



## **NEW FORTRESS SECOND JACK-UP RIG-TO-FLNG UNIT CONVERSION MOVES OFF TO MEXICO**

As company's embryonic green hydrogen arm ZeroParks strikes deal to supply OCI Global. A second jack-up rig which has been converted into one of the elements of New Fortress Energy's first floating LNG (FLNG) production unit has left a US shipyard for Mexico. This unit, which is one of three that will make up New Fortress' 1.4 million tonnes per annum Fast LNG 1 project, houses the gas processing module. A first jack-up rig conversion, NFE Pioneer III with the project's main control room and accommodation block onboard, left the US yard on 28 July and has since arrived on site in Altamira on Mexico's east coast. The FLNG producer will be fed with pipeline gas and will use New Fortress' 160,000-cbm Penguin FSU (ex-Golar Penguin, built 2014) as the floating storage unit for this first FLNG vessel. The schedule for the delivery of the units has been slipping back. New Fortress was originally targeting a start-up for the novel FLNG project in August. In a first half results call that month chief financial officer Chris Guinta said the FLNG unit would start commercial operations by the end of the third quarter. At the time Guinta said NFE Pioneer 1 would be installed by 23 August followed by the Pioneer II, which is fitted with the cold box for the unit's liquefaction, on 28 August. In a separate announcement today New Fortress Energy's emerging hydrogen production arm ZeroParks has signed a deal to supply green hydrogen from 2025 to Dutch methanol and ammonia

producer OCI Global. OCI, which has started supplying bunker fuels to the marine industry, said the deal, which follows a competitive bidding process, will allow it to significantly scale up green ammonia production capacity to approximately 160,000 tonnes per year in Beaumont, Texas. It said the green hydrogen will be produced by ZeroParks, NFE's hydrogen business, using proton exchange membrane (PEM) technology and delivered to OCI's facilities in Beaumont, Texas where it will then be converted into green ammonia. NFE's first green hydrogen project, ZeroPark I, will come online in two phases; the first phase in 2025, allowing OCI to produce approximately 80,000 tonnes per year of green ammonia and the second, in 2026, doubling OCI's production capacity to 160,000 tonnes per year. OCI, which highlighted that green hydrogen can also be used to produce green methanol, said the deal complements its large-scale blue ammonia project in Texas for 2025 start-up which can use green hydrogen as a feedstock it increase its green ammonia production capabilities. New Fortress chairman and chief executive Wes Edens, who has said he plans to spin off ZeroParks as a separate entity, said the deal shows the company's focus on developing green hydrogen projects of scale to successfully decarbonise hard-to-abate corners of the global economy such as agriculture, power, and marine fuels. [www.tradewindsnews.com](http://www.tradewindsnews.com)

## **KARMOL EARMARKS TWO PLANNED CONVERSIONS FOR SOUTH AFRICA JOBS**

Four-ship North West Shelf LNG-carrier buy concludes with at least one pair destined for conversion to floating regasification and storage units. Floating power provider Karpowership and Japanese shipowner partner Mitsui OSK Lines' joint venture KARMOL plans to convert at least two of four recently purchased steam turbine LNG carriers into floating storage and regasification units for likely deployment to South Africa. Those following the two companies told TradeWinds that Karpowership has wrapped up the purchase of four LNG carriers from Australia's North West Shelf shipping partners. The vessels — the 127,362-cbm Northwest Sanderling (built 1989), 127,585-cbm Northwest Snipe (built 1990), 127,594-cbm Northwest Sandpiper (built 1993) and 127,443-cbm Northwest Stormpetrel (built 1994) — are expected to be transferred to KARMOL, with two of them earmarked for conversions to FSRUs. Discussions on the conversions are said to be in progress with shipyards. Karpowership is understood to be closing in on contracts that would see its powerships deployed to South Africa in the near term. The units are said to be ready for use. The FSRUs, which would supply regasified LNG to the floating power plants, would be sent in once they are completed. The Turkish company has been in talks with South Africa on the deployment of its powerships there since 2021. This year it was granted access to the ports of Ngqura, Durban and Saldanha Bay for 20 years by South Africa's Ministry of Transport as the country tries to move forward and solve its acute power shortage. It is unclear what KARMOL plans to do with its other two new LNG carrier acquisitions but some sources have indicated that Karpowership is also looking at floating LNG production, which would require LNG tonnage. Karpowership officials at the Gastech meeting in Singapore declined to comment on the reports about the future of the North West Shelf ships. In August, TradeWinds named

KARMOL as the upcoming buyer of North West Shelf's remaining Moss-type quartet. No price has yet emerged for the ships, which have been circulated for sale several times. Karpowership previously bought two vessels in the North West Shelf shipping fleet, selling one — the 127,363-cbm Northwest Seaeagle (built 1992) — at a profit, with KARMOL converting the other — the 127,452-cbm FSRU KARMOL LNGT Powership Asia (ex-Northwest Shearwater, built 1991) — to an FSRU, which is now based in Brazil. Aside from this vessel, KARMOL also sent a first LNG carrier-to-FSRU conversion to Senegal — the 125,000-cbm KARMOL LNGT Powership Africa (ex-Dwiputra, built 1994) — which arrived off Dakar in June 2021 but has yet to receive a shipment. KARMOL also completed the conversion of a third LNG carrier — the 127,000-cbm LNG Vesta (built 1994) — into an FSRU named the FSRU KARMOL LNGT Powership Europe. But it has yet to be deployed. The conclusion of the acquisitions of the final four LNG carriers in the North West Shelf LNG fleet would bring to an end a sales process that started five years ago. Seven vessels were marketed for sale in March 2018 — six Moss-type steam turbine ships and one younger membrane-type vessel — as the ships neared the end of their contracts with the Australian LNG production project. The sole membrane vessel — the 140,708-cbm Northwest Swan (built 2004) — was bought by Sinokor Merchant Marine and now trades as the HongKong Energy. LNG market players said the sales process on each vessel was complicated by each ship having a different shareholding structure made up of North West Shelf infrastructure project partners. Source : [www.tradewindsnews.com](http://www.tradewindsnews.com)

## **COOL CO SAYS 2026 WOULD BE 'NICE TIME' TO INK ORDERS**

Ship prices may be high and delivery dates distant but there is demand for LNG, long-term contracts to be had and financing available. A perceived growth in the long-term demand for LNG is fuelling the continued interest in LNG carrier newbuildings that will deliver in about five years' time but shipowners said contracting at today's high prices will require six-figure rates and long-term contracts. Speaking at the Capital Link conference held during London International Shipping week, Cool Co chief executive Richard Tyrrell said he believes there are people who got squeezed after ordering and fixing out LNG carrier newbuildings only to find the cost of financing rising and reducing their margins. "Maybe some of those are not going to come back for more," he said. Tyrrell highlighted that while LNG carrier designs have not been substantially changing, newbuilding prices are rising, which in turn is increasing charter rates and giving owners some confidence to order.

