LIGHT HOUSE
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voyage - 23 JANUARY-2024 HAPPY NEW YEAR CALL - 1

New Hydrogen Facility opens in Norwegian Egersund Harbor

Madan Kanagaraj-GME

BUSINESS DEVELOPMENTS& PROJECTS

Norwegian companies Dalane Energi and Hydrogen Solution (HYDS) have launched a new hydrogen production facility in Egersund harbor as a part of the EU-funded ROBINSON H2020 project.

The official opening ceremony of the hydrogen production plant was held in Grand Hotell Eigersund on February 8 in the presence of various industrial, political, and scientific stakeholders, including the Norwegian Minister of Industry Jan Christian Vestre.

This is the first facility in Rogaland that will use renewable electricity to produce green hydrogen for commercial use.

Construction of the hydrogen production plant was completed in 2023. Danish company Green Hydrogen System delivered electrolyzers through its Norwegian partner Liquiline.

Norwegian Minister of Industry Jan Christian Vestre and Knut Førland, Managing Director of Liquiline. Photo: Peter Tubaas/HYDS

Once the ROBINSON project ends in the fall of 2024, Dalane Hydrogen AS will take over the facility.

Dalane Hydrogen AS is owned by Dalane Energi AS, Hydrogen Solutions AS (HYDS), and Eigersund Næring og Havn KF.

The opening of the facility in Egersund harbor was also welcomed by Norway's leading network for hydrogen and ammonia solutions in the maritime industry, Ocean Hyway Cluster.

"The market for green hydrogen is experiencing rapid and significant growth. Egersund harbor will be the first location in Rogaland to produce green hydrogen using electricity that is 100 percent renewable – meaning from water, wind, or solar sources. Hydrogen serves as an energy carrier similar to other gases and has comparable efficiency. This opens up significant opportunities for a harbor strategically positioned for shipping," said Idar Sønstabø, CEO at Dalane Energi.

"Egersund is well positioned

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to capitalize on the hydrogen initiative. It is an active port with extensive activity in the m aritime sector.

The initiative will contribute to creating new opportunities and further activity, thereby strength - ening the position of Egersund port. We believe this could be the beginning of Egersund becoming a strategic hub for hydrogen as fuel for the shipping industry," commented Anne Vigdis Ellingsen, CEO at Egersund Næring og Havn KF.

Thor Henrik Hagen, CEO at HYDS, added: "Hydrogen will be a crucial contributor to Norway's success in transitioning to renewable energy sources. For HYDS, the facility will be the second in line after production started in Stord last year. We have greatly benefited from standardization and the experience we have gained from Stord in the construction process, and we look forward to getting the facility up and running. These two facilities are central contributions to increasing the availability of green hydrogen for commercial use in Norway."

Courtesy: World Maritime News

New Maritime Emissions Reduction Centre Launched In Athens

Valli kumar Alagan - GME

The Lloyd's Register (LR) Maritime Decarbonisation Hub has partnered with five prominent shipowners as Founding Members to establish the worldwide Maritime Emissions Reduction Centre (abbreviated as the M-ERC), a not-for-profit organization based in Athens. This effort, in the opinion of LR and the Founding Members, is noteworthy and emphasizes the significance of Athens as a global marine hub.

The M-ERC aims to get rid of the investment-specific, technical, as well as community barriers to the uptake of innovative solutions to minimize the Green House Gas emissions of the current global fleet, ensuring a collaborative as well as sustainable safe space for the maritime value chain's stakeholders, to navigate to net zero safely.

To inspire and inform the adoption of new and existing solutions to enable the maritime energy transition, the centre will also use applied research and innovation to eliminate barriers facilitating the uptake of solutions and technologies today. The M-ERC will also help drive optimal operational

CONTENTS

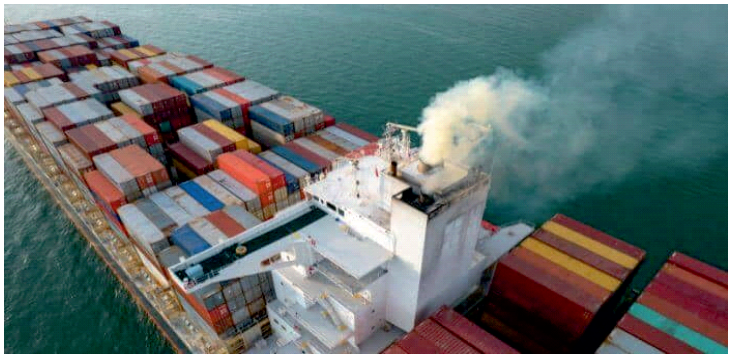
achievements, identifying and resolving stakeholders' commercial obstacles.

