

LNG Unlimited

LNG JOURNAL PUBLICATION

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TotalEnergies project spending set to hit up to net \$18Bln a year

French major sets up three-year strategy focused on LNG and with transition in mind

LNG News Editor

TotalEnergies held a four-day Board meeting to approve future strategy that will involve a larger liquefied natural gas portfolio to position the French major in the top three worldwide of LNG market participants.

The Board considered proposals needed for the oil and gas player to keep on track in the context of changing energy markets as a result of the energy transition.

Multi-energy

"The Board of Directors noted the relevance of the Company's balanced multi-energy strategy in light of the developments in the oil, gas and electricity markets," said a statement.

"Thanks to refocusing the portfolio of oil and gas assets and projects on low cost (less than \$20 a barrel of oil), along with having a strong growth strategy in LNG and an accelerated development into electricity, the company was in a very favourable position to benefit from the evolution of energy markets," explained TotalEnergies.

"With a breakeven anchored below \$25 a barrel, TotalEnergies is a much more profitable company today than it was 10 years ago," said the Board.

"At the same oil equivalent price, it generates an additional \$15 billions of cash flow and can take full advantage of favourable environments," it added.

TotalEnergies said that by the end-2022, the company would have a very strong balance sheet



CEO Patrick Pouyanné and QatarEnergy counterpart Saad Sherida Al-Kaabi happy to sign deal on two mega-Trains

with gearing sharply down to around 5 percent, providing more flexibility.

"It is positioned to both accelerate its transformation strategy and to offer an attractive return to the shareholders," said the Board statement.

In addition, the company expects underlying cash flow, excluding Russian assets, to grow by \$4Bln over the coming five years using moderate energy price assumptions such as \$50 a barrel for oil and natural gas at \$8 per million British thermal units.

From this standpoint, the Paris-based company expected to generate an additional cash flow of more than \$3Bln for every \$10 a barrel increase in the price of oil.

Growth

"This structural cash flow growth will support dividend growth over the next five years," said TotalEnergies.

In this context, the Board said it had adopted a cash flow allocation strategy for the coming years.

It provides for the allocation of 35-40 percent of cash flow to

shareholders through the cycles while accelerating the company's transformation strategy with net investments increasing to between \$14Bln and \$18Bln per year from 2022-2025.

The company said that this increase would be dedicated in priority to the development of carbon-free energies and carbon footprint reduction programmes which will represent about a third.

Investments in solar and wind will exceed \$4Bln in 2022 (compared with \$3Bln in 2021) and a \$1Bln energy-savings program would be deployed globally in 2023-24 to control the cost of energy consumed and accelerate the reduction of emissions.

"The remaining two-thirds will be dedicated to - on the one hand growing LNG - and on the other to developing low-cost, low-emission oil projects to meet demand," stated the French major.

"The return to shareholders should therefore represent between 35 percent and 40 percent of cash flow as of 2022," the statement concluded.

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Tellurian shares plunge as it cancels Shell and Vitol deals as well as bond sale and seeks partner

LNG News Editor

Tellurian Inc., the developer of the Driftwood LNG export plant in Louisiana, saw its shares plunge 40 percent on the week as it cancelled two sales and purchase agreements with UK major Shell and global commodities firm Vitol and said it had formulated a new financing strategy.

Shares in Tellurian tumbled by 15.60 percent in one day to \$2.33 per share from \$2.77 per share on the New York Stock Exchange American list after the statement saying it was seeking a strategic partner to pursue the venture.

Other options

The shares were down about 40 percent on the week through September 23 after negative reports emerged on the stock and the progress of the company to a final investment decision.

"The potential corporate and strategic partners we are seeking may want liquefied natural gas volumes that they can sell globally and now we have some capacity to offer



CEO Simões pointed to Tellurian's growing gas volumes

that option," said President and Chief Executive Octávio Simões.

"We have made good progress on our construction plan and will continue funding that with our cash and operating cash flow," added the CEO. Tellurian's recent income has come from Haynesville shale gas sales and previously from some LNG trading.

Houston. Texas-based Tellurian had initially said it would raise \$1 billion by selling bonds to help finance Driftwood LNG for which some site clearing and preliminary work had already started at the site near Lake Charles and ahead of an FID.

