

LNG Unlimited

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Sinopec demonstrates win-win of Chinese majors on LNG and shale

Beijing company doubled profits and increased US and Qatar procurement
LNG News Editor

China Petroleum and Chemical Corp. (Sinopec), one of the world's top six oil and gas companies and a significant liquefied natural gas importer to back up its refining activities, more than doubled annual net profits as prices soared and it continued to seal LNG supply deals.

Sinopec, an importer of LNG cargoes from Queensland in Australia and from the US and Qatar, said its net profits jumped by 114 percent year on year to 71.21 billion yuan (\$11.19 billion) in 2021 compared with 33.27Bln yuan (\$5.22Bln) in 2020.

Revenue jump

The company's revenues spiralled by 30 percent to 2.74 trillion yuan (\$430Bln) versus 2.10Trln yuan (\$330Bln) in 2020.

However, fourth-quarter net profits were the lowest of the year at 13.5Bln yuan (\$2.12Bln) compared with 20.3Bln (\$3.23Bln) in the third quarter.

Fourth-quarter operating income came to 739Bln yuan (\$116.1Bln), according to the earnings report filed with the Hong Kong Stock Exchange.

Sinopec reported total annual revenues of 2.74 trillion yuan (\$430Bln) in 2021 an increase of more than 30.2 percent year-on-year.

"The operating results for 2021 achieved a 10-year record high," said Sinopec Group Chairman Ma Yong Sheng.

"Over the past year, the company has taken full advantage of its



Sinopec Group Chairman Ma Yong Sheng made 2021 impact

integrated businesses, made every effort to optimize operations, expanded sales and markets, and reduced costs and expenses, resulting in a substantial increase in operating performance," he stated.

In its overview of the various businesses, Sinopec said that natural gas consumption in China rose by 12.7 percent to 372.6 billion cubic metres.

"In the meantime, we signed medium and long-term LNG agreements to increase overseas natural gas supply," added the company.

These included two formal supply agreements with the newest US LNG export Venture Global.

"We developed new natural gas market reaching more quality end-users with sales volume and market share rising constantly," it added.

Sinopec additionally has a new 10-year supply deal signed with QatarEnergy and received the first cargo from Ras Laffan in January 2022.

Sinopec also reported increases in its own oil and natural gas production.

The company's output of oil and gas equivalent reached 479.74 million barrels including 249.60 million barrels of domestic crude, little changed from the previous

year, and 1,199.4 billion cubic feet of natural gas which increased by 11.9 percent year-on-year.

In exploration and production, Sinopec said that in 2021 the company seized the opportunity of rising oil prices to promote oil and gas development in major target basins.

"In exploration, we strengthened risk exploration and pre-exploration in new areas, and made a number of new oil and gas discoveries, including major breakthroughs in continental shale oil-fields exploration in the Bohai Bay Basin, North Jiangsu Basin and Sichuan Basin," Sinopec explained.

"In crude oil development, we accelerated the building of production capacity in Shunbei and Tahe, and strengthened development in mature fields," it added.

"In natural gas development, we sped up capacity building of the Weirong, Yongchuan South and Nanchuan fields, strengthened development of Puguang, Yuanba and other fields, and deepened the development of Fuling shale gas field," declared Sinopec.

In its market outlook, Sinopec said world economic growth was expected to maintain the recovery.

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Major LNG player Fluxys of Belgium posts profit rise in line with more ship traffic and truck loads

LNG News Editor

Fluxys, the Belgian gas grid and LNG terminal owner, reported annual increased consolidated turnover of €573.2 million (\$638.3M) and more shipping traffic and truck-loadings as expansion plans progressed.

The company, whose activities are regulated by the Belgian government's energy authorities, said turnover was higher than the €560.6M posted in 2020 and the net income of Fluxys for the year edged higher to €75.5M compared with €73.2M in the previous year.

Expansion

Fluxys reported that even before the Ukraine crisis there had been shifts in natural gas import flows into Europe in late 2021.

"This meant that there was high demand in both Germany and the Netherlands for supply flows from Belgium," said the company.