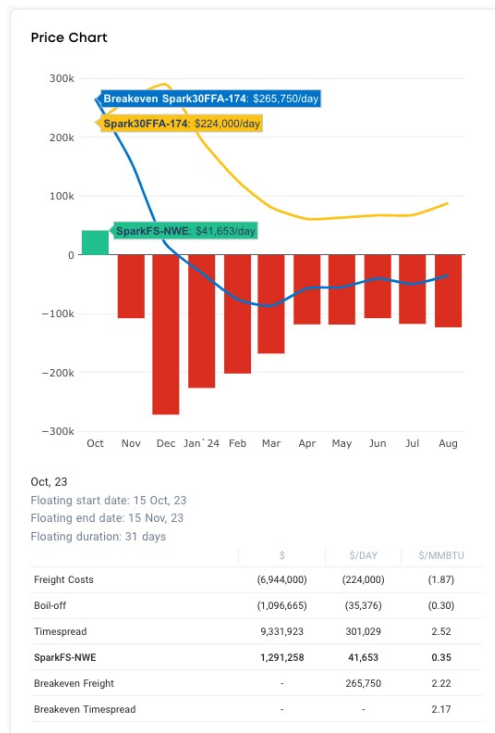
### **Demand for LNG**

"Would I order a ship today?" he asked rhetorically. "Maybe not but it is mainly because of the terms and the time that we would have to wait. "Would I order a ship in 2026 for a 2028 delivery? Absolutely. It is clear there is going to be a demand for LNG and that would be a nice time to have some newbuilds." When answering questions put to panellists by moderator Panos Mitrou — the global gas segment director at Lloyd's Register — Flex LNG chief financial officer Knut Traaholt said a newbuilding order today is priced at about \$265m and with accumulated interest the book value is around \$280m. These vessels will require a minimum 10-year contract — Traaholt said it probably should be higher — and at a rate above \$100,000

per day. “That gives a decent return, not a fantastic return, and it comes with some residual value risk,” he said. Traaholt said financing is widely available, albeit at slightly too steep repayment profiles compared to the life of the vessel. “The only challenge now is the high interest rates,” he said. GasLog chief financial officer Achilleas Tasioulas said: “There is definitely liquidity available,” adding that he is surprised at how much — although it comes at a cost. But Tasioulas described the returns that owners can make out of their newbuilding investments as “really skinny” today, which means that shipowners are going to take more risk. Golar LNG chief financial officer Eduardo Maranhao said that for both LNG carriers and floating LNG production units, there is a continuing increase in appetite from Asian lenders — particularly Chinese financiers — to provide long-term financing for projects as they see LNG as an important tool in the energy transition. Looking ahead, Maranhao said there is still a very “delicate balance” on LNG supply, with buyers concerned about where they can source additional supply. “We are in a very tight market,” he said. Tyrrell said market players are “very much on edge”, citing the strikes at liquefaction plants in Australia, concerns around the Panama Canal and gas storage filling up in Europe. Source : [www.tradewindnews.com](http://www.tradewindnews.com)

## SPARK: LNG FREIGHT RATES CONTINUE TO RISE

Spot charter rates for the global liquefied natural gas (LNG) carrier fleet continued to rise this week as positive NWE floating storage economics for October ties up vessels, according to Spark Commodities. Last week, LNG freight rates rose in both basins with the Spark30S Atlantic rate rising \$22,250 to \$160,000 per day and the Spark25S Pacific rising \$24,000 to \$167,250 per day. “Spark30S Atlantic increased by \$22,750 to \$182,750 per day this week, and the Spark25S Pacific increased by \$20,500 to \$187,750 per day,” **Henry Bennett**, Spark’s head of pricing, told LNG Prime on Friday. “Spark estimates that



a 2 Stroke 174k vessel in NWE in October would be \$42,000 per day better off floating until November before delivering into NWE, rather than delivering immediately in October,” he said. As per European LNG pricing, SparkNWE DES LNG front month increased from the last week. Last week, NWE DES LNG for October loadings was assessed at \$9.731 per MMBtu, a \$0.545 discount to the October TTF price. “The front month SparkNWE for October deliveries increased by \$0.827 to \$10.558/MMBtu this week,” Bennet said. The TTF price for October settled at \$11.149 per MMBtu on Thursday, while the JKM spot LNG price for October settled at \$13.365 per MMBtu. Natural gas prices have been volatile since the last month due to uncertainty about Australian LNG supplies amid the potential for strikes. Woodside and unions representing its workers at North West Shelf offshore gas platforms reached an agreement last month.

However, workers at Chevron's Gorgon and Wheatstone LNG plants have started protected action on Friday last week after talks between the energy giant and unions ended without an agreement. Chevron's unit in Australia is also working to resume full production at its 8.9 mtpa Wheatstone LNG terminal near Onslow following a fault which has impacted about 25 percent of the plant's production. The Gorgon LNG plant on Barrow Island has three trains and a production capacity of some 15.5 mtpa. US LNG exports also dropped in the week ending September 13 to 18 cargoes as the Freeport LNG terminal shipped only one cargo. The facility shipped four LNG cargoes in the week before, according to the Energy Information Administration.

Source : [www.lngprime.com](http://www.lngprime.com)

## CONOCOPHILLIPS BOOKS CAPACITY AT DUTCH GATE LNG TERMINAL

US energy giant ConocoPhillips has signed a deal to book long-term capacity at the Dutch Gate LNG import terminal, owned by Gasunie and Vopak, in the port of Rotterdam. The 15-year throughput agreement for about 1.5 million tonnes per annum (Mtpa), or 2 Bcm equivalent, begins in September 2031, ConocoPhillips said in a statement late on Thursday. With the commercial agreement, ConocoPhillips secures access to this "important market" for the company's growing global LNG portfolio, it said. Also, the energy firm now secured additional regasification capacity in Europe after it agreed last year to book long-term capacity at the planned onshore LNG import terminal in Brunsbuettel, Germany. This agreement further complements the company's foundational LNG resource positions in Qatar and Australia, offtake and equity in Sempra's recently sanctioned Port Arthur LNG Phase 1 project, and the offtake agreements at Mexico Pacific's Saguario LNG export facility, ConocoPhillips said. "Adding capacity at the Gate LNG terminal fits well with our efforts to deliver reliable, lower-carbon energy into Europe from highly competitive LNG supply," **Bill Bullock**, executive vice president and chief financial officer of ConocoPhillips, said in the statement. "Expanding our LNG footprint with agreements like this further enhances a balanced, diversified, and attractive portfolio as we progress our global LNG strategy," Bullock said.

