



ATLANTIC LNG SHIPPING RATES CLIMB TO \$87,000 PER DAY, EUROPEAN PRICES STEADY

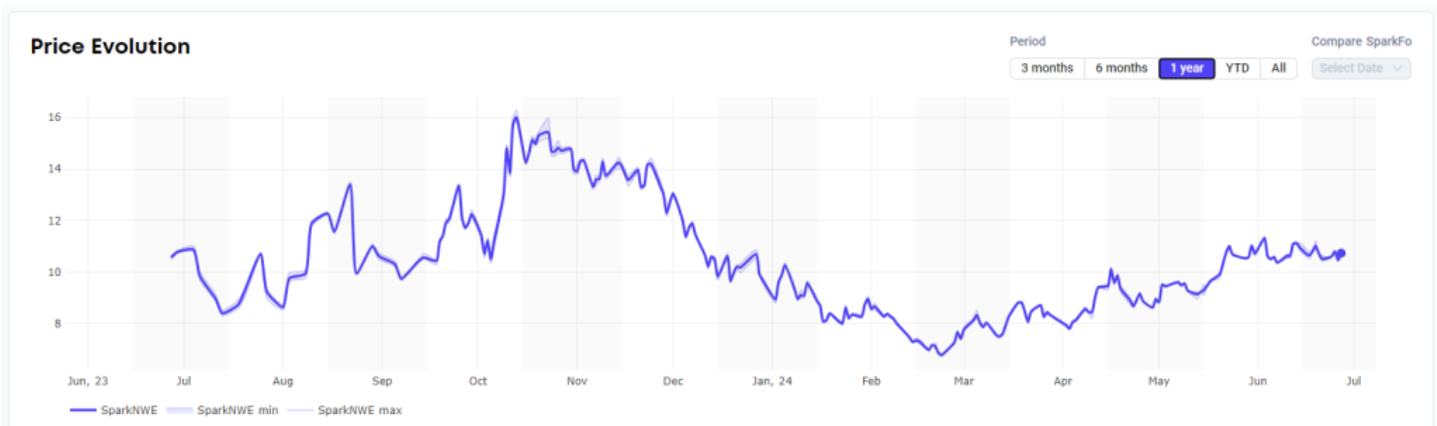
Atlantic spot liquefied natural gas (LNG) freight rates jumped this week, while European prices remained steady compared to the previous week. Last week, freight rates increased in both the Atlantic and Pacific basins. “Spark30s Atlantic rates continued to experience record week-on-week increases for 2024, rising by \$12,000 to \$87,000 per day and increasing by over \$35,000 in the last month. This mirrors a similar rally seen in 2023,” Qasim Afghan, Spark’s commercial analyst told LNG Prime on Friday.



At the same time, Spark25S Pacific rates are also starting to increase, rising by \$4,000 this week to \$51,750 per day, he said. “After an extremely steady period in April and much of May, Spark30S rates have increased by over \$30,000 in the last month, amid increasing demand in the Atlantic basin and the US arb to NE-Asia (via COGH) remaining open for July and August,” he said. “Whilst the US arb to NEA via COGH is currently closed, the arb to NEA via Panama remains open for the next few months, continuing to apply upward pressure on Atlantic freight rates,” Afghan said.

European prices

In Europe, the SparkNWE DES LNG front month was slightly up compared to the prior week. “SparkNWE DES LNG prices remained steady this week, with the front month price for July delivery assessed at \$10.731/MMBtu and at a \$0.12/MMBtu discount to the TTF,” Afghan said. He said DES LNG prices remain at “approximately the tightest discount to the TTF of the year”.



Data by Gas Infrastructure Europe (GIE) shows that volumes in gas storages in the EU continued to rise and storages were 76.20 percent full on June 26. Gas storages were 74.34 percent full on June 19, and 76.33 percent full on June 26 last year.

JKM climbs

In Asia, JKM, the price for LNG cargoes delivered to Northeast Asia, for August settled at \$12.660/MMBtu on Thursday. Last week, JKM for July settled at 12.465/MMBtu on Friday. JKM rose to 12.610/MMBtu on Monday and to 12.735/MMBtu on Tuesday, while it dropped to 12.620/MMBtu on Wednesday.

Egypt LNG tender

Several reports said this week that Egypt has awarded a large tender for LNG cargoes. S&P Global Commodity Insights said that Egyptian General Petroleum Corp., the parent company of EGAS, awarded a total of 20 cargoes on June 26. In addition to the original 17 cargoes, EGPC awarded three more cargoes, two of which were for August delivery and one for September delivery, S&P Global Commodity Insights said, citing an EGPC spokesperson. The company received offers from around 15 market players and the awarded tender comprised both fixed prices and TTF-linked cargoes. According to S&P Global Commodity Insights, the price levels ranged between TTF plus \$1.6/MMBtu and TTF plus \$2/MMBtu. The awardees included Total, BP, Vitol, Trafigura, and Aramco, the report said. In May, Norwegian FSRU player Hoegh LNG confirmed it has signed

a deal with Australian Industrial Energy (AIE) and Egypt's EGAS to deploy the 2019-built FSRU Hoegh Galleon to Egypt. The agreement with EGAS is for an interim period of June 2024 to February 2026. Hoegh Galleon arrived from the Sagunto LNG import terminal in Spain to Ain Sohna this month.

