

LNG Unlimited

LNG JOURNAL PUBLICATION

12 October 2021

Tanzania holds talks with Shell amid renewed hope on LNG plan

East African nation would like to have a Canada-style liquefaction and export plant to monetize resources
LNG News Editor

Tanzanian President Samia Suluhu Hassan has held talks with Royal Dutch Shell Chief Executive Ben van Beurden and the long-planned liquefied natural gas export project was discussed.

President Samia and CEO Van Beurden held a virtual bilateral meeting, along with Tanzanian officials and senior Shell executives, in the same week that the Shell-led LNG Canada project in British Columbia announced landmark progress in construction.

Investment

"In their discussion Mr Van Beurden thanked President Samia for her efforts and determination in creating conducive investment environment for the Liquefied natural gas project in Tanzania," said a statement from Director of Presidential Communications, Jaffar Haniu.

Mrs Samia also thanked the Shell CEO for the interest to invest in the project, adding that the move would give a vital boost to the country's economic growth.

Also participating in the talks were Minister of Energy January Makamba and the head of the Tanzanian Petroleum Development Corp. (TPDC) James Mataragio.

Makamba said there was a "strong mutual commitment" to implementing the Tanzanian LNG project.

"There's increased certainty that this project will happen. We're starting talks ASAP," stated Makamba.



President Samia and Shell executives held virtual meeting

Shell became the operator of blocks 1, 3 and 4 in Tanzania in February 2016 after its takeover of BG Group and has also been working closely with TPDC.

The Block 2 in the same Basin is operated by Norwegian energy company Equinor.

The Basin and gas resources occupy an area of some 75,000 square kilometres between the Tanzanian continental shelf edge and an area 200km east of the coast in water depths ranging from 500 metres to 3,300 metres.

Net contingent resources in the four Blocks are estimated to be at least 20 trillion cubic feet, sufficient to support a three-Train LNG development.

Equinor has a production-sharing agreement with TPDC and is the operator with a 65 percent participating interest, while US major ExxonMobil has a working interest of 35 percent in the PSA.

Resources

TPDC has the right to participate in any project and would have a 10 percent interest.

Equinor made nine natural gas discoveries in Block 2, one of four explored blocks with proven resources offshore Tanzania.

The Shell CEO's talks with Pres-

ident Samia of Tanzania coincided with the Anglo-Dutch company's LNG Canada project announcing construction was more than 50 percent completed.

Building began three years ago at the BC liquefaction and export plant site at Kitimat, 640 kilometres north of Vancouver.

The initial two Trains will produce 14 million tonnes per annum of LNG. There is the possibility of expanding the facility to include up to four processing units in the future.

The engineering, procurement and construction contractors are JGC Corp of Japan and Fluor Corp. of the US.

Among the plant innovations are energy-efficient natural gas turbines and renewable electricity from local utility BC Hydro, meaning the plant will emit less than half the greenhouse-gas emissions of the average LNG facility currently in operation.

Analysts note that such liquefaction refinements could be replicated in Africa and in Asia so that developing countries could have the huge economic benefits of their undeveloped resources while meeting the West's carbon-dioxide reduction aims.

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Petronas announces lifting of 50th cargo from world's first commercial producer 'PFLNG Satu'

LNG News Editor

Petronas, the Malaysian oil and gas company and leading floating LNG plant operator, has announced a 50th cargo lifting from the "PFLNG Satu" production hull, the first in the world to operate over a stranded gas field.

The cargo was successfully loaded onto the 150,200 cubic metres capacity carrier "Seri Cemara" and was scheduled to be delivered on October 7 to the Yung-An import terminal in Taiwan.

Two deployments

The "PFLNG Satu" produced its first cargo in 2017 from the Kanowit gas field, offshore Sarawak, the Malaysian state on the island of Borneo.

The FLNG vessel is currently deployed over the Kebabangan gas field, offshore the Malaysian state of Sabah.



Carrier 'Seri Cemara' (front) lifting the cargo for Taiwan

When it produced its first cargo there in 2019, the vessel became the first floating liquefaction plant to produce LNG over two different gas fields.

