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KOREA LINE LNG LINKED TO SINGLE CONTRACT FOR BUNKER NEWBUILD

South Korea's Korea Line LNG is being linked to an order for an LNG bunker vessel at HD Hyundai Mipo.HD Korea Shipbuilding & Offshore Engineering, the shipyard holding arm of HD Hyundai Group, announced late last week that an Asian shipper had ordered a single LNGBV newbuilding without naming the contracting party. Ulsan-based HD Mipo is slated to deliver the unit by May 2027. The shipbuilding group did not disclose the exact size nor the price of the vessel, opting to combine the contract values with those of ultra-large ethane carriers. Shipbuilding sources said the vessel has a capacity of 12,500 cbm and was priced at $88m. Shipping players in Seoul said SM Group's Korea Line LNG has ordered the bunker vessel against a long-term charter with Posco International — the trading arm of domestic steel giant Posco. The globally facing Posco company recently completed the construction of a KRW 1.45trn ($1.1bn) LNG terminal in Gwangyang that took 20 years to build. Gwangyang Terminal 1 has six tanks with a total capacity of 930,000 kiloliters, with port facilities offering further storage. Posco International has said the terminal will provide natural gas for power generation and manufacturing in South Korea's key industries. It will also offer services for unloading, storing, regasifying and discharging natural gas directly imported by client companies such as Posco, S-Oil and SK E&S. The company said that aside from the LNG storage tank rental business, it

plans to develop complementary projects such as sea trials and LNG bunkering. Posco International is also constructing a second LNG terminal adjacent to the first, which is due for completion in 202SM Group has become the go-to South Korean shipowner for LNG bunkering. The company's Korea Line LNG has built two large 18,137-cbm LNGBVs, the K Lotus (built 2022) for charter to Shell and the Korea Line LNG-chartered FuelLNG Venosa (built 2023). As Korea Line, the company was selected to build the first two LNGBVs with Kogas' in-house cargo containment system KC-1. Both vessels, the 7,654-cbm SM Jeju LNG1 (built 2019) and the SM Jeju LNG2 (built 2020), are listed as "damaged" in Clarksons Shipping Intelligence Network database.In February, the SM Jeju LNG1 was involved in a collision with a cargo ship, where the bunker vessel sustaining damage to its starboard side. Repairs were described as complex due to the new containment system design. HD Mipo has also been making a name for itself in building LNGBVs. The company recently secured an order from John Bassadone's new company, Hercules Tanker Management, for up to two 18,000-cbm vessels for about $92.4m each. Big-name industry players such as TotalEnergies have spoken of a 40-vessel shortfall in LNGBVs in the period to 2030, as the number of LNG dual-fuelled vessels ramps up. source: www.tradewindsnews.com

AVENIR SIGNS UP FOR MULTI-YEAR CHARTER WITH ENI

Refocusing Avenir LNG has chartered one of its existing fleet of five LNG bunker vessels to an arm of Italian energy company Eni.Avenir — a joint venture of Stolt-Nielsen, Golar LNG and Hoegh Evi — said on Tuesday it has signed a time-charter party for its 7,500-cbm LNGBV Avenir Aspiration (built 2021) with Eni subsidiary LNG Shipping. The company described this as a "multi-year" charter starting from delivery in Europe in 2025. No further details were given. It said: "This charter increases the company's third-party charter revenue backlog, including options, to over $285m." Sources indicated the period, which includes options to extend the hire, is between five and 10 years. They said the rate is reflective of a tightening market for LNGBVs. The Avenir Aspiration trades alongside the Avenir Ascension in north-west Europe, performing small-scale supply services and ship-to-ship bunkering operations as part of the company's physical LNG trading division. Avenir said this is the fourth charter deal it has concluded in the past 12 months on its fleet of five existing small-scale vessels and two under-construction units. In January, the company announced a two-year extension to the charter of its 7,500-cbm Avenir Advantage (built 2020) to Petronas and a contract covering two years for its 7,500-cbm Avenir Accolade with New Fortress Energy's interests. By mid-year, Avenir had boosted its fleet by contracting two 20,000-cbm LNGBV newbuildings at Nantong CIMC Sinopacific Offshore & Engineering Co. In July, the company fixed one of these to Vitol as the trader made its dive into the LNG bunkering sector. The other newbuilding is described by those familiar with the company as "open — for now".The joint venture company, which has just announced a refocusing of its interests to LNGBVs and a planned $50m Oslo stock listing, said the latest deal with Eni establishes it as "the leading provider for modern LNG bunker vessels, both as an owner and operator". Eni said the Avenir Aspiration will supply cargo and passenger ships, which are increasingly using LNG as fuel due to its lower environmental impact compared to conventional fuels and compliance with the latest emission standards. The company said the charter

strengthens its presence in the bunkering market in the Mediterranean. “This agreement is part of Eni’s strategy to market its growing LNG portfolio and promote fuels that have less environmental impact for shipping and transport, contributing to the transition to low-emission energy carriers,” the company added. Avenir managing director Jonathan Quinn said: “We are excited to be working with Eni to support their expansion into the LNG bunkering market.” He added that the deal further solidifies Avenir as a partner for modern and efficient small-scale LNG vessels while delivering on the company’s strategy to facilitate the growth of LNG as a marine fuel globally. source: www.tradewindsnews.com