"Our grid smoothly ensured high throughputs to our neighbours, reaffirming once again its role as an energy hub for north-



Fluxys has stake in Chile's Quintero terminal in Valparaíso

west Europe," it added.

The company said there were more LNG cargoes handled at the more Zeebrugge LNG terminal and more LNG trailer-trucks were loaded with the fuel.

Fluxys said that in total 181 ships docked at the terminal, breaking the previous record of 172 in 2020. During 2021, the month of May was the busiest for marine LNG at Zeebrugge with 26 ships docking.

The earnings report added that there had been particularly strong growth over past three years in LNG truck-loading with the number of loading operations doubling to 6,635.

Fluxys said LNG truck loading

was among its expansion plans for 2022 and four new loading bays were under construction.

"Given current volumes of traffic, the existing truck-loading stations are gradually approaching their maximum capacity," said Fluxys.

"Moreover, there is considerable market interest in booking even more loading slots in the future. Therefore, four additional truck loading stations are being built at the terminal," it added.

Fluxys also launched a bio-LNG service for gas made from waste and around a 100 trucks and two bunker vessels were loaded with the fuel in 2021.

"In consultation with the market and federal energy regulator we have developed a regulated service package for bio-LNG," said Fluxys.

"The service range is attracting considerable interest, with 60 per cent of the bio-LNG capacity for 2022 being sold in a first subscription window," it added.

In its financial outlook Fluxys noted that under the tariff methodology, the net profit from Belgian regulated activities is determined based on various regulatory parameters.

Fluxys said it was also extremely difficult at this time to anticipate the economic impact of the conflict in Ukraine.

"In light of the current understanding of the situation, the essential nature of the company's activities and its regulatory framework, at present we do not anticipate the war and the current resulting measures and market developments having a significant negative impact on the consolidated result of the Fluxys Belgium group in 2022," it stated.

Greece's Blue Grid joins Molgas group and will expand bunkering to include Port of Piraeus

Blue Grid, an Athens-based company leading the development of the LNG and alternative fuels market in southeast Europe, has joined the Molgas group of companies after receiving a significant investment.

Blue Grid, incorporated in 2017, is developing alternative fuels supply chains delivering environmental, economic, and operational benefits to a wide range of customers.

The company's current activity focuses on supplying LNG as a fuel to three main customer segments in industry, road transport and for marine bunkering.

Blue Grid said its broader scope includes LNG, renewable methane

and bioLNG. Molgas is a leading downstream supplier of LNG in Europe, providing volumes to over 200 industrial customers, 34 LNG fuelling stations, as well as a growing number of marine customers.

The company is active in eight countries in Europe, including Norway through its fully owned subsidiary Gasnor, a company acquired from Shell in 2021.

Molgas, which has its headquarters in Madrid, is owned by funds managed by InfraVia Capital Partners, a Paris-based private equity firm specializing in infrastructure investments.

As a new part of Molgas, Blue Grid said it would focus on accel-

erating growth in LNG and bioLNG supply in the broader region of southeast Europe and the East Mediterranean.

"The Molgas investment comes at an opportune time, considering the imminent commissioning of the Revithoussa truck-loading terminal, anticipated for the summer of 2022, which will allow reliable and competitive supply of LNG to final customers in the SE European region," said Blue Grid.

The Hellenic Gas Transmission System Operator (DESFA) is the owner of the Revithoussa LNG terminal.

DESFA is also constructing a small-scale LNG reloading jetty on Revithoussa island and it is

expected to be operational by the end of 2023.

Piraeus bunkering

Blue Grid said it aimed to be one of the first physical suppliers of LNG to marine customers in the Port of Piraeus, and to this end, is planning to have an LNG bunkering vessel available in alignment with the commissioning of the jetty.

"We are proud to have Molgas onboard, and view this investment as a vote of confidence in the work that we have been doing in the region over the past years" said Sofoklis Papanikolaou, founder and Chief Executive of Blue Grid.

Dallas firm revives LNG project at Lake Charles

Energy Transfer LP, the owner of assets in the Permian Basin and Haynesville Shale as well as the Cushing crude oil delivery system, has signed two LNG sale and purchase agreements with ENN Group for its almost forgotten Lake Charles LNG export project in Louisiana.