The centre will play a crucial role in ensuring that today's vessels are suitable for the energy transition while also ensuring that the industry's stakeholders are empowered with the necessary training and skills.

The goals will be achieved via research and intense collaboration with shipyards and original equipment manufacturers besides M-ERC's work across seafarer organizations, society, and ports to facilitate the upskilling and awareness among seafarers and the shore-based staff.

As part of the collaboration between the LR Maritime Decarbonisation Hub and ship owners, such as Star Bulk, Capital Group, Neda Maritime Agency, Navios Maritime Partners, and Thenamaris, the centre will try to appeal to global as well as regional funding to fund projects, initiatives, and activities to deliver on desired outcomes of M-ERC. It's further anticipated that even more shipping stakeholders will take part in the initiative in months to come.

Courtesy : Marine insight



The Sailing Episode With a Chief Engineer

For the maritime industry, the year 2020 has brought in one of the most crucial implemen - tations called IMO Sulphur Cap. The rule that is predicted to curtail pollution to a great extent, came into play on 1st January, 2020. While the industry has been turning to different available options of compliance, we had an opportunity to record the first-hand experience of a sailing Chief Engineer on the IMO Sulphur Cap 2020- its compliance and challenges, Long Stroke Engines and topics alike.

WHAT IS THE FIRST STEP TO COMPLIANCE WITH THE SULPHUR CAP 2020?

On the vessel I sailed, the first step involved cleaning of tank and that is where we faced challenges. Multiple cases of injury had been reported while cleaning the tank which is nothing but a hazard. This has also increased the utility of manpower, because in our case the tank cleaning was done by ship staff. Some vessels have got the luxury of having two sets of fuel oil settling and service tanks that facilitate separate storage of fuel that gets blended only in the pipeline not in the tanks. Since, compatibility is the biggest issue we are facing with these fuels, it has to be ensured that the remaining fuel is not mixed with the new oil. As of now, 2 types of Low Sulphur Fuel have been made available of which one is produced and supplied by the oil majors and is more stable and compatible. The other one is a blended fuel which will always possess compatibility issue risks because the ratio of blending is different in all places. The price of Low Sulphur Fuel has now

doubled and considering this, the companies are ready to go with LSMGO.

WHAT OTHER CHALLENGES ACCOMPANY BUNKERING WHEN IT COMES TO COMPLYING WITH THE REGULATION?

Another challenge that I foresee is the Port State Inspections which is expected to turn very stringent. During an inspection, the sulphur content of the fuel is checked for less than 0.5% but IMO permits for the extension of Sulphur Content to 0.53%. The big players have opted for the scrubber retrofits, it has costed them the installation but the operational cost has reduced. Then comes logistics involved in fuel change, on which port the change has to take place and where the bunker has to be bought from. A ship staff is then required to monitor the temperature and parameter during the change over. So, fuel change is now a critical procedure until the fuel doesn't come in line.

THE CHINESE AUTHORITIES RECENTLY CAUGHT 2 VESSELS VIOLATING IMO SULPHUR CAP 2020, ARE WE LIKELY TO WITNESS SIMILAR CASES IN TIMES TO COME?

Lately, there have been some cases in China wherein the fuel was found to have the sulphur content more than 0.55%. This happened because they probably made a change at the last moment. So, it takes time for the compliant fuel to come to the line get consumed and get into the system. Talking about such cases in future, I would say as an operator we try our best to comply with the regulation, we buy fuel from the supplier that is above BDN (Bunker Delivery Note) based on fuel quality analysis report. But the issues during inspection will continue to prevail if the aim is to harass the ship staff.

WHAT MEASURES ARE IN PLACE TO ENSURE COMPLIANT BUNKERING PROCESS?

The companies have adopted a system called Ship Implementation Plan (SIP) under which the companies declare about the arrival of fuel, one year ago. As per SIP, the ship staff is required to maintain a file with a check list of tank cleaning schedules, the bunker intake, pictures of the tank and change over routine to manifest compliance with the Sulphur Cap 2020.

