

LNG Unlimited

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Japex to bring wide expertise to Vietnam's Haiphong LNG terminal

Japanese firm signs deal with joint venture company called Iteco for terminal in the North
LNG News Editor

Japan Petroleum Exploration (Japex), which operates the main LNG import terminal in Japan's Fukushima Prefecture and has wide energy industry experience, is taking its expertise to Vietnam to help develop an LNG receiving terminal in the Vietnamese port city of Haiphong.

Japex has just signed a share purchase agreement with a Vietnamese joint venture company called Iteco to develop the project in the Nam Dinh Vu Industrial Park.

Approved

Terminal will initially handle up to 650,000 tonnes per annum of LNG and is expected to come online in 2025, subject to a final investment decision.

The project, which also includes procurement, storage, and supply of LNG, has already received government approval.

"Japex will respond to the demand for natural gas and LNG as a lower environmental impact energy source in Japan and abroad, utilizing our capabilities in domestic natural gas supply, such as LNG terminal operations and gas supply chain establishment," said the Tokyo-based company's statement.

"The company signed a share purchase agreement with Iteco joint stock company, based in Ho Chi Minh City, northern Vietnam, the promoter of the project," added Japex.

"This project, including the Northern Vietnam LNG Terminal, was approved by the Government to be added to the Gas Industry



Japanese company's own terminal sited in Soma port

Development Master Plan," stated Japex.

Japex declared that it was currently working to make a final investment decision expected in the second half of 2022.

"In alignment with the project, Iteco JSC is currently moving forward with discussions about LNG procurement as well as its offtake and distribution," Japex said.

Japex has worked on the development and production of oil and natural gas in Japan itself and overseas in nations like Indonesia and Iraq and is also expanding into the power business.

Japex's own Japanese import terminal at Soma port started operations in 2018 and is the first large-scale LNG terminal in Fukushima Prefecture, comprising two LNG tanks with a capacity of 230,000 cubic metres.

The terminal receives and stores LNG from overseas and regasified cargoes are fed into the pipeline gas grid, also serving a nearby power plant, or can be distributed along the coast or loaded onto trucks.

The Japex small-scale carrier vessel has 4,800 cubic metres capacity and the Soma terminal has five lanes for LNG tank trucks.

Vietnam is developing up to six LNG import projects backed by

power plant developments along its coast from the northern port of Haiphong to the ports in the South.

Singapore-based Delta Offshore is using Stena's jetty-less LNG transfer and regasification system for the venture planned for Bac Lieu province in Vietnam's southern Mekong Delta.

Stena's Jetty-less Floating Terminal (JFT) and Self-Installing Regas Platform (SRP) will enable LNG imports to provide 3,200 megawatts of gas-fired power for Bac Lieu's economic development.

PetroVietnam

State company PetroVietnam Gas said it was making progress with plans to raise investments for infrastructure for importing, storing and distributing LNG nationwide and that the start-up of imports is less than a year away.

PV Gas said that each region of the southeast Asian nation would have one of three proposed LNG hubs.

These are the Thi Vai LNG storage and regasification terminal in the South, the Son My LNG storage and regas facility in the central region and a large storage and regas hub covering Quang Ninh, Haiphong and Thanh Hoa in the North.

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Asia-led Woodfibre LNG in Canada starts hiring workers and staff as project gets ready for lift off

LNG News Editor

Woodfibre LNG, the mid-scale project near the town of Squamish in British Columbia, has started hiring workers for wide range of posts as the projects development gathers pace.

The Woodfibre liquefaction plant will be built on the site of a former pulp mill, located about seven kilometres from Squamish and 70km (44 miles) north of Vancouver.

Openings

Woodfibre is the second project in BC to start the construction phase and hiring following the LNG Canada project at Kitimat in BC, which is about 60 percent complete.

The openings at the Woodfibre venture cover posts from site maintenance to deputy project director.

They include a list of positions such as government relations manager (regulatory), a senior regulatory-environmental specialist, indigenous affairs manager, government relations manager, legal



Liquefaction plant site is located 70km north of Vancouver

counsel and an environmental compliance and systems specialist.