Under the two SPAs, Energy Transfer is expected to supply 1.8 million tonnes of LNG to ENN's natural gas subsidiary and 900,000 tonnes of LNG to the ENN Energy unit per annum on a free-on-board (FOB) basis.

Energy Transfer said the purchase price was indexed to the Henry Hub benchmark plus a fixed liquefaction charge.

Both SPAs are for a term of 20 years and first deliveries are expected to commence as early as 2026.

China's ENN has an annual LNG distribution capacity of over 10 billion cubic metres of natural gas and runs the first large-scale private LNG terminal in China, the Zhoushan LNG facility in eastern Zhejiang province south of Shanghai.

The SPAs will become fully effective upon the satisfaction of the conditions precedent by Energy Transfer's plan and final investment decision to transform the existing Lake Charles LNG import terminal into an export plant.

Analysts note that the Lake Charles liquefaction and export venture was the ghost LNG project of North America where nothing ever moved since 2015 on the regulatory front.

The Lake Charles LNG import terminal was once part of assets of BG Group of the UK and was acquired by Shell as a joint venture involving Energy Transfer had already made significant advances on the permit front before sliding to a halt.

Australian LNG shipments set to rise with start-up of Pluto gas flow

LNG News Editor

Woodside Petroleum, the Australian operator of the North West Shelf and Pluto LNG export plants, said the processing of gas had started ahead of schedule from new fields offshore Western Australia, opening the way for more LNG shipments.

Woodside said the processing of gas from the offshore Pluto fields had started at the NWS project's Karratha Gas Plant.

Accelerated

"This accelerated production of Pluto gas has been enabled by the start-up of the Pluto-Karratha Gas Plant Interconnector," the company explained.

The Interconnector is a 3.2 kilometre pipeline which connects Pluto LNG with Karratha, providing access for the processing of gas for other resource owners.

"The start-up of the Interconnector supports the accelerated production of gas from the first phase of Pluto's Pyxis Hub by en-



Pluto gas is part of the Australian WA-34-L permit

abling it to be processed," explained Woodside.

The "ready for start-up" had been achieved for the first phase of Pyxis Hub in October 2021.

The Karratha plant is expected to process approximately 2.5 million tonnes of LNG in aggregate and approximately 20 petajoules of domestic gas from Pluto in the period 2022 to 2025.

Woodside Chief Executive Meg O'Neill said the accelerated production from the offshore Pluto fields through the Interconnector is a significant achievement.

"The start-up of the Pluto-KGP

Interconnector provides access to spare capacity at Karratha Gas Plant to process gas owned by other resource owners, both onshore and offshore Western Australia," O'Neill stated.

"The commencement of Pluto gas flowing through the Interconnector is the first example of this," she added.

"The processing of gas from the offshore Pluto fields through Karratha Gas Plant enables Woodside to deliver additional LNG cargoes into the international gas market," the CEO explained.

Italy's Eni says technology helped upgrade of discovery offshore Angola

Italian energy company Eni has upgraded the resources by more than three times in the Ndungu field offshore the LNG-producing nation of Angola and said the move showed how improved technology can alter the profile and economic viability of a discovery.

Eni said the resource base in the Ndungu field, located about 130 kilometres (81 miles) off the coast of the southwest African country, had been re-assessed after further exploration.

The field is additionally about 10km from the Ngoma Floating Production Storage and Offloading unit in the West Hub of block 15/06.

The Ndungu 2 appraisal well was drilled 5km away from Ndungu 1 and 40 metres of net oil pay

(35° API) in the Lower Oligocene reservoirs were confirmed with good petrophysical properties and in the hydraulic communication with the discovery well.

"An intensive data acquisition was performed to assess the full potential of the discovery," explained Eni.

The preliminary data collected on Ndungu 2 has allowed an upgraded estimate to 800 million barrels of oil equivalent to 1,000 million barrels of oil equivalent in place in the field.

"This is an improvement from the initial estimates of 250-300 (post Ndungu 1), making Ndungu, together with Agogo, the largest accumulation discovered in Block 15/06 since the block award," added Eni.

