

EU TARIFFS TIGHTEN SCREWS ON RUSSIA

Port and terminal operators are facing a new wave of rules relating to government initiatives, as well as deadlines on the introduction of new procedures.

Bulk cargo operators are likely to be affected by political moves affecting products from certain regions. For example, the European Commission proposes to increase the tariffs on imports into the EU of cereals, oilseeds, and derived products from Russia and Belarus, including wheat, maize and sunflower meal. These tariffs, while high enough to suppress such imports into the EU in practice, would not affect exports to third countries, the Commission believes.

The measures are designed to achieve several objectives:

- to prevent EU market destabilisation through any future significant redirection of Russian grain products on to the EU market. The EU farming community has, in particular, expressed concerns about this risk – Russia’s role as a leading global grain exporter, coupled with its willingness to use food exports as a geopolitical tool, shows that it is high.
- to tackle Russian exports of illegally appropriated grain produced in the territories of Ukraine, some of which has been illegally exported to the EU market deliberately mislabelled as ‘Russian’. The tariffs proposed will ensure that this illicit export method is no longer profitable.
- to prevent Russia from using revenues from exports to the EU – of both Russian and illegally appropriated Ukrainian grain products – to fund its war of aggression against Ukraine. As Russia exported some €1.3bn-worth of such products to the EU in 2023, these EU tariffs will cut off another important source of profit for the Russian economy and, by extension, the Russian war machine.

European Commission President, Ursula von der Leyen, said: “We propose the imposition of tariffs on these Russian imports to mitigate the growing risk to our markets and our farmers. They will reduce Russia’s capacity to exploit the EU for the benefit of its war machine. And we maintain our commitment to preserving global food security, especially for developing countries. We are striking the right balance between supporting our economy and farming communities. At the same time, we maintain our unyielding support for Ukraine.”

The increased tariffs would also apply to Belarus in light of the country’s close political and economic ties to Russia. The transit of cereals, oilseeds and derived products from Russia and Belarus to third countries is unaffected by the proposal. This shows that the European Union remains fully committed to promoting food security globally, especially when it comes to developing countries, according to the Commission.

The proposal will now be considered by the Council of the European Union. Once adopted by the Council, the tariffs will immediately be applied.

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NEW GUIDELINES UPDATE DRUGS AND ALCOHOL ADVICE

The Oil Companies International Marine Forum (OCIMF) has recently published an updated information paper, *Guidelines for the Control of Drugs and Alcohol in the Maritime Industry (2024)*, that provides guidance on how to manage the risks and potentially serious impacts associated with the use of drugs and alcohol in relation to marine operations.

The updated publication aims to provide general guidance and recommendations for the maritime industry (operators of tankers, barges, offshore vessels and terminals associated with the ship-shore interface) in developing and implementing controls for the use of drugs and alcohol.

In the guidelines, drug and alcohol use includes the use of prescribed and over-the-counter medication, self-medication, recreational drug or alcohol use, drug or alcohol dependency, and accidental exposure to drugs or alcohol.

When designing a policy and procedures in relation to the control of drugs and alcohol, OCIMF advises that legal and other medical professional advice should be sought on the specific circumstances, including a review of legal authority

in the country or jurisdiction where workplace drug and/or alcohol testing may take place.

Saurabh Sachdeva, publications and advocacy director, OCIMF, welcomed the updated guidelines: "The reasons behind substance use can be complicated. To address this issue, OCIMF places great importance on having a well-defined drug and alcohol policy encompassing preventive and supportive measures, a testing programme and disciplinary actions. It is crucial to foster an environment where individuals feel supported and comfortable seeking help to manage this risk effectively."

These guidelines replace OCIMF's Guidelines for the Control of Drugs and Alcohol Onboard Ship (1995). The scope of the updated guidelines has been expanded to cover ships, barges, terminals and the offshore industry and includes new information on sampling and testing methods. Details of substances to be tested are included and a human factors lens has been applied throughout the document.

OCIMF advises the industry to use all the documentation and training resources available on the [OCIMF website](#).