### Gate expansion

Dutch gas grid operator Gasunie and compatriot storage tank firm Vopak recently took a final investment decision to build the fourth storage tank and add more regasification capacity at their Gate LNG terminal. The expansion consists of a new LNG storage tank of 180,000 cubic meters and additional regasification capacity of 4 Bcm per year. Also, the new capacity is already rented out under long-term commercial agreements and is expected to be ready for operation by the second half of 2026. UK-based energy giant BP and a unit of PetroChina have previously agreed to book long-term capacity. They will each acquire 2 Bcm per year of regasification and also corresponding storage capacity for a period of 20 years. Following the completion of all planned projects, Gate will have a total regas capacity of 20 Bcm per year and four LNG tanks with 720,000 cbm of storage capacity. Source : [www.lngprime.com](http://www.lngprime.com)

## LITHUANIA'S KN SELECTS HOEGH LNG TO OPERATE KLAIPEDA FSRU FOR FIVE YEARS

Lithuania's KN, the state-owned operator of the country's first LNG import facility in Klaipeda, has selected a unit of Norway's Hoegh LNG to operate and maintain the 170,000-cbm FSRU Independence for five years. Last year, KN exercised its option to buy the FSRU Independence for \$153.5 million, excluding VAT, from Hoegh LNG at the end of its current lease deal in 2024. The FSRU has a regas capacity of 3.75 bcm but there are plans to boost the capacity up to 6.25 bcm due to very high demand. In October last year, KN launched a tender for operation and maintenance services of the FSRU after its lease contract with Hoegh LNG ends in 2024. Following completion of the tender, KN selected Hoegh LNG Klaipeda to serve as the FSRUs technical operator for a minimum of 5 years, with the possibility to extend it for an additional five years, it said in a statement issued on Friday. This company belongs to the Hoegh LNG group, which is the current owner of the FSRU and has been taking care of its operation and technical maintenance since 2014, KN said. In total three international shipping companies that passed the initial selection stage participated in the tender, including Wilhelmsen Ship Management and Mitsui O.S.K. Lines. (MOL), KN said. "The bid of Hoegh LNG Klaipeda met the requirements, the most important of which are the price and quality of the service," it said.

### Lower costs

Until now, the share of the operator's services was included in the total price of the time charter party agreement price, KN said. After FSRU Independence becomes the property of Lithuania, the services will need to be purchased separately. KN estimates that after taking over of the FSRU, the total annual terminal costs will be about one third lower than if the lease is extended under the terms of the current agreement. The firm says that the operating costs of the FSRU will consist of fixed and variable parts. About a third of the amount, i. e. 4.85 million euros (\$5.19 million) per year, will be a fixed part: vessel management fee and crew costs, excluding taxes applicable in Lithuania. Variable costs will depend on the FSRU need for repairs, regasification volumes, and the price of emission permits directly related to them, as well as other components, KN said.

### Energy security

"Klaipeda LNG terminal is strategically important for the energy security of both Lithuania and the Baltic States, it is the main regional alternative to the import of Russian natural gas. This became especially important after Russia's large-scale invasion of Ukraine," KN's CEO **Darius Silenskis** said in the statement. "The tender that we announced attracted a lot of interest, which ensured the competitiveness of the bids and allowed us to choose the most favorable option for Lithuania", he said. According to Silenskis, it is also important that the operator, who won the tender, will maintain the vessel, which will be flying the flag of Lithuania. Once the FSRU becomes the property of the country, it will be registered in the Register of Seagoing Ships of Lithuania and will be subject to the local legislation, and all taxes from salaries of sailors will supplement the country's

budget, he said. It is estimated that the alternative to the import of natural gas created by the terminal allows Lithuania to save about 140-150 million euros annually (without the cost of the terminal upkeep), Silenskis said. Source : [www.lngprime.com](http://www.lngprime.com)

## **JAPAN'S JOGMEC PUBLISHES SPOT LNG PRICE FOR FIRST TIME THIS YEAR**

State-run Japan Organization for Metals and Energy Security (JOGMEC) has published the first contract-based monthly spot LNG price since December 2022. JOGMEC did not publish both the contract-based and the arrival-based monthly spot LNG prices in the January-July period as there were less than two companies that imported spot LNG. Also, JOGMEC excludes LNG cargoes if spot LNG prices are linked to other indices, such as Henry Hub or JKM. The contract-based price in December 2022 was \$30.8/MMBtu. "The average price of spot LNG cargoes for delivery to Japan contracted in August 2023 and scheduled to be delivered from the month onward (contract-based price) was \$11.6/MMBtu," JOGMEC said. The firm did not publish the arrival-based price or the average price of spot LNG cargoes that were delivered in Japan within the month of August regardless of the month when the contract was made, it said.

### **Australian strike, Japan's LNG inventories**

JOGMEC said in a separate report that the Northeast Asian assessed spot LNG price JKM for the previous week (September 4 - 8) fell from the "high US\$13s of the previous week to the high US\$12s on September 7 amid market participants' expectation that supply risks from Australia would ease in the future and that inventory levels would remain comfortable." "The following day, September 8, JKM rose to the low US\$13s due to the start of strikes at Wheatstone and Gorgon in Australia," it said. Japan's METI announced on September 6 that Japan's LNG inventories for power generation totaled 1.73 million tonnes as of September 3, up 0.28 million tonnes from the previous week. The country's Ministry of Finance has not yet published its data for LNG imports in August. Japan's monthly LNG imports continued to decline in July, dropping by 17.4 percent year-on-year in July to about 5.09 million tonnes. LNG imports dropped by 13.3 percent year-on-year in January-June to 32.62 million tonnes. Source : [www.lngprime.com](http://www.lngprime.com)

## **NOVATEK'S YAMAL PROJECT PRODUCES 100 MILLION TONS OF LNG**

Russian LNG exporter Novatek has produced 100 million tons of liquefied natural gas at the giant Yamal LNG project since its launch in December 2017. Novatek announced this milestone in a statement issued on Friday saying that Yamal LNG has become the LNG industry's "outstanding" producer in terms of the project execution and operational excellence. The 17.4 mtpa Yamal LNG plant in Sabetta has three 5.5 mtpa liquefaction trains, and one smaller unit with a capacity of about 900,000 tons per year which features Novatek's domestic liquefaction tech, Arctic Cascade. Besides Novatek that holds 50.1 percent

in Yamal LNG, other shareholders include France's TotalEnergies and China's CNPC with a 20 percent stake, each, and the Silk Road Fund that owns a 9.9 percent share. Novatek said in the statement that the plant has been operating at 20 percent above-nameplate capacity. The project's share in global LNG production is about 5 percent, according to Novatek. It gets supplies from from the South-Tambeyskoye gas field. Earlier this year, Yamal LNG produced its billionth cubic meter of gas from the South-Tambeyskoye gas and condensate field's Jurassic reservoirs since the start of production in 2020. In addition to Yamal LNG, Novatek is working to launch production from the first gravity-based structure platform, or train, which will serve its Arctic LNG 2 project located on the Gydan peninsula. Last month, the firm completed the installation of the first GBS on the underbase foundation on the seabed at the Utrenniy terminal on Gydan. The project will have three trains in total. Novatek expects to launch production from the first unit by the end of this year and to reach its full capacity of 6.6 mtpa during the first quarter in 2024. The resource base of the Arctic LNG 2 project is the Utrenneye field located on the Gydan Peninsula in the YaNAO, about 70 km from the Yamal LNG project across the Gulf of Ob. Novatek is the LNG project's operator with a 60 percent stake, France's TotalEnergies owns 10 percent, while CNPC and CNOOC of China have 10 percent, each. Japan Arctic LNG, a consortium of Mitsui & Co and Jorgmec, owns a 10 percent stake in the project as well. Source : [www.lngprime.com](http://www.lngprime.com)