"The systematic and continuous Infrastructure-Led Exploration (ILX) effort conducted by Eni and its partners during the last three years, with the full support of ANPG and the Angolan Authorities, leveraged leading-edge technology and allowed to unlock significant additional potential in the complex structural and stratigraphic traps inside Block 15/06," stated Eni.

The early production phase of Ndungu had already started last February through one producer well. A second producer well is expected in the fourth quarter of 2022, maximizing the utilization of existing facilities in the West Hub.



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NEWS BRIEFS

Stolt-Nielsen earnings

Stolt-Nielsen Ltd, the Norwegian company which derives a small part of its income from the Avenir LNG joint venture with partners Høegh LNG and Golar LNG, reported first-quarter 2022 net profits of \$52.3 million with revenues of \$606.2M compared with a net profit of \$35.0M and revenues of \$593.M logged in the fourth quarter of 2021. The Stolt-Nielsen group operates in an array of businesses including tankers, terminals and gas. "Typically the first quarter of the year is the seasonally weakest quarter.

Japan LNG fuel fleet

Nippon Yusen Kaisha (NYK), the Japanese shipping line, said it had taken delivery of the LNG-powered pure car and truck carrier (PCTC), the "Plumeria Leader". The vessel was built at the Shin Kurushima Dockyard in Hiroshima. "This is NYK's second LNG-fuelled car carrier following the 'Sakura Leader' being delivered," said NYK.

ICE notes WTI growth

The Intercontinental Exchange's second expiry date for the new Permian Basin Midland WTI American Gulf Coast Futures showed that the use of the instruments in the heart of LNG export and pipeline natural gas territory has grown quickly. The ICE Midland WTI American Gulf Coast futures (HOU) went to its second expiry on March 23, with 2,588 contracts going to delivery in April, almost double the 1,400 contracts which went to expiry in March. Each futures contract is equivalent to 1,000 barrels of Permian Basin originated WTI crude oil.

B.Grimm Power of Thailand makes more progress on further advancing domestic and overseas LNG and power businesses

LNG News Editor

One of the oldest registered companies in Thailand is making progress on developing its liquefied natural gas business with more imports while expanding its power business domestically and in Southeast Asia and elsewhere as earnings were hit by the rising natural gas price.

The company, B.Grimm Power Public Company Ltd, is headed by Chairman Pakorn Thavisin and with Harald Link as President and director.

Revenue rise

It has posted increased annual revenues of 46.62 billion Thai baht (\$1.38Bn) compared with 44.08Bn baht (\$1.31Bn) in the previous year.

Net profits amounted to 3.41Bn baht (\$101.4 million) versus 3.75Bn baht (\$111.4M) in 2020.

B.Grimm Power said natural gas costs increased 12.4 percent year-on-year to 27.79Bn baht (\$825M), mainly from an 8.8 percent increase in the natural gas price, which is linked with the weighted average price from state energy company PTT's pool gas.

"Total revenue rose 5.8 percent thanks to growth in electricity volume from both new customers and existing customers," said B.Grimm Power.

Gross earnings (EBITDA) decreased 4.7 percent as margins softened due to the gas price increase.

B.Grimm Power said it was still advancing with its LNG business development and import plans.

"In a joint investment with the state-owned PTT Global LNG Co. Ltd. (PTTGL) B.Grimm Power LNG JV Co. Ltd. (BGPLNGJV) was formed to engage in a joint venture to supply and distribute LNG as well as pursuing other business opportunities in the LNG value chain here and abroad," explained B.Grimm Power.

"The move will sharpen our capability and competitiveness



Company is headed by Pakorn Thavisin and Harald Link

as well as scaling up our future businesses," said the company.

"BGLNG (a subsidiary) secured approval from the Energy Regulatory Commission for raising LNG import volumes by up to 550,000 tonnes a year, thus raising its total import volumes to 1.2 million tonnes a year," explained B.Grimm Power.

Thailand is opening up its own LNG import market and has handed out six LNG import licences to non-state power and industrial operators

PTT has additionally completed several expansions at the Thai import terminal at Map Ta Phut with the most recent from 10.7 MTPA capacity to 11.5 MTPA.

