10-15 percent of the business is handled with a letter of credit, but it is the highest-value orders," she explained. As a result, the course is attractive to those that administer the contracts, as well as the senior executives that sign them.

"Information needs to flow from sales, to finance, logistics, everyone in the chain needs to have a legal standing. There are a number of compliance issues and everyone needs to have a part in this type of training," Cosman explained.

Letter of credit

4D also provides an e-learning course on letter of credit. Thomas Skellingsted, president of 4D, said the online platform is a "crash course and a great introduction to the topic. It is a thorough introduction." Cosman said the face-to-face programme benefits from greater interaction and depth.

"We divide the room into buyers and sellers. People are given roles with various criteria about what the company is looking for, so they can request it in a letter of credit. Then you get the push back from the other side. Typically, the importer has a long letter of credit, and the exporter ends up with a shorter, four-point letter."

Rockbottom Consulting is also taking action in its efforts to help the sector find and train talent and is launching a new business called Rockbottom Project



Logistics Academy. "We have recognised that we need to support our customers globally in attracting and nurturing entry level talent," said Dickens.

"The goal is to identify, train, support and present volume entry-level candidates to help solve the global talent shortages we are all experiencing. We will engage with individuals through strategic global university partnerships in Europe, the USA, India and Asia, while also remaining true to our recruitment roots, by proactively seeking out young professional across rival industries.

"The talent we attract will be exposed to top training and testing facilities before being presented to, and engaged by, our client base. We will also support and guide our academy members through their early project logistics careers, offering further opportunities for training and personal development."

Rockbottom Project Logistics Academy has already signed up three project forwarders who agree with and embrace the initiative, and a website is currently under

Regarding the overall outlook for the logistics industry Fisher at the TSC Institute

The number of companies talking about nearsourcing or maybe moving manufacturing locations – I am hearing more of these conversations now than I have heard in 40 years.

- David Fisher, TSC Institute

shared some pessimistic views: "I do not know what the future holds but I am quite concerned. I think it is more likely than not that we are headed for very significant recession in Europe and North America. I think this is going to be a supply chaingenerated recession," he warned, drawing attention to Chinese port closures, bottlenecks in the supply chain, and subsequent price inflation.

Backbone of recovery

Nevertheless, he believes the logistics industry will be "the backbone of the economic recovery" and, furthermore, the prognosis for project cargo shipping is positive. "I do have a lot of optimism about project cargo. I think it is going to be fairly robust. The number of companies talking about nearsourcing or maybe moving manufacturing locations - I am hearing more of these conversations now than I have heard in 40 years. From that perspective, I am optimistic for us." The proviso, however, is staff. "It all revolves around this caveat of whether or not we can get the people."

And once young professionals join, the key is staff retention. According to Dickens, keeping talent rests upon ensuring progression is available at all levels.

"It is vitally important that homegrown talent does not reach that glass ceiling too quickly. This is an issue in all industries, especially in project related ones; however, this is certainly the main reason talent leaves, either for competition or the industry altogether. We cannot afford for talent to leave for other sectors."

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Renewables dominate **East Coast** pipeline

Project cargo shipments to and from the East Coast of the USA have mostly recovered from the pandemic. Infrastructure shipments, including tunnel-boring machines and bridge components, are among the notable moves but the driving force from Cape Cod to Cape Hatteras is offshore wind energy. Gregory DL Morris reports.

everal ports have greenfield and brownfield projects under way to create dedicated marshalling facilities to accelerate the US East Coast's offshore wind energy drive. These areas will play a vital role where tower sections, blades and nacelle components can be staged for transportation to the construction sites. Some gateways also have plans for component manufacturing facilities either onsite or nearby. Several of the offshore hubs have the support of the respective state governments, including Salem, Massachusetts; New London, Connecticut; South Brooklyn, New York; and Portsmouth, Virginia.

Terminal targets

"The agreement for the 42-acres (17-ha) for the Salem site is going through and we hope to close by the end of September," said Jeff Andreini, vice president of Crowley New Energy. "The terminal will be fully operational on January 1, 2025. Avangrid is the anchor tenant to develop a marshalling yard for its Vineyard Wind project. Beyond that we have expectations of [having Salem

be the hub for] other projects around the northeast as far as Maine."

The developer and equipment suppliers for each wind farm have the responsibility to determine what equipment will be required to handle the components, Andreini explained. That includes floating or onshore cranes, as well as dollies or cradles for loading, unloading, transportation and storage ashore and afloat.

"We are in the design and permitting phase of the terminal development," he said, although it will be some time before decisions are made on which heavy lift cranes and other equipment will be stationed onsite. "Cranes are not a problem. We have identified resources. The heavy lift

The agreement for the 42acres for the Salem site is going through and we hope to close by the end of September.

- Jeff Andreini, Crowley New Energy

Vineyard Wind has entered into an agreement with Crowley Maritime Corporation and the city of Salem to create a public-private partnership aimed at establishing Salem Harbor as the state's second major offshore wind port. Pictured here is a computergenerated image of how the port will look.

providers are more than capable," he said.

Barges are another matter. The size of latest-generation wind turbine blades, towers, and nacelles means that very large, oceangoing barges as big as 400 ft (121.9 m) long are required to shuttle components from the marshalling yard to the installation site. Because the projects are all in US waters, Jones-Act cabotage laws require all vessels, barges, tugs and workboats, to be US flagged. There are fewer than two dozen of the largest barges in the domestic fleet.

"We have projects that we are bidding on now through 2028," said Andreini. "There has been no change in the number of tugs and barges. We are concerned, but we still need commitments on some of those projects. We would be hard pressed to build

REGIONAL REPORTEAST COAST NORTH AMERICA





In 2020, Ørsted signed an agreement with the port of Virginia in the USA to lease a portion of the Portsmouth Marine Terminal.

without commitments. At present we have eight 400 ft barges required for this work, as well as four ocean-class tugs.

"Vineyard starts next year," said Andreini. "Projects will slowly increase through 2025. There are marshalling facilities under development in Massachusetts, Rhode Island, Connecticut, New York and elsewhere. This is happening. You can go to the ports and see it happening. We are very excited about our development in Salem and are eager to see how it comes together over the second half of the year."

New York has not been one of the larger project cargo ports in recent years, mostly because of congested roads and rails. But wind energy may change that as well. "We have been working on this wind energy

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project for many years," said Michael Stamatis, president and ceo of Red Hook, and managing partner of South Brooklyn Marine Terminal (SBMT). "The facility was once a container port, but has been inactive for more than 35 years. We have acquired the property, made arrangements with Equinor and have started design with AECom and Equinor. This is just the first project. We expect there will be others."

The first offshore wind energy project in the region was a 5 MW development off Block Island, Rhode Island. The Equinor projects are planned to be more than 3 GW when they come into service, giving an idea of how far the scope has accelerated.

Designing for size

"Equinor and ourselves are preparing a design for the largest components of today as well as any conceivable projects for the coming years," said Stamatis. "That includes vessels and cranes. We are designing the terminal with heavy-duty crane pads up to 5,500 lbs per sq ft (26.8 tonnes per sq m). Specifications for cranes and for SPMTs are being developed. We will be responsible for moving components and equipment off ships and onto the terminal, then onto the barges to be taken to the construction site."

According to Equinor, "the offshore wind projects on the US East Coast are key building blocks to accelerate profitable growth in renewables and Equinor's ambition to install 12-16 GW of renewable capacity by 2030.

"Equinor and [partner company] bp will create an operations and maintenance hub and staging area at SBMT, with a total investment of USD200-250 million in infrastructure upgrades, while also pursuing the development of SBMT as a lowemissions facility. The port will become a cutting-edge staging facility for Equinor and bp's Empire Wind and Beacon Wind projects, which will supply 3.3 GW of energy - enough to power nearly 2 million New York homes - as well as become a goto destination for future offshore wind projects in the region."

The advantage of SBMT is that it was already a working terminal in the past, said Stamatis. So while Red Hook and its partners are investing in modern equipment, this development does not have to be from scratch.

There is also a regional advantage. "New York is where everyone wants to be," said Stamatis. "SBMT is going to be a regional hub for wind energy. The geography and

The offshore wind projects on the US east coast are key building blocks to accelerate profitable growth in renewables and Equinor's ambition to install 12-16 GW of renewables capacity by 2030.

- Equinor

capabilities are an advantage. There cannot be a wind energy terminal in every state. There is a facility planned for building tower components in Albany, and we are working on other additional partners for local component manufacture. We have 73 acres (29.5 ha). There is lots of room for further development."

Bridge clearance

Air draught is always a question when wind energy hubs are planned. Shipments into and out of SBMT will have to go under the Verrazano Narrows Bridge, but with 215 ft (61.5 m) of clearance, Stamatis said "that is not an issue".