"We are proud to celebrate this event attests to the world-class reliability of our first FLNG facility and more importantly, the commitment of our workforce to provide an uninterrupted supply of LNG to our customers," said Petronas Vice President of LNG As-

sets, Abang Yusuf Abang Puteh.

"This achievement showcases our leadership in the LNG industry, where we continue to benefit from our first-mover advantage to monetise remote and stranded gas fields with FLNG solutions," he stated.

Abang Yusuf noted that despite operating in a challenging environment heightened by the Covid-19 pandemic, the "PFLNG Satu" had produced and exported nearly 3.18

million tonnes of LNG from the Kebabangan and Kanowit gas fields.

The "PFLNG Satu" is designed to operate at water depths of up to 200 metres with a production capacity of 1.2 MTPA of LNG.

Petronas is the only global energy company that owns and operates two FLNG facilities, the other being the "PFLNG Dua" and a third is being planned.

The "PFLNG Dua" is deployed over the Rotan gas field, located 140 kilometres off Kota Kinabalu in Sabah state.

The Malaysian company is now assessing front-end engineering and design tenders for its third FLNG production hull.

The "PFLNG Tiga" project, with "Tiga" being the Malaysian word for three, will have a production capacity of around 2 MTPA, slightly more than the other two vessels.

Stena Power and LNG completes full model terminal testing for Vietnam's Bac Lieu province

Stena Power and LNG Solutions has completed successful model testing of the receiving terminal technology ordered for Delta Offshore Energy's LNG-to-power project in Vietnam.

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 Mekong Delta.

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

A technology license agreement had previously reached between Stena Power in August 2020 for Delta Offshore to use the proprietary technology.

"Scale-model testing of the JFT, the Floating Storage Unit (FSU) and an LNG carrier was com-

pleted at the Maritime Research Institute Netherlands (MARIN) to verify and calibrate Stena's computer simulations and research, ahead of construction and deployment of the assets to waters off Bac Lieu province," explained the Stena Power and LNG unit, based in Grimstad, Norway.

The jettyless terminal solutions contains all the required equipment, systems and safety features normally installed on a fixed jetty.

It can also be adapted for all LNG carriers from small-scale distribution or bunker vessels to the largest existing LNG carriers.

"Large-scale models (up to 10m in length) were created in a scale of 1:30 to obtain test results with the highest possible accuracy," said the company.

"A number of various tests were performed by engineers from both Stena and MARIN to simulate

critical wave, wind and current conditions specific to local conditions in Vietnam, including 100-year cyclonic and monsoon events," it added.

Knut-Erik Johansen, Engineering Manager, Stena Power and LNG, said he was delighted to have successfully verified the performance of the technology.

"The model testing was carried out over six weeks in MARIN's large and highly reputable offshore basin to assist us to finalise design, better understand performance limits in a variety of localized wave conditions, and ultimately produce safe and effective operational procedures," added Johansen.

The first phase of the Bac Lieu project alone will see investments of around \$1 billion in Vietnam's power sector with construction expected in four distinct phases through to 2026.

The Vietnamese government has also line up several other LNG-for-Power projects with import facilities, including a 4,000MW plant in the northern port city of Haiphong and another in Ninh Thuan province, south of Cam Ranh Bay.

"The oil and gas industry, particularly offshore, has developed and evolved through innovation and change," said Bobby Quintos, Managing Director of Delta Offshore.

"We have a more modular system that can easily be scaled up without having to go to drydock or shipyards. If you are not innovating in this industry, you are falling behind," added Quintos.

Bureau Veritas, the French maritime classification society, has recently also issued an Approval In Principle for the complete LNG receiving facilities engineered by Stena for the Bac Lieu project.

Shell says earnings feel hurricane impacts

Royal Dutch Shell, whose oil and gas operations include more than 60 million tonnes per annum of LNG sales, has warned that its third-quarter earnings would be hit by the impacts of Hurricane Ida in the US Gulf of Mexico and is expected to have an aggregate adverse impact of around \$400 million.