A second regasification terminal adjacent to Map Ta Phut and called Nong Fab LNG is expected to be completed by 2023 with total additional regasification capacity of 7.5 MTPA.

B.Grimm Power had also previously signed an agreement with PetroVietnam Power Corp. to jointly investigate the development of LNG-based power projects and a project to import and sell LNG for power in Vietnam.

B.Grimm Power said it had also growing investments in hydro-electric power plants in Laos and in power transmission and distribution in Cambodia.

B.Grimm Power sells most of its domestic output to Electricity

Generating Authority of Thailand (EGAT), the national electricity generator and distributor.

The company also signed an accord to expand a power plant project and a hybrid smart-grid system in the Asia Industrial Estate (Suvannabhumi). The industrial user group consists of the automotive, medical supply, and data centre sectors.

B.Grimm is a Thai conglomerate with the power subsidiary as a separate company and was founded in 1878.

Then it aimed to improve the wellbeing of the people of Siam and started a European modern pharmacy named Siam Dispensary which earned B.Grimm a royal appointment.

Irrigation pioneer

B.Grimm was also part of a company formed to excavate 1,500-kilometres of canals in Siam, the longest and largest irrigation system in Southeast Asia at that time under the reign of King Chulalongkorn.

B.Grimm is still a conglomerate company active in many sectors from building and industrial systems to healthcare, transportation, real estate and emerging digital technologies.

However, it has a growing power company that was listed in 2017 to engage in electricity generation and steam production.

LNG producer Abu Dhabi marks anniversary of oil futures platform launch and start of oil surge

LNG News Editor

Abu Dhabi National Oil Company (ADNOC), the oldest LNG producer in the Middle East, has marked the first anniversary since the launch of ICE Futures Abu Dhabi (IFAD) platform and ICE Murban Crude Oil futures in a time when the price of oil has doubled and just fallen back slightly.

It was on March 29, 2021, that the Intercontinental Exchange Murban Crude Oil futures began trading on the new ICE Futures Abu Dhabi (IFAD) platform.

Vision

The IFAD exchange, located in the Abu Dhabi Global Market with nine of the world's largest energy traders joining ICE and ADNOC as founding partners, has been a great success.

At that time the price of the most expensive crude, North Sea Brent, was at \$63.22 a barrel and the US benchmark West Texas Intermediate was at \$59.60 a barrel.

Now at the end of March 2022 Brent and WTI are at around \$111.05 a barrel and 105.95 per barrel respectively.

That launch a year ago was combined with two fundamental reforms by ADNOC to physical Murban pricing and physical trading.

In June 2021, ADNOC moved its official selling price (OSP) for Murban sales to be based off the ICE Murban Crude Oil future, with the OSPs for Das, Upper Zakum, and Umm Lulu grades set as a differential to ICE Murban futures.

In addition, ADNOC removed destination and resale restrictions on all its crude, allowing it to be freely traded and delivered in the global market.

"The vision and strategy of



The ICE Futures Abu Dhabi (IFAD) platform is a year old

ADNOC in removing destination and resale restrictions and moving the OSP to forward pricing based on ICE Murban futures has without question served to increase trading in Murban and opened it up to a far wider and more global audience," said Jamal Oulhadj, President of ICE Futures Abu Dhabi.

"Our customers come to IFAD to hedge Murban and gain exposure to one of the top crudes for the Asia market," Oulhadj explained.

Sultan Ahmed Al Jaber, the Minister of Industry and Advanced Technology and ADNOC Group Chief Executive, also praised the launch of IFAD.

"As we celebrate the anniversary of the start of trading of the Murban futures contract on ICE Futures Abu Dhabi, we pay tribute to Abu Dhabi's visionary leadership whose bold decisions to move to forward pricing, to use a market-driven pricing mechanism and to remove destination restrictions on Murban, have transformed how Murban is bought and sold around the world," stated Al Jaber.

"The foresight and wisdom of our leadership has enabled ADNOC

to bring our flagship crude to international markets as a futures contract, establishing Abu Dhabi and the United Arab Emirates as important players in global energy trading and liberalizing access to one of the world's least-carbon intensive crude grades," he explained.