The permitting process is well under way, and contacts for engineering and construction are expected to go out later this year. Construction is expected to take 18 months. "The terminal will be in operation and ready to receive components in 2025,"

"We have been handling a lot of shipments for Consolidated Edison, the New York utility company," said Steven Newes, senior vice president of Donjon Marine, based in Hillside, New Jersey, near Newark. "ConEd has been bringing in a lot of transformers and ancillary equipment from overseas, staging those to be prepared for power problems. We have been doing lots of work with the freight forwarders to bring those shipments into the port of Newark (New Jersey). They are shipped from Europe and the Far East.

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"We have also been handling some construction work along the [New York] East Midtown Greenway, the esplanade along Manhattan's east side from the Battery to the northern tip of the island at Spuyten Duyvel."

According to Trevcon Consulting, it "is involved in the demolition of an existing waterfront facility and the construction of a new waterfront esplanade over the East River in Manhattan contracted with NYC Economic Development Corporation for the NYC Parks and Recreation Department. The East Midtown Greenway project will provide an accessible pedestrian walkway on the East River adjacent to the FDR Drive. Trevcon is the primary marine contractor and is involved in all the major marine phases of the project."

Diverse projects

Underscoring that point, Newes said: "Our heavy lift assets are not just for cargo but also construction support for the subcontractors and the prime contractors. That is all in addition to our work in salvage and wreck removal. We were heavily involved in the removal of the Ever Forward, the container vessel that grounded in Baltimore."

In addition to that workload, Donjon has been putting significant time and effort into fleet upkeep. That is particularly important this year as the deadline for compliance to strict new rules for tugboats, called Subchapter M, is July 19.

According to the Maritime Institute of Technology: "Subchapter M is a relatively new set of US Coast Guard training and inspection regulations for tugboat and towboat companies. Released in 2016, it builds on the industry safeguards already in place and establishes new training protocol and vessel compliances based on qualitative risk assessment and risk management standards."

"All of our vessels are in compliance," said Newes. "It required a lot of money. The new regulations are quite expensive. At least we were able to take advantage of our own shipyard in Erie, Pennsylvania." On the eponymous lake, southwest of Buffalo, New York, Donjon's shipyard handles newbuilds as well as heavy and light repair. The company recently commissioned its newest tug, the J Arnold Whitte, built in Erie late last year.

"The yard is capable of building the big 300-400 ft (91.4-121.9 m) barges that will be needed for offshore wind, but being on the Great Lakes, they could not get through the lock system to the ocean," Newes explained. "We have built 165-240 ft (50.3-73.2 m) barges, and will build more. For offshore wind, our focus is on anchor-handling tug



and smaller feeder barges. They are not the biggest, but they are ocean certified."

Newes added that Donjon will fill the role of "local, long-term marine services provider to the wind farm constructors. We have all the local knowledge of the East Coast from Cape Cod to Delaware, and a base at Port Newark. We have already had lots of interactions advising the major contractors of the first few big developments."

Port of Virginia operates six facilities, two inland ports for transhipment, two big container facilities, and two for breakbulk, ro-ro and project cargo. Notably, even the container facilities handle some ro-ro and project cargo. "We have a heavy lift barge crane to pick project cargo off those containerships," said Aaron Katrancha director of breakbulk and ro-ro at the port of Virginia. "We have one dedicated ro-ro line from Europe and another from Asia, and we get a lot of project cargo on those as well."

Given the vast extent of Chesapeake Bay and the road and rail infrastructure in and around it, the region itself is a considerable market for project cargo as that infrastructure is maintained and expanded.

"We have two big bridge-tunnel complexes in the area", said Katrancha, "and we have been handling the tunnel-boring machines for projects on both of them. One

Our heavy lift assets are not just for cargo but also construction support for the subcontractors and the prime contractors. That is all in addition to our work in salvage and wreck removal.

- Steven Newes, Donjon Marine

arrived in December last year from Europe. That required staging of barges and some road and rail." As this issue was going to press, the other tunnel-boring machine was scheduled to arrive. Crofton Marine is handling those projects.

Frequent shipments

To the extent that project cargo can be customary, port of Virginia has frequent shipments from the Siemens manufacturing complex near Charlotte, North Carolina, about 325 road miles from Norfolk, Virginia.

"They ship project cargo up to 1 million lbs (453.6 tonnes) generators," said Katrancha. "That business is about as regular as project cargo can be. There are wide clearances by rail, and service providers in the port to support the moves. Separately, we also do stuffing and stripping of flatracks. There is quite a bit of that going on. It saves on costs for shippers."

Having a diversified port means that Virginia has a full perspective on the trend in the last year or so of dislocation as heavy lift, bulker and other vessels have been taken up in container service. "That is starting to level out," said Katrancha, "but we are not out of the woods yet. When rates were low, container vessels were happy to take project cargo. Now it is more of a challenge."

Port of Virginia is also developing one of the wind energy hub facilities. "We had a third container facility, Portsmouth Marine Terminal (PMT)," Katrancha explained. "When we upgraded and expanded our other container ports, it seemed like a good time to convert the 285 acres (115.4 ha) at PMT. We were already in discussions with the offshore energy developer Ørsted, and now there is a firm plan in place for its project with Dominion Energy. All the components for the 177 turbines will be staged and loaded out from PMT."

7 HLPFI

Size Doesn't Matter

(Really!)



Simplified truck permitting process

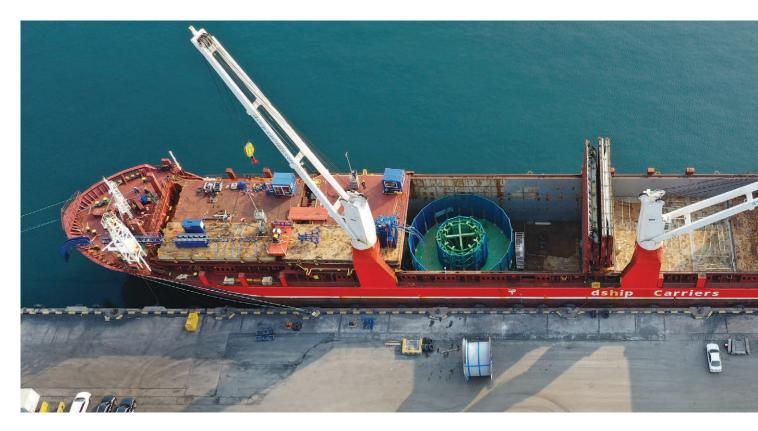
2 Class 1 on-dock railroads

New direct rail discharge and load capabilities

On-dock heavy lift cranes

Numerous choices of service providers and carriers





Transition and transmission: the way ahead

Tim Killen, chief sales officer for deugro, shares his insights on the energy transition and how it can be realised.

he energy transition is just that: a transition. A journey we must all travel together and commit to. The current energy crisis in Europe has shown us that the shift to green energy, as a way to quickly replace existing fuel sources, is a challenge. Cutting off oil and gas tomorrow is impossible; the lights would literally go out. And the challenge remains despite the results of COP26, following which we have seen a significant governmental and industry commitment to realise the ambition of a net-zero carbon future for 2050.

A recently published article from the

Energy Industries Council (EIC) claims a "rising demand for fossil fuels" during the first quarter of 2022, with the trend continuing in the third quarter due to "new oil and gasfields being brought onstream, as companies consolidate their portfolios of producing fields and contracts being awarded for the expansion, upgrade or redevelopment of infrastructure required to extract, transport and refine natural resources."

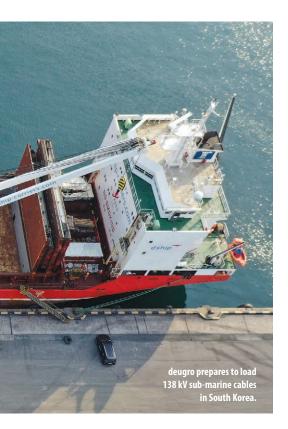
It is the return on investment from these traditional projects that will enable future investment in wind power, solar energy and other low-carbon energy ventures.

The significant and rapid increase in the investment in renewable energy and sustainable supply chains is being driven by financial institutions, governments and environmental organisations, many of which demand a green transition to create and support new employment opportunities and skill creation for future generations. This push goes along with that of oil and gas majors, which are updating their images and diversifying investment portfolios as 'energy' companies. In line with this, EPC contractors and OEMs are also focusing and restructuring their business models to reassign and add skills and expertise in the sustainable energy sector.

Being a strategic partner to energy companies, EPCs and OEMs, deugro is playing a part in this transition. Much of our well-established client base has a current and future need for technical and commercial support in planning and executing new energy projects, as well as balancing diversification in new technology designs with the unpredictability that the global supply chain continues to face.

What will the green future hold?

Meeting ambitious sustainability targets will require a long-term vision and commitment. Energy projects anticipated to achieve final investment decision (FID) in the next five years currently require a capital expenditure of around USD830 billion*. This potential is one of the reasons why deugro continues



to invest in both physical and digital resources, with the aim to support the logistics requirements of our existing and prospective clients. With almost 90 percent of this capital expenditure planned for traditional oil and gas projects over 2022 and 2023, the next five years will be pivotal for the energy transition. Meaning deugro, together with its clients, is considering more flexible, innovative and sustainable logistics solutions.