Tellurian Executive Chairman Charif Souki said the focus was now on finding a strategic investor for the \$12 billion project which had signed three SPAs in mid-2021 with Shell Vitol and with another global commodities firm Gunvor, whose SPA remains in place.

The strategy change followed previous unsuccessful talks with possible equity shareholders in return for them buying debt.

Tellurian's SPAs with Shell and Vitol were for 3 million tonnes per annum of LNG each for 10 years from the first liquefaction Trains from the venture scheduled to come on stream in 2026 and with

regulatory approvals for 27.6 MTPA of output.

"It sets us back, definitely. It puts in jeopardy the ability to deliver gas on the schedule that we were hoping to stick to," explained Chairman Souki.

CEO Simões explained that what has not changed for Tellurian was that it was already operating as a natural gas producer with revenues from gas sales.

Acquisition

"Last quarter we produced 9 billion cubic feet of natural gas and had over \$61 million in sales, and since then we have closed the En-Sight acquisition," noted Simões.

"Currently we have 11 natural gas wells in various stages of completion and therefore expect a significant increase in production and sales next quarter," he said.

"In addition, we will add to our value when our fully permitted Driftwood LNG project is completed, and we can reach the global markets with LNG sales at global prices," he stated. ■

Kinder Morgan sells half of majority stake in Elba Island LNG to mystery buyer for \$565M

Kinder Morgan Inc., the US natural gas pipeline giant and a shareholder in the Elba Island LNG export plant in Georgia, has sold part of its stake in the liquefaction plant.

KMI said it sold a 25.5 percent equity interest in Elba Liquefaction Company (ELC) to "an undisclosed financial buyer" for around \$565 million.

Plans for cash

After the close of the transaction the Houston, Texas-based company would own 25.5 percent of Elba Island, the same as the mystery buyer.

New York-based Blackstone Credit, a hedge fund and invest-

ment arm of the Blackstone Group, would continue to hold a 49 percent interest in ELC, which is now the majority holding.

KMI said the proceeds from the sale would reduce short-term debt and create additional capacity for "attractive investments" including "opportunistic" share repurchases.

It added that the value of the equity interest implied an enterprise value of ELC amounting to \$2.3 billion, which is approximately 13 times 2022 gross earnings.

The ELC joint venture was formed in 2017 to construct and own the 10 modular liquefaction units in operation at Elba Island and KMI would continue to operate

the facility. The export plant is supported by a 20-year contract with Shell LNG North America for 100 percent of the liquefaction capacity.

"We are pleased to welcome a new partner into the ELC joint venture," said KMI's Interstate Natural Gas President Kimberly Watson.

"Recent geopolitical events have proven how critical liquefied natural gas infrastructure is to meeting global energy demand," added Watson.

"We believe this investment further shows the value of LNG and demonstrates the important role it will play for decades to come," she stated.

The Elba Liquefaction facility is in Chatham County in Georgia, near the city of Savannah, and produces around 2.5 million tonnes per annum of LNG from its 10 Trains using Shell processing technology.

In the operational plan, ELC then delivers the LNG to Southern LNG Co. (SLNG) for export.

KMI owns 100 percent of SLNG, which owns and operates the Elba Island LNG Terminal, including the LNG storage tanks and the ship dock for import and export.

The statement added that Bracewell LLP served as legal advisor to KMI for the transaction. ■

Saipem wins €1Bln of work on Africa hub

Saipem, the Italian offshore energy and LNG engineering specialist, was awarded two contracts worth €1 billion (\$961 million) by a joint venture in the Côte d'Ivoire in West Africa to develop the Baleine Phase 1 project for offshore oil and associated gas and to maintain the country's status as an African energy hub.

The contracts have been awarded by a venture comprising Italian oil and gas company Eni and the African nation's state energy company, Société Nationale d'Opérations Pétrolières de la Côte d'Ivoire (Petroci).

The Eni-Petroci project is for the oil and gas find in offshore block CI-101 which is forecast to hold up to 2.0 billion barrels of oil in place and 2.4 trillion cubic feet of associated gas located at a 1,200m water depth.

"The Baleine Prospect represents the largest commercial discovery in the country in the last 20 years and it will contribute to energy production in Côte d'Ivoire, strengthening the country's role as a regional energy hub," said a statement.

Saipem noted that it had contributed to the discovery of the field in 2021 thanks to the drilling activities of the "Saipem 10000" and "Saipem 12000" vessels.