SURVEY HIGHLIGHTS SALVAGE'S GREEN ROLE

The International Salvage Union's (ISU) recently released pollution prevention survey underlines once again the environmental benefit of the salvage industry.

Members of the ISU provided 173 services to vessels carrying 1.9m tonnes of potentially polluting cargo and fuel during operations in 2023. It again demonstrates the vital role of professional salvors in protecting the marine environment.

The data come from the ISU's Annual Pollution Prevention Survey for operations in 2023. President of the ISU, John Witte, says: "More than ever, environmental, social and governance requirements are at the top of the agenda for all industries and, of course, for shipping. The focus on emissions and climate change must be maintained but we must not lose sight of the importance of simply protecting the environment. It affects those providing services to shipping as much as the owners: the insurers and financiers as we see with the adoption of the Poseidon Principles.

"Sustaining a viable professional salvage industry ready to respond to all kinds of incidents around the world is vital and that is recognised by insurers and owners but it needs to be properly funded." There were fewer services in 2023 compared with the previous year and that is in line with the downward trend of the ISU general industry statistics. But each year there can be significant variations in the quantities of pollutants in each category. That may be due to vessel size increasing so that, for example, one major containership case might significantly affect that category.

The number of containers is lower than last year but, after bulk cargo, still represents the most significant category with ISU members providing services to vessels carrying 30,000 TEU amounting to some 400,000 tonnes of cargo. It compares with 187,000 tonnes of crude oil. Containers carrying a great variety of harmful and dangerous goods including plastic pellets (nurdles) represent one of the biggest threats to the marine environment.

Witte adds: "Containers continue to be difficult to deal with – offloading, storing and perhaps backloading. But the traditional threat from oils remains and there were also several cases of car carriers and RoRo fires and the carriage of electric vehicles (EVs) is an increasing concern. Salvors often do not know if there are EVs or batteries on board or the quantity."

Cargoes of refined oil products increased significantly in the 2023 numbers as did chemicals. Dirty and hazardous bulk cargoes in 2023 were 770,000 – down from 1,236,000 the previous year. An increased number of the services in the survey did not record the quantity of bunkers or the cargo type meaning the reported numbers likely represent a more modest total than the reality.

ITIC SHINES SPOTLIGHT ON ROBUST VESSEL DESIGN

International Transport Intermediaries Club (ITIC) has highlighted the importance of robust vessel design reviews and related insurance coverage throughout the construction process following a recent dispute between a naval architect, a shipowner and a shipyard regarding a vessel's operational performance post-delivery.

The vessel, a 24m catamaran servicing the offshore oil and gas industry, faced considerable operational limitations. This was attributed to unexpected vibration issues in the vessel's rudders, leading to hull stress and subsequent structural cracking.

Despite the naval architect's best efforts to solve the problem and the shipowner and shipyard's collaboration to rectify the causes through various modifications, no significant reduction in vibration was achieved.

Upon further investigation, it was discovered that the vibrations in the rudders were caused by cavitation due to the original propeller designs. Cavitation is the formation of bubbles from a nearby moving blade, such as the propeller, which results in the pitting of the rudder and/or blades' surface.

Despite the naval architect's proposal to change the propellers, which was covered by ITIC, the modifications only marginally decreased the vibrations and

the vessel still failed to meet its intended speed and performance specifications.

After analysing the situation, third-party experts concluded that the most likely cause of the problem was the insufficient clearance between the propellers' tips and the vessel, which resulted from the original design by the naval architect. However, the experts also recommended replacing the rudders and correcting the rudder support structure as it was found that the rudder support structure was not constructed according to the naval architect's design. This needed to be rectified before it was worthwhile moving the propellers.

The vessel's owners faced operational and financial problems as a result of these issues and took legal action against both the naval architect and shipyard. They sought damages for rectification costs, loss of earnings, diminution in the vessel's value, and other related expenses. As a result, they filed a claim of US\$5m plus legal costs and interest.