For IECs, EPCs and OEMs, deugro works hard to provide regular reports on how global logistics and supply chains are affected by the continued unpredictability in terms of the rising raw materials, energy and manpower costs faced by the industry while also working in partnership to design solutions on how to navigate through these challenges. Our clients can use these to help assess the real financial and operational impact that the crisis is having on project delivery and supply chain security and predictability. Here, IT tools like deugro visiotrack, with its carbon footprint feature, and market indices can assist stakeholders in illustrating growing trends in the cost of shipping cargo, in port congestion and transit time risks within the supply chain.

deugro has also developed alternative contracting methods and pricing mechanisms to support our customers in mitigating the risk of ongoing and future projects. Early engagement and detailed discussions are essential to ensuring that project challenges can be assessed, solutions designed, and tangible benefits realised. With many EPCs moving away from pure lump-sum turnkey contracts due to market volatility, it is important that the energy and petrochemical industry have the opportunity to manage the risks faced while being able to transparently pass on cost savings to their clients, as well as protect themselves from escalating rates.

In view of the global efforts to decarbonise, and considering local environmental protection, the energy industry is already strongly investing in measures and strategies to support more effective and efficient operations, energy consumption and sustainable supply chains.

At deugro, we are observing a real demand for consulting services, with an increasing need for professional advice from logistics subject matter experts as the value of a strong, secure and predictable supply chain becomes more important.

These encompass extensive logistics studies, supply chain assessments and analyses to accurately record and reduce carbon emissions. Including supply chain concepts to consolidate more cargo and better utilise freight space capacities, either for ocean, overland or air transport. This enables the reduction of carbon emissions, while focusing on lowering transport costs and risks at the same time.

An important additional part of these concepts to improve the environmental balance and safety focus is the selection of suitable subcontractors with investment in more efficient and environmentally focused assets, along with a commitment to upskill and train their operational teams.

To report and record carbon emissions more precisely, deugro has integrated EcoTransIT World into its CargoWise



At deugro, we are observing a real demand for consulting services.

-Tim Killen, deugro

transport management system and deugro visiotrack tools. It calculates the carbon emissions of complete transport chains across all transportation modes worldwide, based on a neutral methodology. Providing users, at the touch of a button, with carbon footprint data of global shipments and supporting them in finding alternative solutions.

This shows that, although there are still many challenges to be resolved, the industry is proactively developing solutions to support a sustainable future.

The grid structure

Huge efforts are being taken to speed up and enhance the development of renewable energy sources, but the electricity grid networks that transmit electricity across countries and continents also need attention as it is this key infrastructure that is necessary to deliver the energy to end-users. Energy from renewable sources makes frequencies and voltage production unreliable and requires a balanced grid – challenging the legacy transmission lines and grid systems, which need invertors to adjust system fluctuations.

For wind and solar power, the question is how to match capacity in times of increased loads during peak hours with the inflow and outflow of power surges in a grid transmission system, and how to mitigate electricity loss across long distances. Ultimately, this means that transmission, distribution and storage are also at the core of sustainable energy transition.

Smart grids, including high-voltage direct current (HVDC) transmission such as the SuedOstLink, are an integral solution to support the transmission of renewable energy sources. It will ensure that the electricity produced in the windy north and northeast of Germany from renewable sources can be transported to the south with reduced electrical losses. Energy storage projects are also being developed as a way to tackle grid instability and provide virtual transmission when required, along with the continued investment in new transformer equipment to manage these increasing challenging grid demands. deugro works with clients across all aspects of the transmission and distribution industry supporting the upgrading and expansion of modern global electrical grid infrastructure.

Let's travel this journey together.

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*Source: EIC DataStream including, Carbon Capture, Hydrogen, Upstream, Midstream, Downstream & Energy Storage



Preparing for the future

The multipurpose shipping sector's decarbonisation drive is ratcheting up another gear. Still, with much ambiguity about fuel types and their safety, making an investment decision is still an arduous task.

here is a certain amount of uncertainty and doubt in the shipping industry as today, while we are pioneering alternative fuels, clear paths for the future are lacking - LNG, LPG, methanol, ammonia, hydrogen, biofuels are just a few examples of alternatives to the common fuels used today" said Valentin Gherciu, head of global operations and QHSE, for AAL Shipping.

"There are pros and cons for each alternative and the lack of a 'silver bullet' solution leaves the whole maritime industry in a precarious situation regarding which way to go, where to invest, with whom to partner."

"It is a complex situation where no clear roadmap is available. Even simple solutions to the problem are missing. For example, at-berth electricity supply to meet the ships' energy requirements is hardly available anywhere.

LNG rethink

"Looking 10 years back, LNG was one of the top preferences for shipping companies and a few hundred ships were fitted or built to use LNG. Nowadays, given the methane emitted in combustion of LNG, it appears to be a 'no go' for the future.

"What we lack today is a clear strategic decision at industry's highest level; individually, each shipowner/carrier may have different perspectives on the challenge ahead. Uncertainty is the word that quantifies the status quo of the future of green marine fuels."

Ammonia is emerging as a

potential fuel of the future for the marine transportation sector; classification society Bureau Veritas (BV) has carried



What we lack today is a clear strategic decision at industry's highest level.

- Valentin Gherciu, AAL

out a study aimed at de-risking its use, with a specific focus on leak mitigation and treatment, in collaboration with energy major TotalEnergies.

Ammonia is one of the main zero-carbon fuel options currently envisioned by shipping as the industry seeks to decarbonise. Because it burns without emitting CO2 and is zero-carbon 'well-to-wake' when produced from renewable energy, it is a top contender among potential alternative fuels. However, ammonia presents several safety challenges that must be addressed before it can be used on board ships.

Exposure

Ammonia is toxic to humans, and exposure beyond certain levels and durations can have serious health consequences for crewmembers and other people on board. For shipowners and designers, therefore, a key challenge is to prevent accidental ammonia leaks during ship operations and bunkering.

The joint preliminary study has evaluated the health and



safety risks from ammonia leaks for crew and passengers and pinpointed key safety criteria, broadening the shipping industry's understanding of ammonia as a marine fuel.

Leak scenarios

So far, the study has examined different leak scenarios for single-wall and double-wall containment, as well as during bunkering operations – also providing key insights on the efficiency of ventilation and vapour processing systems, the size of safety zones needed, and the health risks to people exposed to leaks.

To help de-risk ammonia as fuel, BV is building on a tried-and-tested approach that was used in the last decade to propel the development of LNG as a fuel. BV's Rule Note NR 671 was also used as a guideline, given its focus on preventing ammonia leaks and requirements for onboard vapour processing systems.

BV found that LNG becomes dangerous at around 50,000 parts per million (ppm), while ammonia starts to have health effects above 30 ppm when permanently exposed, or around 300 ppm when exposed for one hour.

Based on this, BV noted that unless modifications are made to design, safety distances should be much greater for ammonia than LNG. This confirmed the approach outlined in BV's NR 671, which includes more stringent leak management on board and vapour gas processing to avoid



At the moment we are looking at optimising, both in terms of performance and structural aspects of the ship.

– Yahaya Sanusi, AAL

even small leaks reaching manned areas.

Laurent Leblanc, senior vice president technical and operations at Bureau Veritas Marine & Offshore, commented: "Until technology developments can eliminate ammonia leaks completely, leak mitigation and treatment remain the best course of action for shipowners and designers.

"Our preliminary study with TotalEnergies forms a strong basis for future industry collaboration. By pairing the right questions with the right tests, marine stakeholders can begin the journey to de-risking ammonia as fuel, as they did for LNG."

Newbuild order

AAL Shipping placed an order for six 32,200 dwt Super B-class newbuilds at the end of last year, which have been designed and developed in cooperation with Columbia Shipmanagement.

Destined to hit the water in 2024, the ships will feature dualfuel and methanol-ready notations.

Yahaya Sanusi, deputy head of transport engineering, AAL Shipping (AAL), commented on the newbuilding programme: "We are still in the detailed engineering phase. At the moment we are looking at optimising, both in terms of performance and structural aspects of the ship. With this, we hope to achieve a higher speed than the contractually specified speed, or the same speed with a reduced engine power."

The vessels will have clear weather deck space of 146 m x 26 m, will feature extendable pontoons that can increase stowage space even further, as well as allowing certain cargoes to safely overhang the deck when required. Under deck there will be two box-shaped cargo holds, one measuring 68 m x 25 m, and the other 38 m x 25 m. "The extremely large holds of the vessel require that we do a detailed study on the ship's structure. Here, we are working closely with DNV to optimise the global structure of



The trade stagnation of the pandemic and geopolitical unrest have cemented a need for nations to become more self-reliant...

– Felix Schoeller, AAL

the ship," Sanusi added.