Shell's half-year LNG sales in the previous second quarter had dropped by 13 percent to 32.30MT compared with 37.10MT in the first six months of 2020.

The Anglo-Dutch company revised its expected numbers for the third-quarter earnings to be published on October 28, covering all four divisions, Integrated Gas, which includes LNG, Upstream, Oil Products and Chemicals.

In Integrated Gas, Shell expects production to be between 890,000 and 950,000 barrels of oil equivalent per day.

LNG liquefaction volumes are expected to be between 7.0 million tonnes and 7.5MT, "reflecting feed-gas constraints" and additional maintenance.

While trading and optimisation results are expected to be higher compared to the second quarter 2021, overall the Integrated Gas division's adjusted earnings show pre-tax depreciation expected of \$1.3 billion and \$1.4Bn.

A taxation charge will also be included for between \$500 million and \$900M.

"Cash flow from operations, excluding working capital, is expected to be significantly impacted by large variation margin inflows on the back of the prevailing gas and electricity price environment; these inflows are expected to be higher than the second quarter 2021," said Shell.

Dutch and EU try to explain what was behind natural gas upheavals

LNG News Editor

A Dutch parliamentary committee has been told that natural gas storage levels in the Netherlands were well short of capacity and the situation is a matter of concern, though not considered a crisis.

Britta van Boven, a board member at Gasunie, the Dutch gas network operator and part owner of the Gate LNG importer terminal in Rotterdam, said storage should ideally be higher to cater for a harsh winter, but high prices had resulted in the current reduced levels.

'Slightly concerning'

"Storage levels are around 60 percent of capacity now, which is slightly concerning as they still need to be full enough at the end of the winter to cover cold days," explained Van Boven.

The Government inquiry comes as the Dutch Title Transfer Facility (TTF) benchmark price, also indicating LNG values, reached on all-time record on October 6 of the equivalent of \$39.40 per million British thermal units.



Short of answers: European Commission President Ursula von der Leyen at a gathering of EU leaders in Slovenia

The soaring natural gas prices in the Netherlands and throughout the European Union are leading to problems in industries which use a lot of gas and are impacting costs too for households.

Since the decision to phase out the Dutch Groningen natural gas fields because of concerns over occasional earth tremors, the Netherlands has become much more dependent on imports of LNG and pipeline natural gas.

The Dutch energy market was liberalized in 2004 and there are now more than 25 suppliers licensed to offer natural gas and electricity supplies to households

and businesses. A number of EU leaders have criticised the European Commission for not responding quickly enough, warning that soaring prices could imperil the continent's economic recovery and risks potential social unrest.

The 27 EU members states held a meeting in Slovenia and were being urged by several states to mitigate the impact of the natural gas and electricity price increases to "avoid threatening the EU economic recovery from Covid-19 and lessening the risks of potential social unrest" in member counties.

Intercontinental Exchange posts record trading for Dutch TTF

Intercontinental Exchange, the leading global provider of trading platforms and clearing, has posted record activity in September on the Dutch Title Transfer Facility (TTF) European benchmark with 5.5 million natural gas futures and options traded.

ICE said September was a record for the number of contracts traded during a single month and was 37 percent higher than the previous record set in January 2021 of 4.0M contracts.

The Dutch TTF, reflecting LNG cargo values in Europe, was last at the equivalent of \$32.90 million British thermal units on October 5 amid soaring natural gas markets in the European Union and in the UK.

The UK National Balancing Point benchmark natural gas prices was quoted on October 5 at the equivalent of \$28.55 per MMBtu.

The third quarter was an overall record period for TTF futures and options trading with a record rise of 27 percent to 13.2 M contracts traded, ahead of the previous record quarter set in the first quarter of 2021 when the total was 10.3M TTF contracts.

ICE TTF futures and options additionally hit a record for open interest of 3.38M contracts on September 23.

Open interest on the TTF currently goes out to and includes December 2028.