"Woodfibre LNG is committed to ensuring local benefits for individuals and businesses," said the company.

"That's why we are committed to giving hiring priority to qualified Squamish Nation members first, then Squamish residents, followed by the rest of BC and Canada," it added.

"We're proud to be able to offer so many opportunities for well-paid work in BC, and we'd

like to do our best to help you prepare for working at Woodfibre LNG," stated the company.

The proposed Woodfibre plant is owned by Pacific Energy Corp., a subsidiary of founder Sukanto Tanoto's Royal Golden Eagle Group and whose main offices are in Singapore, Jakarta, Beijing and Hong Kong.

The Woodfibre project comprises a single liquefaction Train with 2,1 million tonnes per annum of LNG production and storage capacity of 250,000 cubic metres.

Woodfibre has already awarded

the engineering, procurement, fabrication and construction (EPFC) contract to Houston, Texas-based McDermott International.

McDermott said the EPFC contract was an important step in advancing detailed engineering and construction schedules.

McDermott will manage on-shore construction, leveraging Canadian-based contractors and commitments included in Woodfibre LNG's Impact Benefit Agreements with the Squamish Nation.

It is estimated that 650 people will be working on the Woodfibre LNG site at peak construction.

Woodfibre is aiming for the cleanest technology available and will use hydro-electricity for the main liquefaction process and will include technology that enables liquefaction machinery to restart without flaring.

Other equipment brought in will be a recycling system for boil-off gas, along with additional transformers, switchgear and transmission lines.

Novatek signs separate long-term supply deals for Arctic LNG II with two Chinese companies

Novatek, the developer of the Arctic LNG II project on the Gydan Peninsula in Northern Siberia, has signed new supply agreements with units of two Chinese companies, the ENN Group and Zhejiang Energy Gas Group.

The Novatek subsidiary, Novatek Gas and Power Asia, signed a deal with the ENN's trading firm ENN LNG (Singapore) Ltd.

The long-term LNG sale and purchase agreement (SPA) is for LNG produced from the Arctic LNG II plant.

The SPA stipulates cargoes of amounting to a total of 600,000 tonnes per annum for a term of 11 years.

The LNG will be on a delivered ex-ship (DES) basis whereby No-

vatek supplies the shipping to ENN's Zhoushan LNG receiving terminal in eastern China.

"We have reached another milestone in successful marketing of Novatek's share of LNG to be produced by our Arctic LNG II project," noted Leonid Mikhelson, Novatek's Chief Executive.

"This is another LNG SPA for delivery to the Chinese market, which is in line with our LNG strategy to expand sales to the Asia-Pacific region with its growing demand for clean-burning natural gas," added Mikhelson.

The second Novatek deal was Zhejiang Energy is in the form of a long-term SPA from the Arctic LNG II plant.

"The SPA follows on from the

Heads of Agreement signed by parties on 2 June 2021 during the Saint-Petersburg International Economic Forum," said Novatek.

The accord is for the supply of up to 1 million tonnes per annum from the Gydan Peninsula facility and also on a DES basis to Zhejiang Energy's designated terminals in China.

The Arctic LNG II project is being developed by Novatek and partners from China and Japan as well as French major TotalEnergies, a shareholder in Novatek.

The project envisages the construction of three processing Trains each with capacity of 6.6 million tonnes per annum.

The first Train is schedule to start up in 2023, the second in 2024 and the third in 2026.

The Novatek company, which already operates the Yamal LNG plant, holds a 60 percent shareholding in the Arctic LNG II project and four other 10 percent stakes are shared between the various shareholders.

Novatek has already concluded firm LNG SPAs for volumes to help in securing the financing and off-take arrangements have been made with all the project's participants from France, China and Japan.

The 10 percent holdings in Arctic LNG II belong to TotalEnergies, China National Petroleum Corp., China National Offshore Oil Corp. and a Japanese investor group comprising Mitsui & Co. and the government institution, the Japan Oil, Gas and Metals National Corp.