"We are proud to see Murban successfully trading alongside the global crude oil benchmarks, with around 1.5 billion barrels traded to date," he declared.

Price and output

Produced by ADNOC, Murban is the UAE's largest crude by volume, with daily production capacity of up to 2 million barrels.

The UAE Murban crude price was last at around \$110 per barrel on March 30.

In addition to producing Murban crude, ADNOC is a growing natural gas developer, including unconventional gas projects as well as operating the liquefaction and LNG export plant on Das Island in the Arabian Gulf.

The UAE as the first LNG exporter from the Middle East

shipped its first cargo in 1977 and is still hopeful of maintaining LNG exports with additional feed-gas resources while boosting domestic natural gas supplies.

The pioneering Das Island plant produces about 6 million tonnes per annum of LNG and is the oldest in the Arab world after Algeria's Arzew plant. It is also the subject of an upgrading project.

"In just a year, the trading of Murban crude oil futures contracts on IFAD has catapulted the UAE onto the global stage," said Ahmed Jasim Al Zaabi, Chairman of Abu Dhabi Global Market.

"To support the growing appeal of Murban to the global market, the flagship IFAD exchange has been reinforced by ADGM's holistic market infrastructure platform that supports financial intermediation, facilitates global connectivity and enables investors to flourish and manage their varying needs," he added.

Since launch, around 1.5 million contracts have traded on IFAD. On IFAD's first day of trading 27 firms traded. Today, this has grown to 97 firms from across the US, Europe, the Middle East and Asia, including commercial customers and financial participants.

In its first year, Murban futures have had 11 expiries with a total of over 80 million barrels going to delivery.

Murban currently accounts for around 50 percent of the UAE's total production capacity, with ADNOC outlining plans to increase the production of Murban to more than 2.5 million barrels per day by 2030, in line with ADNOC's goal of growing its production capacity to 5 million barrels of crude per day.

Contracts traded on IFAD are cleared at ICE Clear Europe alongside ICE's global energy futures platform covering oil, natural gas and the environmental complex, allowing customers to benefit from critical margin offsets to enhance capital efficiency.

In just a year, the trading of Murban crude oil futures contracts on IFAD has catapulted the UAE onto the global stage

- Ahmed Jasim Al Zaabi, Chairman of Abu Dhabi Global Market

Avenir LNG buys out shareholders in Sardinia

Avenir LNG, the Norwegian-listed LNG project developer with a small-scale fleet, has agreed to buy out the shareholdings of its Italian partners in the small-scale LNG terminal at Port of Oristano on the Mediterranean island of Sardinia.

Avenir has now taken over the stakes of Gas and Heat and CPL Concordia in the Higas venture, the company that owns and operates the LNG facility.

Financial details of the transaction were not disclosed by the London-headquartered firm, which held 80 percent of the equity while its local partners each held a 10 percent stake.

Avenir is itself a joint venture owned by London-based Stolt-Nielsen and partners Høegh LNG and Golar LNG Ltd.

The company has a fleet of six small-scale LNG carriers delivered or on order and ranging in capacity from of 7,500 cubic metres to 20,000 cubic metres.

The company is listed on the over-the-counter market of the Oslo stock exchange in Norway.

The Higas terminal was the first dedicated small-scale LNG facility in the Mediterranean and via the adjacent deep draft jetty and enabled LNG imports for Sardinia.

Utilising the terminal's LNG truck-loading bays, Higas distributes LNG via road tankers to industrial users and to gas distributors across the island.

The terminal has the capacity to load up to 8,000 LNG trucks per annum via the two truck-loading bays.

"This is another important step in executing our investment strategy," said Peter Mackey, Chief Executive of Avenir LNG.

Baleària signs first green financing agreement in Spanish ship sector

LNG News Editor

Spanish ferry company Baleària, which is continuing with its build-out of dual-fuelled ferries with gas capability for use on its Mediterranean routes, has become the first company in the Spanish shipping sector to sign a "sustainable financing" agreement.