## **ITALY'S SAIPEM SCORES RAVENNA FSRU GIG**

Italian contractor Saipem has secured a contract for Snam's planned FSRU-based LNG import project offshore Ravenna in the Adriatic Sea. Besides this contract, Saipem also won a contract from its biggest shareholder Eni and partner Petroci for the Baleine Phase 2 project offshore Ivory Coast. Both of these contracts are worth 850 million euros (\$911.7 million), according to a statement by Saipem. Saipem, through a temporary association of companies with Rosetti Marino and Micoperi, won the FSRU contract from Snam Rete Gas, it said. Moreover, the deal includes the construction of the facilities for the new floating storage and regasification unit (FSRU) to be located offshore Ravenna, Italy. According to Snam, the project consists of the engineering, procurement, construction, and installation (EPCI) of a new offshore facility, linked to the existing one, for the docking and mooring of the FSRU. The facility will be connected to shore via a 26" offshore pipeline 8.5 km in length, plus a 2.6 km onshore pipeline and a parallel fibre optic cable. In addition, the shore crossing will utilize a microtunneling system to minimize environmental impacts, it said. Saipem said that its pipelay barge Castoro 10 will execute the offshore operations. "The new FSRU will enable an increase in Italy's LNG import capacity, thus improving the country's energy security thanks to the diversification of gas sources," the firm said. Italy's Rosetti Marino said in a separate statement that activities on the Ravenna FSRU contract will start immediately and are expected to be completed by November 2024. Last year, Snam purchased BW LNG's 2015-built FSRU BW Singapore for \$400 million, and plans to install it off Ravenna next year. The FSRU has a maximum storage capacity of about 170,000 cubic meters of LNG and a nominal continuous regasification capacity of about 5 billion cubic meters per year. It currently works in Egypt and the FSRU's charter contract with Egas expires in

November 2023. Snam already launched this year the FSRU-based LNG import terminal in the Italian port of Piombino. The company purchased Golar Tundra with a regasification capacity of 5 bcm from Golar LNG last year for \$350 million, and the unit arrived in Piombino from Singapore in March. This is Italy's fourth large LNG terminal and also the second FSRU-based facility. Snam owns the Panigaglia facility and has stakes in the FSRU Toscana and the Adriatic LNG import terminal. Source : [www.lngprime.com](http://www.lngprime.com)

## **SPANISH LNG IMPORTS, RELOADS DROP IN AUGUST**

Spanish liquefied natural gas (LNG) imports and reloads declined in August compared to the same month last year, according to Enagas. LNG imports dropped by 7.3 percent to about 22.3 TWh in August and accounted for 69.1 percent of the total gas imports. In July, LNG imports reached some 20.5 TWh. Including pipeline imports from Algeria, France, and Portugal, gas imports to Spain reached about 33.8 TWh last month, a drop from some 38 TWh in August last year, Enagas said in its monthly report. Moreover, national gas demand in August dropped by 11.6 percent year-on-year to some 25 TWh. Demand for power generation declined by 37.2 percent year-on-year to about 10.4 TWh last month, while conventional demand rose by 24.8 percent to 14.6 TWh, the LNG terminal operator said. Enagas operates a large network of gas pipelines and has four LNG import plants in Barcelona, Huelva, Cartagena, and Gijon. It also owns 50 percent of the BBG regasification plant in Bilbao and 72.5 percent of the Sagunto plant, while Reganosa operates the Mugarodos plant. Last month, Spanish power group Endesa delivered the first commercial cargo to the El Musel LNG terminal in Gijon. Enagas awarded the logistics services contract to Endesa in July.

### **US biggest LNG supplier**

The seven operational Spanish LNG regasification terminals, including El Musel, unloaded 25 cargoes last month, the same number of cargoes compared to August 2022, according to Enagas. The US regained the title of the biggest LNG supplier to Spain last month after Russia was the biggest supplier for three months in a row. Spanish LNG terminals received 10.89 TWh from the US in August, a rise from 10 TWh last year. US volumes accounted for 32.2 percent of all of the Spanish gas imports in August, the data shows. Nigerian LNG volumes to Spain rose from 5.83 TWh in August 2022 to 6.85 TWh last month, while Russian volumes dropped from 4.50 TWh to 3.32 TWh last month. Other LNG sources in August include Qatar and Algeria, the data shows.

### **LNG reloads drop**

Spanish LNG terminals loaded about 2.25 TWh in August, down 52 percent compared to some 4.65 TWh in August 2022 but up compared to 0.38 TWh in July. The Cartagena LNG terminal reloaded about 1.13 TWh of LNG, followed by the Sagunto terminal with about 0.90 TWh. On the other hand, the number of truck loads at the LNG terminals rose by 21.4 percent year-on-year to 896, the data shows. The Huelva LNG terminal completed 270 truck loads in August, followed by Barcelona with 154 truck loads, and Sagunto with 153 truck loads. Source : [www.lngprime.com](http://www.lngprime.com)

## CHEVRON ASKS AUSTRALIA'S FAIR WORK COMMISSION TO RESOLVE LNG STRIKE

A unit of energy giant Chevron has asked Australia's Fair Work Commission to help resolve its ongoing dispute with unions representing its workers on the Gorgon and Wheatstone LNG projects as a partial strike continues. Workers at Chevron's Gorgon and Wheatstone LNG plants have started protected industrial action on Friday after talks between the energy giant and unions ended without an agreement. There are currently stoppages and specific work bans occurring across Chevron's Wheatstone and Gorgon sites for periods during the day. LNG Prime understands that there is currently no impact on LNG production at the 15.5 mtpa Gorgon LNG plant and the 8.9 mtpa Wheatstone LNG plant near Onslow. However, the Offshore Alliance, which includes the Maritime Union of Australia and Australian Workers' Union, has provided Chevron with a notice that work bans may apply for up to 24 hours a day from Thursday, September 14. Last week, Chevron has been trying to narrow points of difference with employees and their representatives through further bargaining mediated by Australia's workplace tribunal FWC. "While industrial action has started, Chevron Australia remains committed to attaining an agreement that achieves market competitive outcomes which are in the interests of both our employees and our company," a Chevron Australia spokesperson said on Monday. "Unfortunately, following numerous meetings and conciliation sessions with the Fair Work Commission, no agreement has been reached as the unions are asking for terms significantly above the market," the spokesperson said.

### **"Intractable bargaining declarations"**

"Given we consider there is no reasonable prospect of agreement, we will now apply for intractable bargaining declarations for the Gorgon and Wheatstone downstream facilities," the spokesperson said. Chevron filed these applications on Monday. This follows the application for the Wheatstone platform the company filed on September 4. "We will seek to have these applications heard with the existing application for the Wheatstone platform," the spokesperson said. First meeting will take place on Tuesday at the Fair Work Commission. The Australian government inserted the intractable bargaining declaration provisions into the fair work act in June 2023 as a "circuit breaker" when there is no prospect of agreement between the parties. A bargaining representative can apply for an "intractable bargaining declaration" if the parties have been bargaining for at least 9 months and have reached an impasse, have already tried to resolve the bargaining dispute including by making an application to the commission, and want further assistance to resolve the dispute, FWC's website shows. "If the commission makes an intractable bargaining declaration and bargaining representatives still can't resolve the dispute, the commission must make an intractable bargaining workplace determination," it said. Source : [www.lngprime.com](http://www.lngprime.com)

## NOVATEK, ROSSETI INK MURMANSK LNG POWER SUPPLY PACT

Russian LNG exporter Novatek is moving forward with its plans to develop the Murmansk LNG project and has signed a deal with compatriot firm Rosseti to secure power for the development. According to a statement by Novatek, the two firms signed on Tuesday a strategic partnership agreement to supply power to the Murmansk LNG project. Novatek said the agreement would enable “timely start of power supply to the company’s prospective large-scale Murmansk LNG project, whose distinctive feature is the use of electric drives for process compressors instead of gas turbines.” The company’s chairman **Leonid Mikhelson** said in the statement that Novatek’s strategy “envisages significant ramp up of LNG production, and we have already started implementing our next large-scale project in the Murmansk region.” “For the Murmansk LNG project, we have chosen to use electricity rather than gas to drive the liquefaction process. The solution will help to speed up the project’s implementation while utilizing technology from Russian suppliers, and will also ensure a strong environmental performance of the project by reducing carbon emissions,” he said.