ICE reports high ADVs for Dutch TTF futures

Intercontinental Exchange, the leading global provider of trading platforms and clearing, said December and fourth-quarter average daily volumes of traded derivatives contracts surged for the European natural gas and LNG benchmark, the Dutch Title Transfer facility.

ICE said its highlights included the total average daily volumes of the Dutch TTF jumping 55 percent in December 2021 compared with the same month last year.

The Dutch TTF also broke the record for fourth-quarter 2021 ADVs, up 69 percent and for the whole of 2021 the ADV rose 45 percent compared with 2020.

The Dutch TTF is increasing in importance as energy traders and asset owners manage their global gas price risk amid record prices for natural gas.

"Throughout 2021, and particularly during the fourth quarter, we saw consistently high volumes as customers navigated volatile gas and carbon markets, as well as interest rate uncertainty," said Ben Jackson, President of ICE.

"In periods such as these, our diverse and liquid futures markets are mission critical for companies to manage their risk, and the resulting impact on end consumers."

ICE said the TTF derivative's open interest increased by 16 percent year-on-year.

In addition to the Dutch TTF, the ICE natural gas complex includes the Japan-Korea Marker, the US Henry Hub and the UK National Balancing Point, alongside the West India Marker (WIM) LNG (Platts) and the Spark LNG Freight Futures contracts.

McDermott wins major contract for Australian Scarborough project

LNG News Editor

US energy and LNG engineering company McDermott International has been awarded a contract by Australian export plant operator Woodside to develop the Scarborough gas field in Western Australia for Pluto LNG.

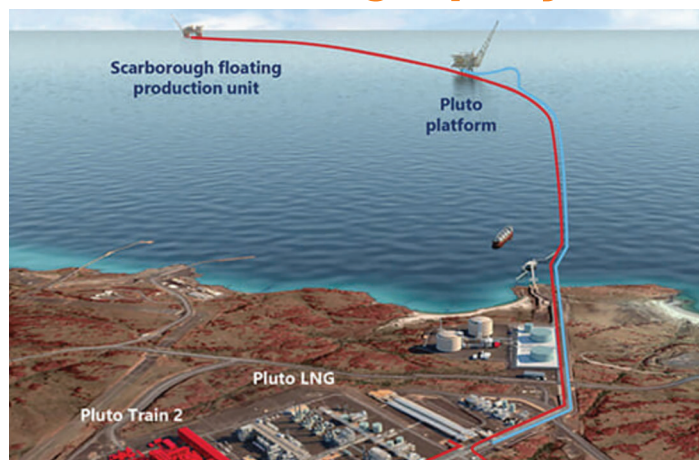
McDermott said that Woodside, on behalf of the Scarborough joint venture, had awarded the Houston, Texas-based company the engineering, procurement, construction, installation and commissioning (EPCIC) services for its Floating Production Unit (FPU) offshore Western Australia.

Feed role

McDermott noted that it had previously and successfully completed the front-end engineering and design for the Scarborough project.

The integrated scope also includes the design, fabrication, integration, transportation and installation of the hull and topsides.

"McDermott brings the engineering and execution expertise to deliver integrated deepwater sub-sea projects and offshore FPUs to



The FPU (top left) will be in hands of Houston company

the highest standards," said Samik Mukherjee, Executive Vice President and Chief Operating Officer.

"After a long engagement on the project, the collaborative execution model with Woodside - from pre-FEED through to EPCIC - de-risks execution," added Mukherjee.

"Further, the facilities incorporate energy efficiency in design to reduce Scarborough's offshore emissions," he stated.

The topside, which will be about 30,000 tons, will be fabricated by McDermott's joint venture fabrication yard, Qingdao McDermott Wuchuan in China.

The project scope includes a battery energy storage system to reduce emissions on the topsides and support Woodside's net emissions reduction targets.

"McDermott will apply our long history of successful integrated project delivery for the Scarborough project, along with our deepwater expertise and industry-leading health and safety standards to drive this incredible project to completion," explained Mahesh Swaminathan, the US company's Senior Vice President for Asia Pacific.