Wheatstone LNG back online

Chevron's 8.9 mtpa Wheatstone LNG export facility in Australia is now back offline. A Chevron Australia spokesperson told LNG Prime on Sunday that it has resumed full LNG and domestic gas production rates at the Wheatstone facility with the restart of the facility's two LNG trains and domestic gas plant. Chevron Australia suspended operations on the Wheatstone offshore platform on June 10 to repair the platform's fuel gas system. As the platform provides gas to Wheatstone's onshore facilities near Onslow, Western Australia, LNG and domestic gas production had been suspended as well. source: www.lngprime.com

AVENIR LNG LINKED TO VITOL ON CHARTER DEAL FOR LATEST NEWBUILDING

Shipowner and supplier Avenir LNG is being named as having agreed to charter one of its two freshly contracted LNG bunker vessel newbuilding's to Vitol. Bunker brokers indicated that the trader has snapped up the first of Avenir's 20,000-cbm LNGV's after floating a requirement in the market for three vessels to serve its emerging LNG bunkering business. Neither Avenir nor Vitol has commented on the reports but there are indications that further details on the charter may emerge shortly. In June, TradeWinds reported that Vitol had been in the market seeking LNGBV tonnage. Specifically, the company is said to have requested offers on two 20,000-cbm vessels and one of 12,500-cbm, and was said to be close to signing letters of intent on tonnage. The company traded more than 17m tonnes of LNG last year. In 2021, it set up Vitol Bunkers, which lists LNG as one of the products it supplies. In April, Avenir signed up to build two LNG carriers at Nantong CIMC Sinopacific Offshore & Engineering Co, where it has previously contracted tonnage. They are due to be delivered in the fourth quarter of 2026 and the first quarter of 2027. In May, Avenir told TradeWinds that the first vessel is committed for business, without giving details. The company, a joint venture between Stolt-Nielsen, Hoegh LNG and Golar LNG, described its second LNGBV newbuilding as "speculative" and said it is not holding further options at the shipyard. Avenir's new tonnage is part of a second growth phase for the company, which has tied up all its existing five small-scale LNG carriers on charters. It opted for the larger-end tonnage on these vessels in an effort to meet the demand to supply LNG bunker stems to the top size of LNG dual-fuelled container ship new buildings that will soon begin to deliver from shipyards in greater numbers. Those working in LNG bunkering have identified a gap in the supply of LNGBVs that will be needed to meet the dual-fuel vessels delivering from next year, with handovers ramping up through to the end of 2026. TotalEnergies Marine Fuels has estimated there will be a nominal demand from shipping for 9m tonnes of LNG as a fuel by 2025, depending on which fuels dual-fuel vessels sail on. This is expected to climb to 22m tonnes by 2030, generating a demand for between 35 and 40 new LNGBVs. As a result, bunker brokers said several new entrants are trying to break into the sector. source : www.tradewindsnews.com

QATAR DOMINATES FIRST-HALF LNG NEWBUILD ORDERBOOK

Big names dive in to firm up slots while others take their time due to high prices and berths dearth. Middle East producer Qatar Energy was responsible for almost 70% of all the 65 LNG newbuilding's contracted in the first half of this year, which has racked up more than double the vessels confirmed in the same period of 2023. The figures for 2024 were bolstered by the ongoing phase two of Qatar Energy's colossal LNG shipbuilding project which from January to June saw charter deals signed with owners on 45 new buildings worth just over \$12bn. The vessels will be built at yards in South Korea and China with delivery dates ranging from 2028 through to then end of 2031. The Qatari project business — which now stacks up at 122 LNG new buildings worth almost \$30bn — also included contracts for 18 of the so-called Qatar-China-Max, or QC-Max, vessels of 271,000-cbm which will be built by China's Hudong-Zhonghua Shipbuilding (Group). Qatar Energy has told associates it still needs more tonnage, with some indicating there could be a requirement for about 20 ships under a Phase 3. There has also been talk that the company may yet book berth space for more Q-Max tonnage at Korean yards. Aside from the Qatari-chartered new buildings, the first half of 2024 proved quiet on the ordering of conventional LNG tonnage. But Adnoc Logistics & Services dived in as a late entrant on 30 June to firm up and boost its letter of intent at two shipyards with eight firm vessels. Greece's Capital Gas was seen extending its fast-growing LNG fleet with four new buildings, while compatriot Evalend Shipping built on its initial four LNG new buildings with another pair of vessels. Qatar's shipping giant Nakilat ordered two LNG carriers for its own account. Sea Jade Investment, Hong Kong owner Wah Kwong Maritime's joint venture with Chinese leasing company CSSC (Hong Kong) Shipping and China Gas Holdings, firmed up two optional LNG slots at China's Dalian Shipbuilding Industry Company to give it a four-vessel LNG fleet. The other orders inked during the six months marked returns to ordering in specialised areas. Japan's Mitsui OSK Lines signed the first floating storage and regasification unit contracted since October 2022 with the FSRU contracted at a high priced \$363m for Poland's Gaz-System. Shipowner Avenir LNG returned to the newbuilding fray order booking two small LNG vessels in China. The year also kicked off with a \$1.5bn floating LNG production unit contracted at Samsung Heavy Industries for Canada's Cedar LNG — a project that took a final investment decision at the end of June. During the same month Wison New Energies said it had signed an engineering, procurement, construction, installation and commissioning contract with subsidiaries of Malaysia's Genting to build an FLNG unit for West Papua in Indonesia. Steel cutting for it began on 7 June. There are more LNG carrier orders in the works. A state-controlled Asian LNG producer is also reported to have signed a Lol for two vessels. A berth has been negotiated for another FSRU, this time to fill a requirement floated by Singapore LNG, and FLNG players expect a unit to be agreed upon within 2024 for the Eni-led Coral Nord project off Mozambique. But the picture is also becoming increasingly blurry on prospects for orders in the second half of 2024. Those following the LNG sector point to the high prices for new buildings which have remained stubbornly at about or slightly over the \$260m mark, although Adnoc L&S's buy may have offered some hope. This is compounded by the lack of available berths before 2028. It comes at a time when several energy majors and US producers have been looking at new LNG tonnage to handle the incoming growth production and trades while others have

been considering fleet renewal moves. But insiders said these projects are moving slowly in the face of these factors. The berth crunch could be eased in some quarters by the shareholders in planned project Mozambique LNG's decision to push delivery dates on 17 new buildings forward into 2028 and 2029 in that it may free up some earlier slots. Source: www.tradewindnews.com