Felix Schoeller, commercial director, believes AAL is well positioned to cater to the growing demands asked of multipurpose carriers: "As far as renewables go, there has already been a global drive for investment for quite a few years, with governments keen to meet their CO₂ emissions commitments. What the trade stagnation of the pandemic and current geopolitical unrest have cemented is a need for nations to become more self-reliant and sustainable - reducing their volumes of energy-related imports and limiting their fossil fuel-heavy economies.

"Despite the forecasted growth in both the fossil fuelbased and renewable energy sectors, the multipurpose shipping market is prepared to deal with this growth.

"Not only is the current spike in container demand set to level out and release certain carriers' tonnage that was chartered to support that demand, but we are also seeing larger'mega-size' vessels enter the market that have been designed to handle the forecasted demands of the next generation in energy sector components – as with our own Super B-class' vessels."

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Resurgent West Africa

The West African market is seeing a resurgence in project cargo shipping activity. Oil, gas, energy and civil infrastructure are generating a wealth of activity, and carriers and forwarders alike are restructuring to capitalise. David Kershaw reports.

nergy, power and transport projects have been the backbone of Africa's construction market - although commercial real estate has also emerged as a critical growth market in recent years. According to Deloitte's Africa Construction Trends report, published at the start of this year, some USD521 billion of projects are under way across the continent.

West Africa is, for the first time since 2016, leading the continent by number and value of projects (at least USD50 million in value). China's role in the market is increasingly pronounced, accounting for one in four projects in 2021. Private domestic firms have also increased their share of projects being built, constructing on average one in four projects across the continent since 2016.

Project values

According to Deloitte, 153 projects with a combined value of USD172.8 billon are in various stages of development and execution in the west and value has risen significantly over the past few years, fuelled by increased investments in new mega projects in the region.

In the past, the continent's economic development as a whole has been hamstrung by, among other things, limited transport and mobility infrastructure. West Africa's attempt to tackle this shortfall is reflected in the number of projects surging ahead in this field - 67 in total (43.8 percent share), primarily roads and bridges. The energy and

power sector recorded 28 projects (18.3 percent), followed by the real estate sector with 23 projects.

As the largest economy in the region, it is no surprise that Nigeria tops the Deloitte chart with 55 projects under way - again mostly road and bridge construction. Ghana had 47 projects in progress, accounting for 31 percent of the region's overall projects. The Ivory Coast registered 15 projects, holding a 10 percent share of the region's capital projects.

In value terms, Nigeria accounted for 58 percent (USD100.9 billion) of the region's total value of projects, followed by Ghana with a share of 13 percent (USD22.5 billion). Guinea contributed the third-largest share in value on account of the its Simandou-Conakry iron ore mining project and associated 670 km railway line.

West Africa is certainly an improving market for project logistics activity. High oil prices had started to encourage exploration activity prior to Russia's invasion of Ukraine, which subsequently disrupted supply significantly.

West Africa is certainly an improving market for project logistics activity. High oil prices had started to encourage exploration activity prior to Russia's invasion of Ukraine.



In Senegal, for instance, work is well under way on major developments including bp's Grand Tortue Ahmeyim (GTA) gasfield, and Woodside's Sangomar field, both set to start production in 2023.

Addressing energy shortfalls

Russia has supplied, on average, 62 percent of European gas needs; with Europe likely to turn its back on those imports for years, new supplies are needed. African imports make up 18 percent of European gas supplies today and it is well placed to pick up the

bp pulled the plug on its Russian activities earlier this year, booking pre-tax charges of USD24 billion and USD1.5 billion in its first-quarter 2022 results in the process. Ceo Bernard Looney said the decision was not only the right thing



We are scaling for growth in our logistics business in Senegal to match our offerings along the coast in Benin, Togo, Ghana and the lvory Coast.

– Gerrit van der Merwe, OMA Group

logistics business in Senegal to match our offerings along the coast in Benin, Togo, Ghana and the Ivory Coast. We will also offer a complete and compliant logistics platform dedicated to the energy industry." He added that the Ivory Coast and Senegal are both investing heavily in power generation and increasingly sophisticated infrastructure, whilst continuing to develop their agricultural capacity.

Joint venture

Multipurpose specialists Bremen Overseas Chartering and Shipping (BOCS) and Universal Africa Lines (UAL), meanwhile, established a joint venture – UAL BOCS Shipping Line (UBSL) – during May 2022.

The joint venture will trade between the Mediterranean and Black seas to and from West Africa. Based in Capelle aan den IJssel, the Netherlands, UBSL will continue the existing UAL Mediterranean service, which will be supplemented by additional expertise and tonnage from BOCS.

Together, the service can draw on the fleets of both shipping lines, comprising 19 modern, geared multipurpose vessels (8,000-33,000 dwt), equipped with cranes capable of lifting up to 360 tonnes.

"This was a logical step for UAL in the strengthening of our excellent relationship with BOCS. We have already been successfully working together with them for years from Northwest Europe to West Africa. This cooperation has brought a lot of advantages for both our groups, as well as our clients. In the current market it is extremely difficult to find vessel space for both ourselves and our clients," said Harald Maas, director of UAL.

"By sharing our tonnage, we still manage to fulfil the needs of our clients in this tight market. The synergies are obvious, and with this exciting new joint venture we will extend these further for our Mediterranean and Black Sea clients as well," he added.

Björn Hollnagel, managing director of BOCS, added: "We are very pleased to intensify our well-established collaboration with UAL. Again, our clientele will benefit from more flexibility, in particular an

to do but is also in the company's long-term interests. bp has several big gas projects in Senegal and Mauritania – the aforementioned GTA, as well as the Yakaar-Terenga and BirAllah LNG projects.

LNG volumes from the 2.5 million tonnes-per-annum GTA FLNG phase 1 have already been sold, and some gas from Yakaar will be used as feedstock for Senegal's gas-to-power plant. Gas from GTA LNG phase 2, the remaining gas from Yakaar-Teranga and BirAllah are still uncontracted. Still, the economic viability of these projects is certainly improved in the current environment and should benefit from a supply-constrained LNG market in the coming years.

According to analysis from Rystad Energy, Africa is conservatively forecast to reach peak gas production at 470 billion cu m by the late 2030s, equivalent to about 75 percent of the expected amount of gas produced by Russia in 2022.

Even with the number of gas projects being developed or currently delayed, Africa still has significant production potential. The continent is forecast to increase its gas output from about 260 billion cu m in 2022 to as much as 335 billion cu m by the end of this decade.

If oil and gas operators decide to up the ante on their gas projects on the continent, near and mid-term natural gas production from Africa could surpass the above conservative forecasts.

Logistics service providers are gearing up in preparation to service growing demand. Gerrit van der Merwe, OMA Group's ceo, stated:"Certainly, from OMA Group's viewpoint we are scaling for growth in our

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Logistics Plus assists delivery of module vaccine plant

The Belgian division of Logistics Plus has transported a modular vaccine manufacturing facility from Zeebrugge to Senegal, West Africa.

Logistics Plus's scope began by arranging and supervising module handling at Zeebrugge, before transferring the units to Antwerp where they were loaded onto a vessel headed to Senegal.

The company said that, although its role in the

overall project was small, it was happy to have played a part in getting the facility up and running. "I am so proud that our team could assist with a project of this magnitude.

"The opening of this vaccine manufacturing facility will positively impact millions of lives in Africa," said Frederik Geirnaert, Logistics Plus global project manager.

Port of Ndayane construction starts

At the start of the year, DP World and the government of Senegal laid the first stone to mark the start of the construction of the port of Ndayane.

The ceremony follows the concession agreement signed in December 2020 between DP World and Senegal to build and operate a new port at Ndayane, about 50 km from the existing port of Dakar.

The investment of more than USD1 billion in

two phases to develop port Ndayane is DP World's largest port investment in Africa to date.

Phase one of the development will include a container terminal with 840 m of quay and a 5 km marine channel designed to handle two 336 m vessels simultaneously.

DP World's plans also include the development of an economic/industrial zone next to the port and near the Blaise Diagne International airport.

Nanami Shipping joint venture launched

The Nanami Shipping joint venture was formed at the end of last year by Antwerp-based Steelduxx, SevenLog Ghana, Japan's TST Yokohama and Portugal-based Grupo ETE formed. The joint venture brings together stakeholders from Asia, Europe and Africa. It will provide services in marine chartering, freight forwarding,

marine technical services, ship management, agency and maritime services, and consultancy.

Steelduxx said the alliance brings the right people, assets and extensive know-how to its clients' businesses and will be the missing link in the trade from Japan to Africa and Europe.

extended port coverage and an increased number of sailings. Furthermore, this step is another attempt to satisfy the needs of our customers, especially our long-term partners in West Africa."

UAL Chartering in Copenhagen will act as commercial agent for the joint venture.