Eni awarded five Egyptian licences in three of nation's producing areas

Eni, the Italian energy company with exploration success in the African continent supplying feed gas for LNG projects from Egypt to Mozambique, has been awarded five new licences by the Egyptian Ministry of Petroleum.

The licences, four of which are as operator, are in the Egyptian offshore and onshore, and follow the successful participation in Egypt's latest bid round.

Located in the in the Eastern Mediterranean Sea, the Western Desert and Gulf of Suez, the licences cover a total acreage of about 8,410 square kilometres.

The awards comprise two East

Med blocks, "Egy-Med-E5" in a 50-50 partnership with UK major BP and "Egy-Med-E6" 100 percent held by Eni's IEOC Egyptian venture.

The Gulf of Suez award is "Egy-Gos-13" fully held by Eni's IEOC and the two awards in the Western Desert are "Egy-WD- 7", a 50-partnership with Houston-based Apex International Energy and the 100-perent owned "EGY-WD-9".

"The bid results are aligned with Eni's strategy to keep exploring and producing gas to sustain the Egyptian domestic market and contribute to LNG export, thanks to the recent restart of the Dami-

etta LNG plant," said the Milan-based energy company.

"The licences are placed within prolific basins with proved petroleum systems able to generate liquid and gaseous hydrocarbons and can also rely on nearby existing producing and processing facilities and on a demanding market that will allow a quick valorization of potential exploration discoveries," stated Eni.

Egypt's prolific East Med Zohr field was discovered by Eni in 2016 and the huge resources helped transform the nation's natural gas and LNG fortunes.



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NEWS BRIEFS

Mangalore proposal

The New Mangalore Port Trust in the West Coast southern Indian state of Karnataka said it was studying the development of an LNG import terminal. Mangalore Port Trust said discussions had covered establishing a facility with an initial capacity of 4.4 million tonnes per annum and with bunkering infrastructure. The Port Trust added that the proposed terminal could be set up with an initial investment of 2,250 crore Indian rupees (\$303M) and with potential for expansion.

Wisconsin LNG tanks

The US liquefied natural gas LNG storage business CB&I has been contracted to design and build tanks for peak-shaving facilities in Bluff Creek and Ixonia in the southeast of the US state of Wisconsin. "Demand for natural gas fluctuates daily and seasonally," said Cesar Canals, Senior Vice President of CB&I. "By storing LNG when demand is low, energy companies can ensure adequate supply when demand is at its peak - which are normally the coldest days of winter in Wisconsin," added Canals whose company is a subsidiary of engineering firm McDermott.

LNG fuel growth

CMA CGM, the French container shipping line based in the Mediterranean port of Marseille, has welcomed the third in a series of five 15,000 twenty-foot equivalent unit LNG-powered containerships built at the Chinese Jiangnan Shipyard. The French company said the naming ceremony for the "CMA CGM Everglade" has just taken place at the Jiangnan yard, a subsidiary of China State Shipbuilding Corp.

Nakilat teams up with ABS on setting strategy for clean shipping

LNG News Editor

Nakilat, one of the world's largest LNG shipping operators, has partnered with the American Bureau of Shipping, the US classification society, to develop a decarbonization strategy.

"Over the past months, Nakilat's project team has worked closely with ABS sustainability specialists to map out decarbonization pathways for the company's fleet of 69 LNG carriers and four Very Large LPG Gas Carriers," said ABS.

Leader

These efforts come as part of Nakilat's drive to become a global maritime sustainability leader.

"Nakilat has rapidly grown over the years to be a leader in the global energy transportation sector. We recognize the important role we play and are committed to carry out our operations in a sustainable manner," said Nakilat Chief Executive Abdullah Al-Sulaiti.

"In addition to this partnership with ABS, we are also leading a working group with our joint venture partners to ensure our global



CEO Al-Sulaiti is committed to sustainable operations

fleet operations meet with decarbonization targets," added Al-Sulaiti in reference to regulations passed by the International Maritime Organization.