US WEEKLY LNG EXPORTS REACH 29 SHIPMENTS

US liquefied natural gas (LNG) exports reached 29 shipments in the week ending June 26, and pipeline deliveries to US terminals decreased compared to the week before, according to the Energy Information Administration. The agency said in its weekly report that 29 LNG carriers departed the US plants between June 20 and June 26. Citing shipping data provided by Bloomberg Finance, the EIA said the total capacity of these LNG vessels is 105 Bcf. The EIA did not release its weekly report in the prior week due to holidays. US LNG terminals shipped 25 cargoes in the week ending June 12. Based on the agency's previous weekly reports, the 29 LNG cargoes sent during this week represent the highest number of cargoes this year.

Natural gas deliveries to US terminals

Average natural gas deliveries to US LNG export terminals decreased 0.4 Bcf/d from last week to 12.2 Bcf/d, according to data from S&P Global Commodity Insights. Natural gas deliveries to terminals in South Louisiana decreased by 5.3 percent (0.4 Bcf/d) to 7.2 Bcf/d, while natural gas deliveries to terminals in South Texas increased 0.3 percent (less than 0.1 Bcf/d) to 3.8 Bcf/d. The agency said that natural gas deliveries to terminals outside the Gulf Coast were essentially unchanged at 1.2 Bcf/d. Enbridge's Sabine Pass plant shipped nine cargoes and the company's Corpus Christi facility sent four shipments during the week under review. The Freeport LNG terminal shipped five cargoes and Sempra Infrastructure's Cameron LNG terminal shipped four cargoes, while Venture Global LNG's Calcasieu Pass facility and the Cove Point facility each shipped three cargoes during the period. Also, the Elba Island facility sent one cargo during the week under review.

Henry Hub up

This report week, the Henry Hub spot price rose 6 cents from \$2.39 per million British thermal units (MMBtu) last Wednesday to \$2.45/MMBtu this Wednesday. The agency said the July 2024 NYMEX contract expired this Wednesday at \$2.628/MMBtu, down 11.3 cents from last Thursday. Moreover, the August 2024 NYMEX contract price decreased to \$2.745/MMBtu, down 10.9 cents from last Thursday to this Wednesday. The price of the 12-month strip averaging August 2024 through July 2025 futures contracts declined 8.5 cents to \$3.268/MMBtu, the agency said.

TTF averaged \$10.75/MMBtu

The agency said that international natural gas futures were mixed this report week. Bloomberg Finance reported that weekly average front-month futures prices for LNG cargoes in East Asia increased 25 cents to a weekly average of \$12.61/MMBtu. Natural gas futures for delivery at the Dutch TTF decreased 27 cents to a weekly average of \$10.75/MMBtu. In the same week last year (week ending June 28, 2023), the prices were \$11.96/MMBtu in East Asia and \$10.72/MMBtu at TTF, the agency said. source: www.lngprime.com

VITOL ORDERS LNG BUNKERING DUO IN CHINA

Geneva-based energy trader Vitol has ordered two liquefied natural gas (LNG) bunkering vessels from China's CIMC Sino Pacific Offshore & Engineering in Nantong. Vito revealed the order in a statement issued on Wednesday. CIMC SOE will build for Vitol's unit Vitol International Shipping one 12,500-cbm and one 20,000-cbm LNG bunkering vessel. According to Vitol, the company will take delivery of the vessels in the fourth quarter of 2026 and the third quarter of 2027. Vitol did not reveal the price tag of the deal. In addition to the order, the trader also just signed a seven-year charter deal for one LNG bunkering vessel with UK-based small-scale player Avenir LNG. CIMC SOE is also building this 20,000-cbm vessel which will start serving Vitol in the fourth quarter of 2026. Pablo Galante Escobar, head of LNG, EMEA gas & power, Vitol said in the statement shipowners worldwide are looking to reduce their emissions. "We are delighted to strengthen our offering to them by investing in LNG/bio-LNG bunkering, thereby increasing their options," he said. Vitol boosted its LNG volumes in 2023 to about 17.3 million tonnes of LNG on the back of higher demand in Europe. The firm, which entered the LNG market in 2006, reported LNG volumes of about 14 million tonnes in 2022, 12.9 million tonnes in 2021, 10 million tonnes in 2020, and 10.5 million tonnes in 2019. Besides trading LNG, Vitol has also been investing in bio-LNG infrastructure for vehicles through its subsidiary ViGo Bioenergy. The trader says it is also one of the world's largest providers of bunker fuels, through its subsidiary Vitol Bunkers. source: www.lngprime.com

CHINA'S COSCO SHIPPING WORKING ON NEW LNG CARRIER ORDER

China's Cosco Shipping Energy Transportation has signed a letter of intent with compatriot shipbuilder Dalian Shipbuilding Industry (DSIC) to build more LNG carriers, according to shipbuilding sources. Sources told LNG Prime on Wednesday that the Lol includes the construction of two 175,000-cbm LNG carriers. The vessels would be equipped with WinGD dual-fuel engines with integrated ICER system, a reliquefaction unit, and GTT's Mark III Flex membrane containment system. No further information has been revealed. Based on the most recent LNG carrier order at DSIC, each LNG carrier is expected to be worth more than \$235 million. DSIC is already building three 175,000-cbm LNG carriers with the same specifications for a joint venture consisting of units of Cosco Shipping Energy Transportation and Sinopec under a deal signed in August last year. The deal is worth about \$700 million or some \$233.3 million per vessel and the delivery of the vessels is expected in 2027 and 2028. Following delivery, these LNG carriers will serve Sinopec under long-term charters deals to ship US LNG volumes Sinopec contracted from Venture Global LNG in November 2021, Sinopec previously said.