Pressures

The present market has proven difficult for Ghana-headquartered haulage, lifting and forwarding specialist Jonmoore International, which has seen project logistics activities drop by roughly 70

A spokesperson said: "We have experienced a tremendous decline in transport and logistics services to Burkina Faso and Mali, our major source of operations, due to increased terrorism activities, and attacks on mining communities and delivery convoys in the region.

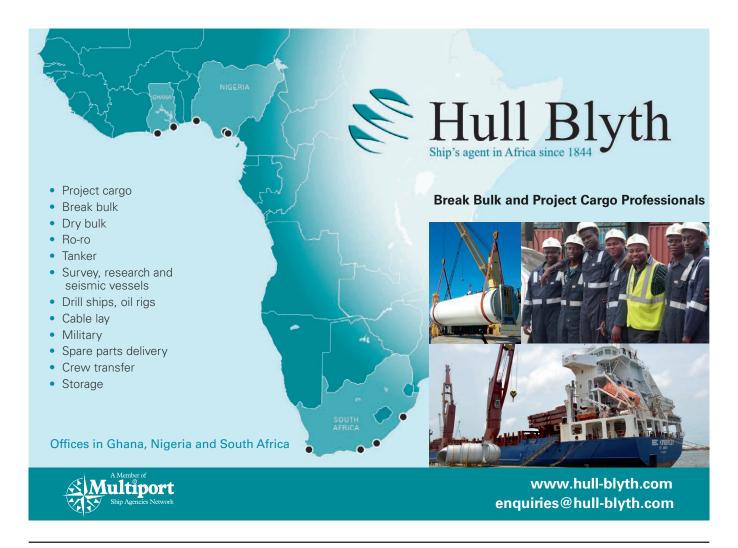
"The impact of another wave of Covid-19 and a subsequent lockdown in China, coupled with high fuel prices has impacted negatively on project logistics."

It too has come under pressure from high freight charges, a lack of space for air and sea shipments, and a shortage of containers for ocean exports.



This cooperation [with BOCS] has brought a lot of advantages for both our groups, as well as our clients. In the current market it is extremely difficult to find vessel space for both ourselves, and our clients.

– Harald Maas, UAL



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South Korea benefits from turmoil in China

Port and manufacturing shutdowns in China have opened up new opportunities for South Korea as companies seek to spread supply chain risks. Although competition from lower-cost countries is fierce, South Korea remains a powerhouse of heavy engineering. *Chris Lewis* reports.



outh Korea has come a long way in a remarkably short time – politically as well as economically. Since the end of authoritarian rule in 1987, the country's successful economic development has gone hand in hand with the growth of democracy.

The transformation has not been entirely straightforward, with two recent former presidents currently serving long prison sentences for corruption. The major business conglomerates (chaebols) that have dominated economic activity since the 1970s still wield great power and arguably hinder full competition.

But undeniably, South Korea is today a much more open economy and one that continues to recover from the setbacks of the Covid-19 pandemic, propelled by strong export growth, improving business

investment and public support, said the Organisation for Economic Cooperation and Development (OECD). The organisation added that South Korea's growth is set to remain robust in 2022 and 2023, averaging close to 3 percent.

Easing of restrictions

A rapid vaccination campaign, with close to 83 percent of the total population having received their first shots and around 80 percent fully vaccinated by late November 2021, enabled a phased easing of restrictions on business operations.

Export growth is projected to remain robust through 2023 on the back of strong global demand for major items such as machinery and petrochemicals, although supply bottlenecks and shortages causing delivery delays are likely to continue to

hamper overseas sales of some products.

Likewise, the International Monetary Fund (IMF) maintained its 2022 growth outlook for South Korea at a projected 3 percent, saying that exports and investment will probably remain robust despite heightened economic uncertainty. The IMF's latest projection, however, lowered its 2023 growth outlook from 2.9 percent to 2.8 percent.

Yoon Suk-yeol of the conservative People Power Party began his term in office during May, promising a tax-cutting and deregulation agenda. This is likely to be popular with business, if not the entire population. But potential headwinds remain – South Korea joined the USA and the EU in imposing trade and financial sanctions on Russia as a result of the latter's invasion of Ukraine. Like elsewhere, the conflict will



have an impact on the supply of energy and some other key materials to the country.

Nevertheless, business is blossoming across South Korea. It has been further boosted by the government's recently announced Urban Renewal New Deal project – a nationwide scheme aimed at creating smart cities and revitalising the urban economy in the next few years.

Felix Schoeller, commercial director at specialist heavy lift and project shipping line AAL Shipping, said that South Korea has traditionally been a strong, even booming, export market for cargoes such as steel and large manufactured items like transformers or power generation modules. While export volumes of these products have fallen away a little due to general global economic difficulties, there is still a strong trade to Australia and North America, he added.

The country also had a strong shipbuilding sector – four of AAL's current 19,000 dwt S-class vessels were built there, for instance – and while most of this business has moved to other countries such as China, the expertise lives on in the production of power generation modules and other energy-related equipment, along with power plant, heavy construction and mining equipment.

Export potential

Prospects for the latter are bright in regions including China, Latin America, Africa and Oceania and, with the USA passing the Infrastructure Bill last year, North America, according to AAL's in-house analysts.

So far, South Korea has concentrated on the production of equipment for the 'traditional' energy segment such as oil and gas rather than renewables, and it remains one of the key manufacturing locations for power plant equipment.

However, the country could develop into a major user of green energy and there is plenty of potential in the renewables sector within South Korea itself. As the eighth largest energy-consuming country in the world, the government plans to increase the share of renewable energy sources in the electricity supply.

One development is the 800 MW Firefly project, which will be among the first commercial scale floating offshore wind projects in the world. During March, Equinor awarded Havfram a contract for a transport and installation study for the project.

The scope of the study includes transport and installation activities offshore as well as the supply and procurement of the interarray cables and mooring systems.

AAL's Schoeller said that South Korea is



often used as an advanced sourcing location by EPCs, with the simpler modules being produced in lower labour cost countries in Asia. South Korea, which has one of the higher labour costs in the region, caters to the more sophisticated end of the market, he explained – assemblies that have major electronic elements, for example.

In the recent past there has been an exodus of activity. "Because of the competitiveness of China, which was able to offer sophisticated equipment at a very good price, a lot of the EPCs went there," explained Schoeller.

But lately, some customers have started returning to South Korea because of port congestion in China and the general uncertainty over supply chains due to the repeated lockdowns. "It is seen as diversifying the risk," Schoeller said. "South Korea is seen as the logical alternative."

Perhaps though, this should not be overstated. AAL's analysis suggests that while there is anecdotal evidence that some firms are considering relocating out of China, it will probably not have a serious effect on its current dominance of global supply chains.



In addition to its engineering know-how, South Korea is an excellent shipping hub.

– Felix Schoeller, AAL Shipping

It is unlikely that there will be a serious shift among companies in the heavy machinery sector to South Korea, given the latter's higher production costs.

Shipping hub

In addition to its engineering know-how, South Korea is an excellent shipping hub, Schoeller pointed out. The country has a large number of very efficient ports, relative to its size, and while they have lately been a little more congested due to the global disruption in shipping, the situation is nowhere near as bad as in China. And with excellent land transport links, it is easy to switch from one South Korean port to another, if necessary.

AAL operates a number of scheduled liner and regular trade lane services for breakbulk, project and heavy lift cargo, and South Korea ports feature in the schedules of several of these, including those to Australia and the Americas. Last year, it appointed Wallem as its agent in the country, replacing the small office and local representative previously employed.

Looking to the future, Schoeller is optimistic about prospects in South Korea, despite Asia being a very competitive market for engineering. The country occupies a useful niche, able to offer technical sophistication on a par with Japan but at lower cost. And while it may be more expensive than the likes of Vietnam or Thailand, it currently has a much greater level of expertise in areas such as electronics.

Although it would be risky to underestimate the potential of some of the lower cost countries, should they make a determined effort to penetrate some of the more sophisticated sectors, Schoeller added: "Nonetheless, South Korea is a strong contender, and it certainly seems to have got its ducks in a row."

He is also generally optimistic about the prospects for the market as more major

Gigafactories look to South Korean expertise

Demand for lithium-ion batteries is soaring, particularly in Europe and North America. The development of gigafactories will be something of a boon for South Korea, which is supplying much of the specialist machinery for the plants.

According to Wallenius Wilhelmsen, currently 70 percent of lithium-ion batteries are made in Asia but European and US manufacturers are ramping up local production with 38 gigafactories planned or currently being built in Europe alone, all of which

rely on the delivery of specialist machinery in order to become operational. South Korean OEMs are benefitting and many of them rely on ro-ro solutions to overcome supply chain constraints.

Jisun Lee, Wallenius Wilhelmsen breakbulk sales representative in South Korea, said: "Having shown resilience in the face of global challenges, our ro-ro service is helping to keep supply chains in the fast-moving electric vehicle lithium-ion battery market running smoothly."

The company also offers storage solutions at destination ports, ensuring machinery is kept safe until it is ready to be moved.

