

LNG Unlimited

LNG JOURNAL PUBLICATION

23 May 2023

Hong Kong set for commercial start-up in June of LNG terminal

Historic suppliers join forces to make LNG reality and bring clean energy supplies to City
LNG News Editor

The Hong Kong floating liquefied natural gas import project has begun commissioning for the start of commercial operations planned for June using the world's largest floating storage and regasification unit, the "FSRU Bauhinia Spirit".

The commissioning cargo, provided by Hong Kong stock exchange-listed Chinese major, PetroChina, was unloaded on May 15 and will contribute to cool-down operations along the specially built jetty, as well as the storage tanks and pipelines.

Two subsea gas pipelines are connected from the FLNG terminal to Hong Kong's Black Point Power Station and the Lamma Power Station respectively.

Owners

The terminal trial processes are also part of the procedure before the senior project contractor, the China Offshore Oil Engineering Company (COOEC), a subsidiary of China National Offshore Oil Corp. (CNOOC), hands over the facility to the joint venture company Hong Kong LNG Terminal Ltd.

The owners of the terminal venture are the two local power utilities, Hong Kong Electric Power Co. and Castle Peak Power (CLP) Hong Kong Ltd.

"The initiative is a critical step in supporting Hong Kong Government's plan to increase the percentage of natural gas used for power generation and reduce carbon intensity in the city," stated the shareholders.

CLP holds a 70 percent stake in



The FSRU berthed at the Hong Kong offshore LNG terminal

the LNG Hongkong Electric owns a 30 percent shareholding.

The companies had initially proposed the terminal to Japanese shipping company, Mitsui OSK Lines, using MOL's "FSRU Challenger", now renamed "FSRU Bauhinia Spirit" and with 263,000 cubic metres capacity.

The FSRU had arrived offshore Hong Kong in the middle of April to prepare for the project launch at a site about 25 kilometres (15.5 miles) southwest of Hong Kong Island.

HK Electric is the historic supplier of electricity to customers on Hong Kong and Lamma Islands.

CLP Hong Kong Limited (CLP Power) is a subsidiary of CLP Holdings, a company listed on the Hong Kong Stock Exchange and now one of the largest investor-owned power businesses in Asia.

The CLP Group has other power assets in Mainland China, Australia, India, Southeast Asia and Taiwan.

The Hong Kong project increases regasification facilities available to the Chinese to 25 and with half-a-dozen other projects planned on the mainland, not including the expansion of existing terminals.

Coal-to-gas

CLP Power said that it had substantially increased the proportion of natural gas in Hong Kong's fuel mix to around 50 percent since 2020.

"Planning and construction of the offshore LNG terminal began a few years ago which underlines the importance of long-term planning to the energy industry," added CLP Power.

HK Electric's Managing Director Wan Chi-Tin said that the utility has always aimed to switch from coal-fired to gas-fired generation as natural gas is a fuel for the energy transition.

"The commissioning of the gas-fired unit L11 in 2022 at Lamma Power Station enabled us to generate over half of our electricity from natural gas," he said.

"Another gas-fired unit, L12, is expected to commence operation in early 2024, which will further increase the share of natural gas in our fuel mix. The offshore LNG terminal, once in operation, will enhance supply security and cost effectiveness," Wan added.

Favoured

The local newspaper, the South China Morning Post has championed the project since it was first proposed seven years ago.

"LNG infrastructure is booming in China, from expansions to new facilities, as the country prioritises transition away from coal," it said in a comment.

UNLIMITED AGENDA

CONTRACTS



Technip and Mideast partner CCC win Qatar LNG NFS expansion contract

2

PRICING

First LNG cargo trade in Chinese yuan instead of dollars is delivered

3

EXPORTS

US LNG data shows Germany in list of leading cargo recipients

5

SHIPPING

Shipbroker gives May overview of the 'stagnant' market for carriers

6

SHIPPING

Exmar explains performance of regas LNG barge and Congo work

7

MIDSTREAM

ONEOK seals \$18.8Bln deal with Magellan to combine assets

9

POLICY

Australian event hears about top global carbon capture plans

11

European engineers Technip and Mideast partner CCC win Qatar LNG NFS contract

LNG News Editor

Technip Energies, the European LNG and energy project engineers, said their joint venture has been awarded an engineering, procurement, construction and commissioning (EPCC) contract by QatarEnergy for the onshore facilities of the North Field South (NFS) Project in the Arabian Gulf.

Technip said its partner for the award is the Middle East-based company Consolidated Contractors Company.

"This award will cover the delivery of two mega-Trains, each with a capacity of 8 million tonnes per annum," said Technip.

The company added that the work would include a large carbon-capture and sequestration (CCS) facility of 1.5 MTPA, leading to 25 percent-plus reduction of greenhouse gas emissions when compared with similar LNG facilities.

The NFS expansion project will produce about 16 MTPA of additional LNG, increasing Qatar's total production from 110 to 126 MTPA



QatarEnergy hosting NFS contract signing at event in Doha

after the North Field East (NFE) project is completed as well.