15 LNG carrier orders for DSIC

In March 2022, DSIC won its first large LNG carrier order for two ships from China Merchants Energy Shipping (CMES), a unit of China Merchants Group, and after that CMES added six more vessels. The shipbuilder recently launched the first CMES LNG carrier. Moreover, DSIC signed a deal in August last year to build two LNG carriers for a joint venture consisting of China Gas, Wah Kwong Maritime Transport, and CSSC Shipping. The three firms have ordered two more LNG carriers at DSIC in

April this year. DSIC currently has 15 large LNG carriers on order. If Cosco Shipping Energy Transportation orders these two new ships, the shipbuilder would have 17 LNG carriers on order. source: www.lngprime.com

HOEGH'S EGYPT FSRU GETS FIRST LNG CARGO

The 2021-built 174,000-cbm, Hellas Athina, owned by Latsco Shipping and chartered by commodity trader Trafigura, delivered the shipment to the FSRU from the Freeport LNG terminal in Texas, its AIS data provided by Vessels Value shows. Hellas Athina has already unloaded the shipment and it left Ain Sohna located on the western coast of the Gulf of Suez, about 43 km south from Suez, the data showed on Wednesday. In May, Norwegian FSRU player Hoegh LNG confirmed it has signed a deal with Australian Industrial Energy (AIE) and Egypt's EGAS to deploy the 2019-built FSRU Hoegh Galleon to Egypt. The agreement with EGAS is for an interim period of June 2024 to February 2026 and will help Egypt to address potential gas shortages and fuel power plants during summer months. Last month, Hoegh Galleon arrived loaded from the Sagunto LNG import terminal in Spain to Ain Sohna. Several reports said last week that Egypt has awarded a large tender for LNG cargoes. S&P Global Commodity Insights said that Egyptian General Petroleum Corp., the parent company of EGAS, awarded a total of 20 cargoes on June 26. In addition to the original 17 cargoes, EGPC awarded three more cargoes, two of which were for August delivery and one for September delivery, S&P Global Commodity Insights said, citing an EGPC spokesperson. The company received offers from around 15 market players and the awarded tender comprised both fixed prices and TTF-linked cargoes. According to S&P Global Commodity Insights, the price levels ranged between TTF plus \$1.6/MMBtu and TTF plus \$2/MMBtu. The awardees included Total, BP, Vitol, Trafigura, and Aramco, the report said. source: www.lngprime.com

PERU LNG TERMINAL SENT FOUR CARGOES TO DUTCH GATE IN JUNE

Peru LNG's liquefaction plant at Pampa Melchorita has shipped four liquefied natural gas cargoes to the Dutch Gate LNG import terminal in the port of Rotterdam in June, according to the shipment data by state-owned Perupetro. The 174,000-cbm Longships Manhattan, which departed the 4.4 mtpa Peru LNG plant on May 31 and is one of the five tankers which left the facility last month, also recently delivered its cargo to the Gate terminal, its AIS data provided by Vessels Value shows. As per the shipments in June, the 174,000-cbm Pan Americas, which departed the Peru LNG plant on June 10, is expected to arrive in Rotterdam on July 9, while the 173,400-cbm Valencia Knutsen, which left the Peru LNG plant on June 19, is expected to arrive in Rotterdam on July 13. The 170,000-cbm Methane Becki Anne left the Peru LNG facility on June 21 and was located offshore Uruguay on Tuesday and heading north, while the 174,000-cbm Malaga Knutsen left the Peru LNG facility on June 29 and is expected to arrive in Rotterdam on July 24, their AIS data shows.

Final destinations may change

The final destinations of these vessels may change in the meantime. If all of the shipments land at Gate, the LNG terminal would receive five cargoes shipped from the Peru LNG plant in a row. Prior to these shipments, Gate received a cargo from Peru in September 2023 and has never received more than two cargoes shipped from the Peru LNG facility in a row, the Perupetro data shows. LNG giant Shell holds 20 percent in Peru LNG and offtakes all the volumes. Shell also has long-term regasification capacity booked at the Gate facility owned by Gasunie and Vopak. US-based Hunt Oil holds a 50 percent operating stake in the Pampa Melchorita LNG plant, while Midocean Energy and Marubeni have 20 percent and 10 percent, respectively. Midocean Energy, the LNG unit of US-based energy investor EIG, completed in April its previously announced purchase of the 20 percent stake in Peru LNG from a unit of South Korean conglomerate SK.

Peru LNG plans to boost number of shipments this year

The four Peru LNG shipments loaded onboard the LNG carriers in June equal about 292,526 tonnes. These LNG cargoes compare to five cargoes (349,343 tonnes) in June last year and five cargoes (352,409 tonnes) in the prior month, while the plant shipped five cargoes in April, five LNG cargoes in March, four cargoes in February, and five cargoes in January. The facility increased its exports last year, and it also expects to boost the number of shipments in 2024. Peru LNG loaded 55 vessels in 2023, compared to 51 vessels in 2022. The LNG terminal operator previously told LNG Prime it expects to load 60 vessels in 2024. source: www.lngprime.com

GASTRADE EXPECTS TO LAUNCH COMMERCIAL OPS AT GREECE'S FIRST FSRU IN OCTOBER

Greece's Gastrade expects to launch commercial operations at its FSRU-based LNG import terminal off Alexandroupolis in October this year following an issue with the project's pipeline. The 2018-built 174,000-cbm LNG carrier, GasLog Hong Kong, delivered on February 18 the commissioning cargo from the US to the 153,600-cbm FSRU, Alexandroupolis. Gastrade said on April 5 that the company planned to launch commercial operations at the end of April and receive the next LNG cargo in mid-May. However, the company postponed the launch due to a "technical issue" that was faced during the commissioning process of the terminal, it said on May 2. "The new COD (commercial operation date) has now been anticipated for October 1, 2024, to coincide with the start of the next gas year," a Gastrade spokeswoman told LNG Prime on Thursday. "The issue that was identified during commissioning in the pipeline system of the project, is under rectification," she said. "Should the issue be resolved earlier, the company will update its customers accordingly and announce an earlier COD," the spokeswoman added.