Following a long legal process that involved challenges in obtaining expert evidence to support the claim, all parties opted for mediation. Due to limited personal funds and policy coverage limits, the naval architect agreed to a settlement contribution of US\$400,000, indemnified by ITIC. This amount represented less than 10% of the original claim.

DUSTING DOWN

BossTek has introduced a new mobile mid-sized dust control cannon. The DustBoss® DB-45 Surge is the next iteration of the popular Surge series, featuring an innovative pressurised centre nozzle paired with the industry-proven fan and misting ring system to suppress both surface dust and airborne particulates.

With three remote-controlled stages and precision oscillation for optimum command over water volume and coverage area, the DB-45 Surge delivers the dependability of atomised mist along with jet-to-plume nozzle technology that surges for more than 60m, even in troublesome windy conditions. The result is an easily manoeuvrable, autonomous and versatile dust control solution for outdoor operations in all weather conditions.

The DB-45 Surge combines the power of a 25-horsepower industrial fan, misting ring and heavy-duty barrel with the reach of a central high-pressure spray nozzle. The misting ring introduces millions of tiny dust capturing droplets into an area for proven dust suppression. The pressurised spray resists wind shear and uses the force of the wind to further fragment droplets, enhancing its dust suppression capabilities. This is achieved with a maximum of 372 lpm and as little as 77 lpm when using only the misting ring and fan. The cannon also features a variable frequency drive, which allows the unit to operate more efficiently at lower water pressure.

The three stages are easily input by the touch screen system, protected by a sealed NEMA 4 cabinet or controlled by a heavy-duty hand-held remote control with a 305m range. Stage one is highly effective on moderate days and uses the powerful 849.5 CMM fan and misting ring for wide area coverage. For windy days, stage two features a pressurised stream delivered by the J2P nozzle to pinpoint the source of the dust. On high wind days, operators can choose stage three which utilises the fan, misting ring and centre nozzle for maximum coverage.

This allows the DB-45 Surge to be 'set it and forget it' autonomous equipment, unlike hoses and industrial sprinklers.

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HOME HELP FOR SHIP PERFORMANCE

Design and engineering consultant Houlder has developed a new tool for analysing ship performance and evaluating efficiency options, including energy efficiency technologies – also known as energy-saving devices or clean technologies.

The **Houlder Optimisation & Modelling Environment, HOME**, uses the latest digital twin technology to create a virtual world which can be used to analyse tweaks to the operations of existing ships, to design brand new vessels, or to outline various ways to save fuel and cut associated greenhouse gas (GHG) emissions on specific voyages or across all operations.

Using HOME, shipowners are able to analyse the emissions performance of efficiency technologies for their specific vessel and its unique operating profile. Fundamentally, each ship has different efficiency requirements impacted by route, cargo, design and so on, and will benefit from a different technology or blend of technologies. The key is to start with the ship, not the technology being offered. Rupert Hare, CEO of Houlder, comments: “The vessel efficiency opportunity is well understood; if you

save fuel, you save money and GHG emissions. If you save emissions, you save the planet. It’s a virtuous circle in that regard. However, uncertainty about the performance of efficiency technologies remains a barrier to final investment decisions and wider uptake.

“Clear data from an independent and objective source on the specific fuel and emissions savings of green solutions can help build the commercial case required. Good decisions need good data and it’s always a smart idea to get a second opinion.”

Jonathan Strachan, CTO of Houlder, says: “This isn’t just about looking at how ships do what they do; it’s about making them do it better. Depending on what a client needs, HOME can dial the detail up or down. For those at the drawing-board stage, basic-fidelity simulations offer a quick peek at what’s possible. For more in-depth analysis, like weighing up different modifications or getting into the nitty-gritty of business planning, mid-fidelity and high-fidelity simulations provide richer, more detailed insights through Houlder’s computational fluid dynamics and hydrodynamics capabilities and expertise.”

SOUTHAMPTON AND SINGAPORE EXCHANGES

Associated British Ports (ABP) recently welcomed a delegation from the Maritime and Port Authority of Singapore (MPA) to the Port of Southampton, led by MPA chief executive Teo Eng Dih.