### Large LNG production capacity

Novatek currently exports LNG via its 17.4 mtpa Yamal LNG plant and the mid-scale facility with a capacity of 660,000 tons in Vysotsk. The firm is also building the 19.8 mtpa Arctic LNG 2 plant and recently completed the installation of the first of three trains which will serve the project. Novatek is planning to start commercial operations from this unit in the first quarter of 2024. Reports previously said that the Murmansk LNG project would have three trains and a total capacity of about 20.4 mtpa. In June, Novatek obtained a Russian patent for its proprietary technology called “Arctic Mix” for large-scale natural gas liquefaction using mixed refrigerants. According to Novatek, the firm developed this LNG process technology to implement the company’s large-scale projects on gravity-based structures with a production capacity of 6+ mtpa per LNG train. Source :

[www.lngprime.com](http://www.lngprime.com)

## KARPOWERSHIP JOINS FORCES WITH GALILEO TO WORK ON FLNG SOLUTIONS

Turkey’s Karpowership, part of Karadeniz, is joining forces with Argentina-based Galileo Technologies to develop solutions in the FLNG sector and other areas. In that regard, the two firms have signed a memorandum of understanding on September 9 in Singapore to form a strategic partnership in a range of technical and commercial areas, according to a statement by Galileo. Karpowership aims to expand its activities into the natural gas, biomethane, hydrogen, and LNG space by leveraging its experience with floating energy infrastructure, the statement said. The partnership includes strategic cooperation in technical and commercial areas, equipment and services supply, joint solution development, and also a potential investment in Galileo by Karpowership for developing “innovative” solutions in the FLNG sector and other areas in transition energies, it said.

### Modular liquefaction units

Karpowership launched its first LNG-to-power project in Indonesia in 2020. The firm owns floating storage and regasification units (FSRUs) as part of its joint venture with Japan's MOL, KARMOL. Also, the Turkish firm today owns and operates a fleet of 36 powerships with 6,000 MW installed capacity, according to its website. "By expanding into floating liquefaction infrastructure with Galileo's support, we will be further securing our reliability and flexibility of supply while also helping customers develop their indigenous gas resources in a more environmentally conscious and cost competitive way," **Orhan Karadeniz**, CEO of Karpowership, said in the statement. As per Galileo, the firm is developing solutions for natural gas and alternative fuels, including small stations for fueling of LNG and CNG vehicles. To date, there are only five operational floating LNG producers globally, the statement noted. Karpowership aims to leverage Galileo's modular liquefaction units, known as 'Cryobox', to become a "one-stop solution provider", from upstream production through transportation, storage, consumption, and also power generation, the statement said. Both firms will share technical and commercial know-how to develop and implement their natural gas, biomethane, hydrogen, and LNG solutions globally, they added. Source : [www.lngprime.com](http://www.lngprime.com)

### **LOADED FSRU ON WAY TO FRANCE'S LE HAVRE**

The FSRU Cape Ann, chartered by TotalEnergies, has loaded a cargo off Gibraltar via a ship-to-ship operation and is on its way to France's Le Havre to start serving the country's first FSRU-based LNG import terminal. TotalEnergies charts this 2010-built 145,130-cbm vessel from Hoegh LNG, which has a 50 percent stake in Cape Ann and Japan's MOL, which owns a 48.5 percent stake. Tokyo LNG Tanker holds a 1.5 percent share in the unit. The 2008-built 165,500-cbm, Seapeak Arwa, completed the LNG cargo delivery to Cape Ann on Tuesday at the Gibraltar West anchorage, the vessel's AIS data shows. Prior to that, Seapeak Arwa loaded the shipment at Equinor's Hammerfest LNG export plant in Norway where TotalEnergies has a stake, the data shows. Cape Ann left Gibraltar after the loading operation and is now sailing towards France. According to the data, the FSRU is expected to arrive in Le Havre on September 16. Following the arrival of the FSRU, TotalEnergies LNG Services France (TELSF), a unit of TotalEnergies and operator of the Le Havre LNG terminal will work on commissioning and start-up of the facility. A spokesperson for TotalEnergies recently told LNG Prime that the FSRU is scheduled to arrive in Le Havre by mid-September and that the project is on track to start operations by the end of the month. The spokesperson also said that a new binding open season started on August 28 to market available capacities from January 2024 to September 2028. France currently hosts four onshore LNG terminals with a capacity of about 26.8 mtpa. These are Elengy's Fos Tonkin, Fos Cavaou, and Montoir-de-Bretagne LNG terminals, and also the Dunkirk LNG facility. The FSRU project in Le Havre will allow France to increase its regasification capacity by around 5 Bcm per year. TotalEnergies previously said it plans to reserve about 50 percent of this capacity. Besides the FSRU, Paris-based LNG engineering giant Technip Energies won a contract last year from TotalEnergies to provide a marine loading arm for the Le Havre facility. TotalEnergies will operate the FSRU and GRTgaz will operate the connecting pipeline to the gas transmission network. Source : [www.lngprime.com](http://www.lngprime.com)

## DYNAGAS LNG APPOINTS NEW BOARD MEMBER

LNG carrier operator Dynagas LNG Partners said that Dimitris Anagnostopoulos has joined the company's board of directors. According to a statement by Dynagas LNG, Anagnostopoulos will serve as a Class III director to fill the vacancy resulting from the death of Levon A. Dedegian. The LNG shipping firm also appointed Anagnostopoulos to the conflicts committee and the compensation committee of the company's board. Moreover, Dynagas LNG said that its board has determined that Anagnostopoulos qualifies as an "independent director" as such term is defined under the US Securities Exchange Act of 1934, as amended, and meets the independence standards under applicable NYSE rules. Anagnostopoulos has over 41 years of experience in shipping, ship finance, and banking. Throughout his career, he has held various posts at the National Investment Bank of Industrial Development (ETEBA), Continental Illinois National Bank of Chicago, the Greyhound Corporation, and with ABN AMRO, where he spent nearly two decades, Dynagas LNG said. Dynagas LNG owns six LNG carriers which operate under long-term charters. The vessels are the 2007-built Clean Energy and Ob River, the 2008-built Amur River, and the 2013-built Arctic Aurora, Yenisei River, and Lena River. In June, the NYSE-listed limited partnership formed by shipowner Dynagas posted a net income of \$9.6 million for the three months ended March 31, 2023. This marked a decrease of \$14.3 million, or 59.8 percent, compared to the same period last year. Dynagas LNG will release its second-quarter results on September 14. Source : [www.lngprime.com](http://www.lngprime.com)