First Greek FSRU

Gastrade's shareholders include founder Copelouzou, DESFA, DEPA, Bulgartransgaz, and GasLog. This is Greece's first FSRU and the second LNG import facility, adding to DESFA's import terminal located on the island of Revithoussa. The

Alexandroupolis LNG terminal will have a capacity of 5.5 bcm. Greece's converted FSRU arrived in Alexandroupolis from Singapore on December 17, 2023, while mooring hook-up was completed on December 23. The FSRU is located in the sea of Thrace at a distance of 17.6 km SW from the port of Alexandroupolis and 10 km from the nearest coast of Makri. It is connected to a high-pressure subsea and onshore gas transmission pipeline. Italy's Saipem announced in April this year that the pipeline project had been completed. The work included the offshore installation of 24 kilometres of pipeline with its pipelay vessel Castoro 10. Following commercial launch, the pipeline will deliver natural gas to the Greek transmission system and onwards to the final consumers in Greece, Bulgaria, Romania, North Macedonia, Serbia and further to Moldova and Ukraine to the East and Hungary and Slovakia to the West, Gastrade previously said. source: www.lngprime.com

DEUTSCHE REGAS SAYS SECOND FSRU ARRIVES IN MUKRAN

German LNG terminal operator Deutsche ReGas has welcomed the second floating storage and regasification unit at its LNG import terminal in Germany's port of Mukran. The 2009-built 145,000-cbm, FSRU Neptune, has arrived on Wednesday at the "Deutsche Ostsee" energy terminal in the industrial port of Mukran, Deutsche ReGas said in a statement. The unit, which is 50 percent owned by Hoegh LNG and sub-chartered by Deutsche ReGas from TotalEnergies, left in May Germany's industrial port of Lubmin, where it served the Lubmin terminal. Deutsche ReGas officially launched its Lubmin FSRU-based LNG import terminal, first private LNG terminal in Germany, in January last year. After leaving Lubmin, Neptune was located for about a month at Fayard, in Denmark's Odense port, to complete preparational work prior to its deployment at the Mukran LNG terminal on the island of Rügen.

Two FSRUs

Deutsche ReGas recently said that it expected to launch full operations at the Mukran LNG facility in July. Prior to the arrival of Neptune, the terminal featured the 2021-built 174,000-cbm, Energos Power, owned by US-based Energos Infrastructure. In June last year, Deutsche ReGas signed a deal with the German government to sub-charter the FSRU delivered in 2021 by Hudong-Zhonghua. Deutsche ReGas took over the charter of Energos Power in October last year. Moreover, Deutsche ReGas received the first LNG tanker at the Mukran facility in March as part of the commissioning phase, and in April it received an operating permit for the facility. Last month, Deutsche ReGas moved Energos Power offshore Mukran ahead of the arrival of the second FSRU. The FSRUs will be located side-by-side at the berth 12 in the Mukran port, "In the course of the next few days, the second regasification vessel Energos Power will also be stationed alongside the Neptune, completing the terminal," Deutsche ReGas said in the statement. A spokesman for Deutsche ReGas told LNG Prime that "the terminal is still in commissioning subject to the permission."

Largest LNG import capacity in Germany

Once both FSRUs are in Mukran, the terminal will offer an annual regasification capacity of up to 13.5 billion cubic meters of natural gas and will be able to cover up to 15 percent of Germany's total natural gas demand, Deutsche ReGas said. Deutsche ReGas said the privately financed terminal has the largest capacity of all German LNG terminals and plays a "central role" in supplying eastern Germany, industrial consumers in south-western Germany, and neighboring Eastern European countries. Besides the FSRUs, the Mukran terminal includes the 50-kilometer-long pipeline Ostsee Anbindungsleitung (OAL). Germany's Gascade built this pipeline which connects the LNG terminal in the port of Mukran with the German gas transmission network in Lubmin. Belgium's Fluxys recently bought a 25 percent stake in this pipeline. The terminal is connected to the pipeline via the entry point named the Baltic Energy Gate (BEG). In June, Deutsche ReGas invited market participants to express an interest in capacity at the Mukran FSRU-based facility from 2024 to 2027. Deutsche ReGas said the terminal has been designed for a nominal send out rate of 1,254,000 MMBtu/d, while net LNG tank capacity of the terminal is 310,000 cbm. This allows for up to 3 cargoes to be simultaneously regasified at any given time creating a send out profile of 9 days for the terminal users, the firm said. source: www.lngprime.com