The Port Authorities opened discussions on various areas of potential co-operation regarding sustainable maritime transport in the context of the UK-Singapore Green Economy Framework. Both sides agreed that co-operation between key like-minded stakeholders across the maritime and port ecosystems of the UK and Singapore would be important to support the decarbonisation, digitalisation and growth of the maritime industry.

SUNDERLAND SCOOPS AWARD

A multi-million-pound project to make swathes of land at Port of Sunderland shovel-ready for development has scooped a major award.

The completion of enabling works at the port’s Trinity – Rail, Road & Sea Enterprise Zone was named ‘Medium Project of the Year’ at the Institution of Civil Engineers (ICE) North East’s annual Robert Stephenson Awards.

The Trinity Enterprise Zone Enabling Works project, also known as Hendon Sidings, was a collaboration between **Port of Sunderland, Esh Construction** and **Mott MacDonald**, and was commended by the judges for its innovation, efficiency and community impact.

Completed in April last year, the project represented the final phase of a number of substantive works packages to improve port infrastructure and help attract inward investment to the North Sea hub

Matthew Hunt, director at Port of Sunderland, says: “The Trinity Enterprise Zone Enabling Works project has been a significant endeavour for us, and we are incredibly proud of

the positive impact it will have on our community and the local economy.”

Steven Garrigan, divisional director at Esh Construction, says: “This is the third project we have undertaken as part of the Port’s Enterprise Zone Accommodation Works and as a local contractor, we are all excited to see what the future holds for the Port of Sunderland.”

The enabling works generated a raft of social benefits. More than 100 apprentice training weeks were delivered on site along with two work experience placements, one for a forces leaver and another for an undergraduate student who has since secured a paid internship with Esh.

Environmental efficiencies and carbon reduction measures were also considered throughout the project, with Esh setting up an on-site processing system which saw more than 34,000m³ of excavated material, segregated, crushed, screened and re-used on site. More than 57 tonnes of hard to recycle waste has been diverted from landfill and instead recycled into biomass fuel.

BV AND HANWHA OCEAN JOIN FORCES

Bureau Veritas (BV) has announced the successful conclusion of a joint development project (JDP) with Hanwha Ocean for the development of a 270K liquefied natural gas (LNG) carrier.

Hanwha Ocean's proprietary hull design for a 270K LNG carrier was developed to anticipate and fulfil the future demands of the LNG market. By optimising the hull's performance and maximising cargo capacity, it exceeds the capabilities of the existing 263K LNG and floating storage regasification unit design.

This collaboration marks a significant milestone in the partnership between Hanwha Ocean and Bureau Veritas, showcasing their combined expertise in advancing cutting-edge LNG carrier technology.

Throughout the project, Hanwha Ocean prepared the development of Hull Key Drawings for the 270K LNG carrier design in compliance with BV's requirements and relevant regulations. Subsequently, Hanwha Ocean and BV agreed to jointly develop this new size vessel to secure structural reliability and obtain an Approval in Principle.

To verify the Hull Key Drawings provided by Hanwha Ocean, BV performed 2D local scantling and 3D Cargo Hold Finite Element Analysis, assessing the longitudinal strength of the hull, as well as the yielding and buckling

of longitudinal and transverse members. Fatigue analysis was also conducted using a local fine mesh to evaluate the details of hull structures sensitive to fatigue. Upon the completion of the comprehensive verification of the hull design, the certification was delivered to Hanwha Ocean on February 28, 2024.

Sang-Don Kang, vice president of the basic design department at Hanwha Ocean, says: "The newly developed 270K LNG carrier is dedicated to minimising unit freight costs, and ensuring structural robustness for the vessel's safety performance. I am pleased that the structural reliability of this new vessel will be verified once again through this JDP with BV."