## SEMPRA, KKR WRAP UP PORT ARTHUR LNG STAKE SALE

US LNG player Sempra Infrastructure, a unit of Sempra, has completed the sale of a 42 percent non-controlling interest in its Port Arthur LNG Phase 1 project to compatriot private equity firm KKR. Sempra Infrastructure took a final investment decision on March 20 for the first phase of its Port Arthur LNG export project worth about \$13 billion. The first phase of the Port Arthur LNG project will have two trains with a total capacity of about 13 million tonnes per annum and two storage tanks with a capacity of 160,000 cbm. In March, Sempra Infrastructure said that it will sell an indirect, non-controlling interest in the project to an infrastructure fund managed by KKR. Also, the firm said that KKR will acquire a 25 percent to 49 percent stake. Sempra Infrastructure announced the completion of the 49 percent stake sale in a statement issued on Tuesday. The transaction, which closed in accordance with the terms previously disclosed, results in Sempra Infrastructure retaining a controlling 28 percent indirect interest in Phase 1 at the project level, and ConocoPhillips owning the remaining 30 percent interest, the company said. "The closing of this transaction continues the positive momentum of our world-class Port Arthur LNG facility and highlights Sempra Infrastructure's ability to access capital to support the growth of its infrastructure business," **Justin Bird**, CEO of Sempra Infrastructure, said.

### ***Construction moving forward***

US engineering and construction giant Bechtel won the EPC contract for the first phase of the project. Over 2.8 million hours of work have been completed since construction began this spring, with no lost-time incidents, Sempra Infrastructure said in

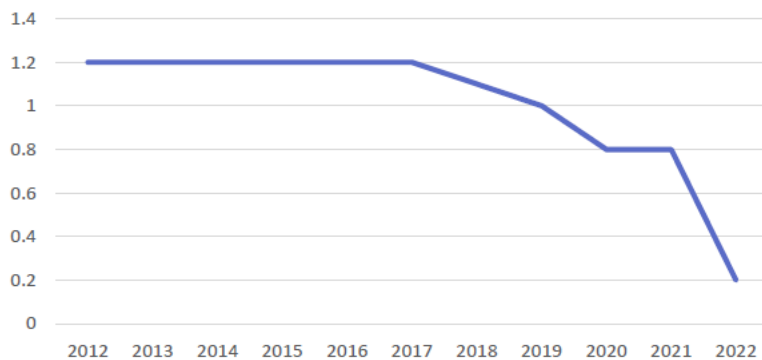
the statement. Sempra Infrastructure's unit Port Arthur LNG said in a recent monthly status report filed with FERC that construction-related activities during August included site clearing, grubbing, stripping, soil stabilization activities, dredging, piling, and maintenance of ECD's. During September, Bechtel will continue with site preparation, soil stabilization, and pile driving activities, it said. The first phase of the project is fully subscribed with 10.5 Mtpa under binding long-term agreements. Sempra Infrastructure previously entered into long-term agreements with each of ConocoPhillips, Ineos, Engie, RWE, and PKN Orlen. The expected commercial operation dates for Train 1 and Train 2 are 2027 and 2028, respectively. Source : www.lngprime.com

## MOROCCO TURNS TO LNG IN THE FACE OF PIPELINE INSECURITY

Morocco is the latest country to enter the LNG market. Like Europe's expansion of its LNG import capacity, the motivation is the loss of pipeline supplies from a neighbouring exporter, owing to a breakdown in political relations. This is not how it was

**FIGURE 1** Morocco's gas consumption tanked in 2022 (bn m3)

Source: Energy Institute



supposed to be. Large infrastructure projects - pipelines - were supposed to bind countries together in mutual economic benefit. However, Algeria, which has sufficient alternative export capacity, has been prepared to use gas as an economic lever in its dispute with Morocco and Spain over the Western Sahara.

### Transit gas truncated

Algeria cut off gas supplies to Spain through the Maghreb-Europe pipeline, which passes through Morocco, in the fourth quarter of 2021. Morocco had

received a small proportion of the transit gas as a royalty, and consequently found itself unable to supply its two gas-fired power stations, Tahddart and Ain Ben Mathar. Together these have 1,735 MW out of total installed capacity in the country of just over 11 GW. The two plants consumed most of the Algerian gas with just over a tenth used by industry. Moroccan gas consumption fell to just 0.2bn m3 last year, according to Energy Institute data (see figure 1), down from 0.8bn m3 in 2021 and 1.2bn m3 in 2017. The gas consumed came from domestic production, which is small, and reversed flows via the section of the Maghreb-Europe pipeline which links Morocco with Spain.

## LNG market entrant

Gas continued to flow from Algeria to Spain via the 756-km subsea Medgaz pipeline, but as Spain otherwise sources its gas imports as LNG, Morocco became a defacto LNG consumer for the first time. This position has now been cemented by the

signing of a deal between Anglo-Dutch LNG major Shell and Morocco's power and water utility ONEE in July for 0.5bn m3/yr of regasified LNG for 12 years. The gas will arrive in chilled form at Spanish LNG import terminals before being sent south via the Maghreb-Europe pipeline. Morocco looked at the construction of on and offshore LNG import terminals, but the availability of floating regasification and storage units (FSRU) dried up in the wake of Russia's invasion of Ukraine and the subsequent rush by European countries to secure FSRUs to expand their own LNG import capacity. As Spain already has spare regasification capacity, but lacks the export infrastructure to send gas further into Europe, using the existing pipeline infrastructure made sense both from an economic point of view and in terms of the speed with which gas could be supplied.



Source: International Mapping.

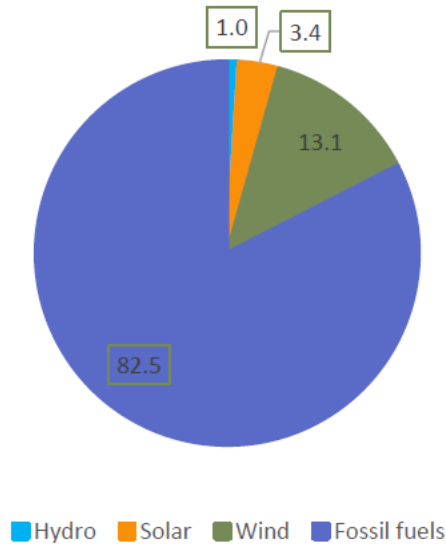
## Power exports turn to imports

Morocco's loss of Algerian gas also had another impact. In 2021, Morocco was a net exporter of power to Spain via two interconnectors, which together have a capacity of 1,400 MW. The country's power surplus, in combination with its largely undeveloped renewable energy resources – both solar and wind – have been widely touted as a basis for the expansion of green electricity exports to Europe. The start of reversed pipeline gas flows in late June 2022 allowed the reactivation of the Tahddart and Ain Ben Mathar gas plants in July last year, but the high cost of LNG in 2022, and the impact on Morocco's gas subsidy bill, meant imports were kept to a minimum.

Owing to the inactivity of the gas plants, last year there was no power surplus and instead Spain exported on a net basis to Morocco.