"Natural gas has become a

global market and the record trading activity in TTF during this past month, where we have witnessed extreme volatility in prices, reflects how TTF is at the forefront of global natural gas price formation," said Gordon Bennett, Managing Director of Utility Markets at ICE.

"Energy value chains are complex and wide-reaching, and therefore subject to periods of volatility," added Bennett.

"ICE's global energy benchmarks give participants access to transparent price signals, the ability to hedge their exposure to price risk and smooth their earnings in periods of volatility," he explained.



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NEWS BRIEFS

Stolt-Nielsen profits rise

Stolt-Nielsen, the London-headquartered Norwegian company with interests including terminals, shipping and the Avenir small-scale LNG business, said third-quarter net profits rose to \$33.5 million from revenues of \$580.9M, an increase on the prior-year quarter's earnings of \$30.36M and revenues of \$474.0M. "Momentum at Avenir LNG has accelerated with the commissioning of the Sardinia terminal and multiple ship deliveries throughout the second half of 2021, said Niels G. Stolt-Nielsen, company Chief Executive.

Nord Stream II is tested

Nord Stream II, the Gazprom-led pipeline natural gas project taking additional gas from Russia to Germany and the European Union in competition to LNG, has started filling one of its two pipelines ahead of commercial operations scheduled for year-end. The pipeline will double Russia's existing gas pipeline export capacity under the Baltic Sea to 110 billion cubic metres, equal to more than a half of Russia's current total pipeline gas supplies to Europe.

Golar LNG bond sale

Golar LNG Limited, the carrier fleet owner and project developer, has successfully placed US\$300 million in senior unsecured bonds in the Nordic bond market. "The bonds will mature in October 2025 and bear interest of 7.00 percent per annum," said Golar. "Net proceeds from the bond issue will be applied towards the refinancing of the company's outstanding convertible bonds maturing in February 2022 and general corporate purposes," it added.

Qatar chooses Chinese shipyard to start fleet expansion and renewal for output increase from substantial Gulf resources

LNG News Editor

Qatar Petroleum has ordered four new liquefied natural gas carriers from the Chinese Hudong-Zhonghua Shipbuilding Group of Shanghai as it begins to put in place the shipping requirements for massive expansion plans.

The four carriers are the first batch of orders in Qatar Petroleum's LNG shipbuilding programme, which will cater for future LNG fleet requirements for the North Field expansion projects as well as for existing vessel replacement requirements.

Berths reserved

This order is also the first ever placed by Qatar Petroleum or any of its affiliates with a Chinese shipyard for LNG carriers.

It is also the first in connection with an agreement to reserve ship construction capacity that was executed in April 2020 with Hudong-Zhonghua, a subsidiary of China State Shipbuilding Corp. (CSSC).

The Qataris had been expected at the time to centre most of their carrier building in South Korea but surprisingly chose China over the Koreans for the first tranche of berth reservations.

The value of this April 2020 agreement had the potential to be well in excess of \$3.0Bln and would be an initial booking to build at least 16 or up to 20 ships in China.

"We continue to push forward with our LNG expansion projects, and today's announcement is yet another step in our journey," said Saad Sherida Al-Kaabi, President



The existing Qatari LNG fleet was built by the South Koreans

and Chief Executive of Qatar Petroleum.

"I am especially pleased with the signing of this order as it marks our first ever new LNG carrier to be built in the People's Republic of China," added Al-Kaabi.

The Qataris declared that they were confident in Hudong's capabilities to execute this order, worth in excess of 2.8 billion Qatari Riyals (\$764M), to the highest safety and technical standards.

"I would like to take this opportunity to thank Hudong's team for all the hard work to bring this order to fruition during these challenging times," Al-Kaabi continued.

"I would also like to thank the leadership of our esteemed partner, CSSC, for their valuable support to this effort in line with our mutual desire to further strengthen the excellent relations between China and Qatar," stated the CEO.

The North Field expansion projects will increase Qatar's LNG production capacity from 77 mil-

lion tonnes per annum to 126 MTPA with the carrier fleet programme alongside, which could amount to 80 vessels, including the replacement of older ships in the current fleet.