Mega-Trains

The contract was signed by Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs and President and Chief Executive of QatarEnergy, Arnaud Pieton, the Chief Executive of Technip Energies and Oussama El Jerbi, CCC Managing Director.

"The NFS project is a unique development that minimizes its environmental footprint by design," said Al-Kabbi.

"It includes one of the largest CO2 capture and sequestration facilities and constitutes an important step towards achieving QatarEnergy's target of more than 11 MTPA of CO2 capture and sequestration by 2035," he added.

Minister Al-Kaabi thanked the management and working teams of QatarEnergy and Qatargas for their "dedicated efforts" in implementing the North Field expansion projects.

The EPC contract's value is around \$10 billion, and its scope covers the construction of the two-

mega LNG trains with a capacity of 8 MTPA each, with associated facilities for gas treatment, natural gas liquids recovery, as well as helium extraction and refining within Ras Laffan Industrial City.

"We are extremely honored to have been awarded by QatarEnergy this mega-LNG project, along with our long-standing partner CCC, a leading construction company for LNG Trains," explained Technip CEO Pieton.

"This award is a testament to the trust, extent, and strength of our relationship with QatarEnergy," added Pieton.

"This new project also reflects our leadership in the LNG market as well as our proven ability to integrate technologies towards low carbon LNG, critical in solving the trilemma for affordable, available and sustainable energy," declared the CEO.

Technip has been active with a local presence since 1986 in Qatar, which it described as "a strategic country" for the company.

Italy's Saipem wins contracts worth \$850M for Turkish gas field and UK decommission

Saipem, the Italian LNG and energy subsea projects developer, has been awarded two contracts worth \$850 million, one to open up a Turkish natural gas field in the Black Sea and a second to decommission energy activities in the UK North Sea.

The Milan-based company said it was awarded two new offshore contracts, one for an Engineering, Procurement, Construction and Installation (EPCI) project in the Black Sea and one for decommissioning energy infrastructure in the North Sea northeast of Aberdeen.

The first contract has been assigned by Turkish Petroleum for the second phase of the Sakarya front-end engineering and EPCI project and entails a 16-inch

pipeline of 175km (109 miles) in length and at 2,200-metres of water depths in Turkish Black Sea waters.

The Sakarya gas field is Turkey's largest ever natural gas discovery and has been estimated to hold between 400 billion cubic metres and 530 Bcm of natural gas in assorted wells.

LNG demand

The gas from Sakarya will help offset some of Turkey's increasing volumes of LNG imports, especially US cargoes.

The government has moved quickly to get Black Sea pipeline natural gas flowing into the national grid with sustained plateau production starting in 2027 or 2028.

Turkey expects to cover up to a quarter of its gas consumption from the discovery by 2027.

The offshore Black Sea operations for the Sakarya gas field second phase are scheduled to begin in the summer of 2024 and will be conducted by Saipem's flagship vessel "Castorone".

Saipem recently completed with success the first phase of the Sakarya Gas Field Development project.

The other contract awarded to Saipem has been assigned by EnQuest Heather Limited for the decommissioning of the existing Thistle A Platform, located in the UK sector of the North Sea, around 510km northeast of Aberdeen in a water depths of 162 metres.

Disposals

Saipem's activities entail the engineering, preparation, removal and disposal of the jacket and topsides, with possible extension to further subsea facilities.

The work will be led by the "Saipem 7000", one of the largest semi-submersible heavy lifting vessels in the world.

"These important awards demonstrate Saipem's excellent competitive positioning in the Offshore Engineering & Construction market, a sector that is experiencing a full expansion momentum of which Saipem is ready to seize the opportunities," said Fabrizio Botta, Saipem Chief Commercial Officer.

Cheniere in long-term LNG deal with Korea

Cheniere Energy has signed a long-term liquefied natural gas sale and purchase agreement with the South Korean utility company, Korea Southern Power (KOSPO) for the Sabine Pass expansion project.

Under the SPA with the Houston, Texas-based company's subsidiary, Cheniere Marketing International, KOSPO has agreed to purchase 400,000 tonnes per annum of cargoes.

The cargoes will be delivered ex-ship whereby Cheniere will supply the transport.

Cheniere said it would begin delivering a smaller amount to the Koreans in 2024, though the full SPA runs from 2027 through to 2046.

"The purchase price for LNG to be delivered under the SPA prior to 2027 will be a market-based price, after which the purchase price will be indexed to the Henry Hub price, plus a fee," Cheniere explained.

Cheniere noted that the volumes associated with the SPA from 2028 through 2046 are subject to a positive final investment decision with respect to the first Train of the Sabine Pass liquefaction expansion project.

The Sabine expansion will comprise three large-scale liquefaction Trains, each with capacity of 6.5 MTPA, a boil-off-gas re-liquefaction unit with output of 750,000 tonnes a year and two 220,000 cubic metres capacity storage tanks.

Cheniere has engaged US engineering company Bechtel Energy to complete a front-end engineering and design study of the Sabine Pass project.