Captain Drago Pinteric, country chief executive, Bureau Veritas Korea, comments: "The development of a new standard 270K LNG carrier holds immense importance for BV as it aligns with our core responsibilities of ensuring safety, compliance, and quality in maritime operations. This involvement reinforces BV's commitment to industry leadership, innovation, and the promotion of sustainable and safe shipping practices. We commend the strong collaboration between Bureau Veritas and Hanwha Ocean, showcasing a robust partnership in the maritime and related industries. Such alliances contribute to enhanced safety, quality assurance, and sustainable practices in the ever-evolving maritime landscape."

INITIATIVE SUPPORTS SAR SERVICES

The International Maritime Rescue Federation (IMRF) has launched its [#SARyouOK? Guidance and Best Practice Framework](#). This follows the launch of its [#SARyouOK?](#) initiative at the G5 International Mass Rescue Operations (MRO) Conference in Gothenburg, Sweden, in 2022. The initiative is supported by the Trinity House DFT Maritime Safety Fund and aims to promote awareness of mental health and wellbeing issues and break down the attached stigma for those working in the maritime search and rescue (SAR) sector.

This initiative provides comprehensive guidance on mental health and wellbeing for maritime SAR services. The aim is to recognise the unique psychological challenges that SAR personnel face while dealing with high-stress and traumatic situations in their line of duty. The core of the guidance is structured around the 'Prepare, Normalise, Support' approach, which provides a structured pathway to managing stress and trauma among SAR personnel.

The guidance stresses the importance of an organisation's commitment to promoting mental health and wellbeing. This entails assessing the organisational culture, ensuring favourable working conditions, and having well-defined policies and procedures in place. Allocating budgets for mental health support and nurturing a culture of transparency are also identified as crucial steps.

The guide addresses an important issue – the management of secondary trauma. It refers to the emotional and psychological distress that SAR personnel can experience when they are exposed to the traumatic experiences of others. The guide recognises that SAR personnel can be vulnerable to both primary and secondary trauma and provides strategies to mitigate these effects.

It further aims to provide a comprehensive approach towards understanding and addressing mental health and well-being within the SAR work environment. It ensures that individuals can access the necessary support to overcome the challenges they face during their operations. By incorporating these practices into their daily operations, SAR organisations can enhance the effectiveness of their operations and ensure the long-term health and well-being of their personnel.

METHANOL FIRES NEED 'DIFFERENT APPROACH'

A new fire safety study by Survitec has revealed that existing fire-fighting methods used to extinguish machinery space spray and pool fires on conventionally fuelled vessels are inadequate when dealing with methanol-based fires.

This follows extensive comparative fire tests on dual-fuel marine engines using diesel oil (DO) and methanol, carried out amid growing interest in methanol as an alternative marine fuel.

"Our tests confirm that traditional water mist fire suppression mechanisms do not perform as expected on methanol pool fires and methanol spray fires. A completely different approach is required if these ships are to remain safe," says Michal Sadzynski, product manager, water mist systems, Survitec.

Methanol is a methyl alcohol (CH₃OH) that burns in a completely different way than hydrocarbon fuels and has a much lower flashpoint of 12°C (54°F). However, while there are established fire safety regulations and testing standards for diesel fuels, clear test protocols for alcohol-based fuels such as methanol and ethanol have yet to be developed.

"We believe this is a high-risk situation that needs immediate action," says Sadzynski. "Methanol fires are far more aggressive than fires involving traditional hydrocarbon fuels. Methanol fires have different physicochemical properties and so they cannot be extinguished as easily or with the same approach."

The Survitec tests found that while water mist systems are highly effective in absorbing heat and displacing oxygen on diesel fires, they do not produce the same results on methanol fires.

"We had to completely rethink nozzle placement, spacing and other factors to make water mist suppression effective on methanol. For instance, the range for nozzle installation height is much lower than that needed to put out a diesel fire," he says.

This finding indicates that if existing vessels are retrofitted to run on methanol, they would need to overhaul and redesign their fixed fire-fighting arrangement completely.

For bilge areas, statutory rules formulated in IMO MSC.1/Circ.1621 establish a requirement for an approved alcohol-resistant foam system for ships running on methanol. For the first time, a fixed, low expansion foam system is mandatory under the rules when it comes to protecting machinery space bilges.