"Our focus is on sustainable development of Nakilat's fleet beyond 2030, which contributes towards the realization of Qatar National Vision 2030 and our own vision to be a global leader and provider of choice for energy transportation and maritime services," stated the Nakilat CEO.

Georgios Plevrakis, an ABS Director, said it was a privilege to be able to support Nakilat in achieving their goal of becoming

a leader in clean shipping.

"ABS is proud to work with forward looking operators that are not only committed to finding a sustainable footing for the industry but to demonstrating how we can make significant strides toward realizing that dream today," added Plevrakis.

Nakilat in October 2021 took delivery of a newbuild carrier called "Global Sea Spirit", its 22nd conventional-sized vessel.

The 171,000 cubic metres capacity "Global Sea Spirit" is commercially and technically managed by Nakilat affiliate Nakilat Shipping Qatar Ltd (NSQL).

ABS approves new FLNG mooring system patented by Korea's Samsung

The American Bureau of Shipping has awarded approval for the design of a one-side spread mooring system for a floating liquefied natural gas facility to South Korean shipyard and offshore equipment-maker Samsung Heavy Industries.

The Approval in Principle (AIP) for SHI will see the FLNG system being safely spread-moored on one side, enabling LNG carriers to berth and load on the opposite side free from obstructions.

"With more than 150 floating oil and gas facilities in the ABS-classed fleet, ABS is the market leader in classification of offshore production units, which includes FLNG assets," said the Houston,

Texas-based company.

Matt Tremblay, ABS Vice President for Global Offshore, explained that the US class society was well placed to understand the unique requirements of these units, with a focus on safety.

"I'm proud to be able to support SHI with this innovation," stated Tremblay.

Wang K. Lee, Vice President of SHI's Offshore Business Division, said the one-side spread mooring system is a patented technology that can replace complex turrets in a mild offshore environment.

"It will be the optimized solution for shipping companies looking for economical FLNG models,"

he added. ABS has expertise on the whole of the LNG engineering, shipping and bunkering sector. One of its 2021 approvals was for a new design by Finnish company Deltamarin and French LNG storage tank firm GTT for an LNG-powered Aframax oil tanker.

The vessel was developed by Deltamarin, a designer of ships and offshore platforms for the energy industry, to increase autonomy and carbon-emission reductions for the Aframax-type vessel, which is a crude oil tanker with a deadweight between 80,000 and 120,000 metric tonnes.

US forecasts 85 percent surge in LNG exports through 2023 and rising natural gas production

LNG News Editor

The US Government forecasts that liquefied natural gas exports will be almost 85 percent higher in 2023 than they were in 2020 and that the nation's natural gas production will increase in the next two years.

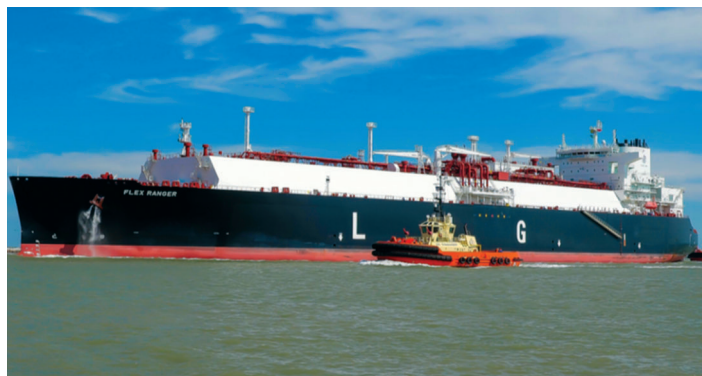
The latest forecasts came in the short-term outlook of the Energy Information Administration.

Estimates

"We estimate that US LNG exports averaged 9.8 billion cubic feet per day in 2021 compared with 6.5 Bcf/d in 2020," said the EIA report.

"We expect US LNG export capacity increases will contribute to LNG exports averaging 11.5 Bcf/d in 2022 and 12.1 Bcf/d in 2023," stated the EIA.