The scope of the first phase of the expansion at the Ras Laffan production complex involves an additional four Trains, each with 8.0 MTPA of output.

North Field

Qatar has the southern portion of the North Field in Gulf waters and the other part is under the jurisdiction of neighbouring Iran.

The main South Korean shipbuilders Samsung Heavy Industries, Hyundai Heavy Industries and Daewoo Shipbuilding & Marine Engineering, won all the first big round of Qatari orders and Ras Laffan came on stream.

Between 2004 and 2007, Qatar ordered 45 LNG carriers from the Korean yards when Daewoo built 19 vessels, Samsung constructed 18 vessels and Hyundai received orders for eight ships.

“

I am especially pleased with the signing of this order as it marks our first ever new LNG carrier to be built in the People's Republic of China

”

Saad Sherida Al-Kaabi, President and Chief Executive, Qatar Petroleum

US energy report shows nations seeking oil and gas through net-zero target date as LNG expands

LNG News Editor

The US government's long-term energy forecast through to 2050 has the nation showing rapid growth in net exports over the next 10 years, as it continues to expand its liquefied natural gas infrastructure and produce natural gas at high volumes, though there is an undertone of desperation for oil and gas worldwide and calls for more exploration and production.

"Oil and natural gas production will continue to grow, mainly to support increasing energy consumption in developing Asian economies," said the 40-page International Energy Outlook published by the US Energy Information Administration (EIA).

Largest

The US report notes that the US, Russia and the Middle East region are currently the largest producers of natural gas.

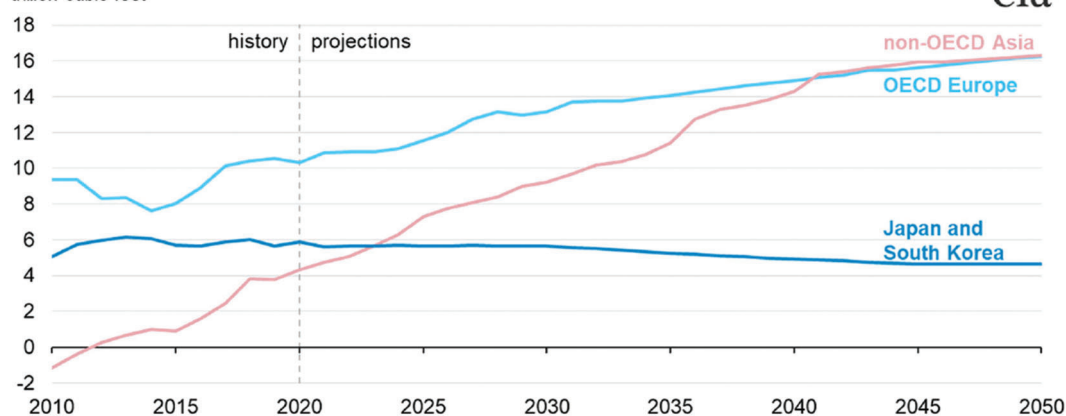
In the global oil sector, the benchmark price has jumped in the high economic growth case in the report, while a consistent outcome is that Canada is one nation capable of expanding oil production to meet demand even amid the net-zero carbon-dioxide emission targets set for 2050 as well.

"All three will continue to expand production throughout the projection period, and the US will remain the largest producer worldwide, producing almost 43 trillion cubic feet (Tcf) in 2050 in the reference case," said the EIA.

"In the Reference case, Russia, the US and the Middle East will all grow as net exporters throughout the projection period to provide natural gas to European and Asian markets," it added.

"Because it is near Europe,

Net imports of natural gas
trillion cubic feet



Source: U.S. Energy Information Administration, *International Energy Outlook 2021 (IEO2021)* Reference case

Global imports of LNG and pipeline natural gas through 2050

China, and the rest of non-OECD Asia, Russia's net natural gas exports will grow through established pipeline infrastructure, potential future pipeline additions and LNG exports," said the US report.