GTT NETS TANK GIG FOR CELSIUS LNG CARRIER

French LNG containment giant GTT has secured a tank design order from China Merchants Heavy Industry-Jiangsu for one LNG carrier being built for Denmark's Celsius Tankers, a unit of Celsius Shipping. GTT said in a statement on Tuesday it has secured the contract for the 180,000-cbm LNG carrier in the second quarter of 2024. According to GTT, the tanks of this vessel will be fitted with the Mark III Flex membrane containment system. GTT added that delivery of the LNG carrier is scheduled for the third quarter of 2027. The firm did not provide further information. In April last year, GTT confirmed it had won its first LNG tank order from China Merchants Heavy Industry-Jiangsu for four 180,000-cbm LNG carriers. LNG Prime reported in December 2022 that Denmark's Celsius Tankers ordered four 180,000-cbm LNG carriers at the China Merchants yard. This was the first LNG carrier order in China for Celsius Tankers and the first order for large LNG carriers for China Merchants Heavy Industry-Jiangsu. The yard won a license from GTT in October 2022 to construct large LNG carriers using GTT membrane technologies. Following the initial order, Celsius booked two more LNG carriers at the Chinese shipbuilder in October 2023 and this LNG carrier for which GTT won a new contract is probably the first vessel from that batch. Celsius has six firm LNG carriers on order at the Chinese shipbuilder but it also has six more options. source: www.lngprime.com

H-LINE AND HYUNDAI GLOVIS TAKE DELIVERY OF LNG-POWERED PCTC IN CHINA

China's Guangzhou Shipyard International (GSI) has delivered one LNG-powered pure car and truck carrier to South Korean owner H-Line Shipping and charterer Hyundai Glovis. According to a statement by GSI, the shipbuilder has handed over the

7,000-ceu, Glovis Sunshine, on July 3, two months ahead of the contract date. The vessel is 200 meters long and 38 meters wide. It and has a design draft of 8.6 meters, a design speed of 19 knots, and a total of 12 vehicle decks. GSI did not provide further information regarding the vessel. According to Vessels Value data, H-Line ordered this LNG-powered PCTC and one more vessel at GSI in 2021 for about \$84 million per ship. GSI delivered H Line's first LNG-powered PCTC, Glovis Solar, in April this year and this vessel serves a charter deal with Hyundai Glovis. After the first order, H-Line placed an order at GSI in 2022 for two more LNG-powered PCTCs with a capacity of 7,000 ceu and these vessels are expected to be delivered in 2025. In January last year, H-Line placed an order with GSI for two LNG dual-fuel PCTS with a capacity of 8,600 units. GSI said at the time that it has three 8,600-ceu vessels on order from H-Line and all of the ships will go on charter to Hyundai Glovis.

Hyundai Glovis building LNG-powered fleet

In May, GSI also secured a new order from Hyundai Glovis to build six more LNG dual-fuel PCTCs with a capacity of 10,800 ceu. Hyundai Glovis, the operator of a large PCTC fleet and the shipping unit of Hyundai Motor Group, said in April it will add six LNG dual-fuel vessels to its fleet, but it did not reveal the name of the yard which will build the vessels. The firm said the investment is worth \$750 million and it expects to take delivery of the six ships by the end of 2028. In December last year, South Korea's HMM and Hyundai Glovis joined forces to order six LNG-powered PCTCs at GSI, while Seaspan and Hyundai Glovis ordered six LNG-powered PCTCs at CSSC's Shanghai Waigaoqiao Shipbuilding (SWS). Moreover, Hyundai Glovis said in February this year that it has signed a deal with state-owned Korea Ocean Business Corporation (KOBIC) related to the construction of four LNG-powered PCTCs with a capacity of 10,800 ceu as part of its plans to have 28 LNG-powered PCTCs in its fleet. SWS and GSI will reportedly build two of these vessels, each. source: www.lngprime.com

STUDY BEGINS ON MASSIVE GREATER SUNRISE FLOATING LNG PROJECT



Work on a major offshore gas and condensates development with an LNG export requirement has started, with concept studies underway. The Greater Sunrise development, that lies between Australia and East Timor, is considered one of the world's largest untapped gas fields yet to be developed. Woodside Energy has contracted UK-headquartered engineering consultant Wood Group to undertake the concept study on behalf of the Sunrise Joint Venture (SJV). During this

study, Wood will consider engineering, technology, financing, commercial structures, fiscal, environmental, health and safety

and socioeconomic drivers, including local content. It expects to complete this study in Q4 2024 to support the SJV's intention to advance the development to the next stage. Greater Sunrise comprises the Sunrise and Troubadour gas and condensate fields, which were initially discovered 50 years ago, 450 km from Darwin, Australia during exploration of the seas off Australia's Northern Territory. They were appraised multiple times, but development has remained dormant due to geopolitical and technological factors, including negotiations over maritime boundaries, regulatory and fiscal jurisdictions and positioning of the LNG processing and export plant. After establishing a new maritime boundary treaty between Australia and Timor-Leste in 2019, negotiations between the governments and the SJV on a Greater Sunrise production sharing contract have been ongoing. In 2024, the SJV participants agreed with the Timor-Leste and Australian governments to undertake a concept study for the potential development to inform relevant stakeholders. Woodside said this study would consider the key issues for developing processing and marketing gas via both Timor-Leste and Australia. In 2023, retention lease renewals were granted for Australian blocks NT/RL2 and NT/RL4, enabling development planning to continue. Previous development scenarios for Greater Sunrise have included subsea wells tied back to a huge LNG floating production, storage and offloading (FPSO) ship, similar in size to the LNG FPSO on Shell's Prelude project in Australia. Other options previously considered were processing gas and condensate on a floating production semi-submersible linked to an FPSO and tie back of gas to an LNG plant in Timor-Leste, 150 km away, or Australia. The Greater Sunrise SJV comprises Timor GAP (56.56%), Woodside Energy (33.44%) and Osaka Gas (10%). "This is an important concept study for the Greater Sunrise development," said Wood president of consulting Azad Hessamodini. "We will deliver the work at pace to ensure the SJV has the impartial insights to advance this regionally significant project." source: www.rivieramm.com