CAN YOU TAKE US THROUGH THE EXPECTED OUTCOMES OF OLD OIL GETTING MIXED WITH COMPLIANT FUEL?

Normally, it takes 2 hours for a tonne of fuel to get consumed in the line and compatibility issues are faced only in the tanks, not in the pipeline. But if the fuels get mixed in the tank, it causes major engine break down further leading to wear down of liner, piston ring, fuel nozzle and fuel pump damage because of cat fines. In many cases, the fuel that was bought was debunkered as well, because of compatibility issue, incurring extra cost to the owners or charterers.

HOW DOES WORKING ON LONG STROKE ENGINES DIFFER FROM THE OLDER VERSIONS?

The long stroke engine vessels are made to consume less fuel and give more power. Unlike the four stroke engines, the two stroke engines are made to run for longer voyages and as of now they are operated at a super slow speed causing carbon deposit. Even a research conducted by Germans says that the exhaust of LSFO is more damaging than the normal fuel oil.

HOW CAN WE PREVENT CARBON DEPOSIT ON MAIN ENGINE LINER?

In the liner only the upper section is heated. The temperature in the scavenge on reaching below the dew point causes acidic corrosion and cold corrosion leading to the formation of carbon in the liner because the temperature in the scavenge should be ideally 41-43 degrees.

WHAT IS THE CAUSE OF CARBON DEPOSITS AND HOW CAN IT BE DEALT WITH?

The carbon deposits take place due to combustion products. You may get done with it if you operate in high temperatures. Generally, people think that the deposit is because of the lack of lubrication but lubrication further worsens the situation. We have now witnessed many such instances where the lubrication of liner is increased, however, it has to be understood that the lube oil put up initially does not get consumed leading to the vessels are now operated at a very slow speed to conserve fuel. The engines are designed to be operated with 80 percent load to give optimum performance where the combustion products are minimal. Even the IMO is conducting a research on the impact of slow streaming that stands contrary to the aim of Sulphur Cap 2020. Moreover, the EU MRV regulation that aims to control CO2 emissions from commercial ships over 500 GRT operating into, out of or between a port of call in EU, measures carbon release by a vessel through the amount of fuel used by a vessel, the sailing period, the number of voyages done and the cargo carried by it. The vessels are required to submit their data every year through an audit.

Courtesy : Sea and Job

UK says India needs to open its markets much more for a successful FTA

Lohit Ishwar Moger - GME

India must be prepared to open its markets for goods and services much more for a successful conclusion of the India-UK Free Trade Agreement (FTA), sources in the UK government have said.

"India's tariffs on goods are very high. The UK believes that India has to do much more in terms of bringing them down and opening its markets. The UK already is very open," a UK official said not wanting to be quoted.

While the UK has recently shown huge interest in expediting the proposed FTA, possibly wanting it concluded before the elections in both countries, sending the ball in India's court could indicate the country's limited flexibility on key issues.

"The India-UK FTA can be sealed in as less as three weeks provided India opens up more. There are economic and political ambitions on both sides," the official added.

The UK has been pressing for deep duty-cuts on items such as Scotch and automobiles, where import duties in India are as high as 150 per cent and 100 per cent (70 per cent for vehicles up to $40,000) respectively. It also wants liberalisation of financial and legal services and strong IPR rules to give additional protection to pharmaceutical majors.

New Delhi, however, holds the view that the UK's tariffs on goods are low because of the attributes of the country's economy as it benefits from the low-duty imports. "The UK must be ready to give additional benefits to India in the FTA such as lowering tariffs for certain items such as textiles where duties are high, liberalisation of non-immigrant visas and a social security totalisation agreement," an Indian industry source said.

Recently, Commerce Secretary Sunil Barthwal told the media that the country must safeguard its interests and make substantial gains in the FTA negotiations with the UK."India should commercially gain out of it (India-UK FTA) and we should also be able to safeguard the interest of our farmers, and (protect) goods covered under PLI (production linked incentive) scheme. So, we are there to see that the deal is a fair deal," Commerce Secretary Sunil Barthwal said.

However, the UK does not seem too comfortable offering big concessions to Indian workers, whether in terms of liberalisation of work visas or a social security agreement. A social

security agreement could help Indian professionals working temporarily in the UK save up to millions of pounds every year in compulsory contributions for pension that they would not be able to enjoy as their work tenure would end much earlier.