First LNG cargo trade settled in Chinese yuan arrives in Dapeng

LNG News Editor

The first ever liquefied natural gas cargo paid for in Chinese yuan instead of US dollars has been unloaded at an import terminal in China's southern Guangdong province.

The shipment from Das Island in Abu Dhabi was delivered by the "Mrawah" LNG carrier, a mid-sized vessel with 135,000 cubic metres of capacity.

"The cargo delivery to the Dapeng terminal is the first settled in Chinese yuan, marking progress in the nation's exploration of yuan settlement of cross-border energy trade," said a statement from the buyer, China National Offshore Oil Corp.

CNOOC said it purchased the cargo from French major TotalEnergies at the Shanghai Petroleum and Natural Gas Exchange in March 2023 and the transaction was completed in yuan.

The Chinese major said the delivery of the shipment to Dapeng



China major CNOOC purchased first yuan-settled cargo

followed a 26-day voyage from the United Arab Emirates.

China grid

"The LNG will be delivered to multiple users, including power plants to urban consumers after gasification, providing stable natural gas supply in the Guangdong-Hong Kong-Macao Greater Bay Area," CNOOC stated.

China has raised the issue over the past several years of more widespread use of the Chinese currency with nations like Saudi Arabia and other energy exporters.

Analysts note that the Chinese

economy would benefit hugely by partly paying for its oil and gas in yuan.

China imported more than 500 million tonnes of crude oil in 2022 and more than 100 million tonnes of natural gas by pipeline and as LNG and with the LNG portion amounting to 63.44 million tonnes.

The Chinese-French LNG cargo trade was first mentioned in March and Chinese media said at the time that the deal marked another step in Beijing's attempts to move away from solely dollar settlements for oil and gas.

South Korea raises natural gas and electricity prices once again

South Korea, the third-largest Asian liquefied natural gas importer, has announced increases in electricity and gas prices to offset the cost of power generation from imports like LNG.

The decision had been meant to be implemented in April, though was postponed because of the impact on government inflation statistics and the cost of living.

The Ministry of Trade, Industry and Energy said it had decided to raise the second-quarter natural gas prices used by consumers for cooking and heating by 1.04 South Korean won per megajoule after leaving them unchanged in the first quarter.

The statement added that the rise would cost a four-member household about 4,400 won

more per month going forward.

Power prices

It would also raise electricity rates for consumer and industrial use by 8 won (US\$0.01) per kilowatt hour (kWh) for the second quarter, compared with a 13.1 won increase per kWh in the first quarter.

It added that the increase would be estimated to cost a four-member household around 3,000 won more on average per month.

The second-quarter rates would take effect on May 16 and would not be applied retroactively.

This would be Korea's second round of price increases after those implemented in January.

The Minister of Trade, Industry and Energy Lee Chang-yang expressed his sympathy for con-

sumers, saying he felt "heavy-hearted" about the burden placed on families.

Minister Lee explained that the price rises were necessary given higher global energy costs after the Russia-Ukraine war and their impact on the management of South Korea's main state-run utilities Korea Electric Power Corp. (KEPCO) and the Korea Gas Corp. (KOGAS).

Utilities in crisis

"The worsening financial plights of the public energy companies may disrupt stable supplies of electricity and gas and we cannot rule out a situation where their financial crisis could spread to the financial markets and to the overall economy," the Minister said in a statement.



NEXUS OF CLEAN™

"Chart's vision is to be the global leader in the design, engineering and manufacturing of cryogenic process technologies and equipment for the Nexus of Clean™ — **clean power, clean water, clean food and clean industrials**, regardless of molecule."

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

JILL EVANKO / CEO / CHART INDUSTRIES

CLEAN CLEAN CLEAN CLEAN

 CHART DELIVERS CLEAN SOLUTIONS FOR



Power



Water



Food



Industrials



Learn more at chartindustries.com

NEWS BRIEFS

Flex LNG profits fall

Flex LNG, the Norwegian ship-ping company with a fleet of 13 vessels and several chartered to the largest US exporter Cheniere Energy, reported a fall in first-quarter profits despite a rise in operating revenues. The average time charter equivalent rate declined in the quarter to \$80,175 per day compared with \$81,699 per day for the fourth quarter of 2022. Flex reported vessel operating revenues in the first quarter of \$92.47 million compared with \$74.57M in the same three months of 2022.

Otway Basin boost

Beach Energy, the company involved in the Waitsia gas development and LNG project in the Perth Basin of Western Australia, has also progressed with new gas wells connected to the Otway Gas Plant in the southern Australian state of Victoria. The company said it had connected two more gas wells in the off-shore Otway Basin to the Otway Gas Plant and was now delivering additional gas into the Australian East Coast domestic gas market.

Mahanagar Gas accord

Mahanagar Gas Limited (MGL), the growing Indian city-gas distribution company, has signed an agreement with Baidyanath LNG (BLNG) to give some momentum to the expansion of a liquefied natural gas fuel station network with a build-out starting from the western state of Maharashtra. MGL, which is listed on the Bombay Stock Exchange, is the sole authorized distributor of compressed natural gas (CNG) and Pipeline Natural gas (PNG) in the city of Mumbai and its adjoining areas as well as in the city of Raigarh, located in the land-locked central Indian state of Chhattisgarh.