Specialist handling equipment means the high-value machinery can be easily rolled on and off vessels and, once wheeled onto the vessel deck, products are safely stowed on the handling equipment and protected against adverse weather conditions for the duration of the sea voyage, said Wallenius Wilhelmsen.



projects start to come online after the two years of uncertainty caused by Covid-19. "The market was a little bit 'dry' as a lot of decisions were, understandably, being pushed back, but it is starting to increase again and many of the new projects are linked to South Korea."

He added that the cost base in South Korea is probably now much more realistic and market-based; in the past, there was a lingering suspicion that the government subsidised heavy industries. However, refusal of the government to bail out bankrupt container line Hanjin in the middle of the last decade is perhaps a sign of a new commitment to market forces.

Local logistics expertise

There is no shortage of local logistics expertise in South Korea, either. A typical participant in this segment is Dongbang Transport Logistics, which provides services such as stevedoring, inland transportation, warehousing and so forth. General manager Kris Bae is responsible mainly for the heavy

cargo business sector. He said that Dongbang has the largest number of selfpropelled barges in the local market.

However, Bae added, the heavy cargo business sector is not constrained by the limits of the South Korean market since Dongbang's fleets are operating worldwide. Indeed, Bae said: "Demand for heavy cargo carriers increased significantly from last year due to large number of modular projects, as well as offshore wind farm projects worldwide. We estimate – and hope – that this trend continues for the next few years."

The one exception is shipments from the

Demand for heavy cargo carriers increased significantly from last year due to large number of modular projects, as well as offshore wind farm projects worldwide.

- Kris Bae, Dongbang

USA and Europe to Russia, which have of course been cancelled or delayed.

Last year, the Covid-19 pandemic led to quite a few cases of shipment schedule delays and cancellation of the contracts for Dongbang fleets. However, as the restrictions began to be relaxed slightly throughout the world, there has been a drop in such cases this year, Bae said.

From an operational perspective, "until last year, none of our superintendents could attend any vessel operations at site due to travel restriction imposed worldwide". As a result, there was an increase in near-miss or incident cases at sites: "However, from this year, superintendents from Dongbang started travelling to sites to control and supervise the operations, improving the communications among all concerned parties at the sites."

Until last year, said Bae, vessels had to go through additional pandemic-related measures when calling at international ports and these were frequently changed, which caused a bit of confusion and delay. However, all masters and vessel operators are now familiar with all the measures and regulations and delays have since been reduced.

Recent project

A recent project for Dongbang saw it handle cargoes for the Dos Bocas refinery in Mexico, on behalf of Samsung Engineering. Dongbang executed 10 voyages from South Korea to Mexico to deliver 47 pre-assembled piperack (PAR) modules, with the heaviest module coming in at 1,570 tonnes.

The work was carried out according to a fixed installation sequence mobilising four self-propelled vessels from Dongbang's fleet as well as six chartered units from other vessel owners.

In addition, Dongbang handled the loading operations with its fleet of SPMTs as well as the seafastening.

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Balancing acts for ever-larger loads

Under-the-jib attachments are a vital component of lifting systems. While they may be small compared with crane and load, they are a critical element in ensuring lifts are performed safely and efficiently. *Will North* reports.

he rapid development of crane capacities over the past half century has revolutionised how we build – from refineries to skyscrapers, structures can be constructed out of large and often heavy

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modules far more quickly and safely than is possible using traditional methods. Raw lifting power is not enough on its own, however. Loads must be balanced and controlled as they are lifted.

The simplest below-the-hook attachment is a lifting beam. This consists of a beam with one lifting point at the top centre position and two below at the ends of the beam. The beam deflects, ensuring the load is

carried through both bottom slings and beam, up to the hook.

A spreader bar typically has lifting points or connections at both ends, both above and below. Slings or chains typically attach in a triangle to the top lifting points, linking these to the hook and compressing the bar; below, further chains or slings may connect straight down to lifting points on the load; or, again at an angle, to further spreader beams below.

Multiple tiers of spreader beams can be configured to keep large loads balanced and to distribute the load across lifting points, which may have limited capacity.

The capacity of spreader bars

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active of the following the load is the capacity of spreader bars

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has increased rapidly in line with that of heavy lifting devices. A good example of this is a recent deal signed by Dutch specialist lifting equipment manufacturer Huisman.

Giant spreader

The company is currently building a 3,000-tonne spreader for Seaway 7, which will be able to handle even the largest offshore wind turbine monopile foundations. As well as its huge capacity, the spreader features a hands-free sling attachment, using a battery powered remote control system.

Huisman builds devices like this to order, using proven design approaches. That is ideal for a client like Seaway 7, which can expect consistent demand for broadly similar lifts, many years, if not decades, into the future.

But what of those companies that take on a wide variety of

In the past, a general hirer, or heavy lift specialist, that took on

Modulift pioneered a new approach, offering beams in different sizes designed to be bolted to each other, and to end points or corner pieces.

different jobs with loads varying widely in size and weight would have needed either to keep a large number of fixed length lifting beams and spreader bar, or to hire them.

Modulift pioneered a new approach to this problem, offering beams in different sizes designed to be bolted to each other, and to end points or corner pieces. The beauty of a system like this is that a company with, perhaps, two 1 m sections, a 3 m section and a 5 m section, can construct beams of 1 m to 10 m in length. It will essentially have a choice of 10 beam lengths, from just four components.

Another advantage of the

Modulift approach is that multiple small components can be more easily transported and handled than one big beam. The company's largest beam is just 6 m long, small enough to fit into the back of a truck; many beams, the company said, can be handled manually.

Modulift innovation

Each Modulift beam has a flange at either end so that it can be attached to either another beam or an endpoint. Each endpoint has its own flange, for attachment to the beams, and attachment points for slings or other rigging. The company also offers corner pieces. These are right-angled sections, again with

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a flange at each end and attachment points. They allow for Modulift beams to be formed into a square, or rectangle, giving control of the load, and load balancing, in two axes rather than one.

The company's latest development is its biggest ever corner piece. The CMOD 250 can handle loads of up to 300 tonnes. It features a new improved design that, Modulft said, reduces the contact stresses between the top shackle bow and corner unit centre plate.

Units delivered

The first CMOD 250 units were ordered by Safe Lifting Europe and by I&I Sling Co in the USA. Jacques Vroegop, Safe Lifting Europe's operations manager, said: "Modulift always has a solution for us when we have a complicated lift and we were surprised with the CMOD 250. The size of span that it can reach is phenomenal, it really can be a huge frame and we cannot wait to use it later in the year." In the USA, I&I has a job lined up for its first CMOD 250 pieces, which will be used on a heavy lift being carried out by a customer at a shipbuilding yard.

A key aspect of below-thehook rigging is that, in many cases, rigging configurations will use multiple simple components. It is easiest for customers if they can deal with a single supplier for this equipment.

The benefits of being able to rely on a single supplier also apply on the manufacturing side. That appears to be the aim of investment company KKR, which in 2013 acquired Crosby and Acco. Since then, Crosby has gone on a buying spree, acquiring lifting equipment and accessory suppliers around the world. In just the last year, it has acquired Japanese hoist manufacturer Kito; Spanish rigging company Airpes, which develops systems including wind turbine blade clamps; lashing manufacturer Speedbinders; and British



camera and alert system innovator BlokCorp. Deals like these allow Crosby to offer a wide range of lifting equipment. As the sector incorporates ideas like Industry 4.0 and the Internet of Things (IoT), whereby devices on a site or facility transfer data between themselves, the company will be well placed to combine both lifting tools and

The size of span that it [Modulift's CMOD 250] can reach is phenomenal, it really can be a huge frame...

– Jacques Vroegop, SafeLifting Europe

sensors, making new approaches to lift monitoring and automation possible.

But the company's development has not just been reliant on having access to KKR's capital. Equally important is innovation. Recent new products from Crosby included a selection of clamps and pipe hooks, often used in wind turbine tower fabrication, as well as in other applications where handling steel pipes, tubes and plates is important.

A challenge here is holding the load securely, without damaging the steel. Design features of Crosby's clamps aim to minimise this. The camsegment and pivot, the components that clamp together, in the CrosbylP range (named following the acquisition of clamp manufacturer Inter Product), are shallower than on previous designs, but with more pieces contacting the load. This reduces the depth of indentations left on the load. When manufacturing components like turbine towers, this reduces the time that must be spent reworking the piece to repair this damage.

The CrosbylP range features both standard and custom products. Recent examples of custom manufacturing include the 22.5-tonne capacity special universal vertical clamp IPU10X3. The clamp, which was designed for a German wind energy manufacturer, features an extra-wide camsegment and three pivots for reduced surface pressure to further minimise indentations. A deep jaw, meanwhile, allows for lifting bevelled plates and constructions. Lifting brackets make positioning easy when the lifting clamp is in the horizontal position. The universal lifting eye permits lifting from every direction.