CaixaBank, the leading financial institution in Spain for "green loans", acted as financing coordinator, insurer and sustainability agent for €80 million (\$88M) syndicated loan.

Gas and electric

Baleària's ferries link the Spanish mainland to Spain's islands such as Majorca, Menorca, Ibiza and the Spanish territories in North Africa, Ceuta and Melilla.

Internationally, it also operates to southern France and links the US mainland with the Bahamas.

To reduce emissions both on journeys and in ports, Baleària has begun to invest in providing vessels with an electrical connection to the port when they are docked



Fast ferry 'Eleanor Roosevelt' completed a first with LNG

to enable them to remain operational without using fuel.

Baleària noted that in 2021 it added the "Eleanor Roosevelt" to its fleet as the world's first fast-ferry with dual-fuel engines and able to run on bio-LNG and with an electrical connection to the port.

"This enabled it to make the first carbon-free journey of any ship in Europe, in its first month of operation, using bio-methane. The shipping company aims to have nearly 15 percent of its fleet utilising these electrical connections by 2026," it added.

Baleària regards itself as a

benchmark shipping company in sustainability as a result of its leadership in projects related to gas and renewable energy.

The €80M loan to Baleària was calculated using the interest rate based on two environmental indicators: the number of eco-sustainable vessels and the number of vessels with electrical connections when docked and used by the company.

Baleària said that other Spanish banks had participated in the CaixaBank-led syndicated loan, including Abanca, Banca March, BBVA, Cajamar and Santander.

Mitsubishi to build first LNG bunker vessel for companies in Western Japan

Mitsubishi Shipbuilding Co. has signed a contract to construct the first liquefied natural gas bunkering vessel to serve a growing base of LNG maritime fuel customers in Western Japan.

Mitsubishi Shipbuilding, a subsidiary of Mitsubishi Heavy Industries, signed the newbuild contract with Keys Bunkering West Japan Co. comprising a group of leading shipping and utility companies.

Investors

The new Japanese bunkering vessel with 3,500 cubic metres of LNG capacity will be built at MHI's Shimomoseki Shipyard in Yamaguchi Prefecture with completion and handover scheduled for March

2024. "The use of LNG propulsion for ships is attracting attention as a solution for compliance with regulations aimed at reducing greenhouse gas emissions," said Mitsubishi Shipbuilding.

"The planned LNG bunkering vessel will have an electric main engine, and be equipped with a dual-fuel engine capable of using both LNG and heavy oil as fuel," added the company.

Keys Bunkering West Japan is a joint venture company established in February 2022 to supply LNG fuel for ships in the Kyushu and Setouchi regions of the country.

The parties in the venture include Kyushu Electric Power Co, Shipping company Nippon Yusen

Kabushiki Kaisha (NYK Line), a unit of trading house Itochu and Saibu Gas Co., a gas utility based in Fukuoka in Northern Kyushu.

"Mitsubishi Shipbuilding, as part of MHI Group's strategic initiatives for the energy transition, will make use of the gas-handling technologies and experience it has accumulated from building LNG carriers," added the statement from the Yokohama-based company.

"Through this business project involving low environmental-impact LNG fuel, Mitsubishi Shipbuilding, as a maritime system integrator, aims to further the decarbonization of the marine industry," it stated.



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Le Havre may once again handle French LNG imports amid report of studies for FSRU in port

LNG News Editor

France is considering plans to deploy a floating storage and regasification unit for liquefied natural gas imports at the Port of Le Havre on the northwest coast of Normandy, where there had previously been an onshore facility that handled deliveries of LNG from Algeria for Gaz de France.

The French financial daily newspaper, "Les Echos" has carried a report on the moves to increase French LNG import capacity to reduce its dependence on Russian natural gas.

Studies

"The public authorities, in partnership with the major French energy companies, plan to install a new liquefied natural gas import terminal in the port of Le Havre," said the report in "Les Echos", citing several unnamed sources.

"A preliminary project for a



Le Havre imported Algerian LNG on 'Jules Verne' tanker

floating terminal in the port of Le Havre is being prepared between the Ministry for Ecological Transition, TotalEnergies, GRTgaz, the subsidiary of Engie which manages the French gas pipelines," said the newspaper.