US LNG pricing and delivery data shows Germany has entered list of leading US cargo recipients for the first time

LNG News Editor

The US Department of Energy has published its latest LNG export data showing that Germany has for the first time entered the monthly list for being a top five recipient of US shipments, though most of the cargoes delivered to Germany were relatively expensive ones.

The May 2023 DoE data report just issued gives the prices, numbers and trends for March 2023.

It showed that the total number of US cargoes delivered worldwide since March 2016 now amounted to 4,579 shipments, or 14,624.4 billion cubic feet of natural gas.

ISO LNG

A further 1,358 ISO containers of LNG have been shipped to nations in the Caribbean and Latin America from ports in Florida and from Puerto Rico.

The seven operating US LNG export plants dispatched 121 full LNG cargoes in March 2023 versus 100 in the previous month of February and 114 shipments in March 2022.

The Sabine Pass plant in Louisiana remained the volume leader in March 2023 supplying 41 cargoes followed by the now combined Cameron export point's 36 shipments from Louisiana. This included 24 cargoes from Cameron LNG and 12 from Calcasieu Pass.

Corpus Christi in Texas shipped 19 cargoes, Cove Point in Maryland dispatched eight cargoes and Elba Island in Georgia five.

Shipments from the Cameron export point in Louisiana cost the most for a 12th straight month through March 2023.

In the DoE data the two separately operated export plants are California-based utility Sempra's Cameron LNG and Arlington-based Venture Global's Calcasieu Pass.

Cargoes lifted from the Cameron facilities near Lake Charles cost an average of \$11.65 per million British thermal units in March 2023,



'Stena Clear Sky' has delivered US cargo to Wilhelmshaven

which was lower than the Cameron price in the previous month of February of \$12.99 per MMBtu.

The Cameron export point price in September 2022 was a record US high of \$19.89 per MMBtu.

The Cameron price combination has never been fully explained by the DoE and is actually viewed by many in the market as an anti-transparency measure.

The combined average March price at the export points of the other five plants, with Freeport back on stream in February, was \$7.67 per MMBtu versus \$9.01 per MMBtu for the previous month.

The year-to-date price in March 2023 for all of the export points combined was \$11.59 per MMBtu.

The average prices for each of the five other plants (from the export point) from highest to lowest in March 2023 were: Elba Island (Georgia) \$7.54 per MMBtu (\$10.72 February); Cove Point (Maryland) \$6.96 per MMBtu (\$8.35, February); Corpus Christi in Texas \$6.26 per MMBtu (\$7.06 February); Freeport LNG (Texas) \$6.14 per MMBtu (\$8.23, February); and Sabine Pass (Louisiana) \$5.86 per MMBtu (\$6.72, February).

German deliveries

New LNG importer Germany received eight US cargoes in March, including three from the Calcasieu Pass plant of Venture Global and two from Sempra's Cameron LNG -

the high-priced US export point.

The Top Five countries of destination, representing 60.9 percent of total US LNG exports in March 2023, were the United Kingdom (70.5 Bcf, 21 cargoes), the Netherlands (61.0, 17 cargoes), Spain (38.1 Bcf, 12 cargoes), France (28.6 Bcf, nine cargoes) and Germany (24.5 Bcf, eight cargoes).

The list of the Top 10 countries of destination overall since 2016 through March 2023 showed two Asian nations, South Korea and Japan, leading and with Spain consolidating its third-placed position.

The UK and France have overtaken China in recent months to take fourth and fifth places respectively while the Chinese drop to sixth. Turkey has now also advanced in the US list and has overtaken India.

The top 10 recipients of US LNG by overall numbers of cargoes at the end of March 2023 were: 1) South Korea 513 cargoes; 2) Japan 380; 3) Spain 363; 4) the UK 361; 5) France 330; 6) China 296; 7) the Netherlands 260; 8) Turkey 205 9) India 195; and 10) Brazil 218 - including split cargoes.

Vessel-borne delivery prices are also given for the US territory of Puerto Rico.

Shipments to Puerto Rico in March 2023 had cost an average of \$7.59 per MMBtu, down from \$8.04 per MMBtu in February.

London shipbroker gives May overview of the 'stagnant' charter market for LNG carriers

LNG News Editor

The liquefied natural gas shipping charter market showed over the past few weeks that there was a lack of uncovered cargo volumes in the market and this was most notable compared with previous years.

"No doubt this is reflective of the abundance of tonnage that is already in the hands of the Charterers, due to extensive chartering over the past 12-18 months," said the monthly LNG shipping report for May from London shipbrokers Simpson Spence Young (SSY).

The report noted that the Middle East and Pacific most recently saw just one fixture each on a spot basis with both being concluded at flat levels versus the previous week.

"This really set the bar for the month to follow, with LNG shipping activity remaining stagnant as there was neither enough activity to improve things, nor so little activity to depress things," explained the SSY report.