Another special product is the 6-tonne capacity universal horizontal clamp (model IPHGUX1), which presents many of the same benefits to the end user and is ideal for rolling larger plates. This is a new hightonnage addition to the universal horizontal lifting clamp range. The 70-tonne capacity pipe hook (model IPPH) has been designed for 5.7 m to 7 m diameter pipe, up to a thickness of 100 mm. It features soft steel replaceable inserts and is equipped with 40-tonne capacity G-2140 shackles. With both the universal horizontal clamp and pipe hook, other capacities and jaw-openings are available on request.

Load control

Crosby has invested into Verton as well. The company is one of two Australian developers of load orientation tools that have been adopted by lifting companies around the world.

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Verton's system is branded Everest; fellow Australian company Tensa calls its system Roborigger.

Loads can easily start to rotate during lifting, potentially colliding with nearby obstacles; conversely, they must sometimes be rotated intentionally. Traditionally, this has been done by having a member of the lifting crew directing the load with a rope. It does not take much imagination to see how dangerous this job can be if the load is caught by the wind, or is dropped.

Verton's Everest and Tensa's Roborigger avoid the need for lifting crew to work near the load. Instead, the tools hang between the load and hook, with a remote precisely controlling the load's orientation.

Worldwide applications

While these innovations were spurred in part by events in the Australian local market, they have clear worldwide application. Over the last year, both companies have been developing their international distribution.

Crosby's investment in Verton will allow the two companies to offer Everest orientation tools, and the specialist WindMaster blade orientation tool, around the world. The company also recently improved its local Australian distribution with an agreement with Brisbane's System Rigging. Another deal, with Rope and Sling Specialists (RSS) will see the products distributed in the UK.

Roborigger has also been boosting its international distribution. The company recently entered into an agency partnership with Ludwig System, a manufacturer of radiocontrolled crane hooks based in Germany. The company will sell Roborigger in Austria, Germany, Switzerland and the Netherlands.

The deal goes beyond a mere distribution agreement. It will also see the development of new product configurations, combining Roborigger with



Ludwig's remote controlled crane hooks. This combination offers the possibility of attaching, orientating and releasing the load, all controlled with a single remote from a safe location.

Roborigger had not, until 2021, had a dedicated manufacturing facility. That changed in July last year when Western Australia's minister for innovation, Don Punch, opened the company's new factory in Wangara. At the opening, Roborigger demonstrated new products and technology in development including a voice control system for Roborigger units and a novel data capture system that allows all load movements by Roboriggers anywhere in the world to be automatically recorded and accessible on the web.

It is hard to overstate the potential importance of tools like this in an industry which is moving rapidly beyond remote control towards autonomous operations. One example of where technologies like this might lead came from a recent Roborigger deployment in Japan, where the company is working with tower crane manufacturer IHI and local developer Sumitomo Mitsui Construction (SMCC) to develop an autonomous tower crane. The system is currently being used to lift, orientate and install pre-cast concrete elements on a project in Tokyo.

SMCC's cloud-based system brings in data from a wide range of sources, including Roborigger, BIM, and GNSS tracking of delivery location, along with RFID tag tracking of deliveries. On a job like this, finding the most efficient load path, and changing the load's orientation as it is lifted, requires a highly skilled operator. Labour and skill shortages can delay projects.

Crosby's investment in Verton will allow the two companies to offer Everest orientation tools, and the specialist WindMaster blade orientation tool, around the world.

SMCC intends its system to work safely and efficiently, even without an operator.

Ocean motion

In most cases, lift planners must account for risks like load sway or rotations, and the effects of the wind. Generally, they do not have to plan for a crane being set up in such a way that it bounces wildly up and down as it works.

That is not the case offshore. There, the heaving motion of the ocean must be considered. In the oil and gas industry, purpose-built vessels and offshore cranes have been designed with active heave compensation (AHC) incorporated to counter this motion

In offshore wind, contractors often use barge-mounted crawler cranes, particularly for jobs closer to the land. These cranes, and the barges they are mounted on, do not have inbuilt AHC. While heave may not be as much of a factor as it is for instance way out in North Sea oilfields, it can still be a problem.

Companies like Roborigger's parent Tensa offer below-the-

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hook devices that can account for heave. In 2020, Tensa supplied one of its dynamic load reducers, a DLR100L, to contractor Austral Construction, for an 80-tonne barge-toplatform transfer in the Dampier Archipelago. Using the DLR increased the crane's lift capacity when subjected to vessel motion, and improved safety during the operation.

Offshore operations can require much more powerful load control. Seaqualize, based in the Netherlands, is developing below the hook heave compensation systems that could, it said, eventually be used on loads of 2,000-tonnes, allowing entire wind turbines to be lifted in one go, even in some of the most demanding sea conditions.

The company recently performed test lifts with Van Oord (which has also been an early partner of Verton). Seagualize's 600-tonne capacity Delta 600 combines passive heave compensation, which keeps the load steady, as well as a smaller active system, which accounts for only 5 to 10 percent of the load, but allows for precise positioning. The company said this is much more efficient than a fully active system.

Offshore trials

During the offshore trials, the Delta600 lifted a test weight to and from the floating supply vessel REM Trader, using Van Oord's jack-up crane vessel Aeolus in both jacked and floating conditions.

These floating-to-floating and floating-to-fixed lifts were operational tests of typical challenges in the offshore wind industry: installing turbine components using a floating vessel, or picking up components from a floating supply vessel. Seaqualize pointed out the potential use of the system in the USA, where the Jones Act means that it may be most efficient to transfer European-built turbine components to local barges offshore.



Transferring the most delicate parts of a wind turbine offshore is new to the market, and such operations comprise demanding lifting conditions and a new set of tools.

Wouter Dirks, innovation manager at Van Oord, said: "The offshore tests showed that the unique technology in the Delta will enable controlled offshore lifts during challenging feeder barge operations".

Another provider of custom under-the-jib equipment is UK-based Britlift. It focuses on designing custom solutions, including its own modular beams and bars, as well as other equipment, and putting them together in complex configurations for its clients.

One recent customer was Vision Modular Systems (VMS), which used Britlift equipment for work on a 44-storey modular building in Croydon, UK. The selection of equipment used by VMS could handle all of the modules installed on site, while reducing the weight of the rigging system itself by half, compared with the lifting frame that the company had previously used; that in turn potentially allows the company to reduce the capacity of the cranes it uses.

Liam Botting, managing director of Britlift, said: "VMS recognised that it had to save rigging weight, so we designed and supplied it with something totally new.

"Telescopic spreaders were not at all standard for this type of application but are now much more commonplace.

"Since then, we have won repeat orders from VMS and also provided additional services such as engineered rigging drawings to lift every module in their project. This involved over 40 different drawings created by our in-house technical team."

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NEWS in **BRIEF**

Layde becomes CEO

The Seafarers' Charity has appointed **Deborah Layde** as its ceo, with **Catherine Spencer** stepping down from the role. Layde has worked with the charity for a decade, most recently serving as director of impact. Her work has included examples of collaborative projects that are significantly enhancing the maritime welfare sector — for example, leading work during Covid-19 to provide an additional GBP2 million (USD2.42 million) of support for maritime welfare.

Konecranes picks Svensson

Konecranes has appointed **Anders Svensson** as its president and ceo. He will assume the role later this year.
Svensson joins Konecranes from Sandvik, where he currently serves as president of Sandvik Rock Processing Solutions. Until Svensson joins the company, Konecranes chief financial officer **Teo Ottola** will continue to act as the interim ceo.

Promotions at Trail King

North American manufacturer Trail
King Industries has promoted Kelly
Menz as vice president of engineering.
He joined the company in 1999 and
has been involved in the design and
development of many Trail King
products. He will step into the role
following the retirement of John
Rust. Eric Thomas, meanwhile, has
been named director of sales,
responsible for leading the district
sales and product support managers.

Kristoffersen steps up

Lasse Kristoffersen has officially stepped up as president and ceo of Wallenius Wilhelmsen. He was named ceo last year and joins from Torvald Klaveness, where he worked for the past 15 years, serving as president and ceo since 2011. Prior to that, he worked for 11 years at DNV.

Toll Group shake up

Toll Group managing director **Thomas Knudsen** is transitioning to the role of chairman following **John Mullen's** retirement. **Alan Beacham**, currently president global forwarding, will succeed Knudsen as managing director.

Skidmore heads up projects at Allelys

K-based Allelys has appointed **Danny Skidmore** as its head of projects. Skidmore has nearly 20 years of experience in the heavy lift and transport industry having worked in a variety of roles spanning a range of sectors, including civil engineering, renewables, power, oil and gas, rail and nuclear. He will be based in Allelys' head office in Studley, Warwickshire.

"I am excited to begin this new role and it is great to be back working for Allelys. I began my career here as a second man nearly 20 years ago and I am looking forward to bringing all of the knowledge I have learnt since that first role back into the business," said Skidmore.