"The US also shows rapid growth in net exports over the next 10 years, as it continues to expand its LNG infrastructure and produce natural gas at high volumes," added the report.

US LNG build-out

"LNG plants and transportation vessels facilitate the overseas transport of natural gas between regions that are not connected by pipeline, creating an outlet for natural gas produced in the US and the Middle East to reach overseas markets where it is in the highest demand," stated the EIA.

The report noted that in addition to meeting domestic demand, growing production in the US, Russia and the Middle East serves increasing demand for natural gas in the global market.

"US and Russian natural gas production grows by about 10 Tcf between 2020 and 2050 in the Ref-

erence case. Middle East natural gas production grows by about 5 Tcf over the same period," the report explained.

In the Reference case, global natural gas production steadily increases, growing by approximately 30 percent between 2020 and 2050.

Before that, natural gas production grew by 25 percent between 2010 and 2020, with the aid of new recovery techniques such as hydraulic fracturing and expanded infrastructure.

Projected growth in global natural gas demand and the expansion of processing and transportation infrastructure around the world drives growth in natural gas production to 2050.

Oil market

The EIA report said that output from both the Organization of Petroleum Exporting Countries (OPEC) and non-OPEC nations would grow over the projection period, but OPEC production grows at almost three times the rate of non-OPEC production between 2020 and 2050.

"We altered the assumptions about oil supply to achieve higher and lower oil prices, as seen in the 2050 input price of North Sea Brent crude oil," said the EIA.

Brent was at \$176 per barrel by 2050 in the high oil price case, at \$95 per barrel in the reference

case and \$45 per barrel in the low oil price case.

"To meet increasing demand, countries will need to rely on increased exploration (to identify additional resources), increased drilling (to harvest new and proven reserves) and technology advances (to achieve greater production yields)," stated the EIA.

Supply of petroleum and other liquids continues increasing in both OPEC and non-OPEC regions to meet growing world demand through 2050 across cases.

"Although consumption in the Reference case reaches approximately 125 million barrels per day by 2050, consumption is highest in the High Economic Growth case, where it reaches approximately 151 million barrels per day of total liquid fuels in 2050, exhibiting significant growth from current levels," said the US report.

"Canada, Iran, Iraq and Russia all have large undeveloped crude oil resources and so could expand production to help meet 2050 global demand in the high economic growth case," explained the report.

"Although Saudi Arabia and the US are also large resource holders, their resources have been more systematically developed and likely have less room to expand beyond their historical levels of production," declared the EIA.

Oil and natural gas production will continue to grow, mainly to support increasing energy consumption in developing Asian economies

- EIA

Australia plans to be carbon-capture 'superpower'

Australian LNG plant operator Santos has welcomed the federal government's support for the carbon capture and storage (CCS) method for its Emissions Reduction Fund and Adelaide-based Santos would immediately register the Moomba CCS Project in South Australia with the Clean Energy Regulator to generate Australian Carbon Credit Units (ACCUs).

Santos said its A\$210 million (US\$151.4M) Moomba CCS Project in the Cooper Basin of outback South Australia would be one of the biggest in the world and safely and permanently store 1.7 million tonnes of carbon-dioxide per year in the same reservoirs that held oil and gas in place for tens of millions of years.

The CCS approval comes as Santos and Australian-listed energy company Oil Search are implementing the takeover of Oil Search by Santos in a deal worth A\$8.40 billion (US\$6.25 billion).

In regard to the Moomba CCS project, Santos Chief Executive Officer Kevin Gallagher said this announcement from the Minister for Energy and Emissions Reduction, Angus Taylor, puts Australia at the forefront of CCS deployment.

Gallagher noted that groups such as the International Energy Agency were convinced that reaching greenhouse-gas targets would be "almost impossible" without CCS ventures in place around the world.

As part of this phase of the Moomba plant project, Santos successfully injected approximately 100 tonnes of CO₂ deep underground into the depleted gas reservoirs

Tokyo Gas and Thailand group PTT form venture for Thai LNG trucking

LNG News Editor

PTT Group, the national energy company of Thailand, has started a joint venture with Tokyo Gas to help with fuel switching in the southeast Asian nation, including small-scale truck deliveries of liquefied natural gas.