The first contract awarded entails engineering, procurement, construction and installation activities of subsea umbilicals, risers and flowlines and for an onshore gas pipeline for the connection to the distribution grid.

Saipem said the offshore laying of flexible lines, risers and umbilicals would be executed by Saipem's flagship vessel "FDS2" and the development of the project will be on a fast-track basis.

Australian Minister signs domestic gas deal Queensland LNG export plants

LNG News Editor

The Australian Government has concluded an agreement with the East Coast LNG exporters in Queensland to ensure that uncontracted gas held by the three export plants in the state would first be offered to the domestic market before being offered to international customers.

The Federal Resources Minister Madeleine King said she had signed a new heads of agreement with the three LNG exporters on Curtis Island in Queensland, Gladstone LNG operator by Santos, Australia-Pacific LNG run by ConocoPhillips and the Shell-operated Queensland Curtis LNG plant.

Reliable gas

"This agreement will ensure Australians continue to have access to secure and reliable gas," said King.

"The new supply commitments will deliver gas to the domestic market when needed and ensure future uncontracted gas will be offered to the domestic market first, on competitive and reason-



Minister Madeleine King signed accord with Curtis Island plants, Gladstone, Australia-Pacific and QCLNG

able terms, before it is offered for export," she added.

The Minister said that LNG exporters had agreed to adhere to the principle that domestic gas customers should not be expected to pay more than international customers.

Gladstone LNG plant operator Santos, based in Adelaide, said it welcomed the finalisation of the agreement and said it would have no adverse impact on Santos nor on the GLNG facility.

"The agreement removes sovereign risk by recognising the importance of honouring LNG contracts and will help to maintain

Australia's reputation as a trusted and reliable LNG exporter to our trade and investment partners," said Santos.

"Each of the LNG exporters has provided a plan to address a forecast potential domestic gas shortfall risk in 2023 and the Government is satisfied those plans are sufficient to mitigate this risk," explained Santos.

For the last two years, unplanned high demand in the Southern Hemisphere winter has resulted in domestic gas price jumps for periods of around two months.

Papua New Guinea firm Kumul in move to increase PNG LNG stake

Australia's Santos has been approached by Papua New Guinea's state petroleum company to purchase for US\$1.4 billion a 5 percent larger stake in the PNG LNG export project.

The purchasing company is Kumul Petroleum Holdings Limited and it already owns a 16.8 percent participating equity interest in the PNG LNG joint venture.

Operator

The operator of PNG LNG is Exxon-Mobil, the US major that developed the facility at Caution Bay, northwest of the PNG capital Port Moresby.

ExxonMobil holds a 33.2 percent

interest in PNG LNG, though Santos became the majority shareholder with its 2021 takeover of PNG-based energy company Oil Search.

Santos has issued a favourable response to the Kumul Petroleum approach for a larger stake in the plant.

"The potential sale would increase the equity interest of the State to approximately 22 percent, supporting the PNG government objectives for the people of PNG to have a greater equity interest in the development of their natural resources," said Adelaide-based Santos.

Santos Chief Executive Kevin Gallagher said the potential sale of

a 5 percent interest in PNG LNG to Kumul represented an opportunity to build strategic alignment for the future development of PNG's natural gas resources, including via PNG LNG infrastructure.

The Papua LNG expansion project, led by TotalEnergies and involving others including Santos, has an initial proposal to construct two additional liquefaction Trains at the PNG plant site to almost double current production to about 20 million tonnes per annum.

Following the sale of 5 percent to Kumul, Santos would remain the largest shareholder with 37.5 percent of PNG LNG.



Power Play AWARDS

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Congratulations to the three winners of the 2022 Power Play Awards!

Once again, there was tremendous support from our Power Play community. Thank you to everyone involved for demonstrating how a mutually supportive environment can help support great business outcomes across all parts of the LNG value chain.

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Ren Chunxia

General Manager, Shenzhen Sino-Benny LPG Co., Ltd.

The Pioneer

Awarded to an LNG champion demonstrating outstanding business, innovation and/or technology contribution



Taciana Peão Lopes

CEO MES-MozUP, Executive Director MWE

Please join us in celebrating our 2022 winners!
We look forward to building off of this momentum in 2023.