"Our tests demonstrate that standard discharge devices do not properly extinguish methanol pool fires in the confined bilge space. It is crucial to deliver properly expanded foam on the methanol pool fire and this is not

an easy task within such a narrow space where throw length is limited," says Maciej Niescioruk, product manager, foam systems, Survitec.

"MSC.1/Circ.1621 provides us with a starting guideline, but it is very general and therefore open to interpretation. Moreover, methanol compliance for Local Application Firefighting (LAFF) systems is not yet covered. As an industry, we need to come together and develop comprehensive and robust fire test standards and safety rules tailored to methanol's unique properties."

The stark conclusion of the investigation arrives at a time of increasing orders for methanol-fuelled ships. The greener fuel is seen as a panacea to meeting the industry's emissions abatement targets, and forecasts predict accelerated adoption rates.

Orders for methanol-fuelled newbuilds increased by 9% in the last 12 months, 2% more than those for LNG-fuelled ships. Analysts suggest the methanol-fuelled fleet will account for 20mgt by 2028.

"We are seeing a significant uptake in orders for methanol-fuelled vessels, with 2023 being the breakout year for this alternative marine fuel. With more methanol-powered ships being built every year, the industry must act now to prevent dangerous gaps in fire safety," says Niescioruk.

"We encourage all stakeholders to come together to address methanol's unique fire risks and create clear standards, new testing protocols and updated safety rules for methanol."



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The war in Ukraine had a serious impact on bulk trade flows and the attacks on shipping in the Red Sea add to the disruption. Antwerp will examine the impact of both on bulk terminal operations – both short term and in the future

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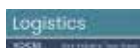
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WÄRTSILÄ GIVES IN-DEPTH GUIDE TO SUSTAINABLE FUELS

Sustainable shipping fuels could reach cost parity with fossil fuels as early as 2035 with the help of decisive emissions policy such as carbon taxes and emissions limits, according to a new report by technology group Wärtsilä.

The report, **Sustainable fuels for shipping by 2050 – the 3 key elements of success**, reveals that the EU Emissions Trading Scheme (ETS) and FuelEU Maritime Initiative (FEUM) will see the cost of using fossil fuels more than double by 2030. By 2035, they will close the price gap between fossil fuels and sustainable fuels for the very first time.

Transporting 80% of world trade, shipping is the engine room of the global economy. However, despite being the most efficient and environmental way to transport goods, it emits 2% of global emissions, equivalent to the annual emissions of Japan. Without action, this could increase by more than 45% by 2050.

Wärtsilä's report argues that sustainable fuels will be a critical step in eliminating the remaining 73%, but radical action is needed to scale them. The industry suffers from a 'chicken and egg' challenge – shipowners won't commit to a fuel today that is expensive, only produced in small quantities, and may be usurped by another fuel that scales faster and more affordably. Meanwhile, it is difficult for suppliers to scale production without clear demand signals.

Wärtsilä has produced new modelling that shows a timeline of which fuels are likely to become widely available on a global scale, when and at what cost. To accelerate this timeline, the report argues that decisive policy implementation, industry collaboration, and individual operator action must coalesce to scale the production of these fuels.

Wärtsilä's modelling shows sustainable fuels will be three-five times more expensive than today's fossil fuels in 2030. As ETS and FEUM show, policy is key to closing the price gap. The report argues that policymakers should:

- Maximise certainty: Set an internationally agreed science-based pathway for phasing out fossil fuels from the marine sector, in line with IMO targets.
- Boost cost competitiveness: Adopt a global industry standard for marine fuel carbon pricing.
- Increase global collaboration between governments on the innovation and infrastructure necessary to deliver sustainable fuels at scale worldwide.

The sector must collaborate with stakeholders from inside and outside shipping. The report calls on industry to:

- Pool buying power – initiate sector-wide procurement agreements to pool demand from multiple shipping operators.
- Collaborate with other sectors – convene with leaders in aviation, heavy transport, and industry to establish a globally recognised framework for the production and allocation of sustainable fuels.
- Share skills – establish an industry-wide knowledge hub for the purpose of sharing expertise, skills and insights.