PTT and Tokyo Gas said they aimed to be at the forefront of fuel conversion in Thailand from liquefied petroleum gas (LPG) and heavy oil to LNG.

Venture

The Japanese utility's subsidiary Tokyo Gas Engineering Solutions (TGES) has set up the joint venture with the PTT unit, Siam Management Holdings Company (SMH).

The joint company is called Optec Co Ltd and PTT's SMH unit will own 51 percent and TGES 49 percent.

The Tokyo Gas existing LNG portfolio currently amounts to around 14 million tonnes per annum and the utility controls a fleet of 10 ships to deliver to its four import terminals in Japan, three around Tokyo Bay and



Nong Fab import project in eastern Rayong province

one at Hitachi in Ibaraki Prefecture.

Thailand is opening up its own LNG import market, handing out six LNG import licences to other 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 in 2022 with total additional regasification capacity of 7.5 MTPA.

The new Optec business of PTT and Tokyo Gas is aimed at provid-

ing efficiency technology solutions and systems, including on-site energy services with combined heat and power system and fuel conversion such as LNG truck supplies for industry, small power producers and utilities in Thailand.

"Optec will aim for business expansion in collaboration with PTT's wide customer base and brand power," they explained.

"In addition to fuel supply, such as LNG deliveries by truck for industrial customers, Optec will specifically implement more advanced energy services," the companies stated.

US Commonwealth LNG project is accorded firm FERC deadlines

Commonwealth LNG, the export venture proposed for Cameron Parish in the US Gulf Coast state of Louisiana, has been informed by the Federal Energy Regulatory Commission of the launch of an environmental impact statement (EIS) process with firm deadlines.

The Commission will use this EIS in its decision-making process to determine whether the project is in the public interest.

Commonwealth LNG proposes to construct and operate a new export plant and accompanying natural gas pipelines on the west side of the Calcasieu Ship Channel at its entrance to the Gulf of Mexico.

"As a result, Commission staff

have revised the schedule for issuance of the final EIS, based on an issuance of the draft EIS in March 2022," said the FERC statement.

"Issuance of notice of availability of the final EIS is September 9, 2022 and the 90-day Federal authorization decision deadline is December 8, 2022," it added.

Commonwealth's plan is for a liquefaction facility consisting of six liquefaction Trains, each with a nominal production capacity of 1.4 million tonnes per annum totalling 8.4 MTPA.

The project is also proposing to construct six LNG storage tanks, each with capacity of 50,000 cubic metres and one marine berth capable of accommodating vessels of up

to 216,000 cubic metres capacity.

The liquefaction plant would require about 182 acres to construct and would occupy about 107 acres during operations.

Commonwealth has told the FERC that the purpose of the project was to liquefy and export to foreign markets, domestically produced natural gas sourced from the existing interstate and intrastate pipeline systems of Kinetica Partners and EnLink Bridgeline respectively in southwest Louisiana.

"Commission staff have identified a few expected impacts that deserve attention in the EIS," said the FERC statement.

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Teekay LNG Partners follows Höegh LNG and GasLog into the hands of New York funds

LNG News Editor

Teekay LNG Partners has become the latest fleet owner to be targeted by a US investment fund with Stonepeak Infrastructure Partners setting up a deal worth \$6.2 billion to acquire the Bermuda-based shipping line, which has a large portfolio of vessels under charter contracts and part ownership of a Middle East LNG import terminal.

Stonepeak offered \$17 per unit, which represents a premium of 8.3 percent on the previous closing price of Teekay LNG's common units.

Debt levels

Excluding Teekay's debt, the deal is for \$1.5 billion and the companies expect to close the transaction by the end of 2021.

Shares of Teekay LNG, which were up almost 48 percent this year, surged an additional 9.53 percent to \$17.19 on the New York Stock Exchange after announcement, giving it a market capitalization of \$1.49Bln.