Equilibrium

"One could argue the market was in near perfect equilibrium. There were marginal fluctuations on charter rates with a limited number of chartered ships against a handful of Atlantic cargoes that were covered for US Gulf and



'The abundance of tonnage is already in hands of charterers'

North Africa loadings, but 2-stroke rates generally continued to hover around the \$70,000 per day mark," the report said.

According to SSY, the Far East remained the stronger market in terms of levels, although there was less activity in April than in the previous months of 2023.

The firm noted that spot had, East and West, a large focus given to several free-on-board tenders through April loading out of USG, Egypt, Algeria, Oman and Australia as traders looked to secure cargoes for their long fleets.

"The Atlantic unfortunately had plentiful length across May so these tenders rarely saw too much 'sub-tender award shipping', but June did look tighter with most positions 'off the list'. The length is no doubt there to be optimised upon should an opportunity work - the issue being, however, that there are minimal cargoes to find

for these," added the report.

Some FOB sell-tenders attracted significant interest, with one second-half of May loading USG receiving at least 11 (some said over 15, possibly 20) bids.

The report said that with religious holidays such as Eid coming to an end in the latter part of April there was hope for an uptick in activity as a result of that but in reality the change was minimal.

"Generally high LNG inventories in the Far East and Europe continued to keep end-user demand lacklustre, with buying activity in those regions dominated by trading firms and portfolio suppliers looking to optimise or cover their short positions," SSY said.

Market lull

"The market lull was not helped when Japan and China went away for the Golden Week holidays.

Term was the much busier market,

with at least two Steam Turbine vessels securing multi-month employment in the Far East and a multi-month deal reported from a Middle Eastern Charterer suggesting they fixed in for 15 months with third quarter 2023 delivery," the report said by way of detail.

"Multiple candidates were available to cover summer and early winter, but if a vessel was made ready across winter, the position did not tend to be there for very long," said SSY.

The firm added that on the longer-term horizon fresh tenders for newbuilds, deals concluded and new orders placed mostly dominated the LNG airwaves at the start of the month.

The report disclosed that a Middle-East and a Pacific based player approached the market for long-term coverage basis 2026 delivery asking for a period of over 8 years.

"Similarly, a long-term new-building tender of a Japanese player was heard awarded to an independent Owner on multiple units. The rumoured rates against this business provided refreshed pricing points which fully reflect the continuing strength of the long-term market, as well as the fundamental scarcity of modern tonnage in the mid-term," SSY concluded.

LNG Journal Subscription Package

Your LNG Journal subscription includes broad coverage of LNG across the globe - from trade and shipments through to LNG prices, plus in-depth technical coverage.

Sign up now for an Online Subscription at only US\$1190; €920 or £830
Discount options are available for multi-users
Contact us for more information or to arrange a free trial

Subscription Contacts

For new subscriptions or general subscription queries contact:
Stephan Venter
venter@lngjournal.com
+44 207 017 3407

To renew an existing subscription or to upgrade your package, contact:
Gabi Weck
gabi@lngjournal.com



Japan imports plunge in April

Japanese liquefied natural gas imports dropped almost 19 percent in April even as cargo numbers remained stable from Australia but declined from other regions as milder weather and higher energy storage curbed demand for LNG cargoes as well as thermal coal.

Japan's LNG imports for April fell by 18.7 percent to 4.53 million tonnes, or about 67 cargoes, down from 5.57MT, or 82 cargoes, received in April 2022, according to preliminary trade figures from the Japanese Finance Ministry.

Deliveries to Japan in March had amounted to 5.70MT, down from 6.50MT received in March 2022.

The April cost of LNG deliveries fell year-on-year by 24.8 percent to 421.99 billion yen (\$3.08Bln) compared with 561.08Bln yen (\$4.09Bln) in April 2022.

Japan's had regained the global No. 1 spot as an LNG importer in 2022 with its 72MT of volumes, though imports have slowed in 2023 as have those to import rival China.

The Japanese Ministry's data showed the decline in gas-fired power needs in April coincided with a fall as well in thermal coal imports for electricity generation.

Thermal coal imports declined by 10.8 percent to 7.28MT as overall energy imports fell, signalling ample storage and stalled demand.

The Ministry LNG data showed that LNG cargo deliveries from Asian countries like Malaysia, Indonesia and Brunei fell by 21.7 percent in April to 1.17MT.

Middle East cargo imports dropped by 47.9 percent year-on-year to 200,000 tonnes and to just one third of the previous month's receipts.

Exmar explains performance of regas LNG barge and Congo work

LNG News Editor

Belgian shipping company Exmar has reported on the progress of the liquefied natural gas barge for regasification deployed at Eemshaven in the Netherlands and advances made in the floating LNG production venture in the Republic of Congo.

Exmar has chartered the regasification barge to the operator of the Eemshaven hub, the Dutch utility Gasunie and which will soon be joined as a shareholder by storage company Royal Vopak.

Production project

Antwerp-based Exmar also sold the 'Tango FLNG' production barge to Italy's Eni for \$646.7M.