ExxonMobil | LNG

NEWS BRIEFS

Germans test market

Deutsche ReGas, the company planning to develop and operate the Deutsche Ostsee LNG terminal at Lubmin on the Baltic Sea Coast, has launched two open seasons. The company said that a binding open season for Phase I of the Deutsche Ostsee floating storage and regasification unit (FSRU) project comprising the first vessel and a non-binding market test for Phase II and the second FSRU would both be held from October 10. "In Phase I from December 1, 2022, the floating LNG terminal (FSRU 1) will be located in the port of Lubmin with 4.5 billion cubic metres of capacity and will be connected to the transmission network via a new pipeline," said Deutsche Regas.

UAE cargoes possible

German Chancellor Olaf Scholz has signed an agreement with the United Arab Emirates over unspecified future energy supplies which could involve receiving the odd cargo from the emirate of Abu Dhabi, which ships one of two cargoes a week from its Das Island plant. Scholz signed an accord after talks with the UAE President Sheikh Mohammed bin Zayed Al Nahyan during a three-day tour of the Gulf.

Fluxys stake is sold

Fluxys, the owner of the Belgian gas grid and holder of stakes in LNG terminals at Zeebrugge in Belgium and Dunkirk in France, said a new shareholder, Swiss-based Energy Infrastructure Partners (EIP), had acquired the 19.85 percent of shares in Fluxys previously held by a Canadian institutional investor, the Caisse de dépôt et placement du Québec (CDPQ). "The equity transfer is expected to be completed by the end of 2022," said Fluxys, without disclosing the value of the deal.

Gas grid and LNG operator Fluxys says its EU border-to-border gas flows have doubled in supply crisis

LNG News Editor

The Fluxys Belgium Group, the operator of the Zeebrugge LNG terminal and the Belgian gas grid, increased turnover and net profits as the company explained how the invasion of Ukraine by Russia had "dramatically changed the dynamics of the gas markets and the direction of gas flows" in Europe.

Fluxys said in its latest earnings statement that Belgian natural gas storage was over 90 percent filled and more pipeline gas through Belgium was flowing to other countries.

Gas storage

"The European Union requires Belgium and the other EU member states to have their gas storage facilities at least 80 percent full by 1 November this year," explained the company.

"Europe wants to go into the winter with buffers filled as much as possible. By the start of September, our underground storage facility in Loenhout, the only one in Belgium, was 92 percent full," added Fluxys.

The company said that transported pipeline natural gas volumes, much of which Belgium receives from Norway with Zeebrugge as the landfall, were also on the rise. Belgium also has an interconnector with the UK from the gas terminal at Bacton in eastern England.

"The volumes transmitted in the network were 38 percent above those in the first half of 2021. Border-to-border volumes almost doubled to 194 terawatt hours, while volumes for consumption on the Belgian market dropped 18 percent to 88 TWh," said Fluxys.

"Demand to send natural gas from Belgium to Germany and the Netherlands is especially high and our commercial and operational staff are doing their very best during these extraordinary times," said Fluxys.

"Our grid has once again confirmed its role as an energy hub



Fifth French LNG terminal to be operating at Le Havre in 2023

for Northwest Europe, with the Zeebrugge terminal as an important gateway for both natural gas via pipelines and LNG via ship," the company explained.

"This vital role means our infrastructure was used more intensively in the first half of 2022 than ever before," stated Fluxys.

Earnings

In the earnings statement, Fluxys Belgium said its revenues increased by 3.4 percent to €287.4 million (\$276.5M) in the first half of 2022 compared with €277.9M in the first six months of 2021.

Net profit jumped by 7 percent year-on-year to €41.1M in the first half from €38.3M in the same period of 2021.

Fluxys Belgium is a regulated energy company and said the rise in revenues was mainly due to the "evolution of the different components" of the regulated tariffs.

The company said investments totalled €35.2 M with €19.3M being spent on LNG infrastructure projects and € 15.9M on transmission projects.

Fluxys Belgium's activities are regulated. In that context, profits are determined in advance and do not change if more capacity is sold. The increased volumes handled do not bring additional profit to shareholders.

The company said that due to changed flows it planned to bolster the Zeebrugge-inland route in the near term by building an additional

pipeline between Desteldonk and Opwijk, parallel to the existing pipeline, to give more throughput capacity for Belgium and neighbouring countries.

"The investment in additional capacity has particular added value in supporting security of supply because the completion of the Low-High conversion will mean that no more low-energy gas from the Netherlands will flow into the Belgian market by 2024," said Fluxys.