"The company is experiencing a significant period of growth and the purpose of my role is to



ensure that we remain focused on continuous improvement during this phase. It is imperative that we build on our successes by instilling the best structure to our operational activities."



Kraaijeveld joins MyCrane

MyCrane has appointed **Piet Kraaijeveld** as its chief operating officer.

Based in Dubai, Kraaijeveld will be tasked with growing the MyCrane business, including working with the crane rental platform's existing franchisees around the world and encouraging EPCs to register as customers on the site. He will also oversee sales activities to the full range of MyCrane clients, including prime contractors, ports, petrochemical and mining operators.

Kraaijeveld has 30 years of experience in the heavy lift and transport industry, working on multiple continents including North America, Europe, the Middle East and Africa. He spent 11 years at General Electric and 18 years in management roles at

C-Job shuffles executive team

Ship design and engineering company C-Job Naval Architects has appointed **Job Volwater**, currently chief commercial officer, as its ceo.

Volwater succeeds **Basjan Faber**, who will take up the position of chief financial officer at the company.

Faber and Volwater founded C-Job Naval Architects in 2007. Volwater previously served as ceo until 2017 when he took a leave of absence to take the role of sailing team director for Team AkzoNobel in



the Volvo Ocean Race. He returned to C-Job in 2019 as chief commercial officer.

Further appointments to the executive team include **Jeroen Liesveld**, who has been with the company since 2010, as chief operational officer. **Wouter den Boer** has joined C-Job from Huisman Equipment as chief commercial officer.

Mammoet. Recently, he worked in Dubai as strategic account manager for Ritchie Bros.

Changes at the top for Swire

Swire Shipping has appointed **Jeremy Sutton** as managing director. **Chris Daniells,** meanwhile, has been named managing director of Swire Projects. Sutton currently serves

as chief operating officer and will succeed **James Woodrow**, who is relocating to the UK to serve as managing director of James Finlay, also a Swire company. Daniells will retain his current position of chief commercial officer of Swire Shipping.

Sutton said: "With very supportive shareholders and a great leadership team, we intend to continue to focus on growing Swire Shipping's three core operating businesses."

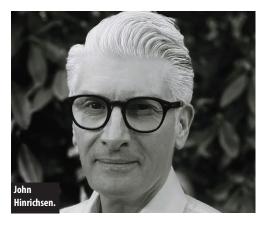
Hinrichsen to lead One World unit

amburg-headquartered One World
Shipbrokers has established One World
Sale & Purchase. **John Hinrichsen** has
been appointed as managing partner, bringing
with him 20-plus years of experience in the market.

Having trained in Hamburg and London, he returned to his native city in Germany in the late 1990s to take the helm of the family shipbroking firm Hinrichsen & Co.

In the ensuing years, Hinrichsen has been managing director of several Hamburg-based shipbroking companies, most recently United Maritime Brokers. He has facilitated many second-hand and newbuilding sales of container, bulker and tanker units, as well as of niche types such as reefer, offshore and multipurpose. He is also an experienced demolition broker.

"This is really an exciting step for me," said Hinrichsen. "With the establishment of One World



Sale & Purchase, we aim to offer a tailored high-capability broking service together with analysis, market reports and valuations, and I am looking forward to welcoming clients old and new across the world."



Damsgaard joins BIMCO

BIMCO has appointed **Thomas Damsgaard** to head up an office in Houston, USA, as it looks to expand its global reach and services to members in the Americas.

Damsgaard has extensive experience working in shipowning companies and agency business, and is engaged in training activities. The main part of Damsgaard's career has been in the USA, including in the Houston area.

An opening reception for the new office is expected to be held in connection with the

Breakbulk Americas exhibition in September 2022.

BIMCO said that local representation in the USA complements its offices in Athens, Shanghai, Singapore, London, and Denmark.

Maxim Crane rejigs team

Maxim Crane Works has appointed **Larry Lis** as vice president of fleet management and **Richard Minter** as vice president of pricing and sales operations.

Lis' appointment comes as Maxim Crane is poised to invest significantly in its crane and support fleet. He has more than 23 years of experience at Maxim Crane, most recently serving as the regional vice president for the Midwest region.

Minter, meanwhile, has served in various roles at Maxim Crane, including vice president all-terrain division, vice president strategic development, director of sales and strategic accounts, vice president special projects, and regional controller.

He will leverage people, data, and technology to develop pricing strategies, market intelligence and sales process design to increase sales productivity and drive profitable growth across Maxim's national branch footprint.

Erhardt grows with Muñiz

Igor Muñiz has been appointed ceo of Erhardt Project Cargo & Logistics Middle East.

Established by Spainheadquartered Erhardt, the company will be based in Abu Dhabi and provide project cargo services in the Middle East, Africa, Turkey and India as well as across the Asia Pacific.

Muñiz will combine this role with his current position as Erhardt general manager, which he has served as since he joined the company in 2019.

He has over 25 years of experience in the logistics sector specialising in project cargo.

NEWS in **BRIEF**

Hess switches roles

deugro has appointed Mario Hess as global head of customer solutions — deugro visiotrack. He said: "I will be fully concentrating in my new role on refining and increasing the portfolio of client solutions and the functionality of deugro visiotrack as well as on building the support and sales team globally." Hess previously led deugro's oil and gas logistics team.

RMS expands team

With RMS Projects and J. Poulsen Shipping entering a cooperation deal, Mads Bo Jørgensen and Anders Poulsen will become members of the RMS Projects chartering team. Working from Korsør, Denmark, they will support the RMS Projects central chartering desk, the tonnage desk as well as other ongoing projects. They both currently serve as chartering managers at J. Poulsen Shipping.

Hill Dickinson adds trio

International maritime law firm Hill Dickinson has boosted its team in Singapore with the hire of two senior shipping team lawyers. **Binoy Dubey** joins the company as counsel and master mariner, while **Matthew Dow**, joins as a partner, bringing significant experience in wet and dry shipping and offshore disputes. In addition, **Lance Tay** joins Hill Dickinson's shipping team as an associate, having previously worked at a niche marine practice in Singapore.

Noeklebye to depart

Erik Noeklebye is leaving Wallenius Wilhelmsen and the position as executive vice president and chief operating officer shipping services. He has worked at the company in a variety of cargo operation, trade and sales roles for 25 years.

Cordero appointed

Port of Long Beach executive director Mario Cordero has been appointed to the Maritime Transportation System National Advisory Committee, which advises the secretary on strategies to improve the readiness and resiliency of the US supply chain. Cordero, who has led the port of Long Beach since 2017, will continue in his role at the port.

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HLPFI columnist Evie Aufheben delivers another collection of updates from the world of project cargo logistics.



AAL puzzles furry fans

HLPFI thoroughly enjoyed seeing one of AAL Shipping's furry fans - a Jack Russell named Phoebe - admiring a scale 3D puzzle model of one of the shipping company's heavy lift Super B-class multipurpose vessels, AAL Hamburg (pictured). Hoping to get our hands on one of the models, HLPFI will be keeping a close eye on AAL's social media feeds where a campaign will soon be launched to give away 100 of the limited edition puzzles.



A slice of celebration

Congratulations to Chipolbrok on celebrating its 71st anniversary on June 15. The occasion was a dual celebration as it coincided with the delivery of the 62,000 dwt newbuild vessel Yongxing. The company took the opportunity to commemorate the day with a delicious-looking cake. HLPFI wishes it could have joined the celebrations with a slice or two.

In the groove with Gorillaz

Integral Chile, member of the XLProjects network, has been handling tour equipment for one of HLPFI's favourite bands,

Equipment for the show, including many screens to show off the trademark virtual characters, arrived at the Arturo Merino Benítez Airport in Santiago de Chile from Buenos Aires, Argentina, and was transported to the Movistar Arena Santiago where the concert took place.

As soon as the show ended, staff disassembled the equipment and Integral Chile carefully took cargoes from the Arena to Santiago's airport again by truck.

To keep up with Gorillaz's busy tour schedule, the equipment had to be shipped to Querétaro, México, as soon as possible. Due to a lack of space and flights, the shipment had to be moved on a passenger flight, requiring Integral Chile to reorganise the cargo so that it met the height restrictions.

"The main challenge of this sort of cargo is that everything must be adjusted to





accommodate a very tight schedule and any mistake could put the next show or the tour at risk. Integral completed very detailed planning, execution and supervision of all the operation, always with people on site, at the airport and monitoring everything," said the company.

Certainly, fans were not left disappointed.

ABBA-solutely fabulous Stena

To celebrate the Swedish Midsummer, ferry company Stena Line put an 'ABBA-solutely' fantastic series of events on board its Irish Sea fleet from June 20-26

A number of vessels were decked out in Swedish bunting and decorations while an ABBA tribute band kept passengers entertained on others.

The company's prize draw also had an impressive line-up of



gifts, with a year's free Stena Line travel, IKEA vouchers and an electric bike, as well as Scandiinspired fashion and music vouchers up for grabs.



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