Holm adds: "If there is one take away from our report, it is that smaller operators need not feel powerless. They have a major role in accelerating towards net-zero emissions shipping. Taking steps to improve fuel efficiency and invest in fuel flexibility can deliver immediate returns, reducing both emissions and operating costs. But action must be swift – we have the lifecycle of just a single vessel to get this right.

Most recently, Wärtsilä launched the first commercially available 4-stroke engine for ammonia fuel, which can immediately reduce emissions by over 70%, compared with diesel.

The report provides a roadmap for the future of sustainable fuels, identifying how the industry can more rapidly and affordably scale these fuels and achieve full decarbonisation by mid-century – within the lifetime of just a single vessel.

LLOYD'S REPORT EXAMINES NEW EU RULES

Lloyd's Register's new report delves into the intricacies of the EU's new regulations affecting shipping from 2024 onwards.

Fit for 55: managing compliance and optimising operations under the EU's new regime provides a comprehensive overview of the new EU Emissions Trading System and Fuel EU Maritime regulations, outlining the key compliance requirements and potential penalties.

It also explores the broader implications of the 'Fit for 55' package, encompassing the Alternative Fuels Infrastructure Regulation (AFIR), Revised Renewable Energy Directives (RED III) and Carbon Border Adjustment Mechanism (CBAM).

The report offers actionable insights and recommendations for minimising exposure to carbon prices and penalties, highlighting the importance of effective fleet management and utilisation, strategic routing, charter agreements and efficient emission trading strategies.

ADVANCED SHIP LOADING SYSTEM FOR ANGLO AMERICAN

The mining group Anglo American relies on a ship loading system from FAM, member of BEUMER Group, for the sustainable and efficient loading of mined copper ore from the Peruvian plant Quellaveco. Thanks to the system's special construction, no material can enter the environment.

The surging demand for lithium-ion batteries in the electro-mobility sector is increasing the need for copper. One of the world's largest and best-known deposits with estimated reserves of 1.1 billion metric tons of copper ore is the Quellaveco mine located near the port city of Ilo, Peru, and operated by Anglo American, one of the world's largest mining companies.

Ready for the increasing demand for copper

The plant is expected to mine 1.1 million metric tons of copper annually. To ship this enormous amount of raw material to the target countries, Anglo American searched for a suitable partner to supply the ship loading system at the new port terminal. Choosing FAM, now part of BEUMER Group since 2022, signifies a strategic partnership with a global supplier for innovative bulk materials handling, processing, and conveying solutions, renowned for comprehensive customer support and a robust portfolio.

Dust-free to the destination

The Quellaveco open pit mine harnesses advanced automation technology to ensure worker safety and minimize dust pollution. Copper ore is efficiently transported via a belt conveyor to a truck loading station, where automated

systems, including gates and dust extraction mechanisms, ensure a clean, seamless transfer. After loading, the hermetically sealed trucks pass through a sensor-activated tire wash, ensuring no trace of dust leaves the facility.

Advanced systems designed to capture airborne particles during ore receipt, storage, and shipment act as powerful air purifiers, maintaining environmental integrity. Real-time data monitoring via sensors provides information for the operations center, enabling the plant to be controlled automatically.

From the mainland on to the ship

Upon arrival at the port, the ore is securely stored in a warehouse before a sophisticated conveyor system transports it to the new ship loader. This loader has a swiveling superstructure and a telescopic tube designed for efficient, emission-free loading, capable of reaching every corner of a ship's cargo hold and handling around 1,320 t/h.

FAM expertly commissioned this advanced system by the end of 2022, overseeing the installation of mechanical components and managing the electrical and control engineering, project planning, production, and transportation. Their expertise in providing a high-capacity, dust-free ship loading system underscores the synergy between Anglo American's mining excellence and FAM's technological prowess, setting a new standard in sustainable mining practices.

For more information, visit:

www.beumergroup.com/pd/port-technology/ship-loader/



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