Connected

There is also a pipeline from the French Dunkirk LNG import terminal, which is majority owned by the Fluxys Group, to the Zeebrugge terminal. This passes through the Pitgam compression station in France and crosses the French-Belgian border near Honschoote.

The pipeline then continues through Alveringem and Maldegem to join the Fluxys gas pipeline network.

Fluxys said that among its investment it was constructing three additional open-rack vaporisers (ORVs) to enter service at Zeebrugge for LNG imports by early 2024.

An ORV uses the heat from seawater to convert LNG back into gaseous form.

"This technology replaces traditional heating installations and results in much more efficient energy consumption and significantly lower CO2 emissions at the terminal," added the company.

MAN Energy and ABB to develop propulsion for LNG ships and FSRUs to cut costs and emissions

LNG News Editor

MAN Energy Solutions of Germany, the maritime propulsion company, and ASEA Brown Boveri (ABB), the Swiss-Swedish power technology group, have signed an accord to reduce the carbon footprint and fuel costs and improve operational flexibility for liquefied natural gas carriers.

The companies said the new dual-fuel electric propulsion proposal was based on MAN's new four-stroke engine 49/60DF and ABB's Dynamic AC power distribution and control system.

Easing pressure

"ABB and German engine manufacturer MAN Energy have set a course to work together on helping a key segment of global shipping ease pressure from rising fuel costs and greenhouse-gas regulations," they explained in a statement.

The memorandum of understanding, was signed at the September's SMM trade show in the German port of Hamburg as Germany embarks on the path to being an LNG importer, though no German LNG newbuilds have yet been ordered to pick up free-on-board cargoes.

The companies said the new



Dual-fuel electric propulsion proposal based on 49/60DF engine from German firm MAN Energy Solutions

propulsion plant concept would be suitable for LNG carriers, LNG floating storage units (FSUs) and floating storage and regasification units (FSRUs).

They added that the MAN-ABB concept would aim to deliver the operational flexibility shipowners need to cut fuel bills for carriers.

"In addition to the joint concept study, the scope of the cooperation covers sharing technical data as well as discussing interfaces and system integration," they said.

MAN Energy noted that dual-fuel engines have consistently offered shipowners a high efficiency route to cleaner fuel alternatives while also retaining the flexibility to switch to conventional fuels as required.

MAN's latest 49/60DF four-stroke engine can run on LNG, diesel, biofuel blends and synthetic natural gas to provide fuel flexibility.

In ABB's DAC concept, the electrical system combines the conventional AC with the variable frequency which can adjust generator load to engine speeds, thereby optimizing total fuel consumption continuously.

Installing an energy storage solution in the power plant would also add to improved fuel efficiency.

"Customers demand efficient and flexible propulsion systems to react quickly to changing market conditions and achieve the best utilization for their assets," said Elvis Ettenhofer, Head of Marine

Four-Stroke and the Asia-Pacific region for MAN Energy.

Innovation

"This agreement represents an agile response from MAN and ABB, using our technologies to deliver a next-generation, Dual-Fuel, Electric+ (DFE+) propulsion concept," he added.

Rune Lysebo, Head of Global Sales for the ABB Marine & Ports division, said progressive regulations on emissions have called for continuous innovation in marine propulsion.

"To be truly future-proof, ships that are being built today need to be able to rely on flexibility in energy sourcing," added Lysebo.

"The new power and propulsion system will be optimized for efficiency and compliance, and have the flexibility needed to achieve best performance," he added.

A combined dual-fuel electric power and propulsion system could be installed with an energy storage solution to enhance load management or come coupled with ABB's Azipod® electric propulsion.

MAN and ABB said they would also explore integrating fuel cells as the technology matures.

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GTT gets Lloyd's approval for FLNG data

Gaztransport and Technigaz (GTT), the French designer of LNG storage tanks for ships and for onshore, has been granted approval from UK maritime classification society Lloyds Register for its digital prediction technology for regasification operations involving floating LNG facilities.

GTT said it was granted an Approval in Principle from Lloyd's for the offering called the prediction of operational windows to enable regasification operations and known as "Power".

The "Power" solution has been designed to optimise the regasification operations of offshore units for floating LNG facilities or floating storage and regasification units (FSRUs) and the transshipment of LNG between these units and LNG carriers in areas subject to difficult sea conditions.