ADNOC L&S COMMITS TO BUILD AT LEAST EIGHT LNG CARRIERS IN SOUTH KOREA

UAE's national oil company ADNOC is set to expand its owned fleet of gas carriers, adding up to 10 new vessels. The company's subsidiary, ADNOC Logistics and Services (L&S) has awarded South Korean shipyards Samsung Heavy Industries and Hanwha Ocean an eight-vessel order worth a combined US\$2.5Bn in shipbuilding contracts for the construction of 174,000-m³ LNG carriers as part of the company's growth strategy and fleet expansion plans. Both Samsung Heavy Industries and Hanwha Ocean were awarded shipbuilding contracts for the construction of four firm vessels with the option for an additional vessel, each. When fulfilled, the order will increase ADNOC L&S' fleet of LNG carriers from 14 to at least 22 vessels. The contracts confirm reports in May that the UAE state-backed company had signed letters of intent (LoI) with both Samsung and Hanwha to build new vessels. Delivery of the newbuilds is set to begin from 2028, and the LNG carriers will be time chartered to ADNOC Group subsidiaries for 20 years to support the growing export volumes of natural gas. The newbuild LNG carriers will feature MAN Energy's ME-GA and WinGD's XDF2.2 engines, and, according to ADNOC L&S chief executive Abdulkareem Al Masabi, employ technology to increase fuel efficiencies, including a cargo conditioning system designed to reduce LNG

cargo evaporation while in transit, systems to direct cargo boil off gases to the engines that will increase fuel efficiency and decrease fuel consumption, a real-time emissions monitoring system, and cargo containment systems to reduce methane emissions. Among other contracts understood to have been handed out in relation to the newbuilds, Norway-based TMC Compressors said it had won a contract to deliver the marine compressed air system to three vessels set to be built at Hanwha Ocean shipyard by "an undisclosed Asian shipowner". At the time of its public listing last year, ADNOC revealed a growth strategy, targeting investments of US\$4-5Bn over the medium term. Following a strong showing in Q1 this year, the company revised its growth guidance upwards and intends to invest in excess of US\$5Bn in energy-related maritime logistics over the medium term. ADNOC immediately followed up the revised increase in investment with a US\$1.4Bn acquisition of Navig8, in early June. source: www.rivieramm.com

VENTURE GLOBAL LAUNCHES FIRST VESSEL FROM STATE-OF-THE-ART LNG FLEET

Venture Global has announced the launch of its first LNG vessel, the Venture Gator, at a ceremony which took place at the Samsung Heavy Industries shipyard in Geoji-si, South Korea. The Venture Gator is the first of nine LNG carriers in the Venture Global fleet to be completed in quick succession across three shipyards in South Korea over the coming 24 months, which will transport LNG from the US to multiple global partners and destinations. The ship deploys best-in-class environmental and efficiency technology and will be primarily fuelled by Venture Global's LNG. The Venture Gator and progressively the fleet's other eight ships will commence serving the company's global partners in Europe and Asia beginning this fall. "Venture Global is proud to have launched our first ship, the Venture Gator, at SHI in Korea. President Biden has committed to increasing LNG supply into Europe and we are pleased to be in a position to continue to support these efforts with a fast-growing shipping fleet, wholly owned, operated and controlled by Venture Global. With these ships, we will increase the security of natural gas supply, through low-cost LNG delivered directly to allies across the world," said Mike Sabel, CEO of Venture Global. The Venture Gator is a 174 000 m³ ship, in a state-of-the-art fleet which showcases the industry's newest, clean technologies for transporting LNG across the world. The new hull design; onboard reliquefaction (for liquefying gas which has 'boiled-off' in transit); air-lubrication systems (ejecting air bubbles from the hull to reduce friction through the water); an auxiliary shaft generator (reducing the number of auxiliary generators running at sea), and exhaust gas recirculation systems (to reduce methane) make Venture Global's LNG new-build carrier fleet among the cleanest on the ocean today. source: www.lngindustry.com

GOLAR TUNDRA NOW UNDER ITALIAN FLAG AND NEW NAME

Italis LNG, no longer Golar Tundra. This is the new name - approved by the Ministry of Infrastructure and Transport - of Snam's floating LNG terminal, which has been operating since July 2023 at the Tuscan port of Piombino. With the vessel now listed in the Italian ship registry, the old Marshall Islands flag has been replaced with the tricolour Italian flag. After sending a

formal request to the Livorno Port Authority, Snam's company FSRU Italia successfully completed the process of registering the floating LNG terminal in the Italian ship registry, intending to update it to the technical requirements of Italian regulations. "The inclusion of the Piombino floating LNG terminal in the Italian ship registry is another important step for our FSRU, which we are particularly pleased about. In just under a year, Italis LNG has received 29 cargoes of LNG from five different countries, for a total of 2.6 billion m3 of gas injected into the Italian network, further guaranteeing the security and diversification of energy sources for our country," stated Stefano Venier, CEO of Snam. With a total of 23 billion m3 of regasification capacity, LNG today makes an essential contribution to the security of the Italian gas system. LNG now covers one-quarter of Italy's gas supply and, in the first two months of 2024, overtook the main entry point via pipeline, namely Mazara del Vallo, where gas from Algeria is. By allowing LNG to come from different supplier countries, FSRUs are therefore a key asset in ensuring flexibility for the country's entire energy system. As part of its initiatives from 2022 onwards to further diversify the country's gas supplies following the Russia-Ukraine crisis, in addition to Italis LNG, Snam has also acquired the floating regasifier BW Singapore, which will start operating off the coast of Ravenna in early 2025. The country's overall regasification capacity will then rise to 28 billion m3, equally distributed between the Tyrrhenian and Adriatic coasts, for a total volume equivalent to what the pipeline imported from Russia in 2021. source: www.lngindustry.com