Also involved is the port company running shipping traffic on the River Seine and the estuary combining Le Havre, the city of Rouen and Paris.

The Haropa Port company is the fifth-largest in northern

Europe in terms of traffic.

"Nothing is completely decided yet, one source emphasized," said "Les Echos".

TotalEnergies, the French government and the utility Engie have so far declined to comment on the report.

"This project for a floating LNG terminal in Le Havre will be useful if we want to reduce our dependence on gas from Russia and increase the security of supplies," the report cited the President of the Com-

mission de Régulation de l'Energie, Jean-Francois Carenco, as saying.

The newspaper gave a timeline for the FSRU to be operational as 18 months, including arranging a charter and building connections to the natural gas grid.

Someone familiar with the Port of Le Havre and the shipping activity there suggests that the FSRU would likely be sited at Antifer, the northern Le Havre oil terminal designed to accommodate ultra large oil tankers.

The person noted that there had previously been an LNG import terminal project under study for Le Havre several years ago led by the private energy firm Poweo.

If the Le Havre FSRU project is confirmed it would be France's fifth import facility after the Channel port of Dunkirk, the Atlantic Coast terminal at Montoir-de-Bretagne and the two facilities west of Marseilles, Fos Cavaou and Fos Tonkin.

Indian LNG cargo volumes fall for fifth month as costs soar but domestic gas output rises again

Indian liquefied natural gas imports declined for a fifth month though at a much slower rate while year-on-year LNG costs soared and were partially offset by more domestic pipeline gas supplies coming ashore from the Bay of Bengal.

LNG imports for the month of February amounted to 1.85 million tonnes, the equivalent of 27 cargoes, a decline of 0.5 percent from the 1.86MT delivered in February 2021, according to preliminary monthly data from the Indian Ministry of Petroleum and Natural Gas.

Deliveries in the previous month of January declined by 10.6 percent to 1.78MT compared with 1.99MT in January 2021.

Shipments to India's operating network of six regasification terminals, mostly concentrated on the West Coast, for the first 11 months of the current fiscal year

from April through February declined by 3.0 percent to 21.67MT versus 22.34MT for the same period of the previous fiscal year.

India's fiscal-year LNG import volumes are still on track to again be lower than in the previous fiscal year.

The Ministry data also showed that India in February 2022 paid around \$1 billion, or 7,6123 crore Indian rupees, for LNG cargoes compared with \$900M in February 2021.

The shipments in the 11-month period from April to February cost \$10.9 billion, or 82,974 crore rupees, versus \$7.0Bln in the same period of the previous fiscal year.

LNG deliveries to Indian terminals come mainly from Qatar, which provides over one-third of volumes, as well as West Africa, the US, Asian nations, Australia, Russia and the spot market.

Increasing domestic natural gas production has more than offset the fall in LNG imports, though the volumes are mostly in different regions than those required near LNG terminals for regular customers.

Domestic production of natural gas surged by 12.8 percent in February to 2.602 billion cubic metres versus 2.307 Bcm in the prior-year month.

The cumulative gross production of natural gas jumped by 19.8 percent in the April-to-February fiscal year to 31.137 Bcm from 25.987 Bcm in the previous year.

The revived Krishna-Godavari Basin of Eastern India has seen production jump and will rise further in the future from development projects involving the Indian group Reliance Industries and UK major BP as well as Oil

and Natural Gas Corp. of India.

The latest Ministry data also gave average capacity utilization rates for the nation's operating LNG terminals.

Terminal throughput

The largest Indian terminal at Dahej, located north of Mumbai and operated by Petronet LNG, has capacity of 17.5 MTPA and the utilisation rate since April 2021 to the end of January 2022 was 89.1 percent compared with 90.0 percent in the previous month.

At the Hazira facility, operated by Shell India, the fiscal year utilisation rate declined to 52.6 percent from 57.2 percent for 5.2 MTPA, while the West Coast terminal at Mundra saw usage edge lower to 19.6 percent from 19.9 percent previously for its 5 MTPA of capacity.



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