**FIGURE 2** Electricity generation in Morocco, 2022 (%)

Source: Energy Institute



**Gas' role in Morocco's climate plans**

Morocco's generation mix is dominated by coal. According to ONEE, the country has 4,641 MW of coal-fired generation. Fossil fuels combined last year generated more than 80% of the country's electricity, owing in part to very low hydropower output, the result of drought conditions. In line with its climate goals, Morocco intends to phase out its coal-fired generation completely by 2050. However, renewable energy capacity is growing only slowly (see figure 2).

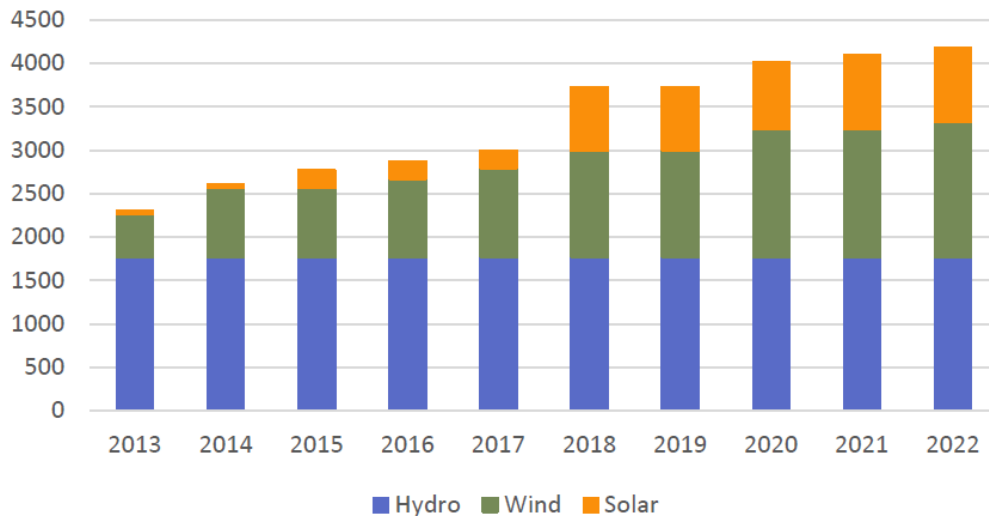
According to the International Renewable Energy

Agency, the country's hydro capacity has remained at 1,306 MW for the last decade, excluding pumped storage. Installed solar is 858 MW, of which 540 MW is concentrated solar power and the remainder solar PV, while wind has grown from 1.022 GW in 2017 to 1.556 GW last year (see figure 3).

More wind and solar farms are under construction as well as two pumped hydro projects, which will add flexibility and resilience to the electricity grid. But the capacity of generation projects under construction – about 800 MW of wind and 1 GW of solar – remain relatively modest in terms of the amount of electricity they will actually generate.

**FIGURE 3** Morocco's renewable energy capacity growth (MW)

Source: IRENA



Increased gas-fired generation is, in any case, a central part of the plan to phase out coal. The government is targeting an additional 2,400 MW of gas-fired power plants by 2030. In May, ONEE issued a tender for construction of a 900-MW open-cycle gas-fired plant to be sited close to both the Al-Wahda dam and the Maghreb-Europe gas pipeline.

### **Domestic production hopes**

Rabat is also pinning its hopes on a number of recent gas discoveries in the country, which could expand the current low level of domestic gas production. Chariot Energy operates the 1,794-km<sup>2</sup> Lixus offshore licence in nearshore water depths of up to 840 m. The licence has two discoveries, Anchois-1, with contingent resources of 361bn ft<sup>3</sup> (10.2bn m<sup>3</sup>) and the more recently drilled Anchois-2, which identified dry gas across seven reservoirs with about 150m of net pay, according to company reports. Chariot says that the Anchois gas field now has contingent resources of 637bn ft<sup>3</sup> with additional on-block exploration potential. Contingent resources assess potentially recoverable gas, but not the economic viability of recovery. The spread of gas across multiple reservoirs could be problematic. Nonetheless, Chariot completed the front-end engineering and design of key components of the Anchois gas development in March, at which point it said engineering, procurement and construction proposals had been requested. The development will initially consist of three subsea production wells, including Anchois-2. The gas will be processed at a facility onshore and a tie-in agreement to the Maghreb-Europe pipeline has already been signed. Production capacity initially will be 100mn ft<sup>3</sup>/d. Chariot also signed in early August a new petroleum agreement for exploration on the Loukos onshore licence, which lies adjacent to its offshore licences. Predator Oil & Gas and SDX Energy are also active in the Moroccan gas sector. In June, Predator announced that its MOU-3 well had identified two new potential gas reservoirs on the Guercif Petroleum licence onshore. The company has identified six targets in addition to the newly-discovered shallow gas zones. SDX Energy in November last year announced two discoveries from the SAK-1 and KSR-20 wells, the first of which has already been linked up to SDX's existing infrastructure. According to the company, the discoveries open up a new area to the north-west of SDX's current production zone. The company has four concessions in the Gharb basin in northern Morocco. In June, SDX announced the renegotiation of one of its gas sales agreements, allowing it to expand its summer exploration programme. Owing to the loss of Algerian imports, gas prices are high making even relatively small discoveries commercially viable. In addition, Morocco has an attractive fiscal regime for gas production, including a total exemption from corporation tax for 10-years. The government's stake in licences is capped at 25% and exploration and production benefit from a range of other tax exemptions. As a result, investment in gas is arguably more attractive than the electricity sector, where no competitive wholesale market exists, transmission and distribution fees are high and infrastructural limitations in the domestic grid are large. Although it remains early days for these discoveries, they could make a significant difference to Morocco's gas balance.

However, ONEE's willingness to sign up to a 12-year LNG supply deal with Shell indicates that it, at least, expects domestic gas in the short-to-medium term to meet only a proportion of the country's demand, and there is no clarity, beyond LNG, as to how new gas-fired plant will be supplied.

### **Long-shot pipeline option**

Another gas supply possibility are the various plans for a Nigeria-Europe gas pipeline. There are two versions of this scheme, both of which would require a host of intergovernmental agreements and billions of dollars in investment for a project which would take years to complete. One plan is to take the pipeline directly north through Niger, where a coup has raised questions about cooperation and security, and into Algeria, which would be of little benefit to Rabat, given the two countries' parlous relations. The second option is for the pipeline to skirt the West African coast and come through the Western Sahara to link up with the now under-used Maghreb-Europe pipeline, which would provide Morocco with plentiful gas for its own economy, as well as transit fees for the onward export of gas to Europe. Some agreements have been signed, but the project is a vast undertaking and dependent on gas supplies from Nigeria, where both oil and gas production experience recurrent interruptions.