One of the Teekay group's vessels is the 'Oak Spirit'.

The transaction is in the form of an agreement and plan of merger.

"Under the merger agreement, investment vehicles managed by Stonepeak will acquire all the issued and outstanding common units representing limited partner units in Teekay LNG," said the statement.

"These include approximately 36.0 million common units owned by Teekay Corp., 100 percent of Teekay's ownership in Teekay LNG's general partner, with an economic ownership interest equivalent to 1.6 million Teekay LNG common units, for \$17.00 per common unit and representing an enterprise value of

\$6.2Bln," explained the statement.

Teekay LNG is one of the world's largest independent owners and operators of LNG carriers, providing LNG and liquefied petroleum gas (LPG) shipping services.

The fleet is primarily under long-term contracts through its interests in 47 LNG carriers, 21 mid-size LPG carriers and seven multi-gas carriers.

Vessel interests

Teekay LNG's ownership interests in these vessels range from 20 percent to 100 percent.

Teekay is the latest LNG fleet

owner to be the subject of a takeover or merger with New York-based fund and banking interests.

Höegh LNG Partners, the US affiliate of Höegh LNG Holdings, is now partnered with the infrastructure unit of US investment bank Morgan Stanley.

The LNG fleet controlled by Höegh LNG Partners consists of five vessels, mostly floating storage and regasification units that operate under long-term charters.

Höegh's and Teekay's rival GasLog Ltd, the Greek-based LNG shipping fleet owner with 35 vessels operating, agreed a merger earlier in 2021 with a unit of US fund giant BlackRock.

GasLog entered into a merger agreement with BlackRock's Global Energy & Power Infrastructure (GEPIF), part of the New York-based firm focused on long-term infrastructure investments in the energy and power sectors.

The deal involved the acquisition of around 45 percent of GasLog Ltd's outstanding common shares by BlackRock.

Former Cove Point LNG operator Dominion Energy completes Questar sale to Southwest Gas

Dominion Energy, the US utility and former operator of the Cove Point LNG export plant in Maryland, has signed a definitive agreement to sell Questar Pipelines to Southwest Gas Holdings in a transaction valued at \$1.97 billion after a previous sale to Warren Buffet's Berkshire Hathaway Energy was cancelled.

The pipeline sales deal includes the assumption of \$430 million of existing Questar debts.

Questar Pipelines consists of long-term contracted, transportation and underground storage assets in the states of Utah, Wyoming and Colorado, together with related services and processing entities.

The assets in the states are regulated by the Federal Energy Regulatory Commission.

Dominion had previously agreed to terminate the planned sale of Questar to the Warren Buffet company Berkshire Hathaway Energy as part of a package that also included other assets such as the operatorship of Cove Point LNG.

That decision was a result of ongoing uncertainty associated with achieving clearance for the Questar Pipelines portion of an overall assets deal because of Federal Trade Commission under antitrust laws.

Dominion, based in Richmond, Virginia, said the Questar transac-

tion was expected to close in the fourth quarter of 2021, subject to regulatory approvals.

"We are pleased with the result of our sale process for these high-quality assets," said Robert M. Blue, Dominion Energy Chairman, President and Chief Executive.

"This transaction represents another significant step in our evolution as a company, allowing us to focus even more on fulfilling the energy needs of our utility customers and continuing growth of our clean-energy portfolio, including development of the largest offshore wind farm in North America," added Blue.

The first two pilot wind turbines are currently in operation for

Dominion off the coast of Virginia and were the first installed in US federal waters. The final project is expected to include a huge cluster of more than 180 giant turbines.

Proceeds from the sale of Questar Pipelines will be used by Dominion Energy to reduce parent-level debt, including retiring the 364-day term loan that was entered into in July, which Dominion Energy previously used to repay the approximately \$1.3Bln transaction deposit made by Berkshire Hathaway Energy.

"Proceeds from the sale of Questar Pipelines will also be used to support Dominion's robust regulated capital plan," said Dominion.



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