"This AiP confirms that "Power" facilitates decision-making and improves the safety, the accuracy and the flexibility of the offshore LNG transfer operations, taking into consideration the specificities of the vessels involved," explained the Paris-based firm.

"When operating in offshore conditions, it is essential for the operators to properly plan ship-to-ship operations between LNG carriers and offshore units," it added.

GTT explained that the programme was designed to present the information in an interpretation-friendly format for the LNG carrier operators and is an automated risk analysis tool based on heading data, sloshing analysis and a three-day forecast.

SEA-LNG alliance signs up US company serving South Pacific and with retrofit and LGN plans

LNG News Editor

SEA-LNG, the multi-sector industry coalition established to demonstrate the benefits of the LNG fuel for shipping, has signed up the New York Stock Exchange-listed US containership and transport company Matson providing commercial life-line services to some South Pacific Islands and Hawaii, Guam and Alaska.

"We are pleased to have such a well renowned carrier and logistics company as Matson onboard," declared Peter Keller, Chairman of SEA-LNG.

Economic links

"With its long history of positive innovation in the important and environmentally sensitive markets it serves, Matson will add valuable expertise to the coalition," explained Keller.

"We are also pleased to be able to help the company achieve its critical decarbonisation aims through the LNG pathway," stated the Chairman.

In addition to its South Pacific services Matson also provides economic links between China and Long



Matson ships serve Pacific Islands and Hawaii to Alaska

Beach, California, and between the US and Okinawa in Japan.

Another premium located served by Matson is Dutch Harbor on Amaknak Island in Alaska.

SEA-LNG said that Matson's core values align well with those of the alliance with the company prioritising the environment, safety, innovation and integrity in all of its operations.

"Matson is already working collaboratively across the shipping industry to promote positive change and to mitigate the industry's environmental impact. It has also invested in sustainability across the company, for example in the design of new state-of-the-art ves-

sels," said SEA-LNG. SEA-LNG noted that in 2023 Matson will be among the first shipping companies to convert existing container-ships with retrofits to operate on LNG.

"The LNG pathway is an important part of our strategy for reducing the greenhouse-gas emissions of our fleet by 40 percent by 2030," said Matt Cox, Chairman and Chief Executive of Matson.

"The transition to bioLNG and in the longer term e-LNG, as well as continuing to improve the commercial availability of conventional LNG worldwide, will be critical to achieving our goals," added Cox.

Denmark establishes no-sail zone near leaking Nord Stream pipes

Leaks of natural gas from the Russian Nord Stream 1 and Nord Stream II links to Germany have led Denmark to advise Baltic Sea shipping not to come within 5 kilometres of the pipelines.

The Danish Energy Agency (DEA) said then that the nation's Maritime Authority had released a navigational warning and established a prohibitive no-sail zone around the area as well as a no-fly zone below 1,000 metres.

Four Nord Stream gas pipeline leaks have now been uncovered, with the most recent one being pinpointed by Sweden's Coast Guard.

The Danes said that the leaks from the pipelines are all in international waters.

"These are not small cracks, but really big holes," said the DEA.

European Commission President Ursula Von der Leyen has called the leaks "sabotage".

The gas pipelines are owned by Swiss-based Nord Stream AG, the majority of which is in the hands of the Russian state-owned company Gazprom.

The pipelines are 1,230-kilometres in length from Russian to the northern German coast. Nord Stream 1 and 2 run at a depth of

70-90 metres (229-295 feet) under the Baltic.

The steel pipes have walls of 4.1 cm (1.6 inches) and are coated with steel-reinforced concrete up to 11 centimetres thick.

"Nord Stream AG has informed the DEA that each of the two Nord Stream 1 pipelines contained 300 million standard cubic meters of natural gas," said Danish the statement.

"Additionally, Nord Stream II AG has informed the DEA that there was 178 million standard cubic meters of natural gas in the Nord Stream II pipe," it added.

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Largest European natural gas provider Equinor signs Baltic pipeline agreement to supply Poland

LNG News Editor

Equinor, the Norwegian LNG producer and largest supplier of pipeline natural gas to Europe, has signed a gas sales agreement with Poland for 10 years of supply through the new Baltic Pipe project.

The deal was signed with Poland Oil and Gas Company (PGNiG) and is for volumes of around 2.4 billion cubic metres per annum.