The Italian company is planning an LNG project from a natural gas field offshore the African nation.

"Eemshaven LNG is performing as per expectations under the five-year charter with Gasunie affiliate EemsEnergy Terminal BV with a 100 percent commercial uptime in the first quarter of 2023," said Exmar.



Exmar regasification barge at Groningen port of Eemshaven

"Since March 2023 the unit is fully operating with shore power and shore heat for its regasification operations," the company added.

Turning to the Congo FLNG project to monetize Marine XII gas field, Exmar said it was helping Eni to develop the project.

"The Marine XII gas valorization project of Eni, using the 'Tango FLNG', formerly owned by Exmar and since 2022 by ENI and Exmar's LNG carrier 'Excalibur' under a 10-year charter, was the subject of an onshore stone-laying ceremony on 25 April 2023," explained Exmar.

"Eni relies for the implementa-

tion of the Marine XII project on the Exmar expertise with fully fledged Exmar teams working in Antwerp, Houston and Dubai on the engineering, procurement and conversion of the units for deployment in late 2023 in the Republic of Congo," the company said.

Exmar reported on the projects in its first-quarter earnings where revenues jumped to \$65.7M from \$24.3M in the same three months last year.

The company reported overall quarterly profits of \$19.2M compared with losses of \$7.7M in the same quarter of 2022.

CoolCo says charter market showing strength as another charter is signed

Cool Company (CoolCo), the LNG shipping joint venture led by Eastern Pacific Shipping and which is growing its owned and managed fleets, said the market was showing continued strength as it entered into a new time-charter agreement for one of its tri-fuel, diesel-electric vessels.

The company, headquartered in Bermuda, said the multi-year charter with an energy major starts in early 2024 upon redelivery from the vessel's current charter, adding backlog.

Delighted

"We are delighted to have secured this attractive time charter, locking in cover at a rate that reflects

the continued strength of the LNG carrier market," said Richard Tyrrell, Chief Executive of CoolCo.

"The forward nature of this contract demonstrates the desire of LNG producers, offtakers, and portfolio players to secure modern tonnage to transport the dramatically increasing volumes of LNG coming online through the middle and latter parts of the decade," stated Tyrrell.

"With vessel availability coinciding with seasonal peaks for chartering, CoolCo stands to benefit from the ongoing LNG carrier re-pricing cycle.

CoolCo's shares are registered with the US Security and Exchange Commission and listed for trading

on the New York Stock Exchange in addition to the Euronext Growth list in Oslo, both under the ticker "CLCO".

CoolCo also has an owned fleet of 11 LNG vessels and a managed fleet of 18 ships.

The owners of the managed ships include sector leaders Golar LNG, Avenir LNG and New Fortress Energy.

The CoolCo-owned fleet comprises the following vessels: the "Golar Bear" the "Golar Crystal", the "Golar Frost", the "Golar Glacier", the "Golar Ice", the "Golar Kelvin", the "Golar Snow", the "Kool Baltic", the "Kool Boreas" and the "Kool Firn" and the "Kool Orca"



Atlas Copco



In LNG, experience matters

The LNG industry is constantly evolving, and we can help you lead the way. We provide custom-engineered compression and expansion technology that boosts your productivity throughout the LNG value chain. For over 40 years we have engineered advanced process equipment that delivers maximum efficiency in modular, compact packaging. We offer end-to-end centrifugal compressors, screw compressors, turboexpanders, Compander™ and centrifugal fluid pumps customized for every LNG application, from small scale to large scale, onshore and off.

Learn more at www.atlascopco-gap.com

ONEOK seals \$18.8Bln deal with Magellan to combine oil and gas hub assets in US Gulf Coast

LNG News Editor

US energy infrastructure company ONEOK Inc. has signed a definitive merger agreement with Magellan Midstream Partners in a cash-and-stock transaction valued at around \$18.8 billion to combine the two Oklahoma-based energy groups.

ONEOK, based in Tulsa like Magellan, said the combined company would own more than 25,000 miles of liquids-oriented pipelines with significant assets at the Gulf Coast and Mid-Continent market hubs.

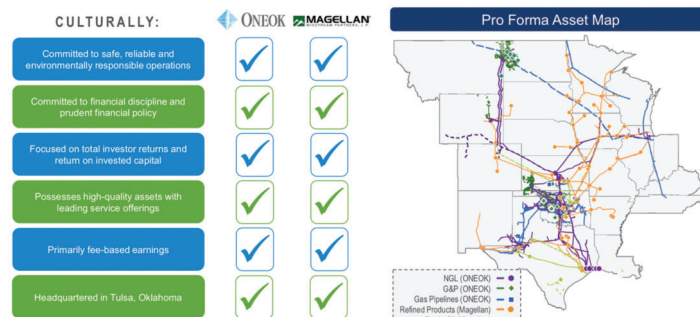
Gas gathering

The company ONEOK has natural gas-gathering, processing, storage and transportation assets and has one of the nation's premier natural gas liquids (NGL) systems, connecting NGL supply in the Rocky Mountain, Mid-Continent and the Permian Basin regions with key markets.