The two countries are optimistic about bilateral trade in goods and services doubling to $100 billion by 2030 if the FTA is implemented soon.

Earlier this month, a UK trade delegation led by Douglas McNeill, chief economic advisor to UK PM Rishi Sunak, was in New Delhi, meeting top decision makers, including Finance Minister Nirmala Sitharaman, Commerce & Industry Minister Piyush Goyal and senor officials in the Prime Minister's Office, looking for possible breakthrough in sticky issues.

Highlights

* India-UK FTA negotiations launched on Jan 13 2022
* Potential to double trade to $100 billion by 2030
* 14th round of negotiations began from Jan 10 2024
* Majority of 26 chapters closed but remaining issues tricky
* UK wants deeper duty cuts in goods, including Scotch, cars
* India keen on liberalisation of work visas, social security pact

Vladivostok-Chennai route talks on, dedicated shipping service under consideration too

Sreesha Uduppa - GME

Over the next three to six months, concrete action plans and (operational) proposals have been sought, says a senior official of the Ministry of Ports, Shipping and Waterways

Keen to increase traffic and ensure commercial viability of the Chennai - Vladivostok route, India's Shipping Ministry, businesses and Russian stakeholders are working on agreements to firm up cargo movement details along this Eastern Maritime Corridor. Also under discussion is the possibility of having dedicated shipping services.

Some trial shipments are taking place. And there is a visible demand for shipping of crude oil and coking coal (mostly imports), the official explained.

Sarbananda Sonowal, the Union Minister of Ports, Shipping and Waterways, recently toldbusinessline: "Talks are progressing well. We hope to get the route operationalised as quickly as possible. Feasibility discussions are on."

Business Meetings

A workshop was held some months back (Nov 2023) in Chennai where stakeholders were told to work on the operational details, tap business opportunities and also "ensure commercial viability" of cargo movement along the route.

A senior Ministry official aware of the discussions said, substantial interest was generated towards use of the route for shipping of coking coal. Coking coal is a key steel-making raw material of which India is amongst the largest importers. Russia is also amongst the top three suppliers to mills here.

In fact, one of the largest steel-makers of the country is exploring the possibility of using the corridor for bringing in its coking coal supplies.

"Coking coal import along the route is happening. And, if the steel-maker's plans fructify you will see a substantial increase in numbers," the official said.

"Towards end-2023 there was a meeting between stakeholders of the Russian side and their Indian counterparts in Chennai," the official said. He said that Indian officials are expected to again visit Vladivostok soon to ensure faster execution and to operationalise this route. "Our internal assessment says this route will mostly see crude oil and coking coal movement, and not much of container traffic is expected here," the official added.

The proposed Vladivostok - Chennai route reduces the travel distance between the two countries to 5,600 nautical miles, from the current shipping route of 8,675 nautical miles from St Petersburg to Mumbai.

The Eastern Maritime Corridor is estimated to bring down transportation time between Indian and Russian ports of the Far-East Region by nearly 50 per cent (20 - 24 days, or even lower, from the current 40 days) as compared to the currently used Suez and Panama Canal routes.

The last numbers of the Indian Ports Association show that there was a 5 per cent Y-o-Y growth in traffic at the Chennai port (one of the major ports in the country) to 43.06 million tonnes (mt) for the April - Jan period. Traffic in the year-ago period was 41.06 mt. The increase came on the back of a 4 per cent Y-o-Y rise in POL (petroleum, oil and lubricants) shipments to 12.13 mt (vs 11.7 mt); and a near 8 per cent rise in container cargo to 26 mt.

Courtesy : Business line

Studets visit to RLINS as Part of a Young Scientist Programme

As part of the Young scientist Programme of NPR College of Engineering , Natham , the school students visited our campus on Monday ,08th January ,2024 and had a glimpse of all the facilities available in R.L Institute of Nautical Sciences. The college has a Ship in Campus which is a model of a typical ship replicating all the important features which include a main engine also.. This visit could be the most inspiring one for the students as this will create a passion in the young minds to explore more in the marine field.

Dr. Kumara samy,Vice-Principal addressing the students on the future of the marine industry

Mr.Sathish, Instructor explaining the features of machineries to the students

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