The report estimates that US dry natural gas production averaged 93.5 Bcf per day in 2021, up 2.0 Bcf per day from 2020.



LNG carrier makes way along the Gulf of Mexico

Natural gas production in the forecast averages 96.0 Bcf/d for all of 2022 and then rises to 97.6 Bcf/d in 2023.

The report said that working natural gas inventories ended December 2021 at 3.2 trillion cubic feet (Tcf), up 3 percent from the 2016-2020 average.

"We forecast inventories will end March 2022 at 1.8 Tcf, which would be 8 percent more than the 2017-2021 average for the

end of March," stated the EIA.

The EIA report added that natural gas spot price at the Henry Hub in Louisiana averaged \$3.91 per million British thermal units (MMBtu) in 2021.

"Monthly average prices reached \$5.51 per MMBtu in October, but they declined in November and December as mild weather prevailed across much of the country, resulting in less natural gas used for space heat-

ing," explained the report.

"We expect Henry Hub spot prices will average \$3.82/MMBtu in the first quarter of 2022 and average \$3.79/MMBtu for all of 2022 and \$3.63/MMBtu in 2023," it said.

The EIA said that Brent crude oil spot prices averaged \$71 per barrel in 2021, and it forecasts Brent prices will average \$75 a barrel in 2022 and \$68 a barrel in 2023.

In other markets, the EIA reported that US regular gasoline retail prices averaged \$3.02 per gallon in 2021 compared with an average of \$2.18 a gallon in 2020.

"We forecast gasoline prices will average \$3.06/gal in 2022 and \$2.81/gal in 2023," said the EIA.

"US diesel fuel prices averaged \$3.29/gal in 2021, compared with \$2.56/gal in 2020, and we forecast diesel prices will average \$3.33/gal in 2022 and \$3.27/gal in 2023," it added.

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Avenir LNG project on Sardinia ups pace

Avenir LNG's dual-purpose bunkering and supply vessel the 7,500 cubic metres capacity "Avenir Aspiration" has again called at the Higas terminal located on the Italian island of Sardinia as the start of commercial operations progress.

The Higas facility is a small-scale LNG import, storage and distribution facility in the port of Oristano in Sardinia.

Avenir LNG holds 80 percent of the equity in Higas and is working with established local partners Gas & Heat and CPL Concordia who each hold a 10 percent stake in the facility.

The "Avenir Aspiration" discharged the cargo and has now departed and was heading for Spain, according to shipping data.

The Higas terminal includes a jetty capable of receiving LNG vessels up to 20,000 cubic metres of capacity, an unloading arm, six horizontal cryogenic holding tanks of 1,500 cubic metres capacity each, two LNG truck-loading bays and a natural gas power generation system.

It has already started the sales and distribution of LNG truckloads to a number of customers.

Avenir itself is a joint venture owned by London-based Stolt-Nielsen and partners Høegh LNG and Golar LNG Ltd. The company's activities include building a fleet of small-scale LNG carriers.

Avenir LNG at the end of December 2021 announced it would charter one of its small-scale LNG carriers to Shell after it is delivered from a Chinese shipyard in 2022.

Avenir said it had entered into a Time Charter Party (TCP) with Shell North America LLC for the "Avenir Achievement", a newbuild with 20,000 cubic metres capacity.

GasLog announces change at top as CEO Paul Wogan retires in March

LNG News Editor

GasLog Ltd, the Greek LNG shipping company, has announced executive changes at the top with the decision of Chief Executive Paul Wogan to retire from his position on March 9, 2022.

"He will remain, in an advisory role until June 30, 2022 to ensure a smooth transition," said GasLog.

Successor

The GasLog board named Paolo Enoizi, currently Chief Operating Officer of GasLog Ltd and CEO of US affiliate GasLog Partners LP. As the new CEO of GasLog Ltd, effective March 10, 2022.

GasLog is currently expanding its fleet and has ordered four newbuild 174,000 cubic metres capacity vessels for delivery in 2024 and 2025.

GasLog Ltd ordered the vessels from South Korea shipyard Daewoo Shipbuilding and Marine Engineering.