ONEOK's intrastate natural gas pipeline assets in Oklahoma transport natural gas through the state and have access to the major natural gas production areas in the Mid-

STRATEGIC ALIGNMENT

COMPLEMENTARY BUSINESSES, ASSET COMPATIBILITY AND OPERATING PHILOSOPHY



How ONEOK and Magellan have complementary assets

Continent region, which include the STACK and SCOOP areas and the Cana-Woodford Shale, Woodford Shale and the Springer Shale.

In Texas, the company's intrastate natural gas pipelines are connected to the major natural gas producing formations in the Texas Panhandle, including the Granite Wash formation and Delaware and Midland Basins in the Permian Basin.

These pipelines are capable of transporting natural gas throughout the western portion of Texas, including the Waha area where other pipelines may be accessed

for transportation to western markets, exports to Mexico and the Houston Ship Channel market to the east and the Mid-Continent market to the north.

Magellan for its part is a specialist in refined products and crude oil handling, storage and transportation.

Its petroleum products division has a 9,800-mile pipeline system with 54 connected terminals and two marine storage terminals.

In the oil division, Magellan has 2,200 miles of crude oil pipelines, a condensate splitter and storage facilities with an aggregate stor-

age capacity of about 39 million barrels, of which 29 million are used for contract storage.

"The deal brings together two premier energy infrastructure businesses with strong returns on invested capital and diverse free cash flow generation," said a statement.

Including assumed debt, the transaction creates a combined company with a total enterprise value of \$60.0Bln.

The deal will consist of \$25.00 in cash and 0.6670 shares of ONEOK common stock for each outstanding Magellan common unit, representing an implied value to each Magellan unit of \$67.50 for a 22 percent premium on the last closing stock price.

The transaction is expected to close in the third quarter of 2023 and has been unanimously approved by the board of directors of both companies.

ONEOK said it had secured \$5.25Bln in fully committed bridge financing for the proposed cash consideration.

Norway's Equinor reopens Njord field to supply Europe with natural gas and oil for 20 more years

Norway's Equinor, an LNG supplier to the European Union and which has enabled some of the replacement of pipeline natural gas to Europe in the past year, has opened the Njord field in the Norwegian Sea.

The field was formally re-launched in a ceremony led by the Norwegian Minister of Petroleum and Energy Terje Aasland.

"The platform and the floating storage and offloading vessel have undergone extensive upgrades and are now ready for doubling the field life and more than doubling production," Equinor explained.

Natural gas from the field will be exported through a 40-kilometre pipeline connected to the Åsgard transport system (ÅTS) and from

there to the Kårstø gas terminal.

Equinor said that the production start on the Njord field had been delayed by two years.

Challenges

"The project became more demanding than expected and the corona pandemic hit the project hard and it also led to higher costs," the company added.

Investment costs are just above 31 billion Norwegian crowns (\$2.9Bln) mark compared with the original 1.17Bln crowns estimated in the plan for development and operation.

Njord is located in the Norwegian Sea, 30 kilometres west of Draugen, and 130 kilometres

northwest of Kristiansund. The water depth is 330 metres.

Ten new wells will be drilled on Njord from an upgraded drilling facility. Discoveries have previously been made in the Njord area and more exploration will be carried out close to the field.

"The ambition is also to double production and produce approximately the same volume from Njord as we have produced so far, around 250 million barrels of oil equivalent," Equinor said.

"With the war in Ukraine, the export of Norwegian oil and gas to Europe has never been more important than now. Reopening Njord contributes to Norway remaining a stable supplier of gas to Europe for

many years to come," said Minister Aasland at the launch event.

Extension

The Njord field started production in 1997 and was originally supposed to produce until 2013. However, systematic work with increased recovery means that there are still large volumes of oil and gas left. New discoveries in the area can also be produced and exported via the Njord infrastructure.

In 2016, the platform and FSO were disconnected from the field and towed to shore for extensive upgrades. On 27 December 2022, production resumed from the Njord field.



LNG2023

VANCOUVER



10-13 JULY

PRINCIPAL BY



HOSTED BY



PRINCIPAL SPONSOR



INCOMING HOST



**REGISTER
NOW**

**Save US \$1,180
with Early Bird**

(Early Bird ends 7 April, 2023)



Discover | Connect | Do Business

LNG2023 is a global Conference and Exhibition that brings together over 15,000 industry professionals to discuss current developments and challenges under the theme 'Fuelling a Secure Energy Future'. Discover the latest insights, connect and do business with the industry to help shape the future of LNG.

VIEW THE PROGRAMME AND REGISTER AT [LNG2023.ORG](https://lng2023.org)

Australian APPEA conference hears about top global carbon capture plan from LNG operator

LNG News Editor

Santos Chief Executive Kevin Gallagher told the Australian Petroleum Production and Exploration Association conference in Adelaide that Australia would soon be taking emissions from natural gas production and heavy industries as a world leader in carbon management services.