### **Western Sahara remains a flashpoint in Algerian-Moroccan relations**

The dispute over the Western Sahara is a flash point for Algeria, a socialist republic, and Morocco, a constitutional monarchy, two countries which have grown apart since independence. Spain withdrew from the Western Sahara in 1975 and it was occupied by Morocco. Mauritania rescinded its claims to parts of the territory. The occupation was resisted by the Sahrawi Arab Democratic Republic (SADR) and its armed wing the Polisario Front. Algeria supports the SADR and independence. Morocco views the Western Sahara as its sovereign territory. Algeria has provided military support to the Polisario Front, as well as providing refuge for its leaders and establishing Sahrawi refugee camps within its borders. Algiers has accused Rabat of supporting the Movement for the Self-Determination of Kabylie and the Islamist Rachad Movement, both of which it categorises as terrorist organisations. Morocco's claim that the Western Sahara is sovereign territory is not recognised by the UN. Only the US, under Donald Trump, recognised the claim when Rabat normalised its relations with Israel. In July this year, Israel also changed its position in support of Morocco. In March 2022, Spain expressed its support for Morocco's autonomy plan for the Western Sahara. The UN and the International Court of Justice have ruled that Morocco's attempts to annex the territory are illegal. The UN categorises the Western Sahara as a non-self-governing territory. A referendum on independence, agreed in the late 1980s, has never been held. The Western Sahara's primary resources are its oceanic fishing grounds and large reserves of phosphate rock, which is used in the production of phosphate fertilisers, as well as containing significant amounts of uranium. Given its high solar irradiance, the territory has huge solar potential as well as a substantial wind resource.

Source : [www.naturalgasworld.com](http://www.naturalgasworld.com)

## **QATARGAS BECOMES QATARENERGY LNG**

LNG producer Qatargas, a unit of QatarEnergy, has changed its name to QatarEnergy LNG. Established in 1984, Qatargas currently operates 14 LNG production trains with a capacity of about 77 Mtpa in Ras Laffan. However, state-owned QatarEnergy is significantly increasing LNG production from the North Field. This first phase of the expansion project will increase Qatar's LNG production capacity from 77 to 110 Mtpa, while the second phase will further boost capacity to total 126 Mtpa. QatarEnergy, previously known as Qatar Petroleum, changed its name in October 2021 to reflect its role as an active global partner in the energy transition. Qatar's energy minister and chief executive of QatarEnergy, **Saad Sherida Al-Kaabi**, said in a statement on Thursday that this new transformation is part of a "historic evolution" that is reshaping Qatar's energy industry, particularly through the flagship LNG sector. Over the course of 39 years, Qatargas has been a pioneer of the LNG industry helping place Qatar firmly on the global LNG map, he said. "While we recognize the tremendous value that the Qatargas brand has accumulated over time, we believe that this evolution will further strengthen Qatar's global position by creating and leveraging a stronger salient link to the QatarEnergy brand to deliver even more value to the State of Qatar, its customers and the broader stakeholders' ecosystem," Al-Kaabi said. "In this context, we are reaffirming our belief in the future of LNG as a primary source of energy for decades to come and placing greater emphasis on the central position LNG occupies in our strategic priorities, development efforts, and energy investments," he said. Source : [www.lngprime.com](http://www.lngprime.com)

## **CHINA'S CNOOC LOADS FIRST LARGE LNG CARRIER AT ZHEJIANG IMPORT TERMINAL**

A unit of China National Offshore Oil Company (CNOOC) has completed the first reloading operation to a large LNG carrier at its Ningbo LNG import facility in Zhejiang since the launch of the plant in 2012. CNOOC's gas and power unit said in a statement that the 160,000-cbm LNG carrier, Kool Frost, has reloaded about 65,000 tonnes of previously imported LNG on September 11. After that, the 2014-built vessel owned by CoolCo departed the regasification facility in Zhejiang. State-owned CNOOC Gas and Power did not provide any additional information regarding this shipment or its final destination. Prior to this, the Zhejiang terminal became the first facility in Zhejiang province to provide LNG for LNG bunkering vessels. CNOOC's 30,000-cbm small-scale vessel, Hai Yang Shi You 301, loaded LNG at the Zhejiang LNG terminal in June and after that it delivered about 9,400 cbm to the LNG-powered containership, CMA CGM Unity. This was the first bonded LNG bunkering operation in the Zhejiang province and the first LNG bunkering operation for CNOOC in the Yangtze River Delta region.

### **Reloaded cargo arrives in Japan**

According to its AIS data provided by VesselValue, Kool Frost was on Thursday located offshore Japan's Himeji. Kpler said that the reloaded cargo is scheduled to be discharged at the Kansai Electric-operated Himeji LNG import terminal in the following days.

The Brussels-based data and analytics group claims that China previously re-exported LNG cargoes only from the Yangpu LNG terminal in Hainan, which has shipped nine cargoes this year to Japan, Korea, Thailand, Bangladesh, and Kuwait.

According to Kpler, Kansai Electric bought the spot LNG cargo probably to meet increased demand due to higher temperatures in Japan this month. Other Japanese utilities have recently bought spot cargoes possibly because of concerns over supply disruptions linked to strikes affecting Chevron's Gorgon and Wheatstone plants in Australia, it said. Kpler noted that China's LNG cargo re-export this week comes as state-owned Unipecc has issued a tender to buy 24 LNG cargoes for delivery to China from November 2023 to December 2024. Source : [www.lngprime.com](http://www.lngprime.com)

## **ALEXANDROUPOLIS FSRU CONVERSION NEARING COMPLETION**

Seatrium's yard in Singapore is finalizing the conversion work on the 153,600-cbm FSRU that will serve Gastrade's FSRU-based LNG import project in Greece's Alexandroupolis. Gastrade said in a social media post on Tuesday that its managing director Konstantinos Sifnaios visited the FSRU at Keppel Offshore & Marine, now part of Seatrium, as the delivery of the converted unit is "getting closer". Sifnaios was accompanied by officials from some of Gastrade's shareholders, including GasLog, Bulgartransgaz, and DESFA, the firm said in the post. The company's shareholders are also founder Copelouzou and DEPA. Gastrade did not provide any additional information in the post. Bulgartransgaz said in a separate statement that its executive director Vladimir Malinov participated in the visit to the shipyard. "On site, the project shareholders were informed about a potential delay in implementation of the activities," Bulgartransgaz said. "In this regard, they discussed measures to optimize the construction of the floating unit of the liquefied gas terminal near Alexandroupolis," the firm said without providing further details regarding the potential delay.

### **First Greek FSRU**

Gastrade took the final investment decision on the project worth 363.7 million euros (\$390.5 million) in January last year and officially started construction in May the same year. Moreover, shareholder and LNG shipping firm GasLog told Keppel Offshore & Marine in February last year to proceed with the conversion of the 2010-built, GasLog Chelsea, to an FSRU. GasLog will sell this unit to Gastrade for about \$265 million. The vessel entered the yard in February this year and the partners renamed it to Alexandroupoli. With the Alexandroupolis project, Greece will get its first FSRU and the second LNG import facility, adding to DESFA's import terminal located on the island of Revithoussa. Gastrade is also planning to install a second FSRU offshore Alexandroupolis. Greece's first FSRU will connect to the gas grid via a 28 km long pipeline, which includes offshore and onshore sections, to supply the markets of Greece, Bulgaria, and also the wider region. Also, Denmark's Svitzer, a unit of Maersk, recently secured a contract from Gastrade to provide towage services for the latter's FSRU-based LNG import project in Alexandroupolis. Svitzer said the Alexandroupolis LNG terminal is set to become operational in the beginning



of 2024. Gastrade previously said that the project with a capacity of 5.5 Bcm could start commercial operation in the fourth quarter of this year. LNG Prime invited Gastrade to comment on the terminal's launch, but we did not receive a reply by the time this article was published. Source : [www.lngprime.com](http://www.lngprime.com)

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