The four newbuilds will have latest generation M-type Electronically Controlled, Gas Injection



Wogan will remain in advisory role until end of June

(MEGI) propulsion system.

GasLog completed a merger in June 2021 with BlackRock's Global Energy and Power Infrastructure division and de-listed its common shares from the New York Stock Exchange.

GasLog's ownership structure has three main shareholders in both companies, parent GasLog Ltd and subsidiary GasLog Partners LP.

They are the Greek Livanos family with 55 percent, the Monaco-based Onassis Foundation

with 12 percent and BlackRock's Global Energy and Power infrastructure fund (GEPIF), holder of 45 percent of the equity.

GasLog Ltd, whose Chairman remains Peter G. Livanos, has an LNG fleet comprising 20 vessels, 12 dual-fuel, seven tri-fuel, diesel electric (TFDE) and one steam-turbine carrier.

Subsidiary GasLog Partners LP owns 15 LNG carriers, including 10 tri-fuel-diesel-electric ships and five steam-turbine vessels.

China yard wins largest single LNG carrier order from Mitsui OSK Lines

China's Hudong-Zhonghua Shipbuilding, an affiliate of China State Shipbuilding Corp. (CSSC), has won a contract from Japanese shipping company Mitsui OSK Lines (MOL) to build six LNG carriers.

The Shanghai-based Hudong-Zhonghua yard said the MOL order was its largest one-time LNG order and was worth 7.5 billion Chinese yuan (around \$1.75bln).

The newbuild contract comes in partnership with Cosco Shipping LNG, also based in Shanghai.

The business unit of Cosco Shipping Energy Transportation will hold a 25 percent interest in each vessel.

The ships will deliver in 2025

and go on a charter with CNOOC Gas and Power Group, a wholly owned subsidiary of China National Offshore Oil Corp. (CNOOC), which recently signed its first US LNG supply deal with Arlington, Virginia-based Venture Global.

MOL, which has an operating fleet of almost 100 LNG carriers, is increasing its interests in the Chinese LNG market.

The Japanese company in mid-December 2021 reached an agreement with Royal Vopak, the Netherlands-based global storage company, whereby Vopak will acquire a minority stake in the "MOL FSRU Challenger" whose name will change to "Bauhinia Spirit" before

being deployed as a Hong Kong LNG import terminal.

This new joint venture company between MOL and Vopak in the former British colony now ceded to China will see Vopak holding a 49.99 percent of the "Bauhinia Spirit" FSRU-owning company.

The FSRU has a storage and regasification capacity of 263,000 cubic metres and 800 million standard cubic feet per day respectively.

Under the contract, the joint venture will provide the FSRU as well as jetty operations and maintenance and port services.



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**Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah
(LNG) Terminal Development Project
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All interested parties/ship-owners who have the technical and financial capabilities with appropriate and relevant experience to visit ADC's website (<https://www.adc.jo/>) to download the EOI form or submit a request to receive the EOI form to the below email addresses. Request for Qualification documents and questionnaire will be provided to all interested parties who submitted fully filled and signed EOI form to newIngru@adc.jo copying MDardasawi@adc.jo, oalbdour@adc.jo, and AGharram@adc.jo

Deadline for receiving the prequalification documents in the manner described in the RFQ is C.O.B. January 31st, 2022.

For further details and questions please do not hesitate to contact us via the aforementioned email addresses or via phone to +962-3-2039100 ext. 279

Excelerate Energy of US will test the appetite of investors for LNG with IPO in New York

Excelerate Energy, the US specialist and a market leader in floating storage and regasification units (FSRUs), is preparing an initial public offering that will help test the appetite of investors for shares in the natural gas sector of the energy transition.

Excelerate has filed with the US Securities and Exchange Commission to debut its shares and will be circulating a prospectus.

Ticker

Excelerate intends to list its Class A common stock on the New York Stock Exchange (NYSE) under the ticker symbol "EE."

Excelerate is based in The Woodlands in Houston in Texas and is part of a privately held US energy group founded by George Kaiser, owner of the Bank of Oklahoma.