Connections

The Baltic Pipe project will connect the Norwegian gas export system to Poland via Denmark.

"Equinor is a broad energy provider and has been a key supplier of gas to Europe for 45 years," explained Irene Rummelhoff, Equinor's executive vice president for Marketing, Midstream and Processing.

"I am very happy that through this gas sales agreement we can extend our offering as a reliable energy partner also to Poland,"



Irene Rummelhoff and Iwona Waksmundzka-Olejniczak

she added. "We look forward to further developing our energy co-operation with PGNiG and Poland in the time to come," stated Rummelhoff.

Equinor said the volumes under the new, long-term agreement reflected market prices and are the equivalent of around 15 percent of the typical, annual gas consumption in Poland.

Deal to 2033

The Equinor-Poland Baltic Pipe gas supply agreement is from January 2023 to January 2033.

"Equinor is a strategic business

partner for the PGNiG Group playing a crucial role in our efforts to diversify gas supplies to Poland," said Iwona Waksmundzka-Olejniczak, Chief Executive of the Polish company.

"The contracts we have just signed provide for gas that will be delivered to Poland using the Baltic Pipe pipeline, resulting in a significant strengthening of energy security of our country," the PGNiG CEO declared.

The Baltic Pipe to transport gas from the Norwegian Continental Shelf in the North Sea is in addition to Poland's onshore LNG

import terminal as well as a possible regional floating facility and the Poland-Lithuania Gas Interconnector.

The Poles have been engaged in several diversification projects to significantly increase import capacity post-2022 when the supply contract with Russian gas company Gazprom was set to expire, though supplies from Russia were cut off earlier in 2022.

Import terminal

The Polish LNG import terminal at Świnoujście was opened in 2016 and has a maximum regasification capacity of 5 billion cubic metres per annum and this is set to rise to 8.3 Bcm in 2023.

The operator of the terminal is Polskie LNG, a subsidiary of the Gaz-System, the national transmission system operator.

All regasification capacity of the LNG terminal has been reserved by PGNiG, which has also lined up additional LNG cargo imports from the US.

Indian LNG imports plunge by 19 percent because of slow economy, tight gas market and weak rupee

Indian liquefied natural gas imports have plunged by 19 percent amid a continued 2022 decline in the nation's LNG deliveries because of a slowing economy, a tighter gas market and the falling value of the rupee against the dollar that makes shipments more expensive.

LNG imports for the month of August to India's network of six terminals came to 1.75 million tonnes, or 26 cargoes, compared with 2.16MT, or 32 cargoes, in July 2021, according to provisional data published by Ministry of Petroleum and Natural Gas.

Cargo costs

Shipments in July 2022 had come to 1.90MT compared with 1.95MT

in July 2021, a fall of 2.7 percent.

The imports for the five months of the fiscal year so far from April to August amounted to 9.13MT versus 10.16MT, a decline of 10.1 percent.

LNG cargoes costs have surged this year because of higher prices coupled with the plunge in the rupee's value against the dollar.

The cost of LNG for the five months of the current fiscal year so far from April through August was \$5.6Bn, or 45,495 Indian crore rupees, compared with \$4.5Bn, or 36,558 crore rupees, in the same period of last year when prices were already rising.

However, shipments were fewer in the month of August 2022 and therefore cost less than in

2021 at around \$1.0 billion, or 8,124 crore rupees, versus \$1.2Bn, or 9,749 crore Indian rupees, in August 2021, according to Ministry data.

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

The Ministry data showed that the total cost of India's monthly oil and gas imports jumped to \$11.5Bn in August from \$9.2Bn in August 2021 while the imports for the fiscal year to date came to \$66.2Bn versus \$40.3Bn in the prior-year period.

While LNG imports have de-

clined every month since September 2021 more domestic pipeline natural gas has been produced in the fiscal year so far offshore the East Coast of India in the Bay of Bengal.

KGB Basin

The Ministry data showed that the five-month domestic natural gas production total came to 14.33 billion cubic metres, which was 2.5 percent higher than the 13.98 Bcm logged in the April-to-August period last year.

However, domestic natural gas production in August 2022 came to 2.89 Bcm, down by 1.0 percent from the 2.92 Bcm reported in the same month of 2021.



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A handwritten signature in black ink, likely belonging to Jill Evanko.