"The main game is gas because it makes renewables possible," he said in response to careless and environmentally extreme policies being touted worldwide that would have intermittent solar and wind power without gas-fired power back-up.

Moomba project

Gallagher said in his speech to the APPEA even that if Santos could deliver abated gas to customers for about \$24 a tonne, this would decrease the huge costs to Australia of the energy transition.

Santos, which is based in Adelaide, is a main domestic natural gas supplier and operator of the Darwin and Gladstone LNG export plants supplying Asia and has LNG produc-



Santos CEO Gallagher says CCS pairs with gas power

tion stakes in Papua New Guinea.

The Santos CEO pointed out that his company was already a first mover in Carbon Capture and Storage (CCS) development as an investment in decarbonisation consistent with the company's own Climate Transition Action Plan.

The Santos Moomba CCS project in the Cooper Basin in the outback of South Australia was 40 percent complete at the end of 2022 and was on track for the first injection of CO₂ in 2024.

Santos has invested several hundred million dollars in the Moomba CCS Project.

It will be the biggest in the world and able to 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.

Gallagher said the Moomba CCS project would be a "game changer" for the future of gas, both in Australia and Asia.

"It will allow existing energy infrastructure, appliances and industrial processes to continue to be used while new technologies are commercialised over time," he explained.

One year away from its first

injection of carbon dioxide, Gallagher said the Cooper Basin area could store up to 20MT of carbon a year for the next 50 years.

A speech was also made to the APPEA conference by Opposition Leader Peter Dutton, the head of the Liberal (conservative) party who accused the Labor-led Government of doing everything possible to shut down coal and frustrate the natural gas sector.

"They're jeopardising Australia's energy security and they're discouraging foreign investment," he said in reference to their introduction of more tax rises on LNG businesses and natural gas price fixing.

"The federal government was undermining reliable and affordable base-load power for homes and businesses," added Dutton.

"They're creating sovereign risk never before seen in Australia and longstanding trading and investment partners are concerned," he said.

Dutton stated that natural gas remained in the "regulatory crosshairs" with the Labor Government's energy policy driven by "renewable zealotry".

European Commission moves again on Russian LNG as first EU joint gas tender deemed a success

The European Commission said it was again pursuing plans to end Russian liquefied natural gas supplies being sold in the European Union and has asked the 27 member states not to sign any new supply contracts.

The latest request followed a similar appeal from EU Energy Commissioner Kadri Simson for individual states to stop buying Russian cargoes.

Most of the Russian LNG delivered to Europe originates from Novatek's Yamal LNG export plant in northern Siberia.

More cargoes are due to be delivered soon to the EU. Belgium, for example, receives cargoes

under a long-term trans-shipment contract.

Oil picture

The International Energy Agency has also said in its May Oil Market Report that Russian exports of crude and refined oil products edged up in April to a post-invasion high of 8.3 million barrels per day.

"Shipments of crude oil increased by 250,000 barrels per day, offsetting a decline in product exports of 200,000 barrels per day," said the IEA.

"Estimated oil export revenues increased by \$1.7 billion to \$15 billion on the back of higher crude oil exports and a narrower Urals

(Russian blend) discount," said the Paris-based agency.

The Ukraine crisis that led to the cut-off of most Russian pipeline natural gas to Europe and rising LNG imports to replace Russia's gas also prompted the European Commission to initiate collective purchases by EU nations.

European Commission said the first EU tender for joint purchased has proved to be a success.

Gas tender

"The EU managed to attract bids from a total number of 25 supplying companies equivalent to more than 13.4 billion cubic metres gas, surpassing the 11.6 Bcm of joint

demand that EU companies submitted through the recently established AggregateEU mechanism," said a Commission statement.

"The international suppliers have already been matched with the European customers on AggregateEU by service provider PRISMA, amounting to an overall volume of 10.9 Bcm. This covers 8.7 Bcm of gas via pipeline and 2.2 Bcm of LNG," the Commission added.

The EU companies will now be able to negotiate the terms of the supply contracts directly with the supplying companies and with no involvement in the trading and financial details by the Commission.

Fast Solution for all your LNG Storage & Transport needs.



Factory-built 1,200+ m³ LNG Tanks



40' & 53' ISO Tank Containers



1,228 m³



Railroad Tank Wagons



Marine LNG Tanks

On-site / Factory-Built Storage Tanks, Intermodal ISO Tank-Containers, Tank Trailers, Ship / Barge Cargo Tanks, Railroad Tank Wagons, & more..

Corban Energy Group (CEG), based in New Jersey, USA, has been creating highly engineered products for the natural gas supply chain in the Americas, Europe, and Africa. With its global network of engineers and its manufacturing facilities optimized for building large tanks, CEG has provided unmatched quality and value in LNG equipment for producers, suppliers, and end-users.

Call or e-mail us to find out how your company can benefit from our comprehensive natural gas products and services today.

www.CorbanEnergyGroup.com

CORBAN ENERGY GROUP

Your Solution for LNG/LPG



T. 201.509.8555 info@corbanenergygroup.com
418 Falmouth Avenue, Elmwood Park, NJ 07407, USA