Excelerate vessel 'Exemplar' transiting Panama Canal

The company has an operating fleet of 10 LNG FSRUs and is the pioneer of over a dozen import projects worldwide.

Excelerate has also led the way in ship-to-ship LNG transfers as it started terminal operations in South America, the US, Europe and Asia.

"The number of shares to be

offered and the price range for the proposed offering are subject to market conditions and have not yet been determined," said Excelerate in a statement.

Three banks have been nominated to serve as joint lead book-running managers for the proposed offering, Barclays of the UK and US investment banks J.P. Morgan,

and Morgan Stanley. "The displacement of dirtier fossil fuels and the natural complement of LNG to a fast-growing renewables sector makes flexible floating LNG products, such as those provided by Excelerate, a part of the solution to decarbonization," the company says.

In its latest terminal project Excelerate will help to stabilize the flow of supplies to Brazil through 2022 with a deal to deploy one of its existing FSRUs to the port of Salvador in the north-east state of Bahia.

Under the agreement with the South American country's state-owned oil and gas company Petróleo Brasileiro Excelerate's FSRU "Excelerate Sequoia" will supply up to 700 million cubic feet per day of regasified LNG.

Indian gas producer Reliance in competition to LNG breaks records for over-subscribed Notes

Reliance Industries, the Indian company with growing natural gas output offshore eastern India in competition to LNG, has succeeded with the first ever jumbo US dollar Notes issuance from India for \$4 billion, which was almost three-times over-subscribed, and showed the money-raising power of over-seas oil and gas.

The Reliance upstream oil and gas business comprises the complete chain of activity starting from exploration, appraisal, development and production of hydrocarbons and even coal-seam gas.

Tranches

The Reliance Senior Unsecured Notes were across 10-year, 30-year and 40-year tranches and had four firsts in the issuing process during the transaction.

It was the largest ever foreign currency bond issuance from India, the tightest ever implied

credit spread over the respective US Treasury bond by an Indian company, the lowest coupon achieved for benchmark 30-year and 40-year issuances by a private sector "BBB" corporate from Asia outside of Japan and the first ever 40-year tranche by a "BBB" Asian private corporate.

Reliance said the Notes received orders from over 200 accounts in Asia, Europe and the United States.

In terms of geographic distribution, the Notes were taken up 53 percent in Asia, 33 percent in the United States and 14 percent in Europe.

Reliance said the Notes were distributed to high-quality fixed income accounts: 69 percent to fund managers, 24 percent to insurance companies, 5 percent to banks and 2 percent to public institutions.

"The support received from the marquee international capital market investors is reflective of

the strength of our underlying businesses with established growth platforms across energy, consumer and technology as well as the robustness of our balance sheet," said Srikanth Venkatachari, Joint Chief Financial Officer of Reliance.

"This issue continues the tradition of Reliance being a sophisticated and innovative issuer across the capital structure," added Venkatachari.

The main domestic portfolio of Reliance comprises conventional oil and gas blocks in the Krishna Godavari Basin and the Mahanadi Basin and two coal-seam gas (CSG) blocks, Sohagpur (East) and Sohagpur (West) in Madhya Pradesh.

Oil and gas is currently being produced from Reliance's KG D6 and CSG blocks in India.

Reliance and partner, UK major BP, have brought on stream two out of three development blocks in the KG D6, the principal Indian gas basin.

The onstream fields are called R Cluster and the Satellite Cluster and the third, which is still to start up, is called the MJ field. Together they can produce around 30 million standard cubic metres per day.

Infrastructure

The fields in the project are able to utilise the existing hub infrastructure in KG D6 block, in which Reliance is the operator with a 66.67 percent stake and BP holds 33.33 percent.

The MJ field is expected to come onstream towards the latter half of 2022 to further boost output.

Outside of oil and gas the Reliance conglomerate is also involved in petrochemicals, textiles, retail, telecom and media.

In the jumbo Notes issuance BoFA Securities, Citigroup and HSBC acted as joint global coordinators.