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Boost for African LNG as FPSO safe

Kosmos Energy, the shareholder along with UK major BP in the floating LNG export project offshore Senegal and Mauritania, said the completed floating production, storage and offloading (FPSO) unit for the venture that had broken free from the quayside during a typhoon at a Chinese shipyard had been returned to the quayside.

Kosmos, based in Dallas, Texas, reported the incident after Typhoon Muifa had passed through the Shanghai region and China's Cosco Shipping Heavy Industry shipyard in Qidong.

"Inspections conducted to date have not identified any significant damage," said Kosmos.

"The forward plan is to complete all inspections and incorporate the findings into the remaining work scope prior to sailaway," added the US company.

Typhoon Muifa, which was the 12th to hit China in the current typhoon season, generated winds speeds of up to 215 kilometres (134 miles) per hour and caused the FPSO to break free from the quayside at the Qidong yard.

During the typhoon, the mooring lines of the FPSO became compromised, resulting in the vessel drifting approximately 200 metres off the quayside.

No injuries had been reported in connection with this incident.

Cosco Shipping's shipyard subsidiary announced in early September 2022 that it had completed the construction of FPSO destined to operate in the Greater Tortue-Ahmeyim gas fields.

The Greater Tortue-Ahmeyim LNG project has the FPSO as one of its key installations. The first Mauritania-Senegal FLNG production facility is scheduled to have first gas in early 2023.

China's large-scale Yangcheng Binhai import and storage terminal in Jiangsu receives first cargo from Qatar

LNG News Editor

China National Offshore Oil Corp. has received the first liquefied natural gas cargo, delivered from Qatar, to the giant Yangcheng-Binhai Port import terminal with 10 storage tanks in eastern Jiangsu Province.

The Yangcheng-Binhai terminal first phase involved the construction of 10 large-scale tanks, including four 220,000 cubic metres capacity tanks and six with 270,000 cubic metres of capacity.

Qatar delivery

The Qatar gas cargo was delivered and was being discharged by the 216,000 cubic metres capacity Q-Flex carrier "Al Ghashamiya", according to CNOOC subsidiary, CNOOC Gas & Power.

"The operation of the project is of great significance for the diversification of natural gas supply channels and the peak regulation and supply protection of natural gas reserves in East China," said a CNOOC statement.

The Qatari vessel had lifted the cargo on September 9 at Ras Laffan in the Arabian Gulf and then departed for China's East Coast.

"The whole process went smoothly, which verified the reliability of the whole set-up," said Yang Yong, deputy general manager of CNOOC Gas & Power Group.

Storage surge

China has accelerated the construction of coastal LNG receiving facilities as the consumption of natural gas increased and it over-



Q-Flex carrier 'Al Ghashamiya' delivered Ras Laffan cargo

took Japan in 2021 to become the world's No. 1 LNG importer.

China has now completed 23 coastal LNG receiving terminals with a total capacity of around 100 million tonnes, ranking first in the world in terms of scale.

"The Yangcheng Green Energy Port is a national key project for natural gas supply, storage and marketing and the largest LNG reserve base in China," added Yang.

The largest storage tanks at the Yangcheng terminal with 270,000 metres capacity are each 60 metres high and have a diameter of 100.6 metres and a total casting volume of 70,860 cubic metres.

However, the initial regasification capacity remains modest at around 6 million tonnes per annum, emphasizing the nature of the facility as a strategic energy base.

CNOOC has previously described the Yangcheng-Binhai project as an important asset in the industrial upgrade of the

Yangtze River Economic Zone.

Huge second phase?

For the next stage of the project, CNOOC said it would like to add a further 10 storage tanks, each of 270,000 cubic metres of capacity, to give an open-ended capability.

Yang also disclosed that in addition to CNOOC's Yangcheng-Binhai terminal, the company was also expanding the terminal in Ningbo, in East China's Zhejiang Province and at Zhuhai, South China's Guangdong Province.

CNOOC has the largest regasification capacity of the Chinese majors with a presence in nine of the existing 23 import terminals, even after state-backed PipeChina bought and opened up several CNOOC-owned terminals to third-party access.

A second large LNG import terminal with mega-storage, the Tianjin Port Nangang project in northeast China, is also under development.

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The operation of the project is of great significance for the diversification of natural gas supply channels and the peak regulation and supply protection of natural gas reserves in East China

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- CNOOC Gas & Power