SMALL-SCALE LNG CONTRACTS WILL DRIVE INDIA'S GAS MARKET EXPANSION

The India Gas Exchange launched small-scale LNG contracts on its platform in April at the Dahej and Hazira terminals in Gujarat, and there are plans for further expansion to other such facilities, the exchange's CEO tells NGW. Indian Gas Exchange (IGX) launched small-scale LNG (ssLNG) contracts on its platform in April following approval from the downstream regulator, the Petroleum and Natural Gas Regulatory Board (PNGRB). IGX expects ssLNG contracts to help expand the gas market beyond traditional in-pipeline gas trading, IGX CEO Rajesh Kumar Mediratta tells NGW. "Many areas lack access to the natural gas grid, so these contracts help serve the demand for natural gas in those areas by transporting gas by road as ssLNG. They aim to meet future demand, encouraged by government policies promoting LNG-fuelled vehicles and LNG retailing stations along highways," he says. IGX also expects city gas distribution (CGD) companies to adopt ssLNG in hard-to-reach areas. Industries shifting to cleaner fuels are boosting demand as well. ssLNG contracts enable the sale of gas from small fields where laying pipelines isn't feasible, Mediratta adds. In India, natural gas is primarily supplied through pipelines. As a result, industries and commercial establishments without access to the grid rely on trucks for LNG transportation. A wide variety of entities are expected to trade in these contracts. On the sell side, IGX expects to see LNG terminal operators or LNG importers bringing gas to these terminals. The buy-side entities could be CGD sector companies not connected to pipelines, companies involved in LNG dispensing and retailing, LNG truck fleet operators, and large industries relying on ssLNG for operations due to no pipeline access. IGX, founded three years ago, currently facilitates delivery-based trades across six

different contract types, including day-ahead, daily, weekday, weekly, fortnightly, and monthly contracts, allowing trades to be executed for up to six consecutive months.

Initial contract launches at Dahej and Hazira LNG terminals

IGX has obtained approval from the PNGRB to launch ssLNG contracts at Dahej, Hazira, Dabhol, and Dhamra terminals. Initially, these contracts have been launched at the Dahej and Hazira LNG terminals in Gujarat, with plans for expansion to other terminals including Dhamra, Dabhol, Mundra, Ennore, Kochi, and on-land ssLNG stations at Vijaipur. Gail, one of India's largest natural gas companies, in March unveiled India's first ssLNG unit at Vijaipur in Madhya Pradesh. Mediratta says Dahej and Hazira were chosen to launch these contracts because of their strategic location and existing infrastructure. "Dahej has a top-notch LNG terminal with eight ssLNG truck loading bays and is well-placed near Gujarat's industrial hub. Similarly, Hazira's terminal, also in Gujarat, serves nearby industries and gas distribution networks," he adds. "Leveraging these locations' infrastructure ensures smooth operations and quick delivery to customers. Plus, their proximity to major demand centres makes them ideal for kickstarting trading activities." IGX plans to launch the ssLNG contracts at the Dabhol terminal in Maharashtra after the monsoon season. "Dabhol is operational but closed during the monsoon; we'll launch contracts there after the current monsoon season is over, towards Q3. Dhamra's terminal is operational, but liquidity is still building up. For other terminals like Chhara, Mundra, and Kochi, we have submitted applications seeking regulatory approval," Mediratta says. Dhamra LNG Terminal Private owns and operates the Dhamra LNG terminal with a peak capacity of 6.5mn tonnes/year within Dhamra Port, Bhadrak District, in the eastern Indian state of Odisha. The terminal, which became operational last year, will see its capacity expanded to 10mn tonnes/year in the next phase.

Significant growth expected in India's ssLNG sector

IGX remains extremely optimistic about the ssLNG sector in India and expects significant growth in the coming years, driven by increasing demand for LNG. "In FY24, India saw record-high LNG imports, reaching 85mn m³/day, up from 72mn m³/day in the previous fiscal year. This trend is expected to continue, supported by lower prices and rising demand. With domestic gas production plateauing in FY25-26, India's demand will increasingly rely on LNG imports. This creates an opportunity for the ssLNG sector to thrive, especially in areas without pipeline infrastructure," Mediratta says. In FY23, about 0.7mn m³/day of LNG was transported by road and consumed in India, equivalent to 0.4% of current natural gas consumption. According to IGX, demand is projected to reach around 5mn m³/day in the next five years. The Indian government plans to introduce over 500 LNG dispensing stations nationwide, boosting demand for the ssLNG segment. Growth in the industry will be driven by various factors. On the demand side, the operationalisation of all auctioned CGD licences, with many expected to deliver gas to customers via the ssLNG route until pipeline connections are established, will be a major contributor, IGX says. Industries shifting to cleaner fuels, especially with expected low/subdued gas prices, and the demand for LNG in transportation will also fuel growth. On the supply side, the establishment of new LNG terminals and FSRUs, as well as LNG retailing stations on



highways, will play a role. “On the regulatory and policy front, the inclusion of natural gas under the goods and services tax (GST) regime and open access to large consumers in CGD areas has been a long-standing demand from stakeholders. If implemented, this could streamline trading, reduce costs, and promote transparency in the sector, thereby fostering growth,” Mediratta says.

In India, natural gas, along with petrol and diesel, is currently outside the ambit of GST, and existing legacy taxes—central excise duty, state VAT, central sales tax—continue to be applicable on the fuel. VAT on natural gas varies from state to state, and is in the range of 14% to 24%. Bringing the commodity under GST has been a long-standing demand of the industry. Recent media reports suggest a revival of discussions on including natural gas under GST after previous unsuccessful attempts. Another factor that could give a leg up to the ssLNG sector is the government’s intention to make the regulatory framework more market and consumer-friendly, potentially through revisions in access rules and bringing LNG terminals under the regulatory purview. “Such regulatory reforms can create a more conducive environment for industry participants and attract investments,” Mediratta adds. source: www.naturalgasworld.com

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