HANWHA OCEAN SCORES $1.26 BILLION ORDER FOR LNG-POWERED CONTAINERSHIPS

South Korean shipbuilder Hanwha Ocean has secured an order worth about $1.26 billion to build LNG dual-fuel containerships. Hanwha Ocean said on Thursday it will build six containerships with a capacity of 15,000 teu. The order is worth about 1.69 trillion won ($1.26 billion) or about $210 million per vessel. The shipbuilder will deliver the vessels by the end of 2028. Hanwha Ocean said the vessels were ordered by a European shipowner, but it did not provide further information. Shipbuilding sources told LNG Prime that Denmark’s Maersk is behind this order. The vessels will feature type B high manganese tanks. In August, Maersk said it was in the process of signing new building orders and charter deals for up to 60 dual-fuel containerships, including LNG dual-fuel vessels. This move represents a significant turn for the shipping company which has been one of the biggest supporters of methanol-powered ships. Maersk said the orders will reach a total of 50-60 combining both owned and chartered dual-fuel vessels equaling 800,000 teu and ensuring a steady flow of needed capacity for Maersk’s network for the years 2026-2030. According to Maersk, about 300,000 teu will be owned capacity while the remaining 500,000 teu is planned through time-charter agreements. With this deal, Hanwha Ocean has received orders worth about $7.35 billion this year for 37 ships, more than doubling last year’s total orders of $3.52 billion. This includes 12 LNG carriers as part of the giant QatarEnergy shipbuilding program and four LNG carriers for Adnoc L&S. Hanwha Ocean recently also secured an order for one FSRU worth for $413 million. This order is linked to Japan’s MOL and Singapore LNG. source: www.lngprime.com

CHEVRON AUSTRALIA SAYS STRIKE NOT EXPECTED TO IMPACT LNG PRODUCTION

Chevron's Australian unit does not expect protected industrial action at its Gorgon and Wheatstone LNG plants to impact LNG production. The Offshore Alliance, which includes the Maritime Union of Australia and Australian Workers' Union, said that its members working for Altrad’s companies REC and Specialist People started the action on Thursday. This includes rolling stoppages, and work bans until a new enterprise bargaining agreement (EBA) is reached, according to OA. “Chevron Australia is aware a number of employees at industrial and maintenance services provider Altrad, which provides services to the Gorgon and Wheatstone natural gas facilities, have commenced industrial action,” a spokesperson for Chevron Australia told LNG

Prime. “Given the nature of the work undertaken by Altrad and the mitigations in place, it is not anticipated there will be any impact to LNG and domestic gas production nor to any critical business activities at our facilities,” the spokesperson said. In October last year, Chevron and its workers at the Gorgon and Wheatstone LNG terminals agreed on new labor agreements following lengthy negotiations between Chevron and unions representing the workers. Launched in 2016, the Gorgon LNG plant has three trains and a production capacity of about 15.6 mtpa. The project is a joint venture of Chevron (47.3 percent), ExxonMobil (25 percent), Shell (25 percent), Osaka Gas (1.25 percent), MidOcean Energy (1 percent), and Jera (0.417 percent). On the other hand, the Wheatstone project consists of two LNG trains with a combined capacity of 8.9 mtpa, and the domestic gas plant. The project was sanctioned in late 2011, with first shipment of LNG announced in October 2017. Chevron operates the project with a 64.14 stake and other shareholders include KUFPEC (13.4 percent), Woodside (13 percent), and Kyushu Electric (1.46 percent), together with PE Wheatstone, part-owned by Jera (8 percent). Source: www.lngprime.com

OMAN LNG INKS SUPPLY DEAL WITH JAPAN’S KANSAI ELECTRIC

State-owned producer Oman LNG has signed a sales and purchase agreement with a unit of Japan's Kansai Electric Power. According to Oman LNG, the deal is for four years starting in 2026. Under the agreement, Kansai Electric Power FTS (Kefts), a unit of Kepco, will buy 0.4 mtpa of LNG from Oman LNG. Oman LNG said the new deal reinforces its role as a reliable global supplier and strengthens its ties with international partners. The LNG producer did not provide further information. Kefts said in a separate statement that this agreement “aims to grow and strengthen its LNG portfolio, which will support Kansai Electric Power Group’s LNG supply-demand situation and customers around the globe.” This is the first deal between the two firms. Kansai Electric uses LNG as fuel for thermal power generation, including for its Himeji No. 1 and No. 2 power stations, Nanko power station, and Sakaiko power station, according to its website. GIIGNL data shows that the firm buys LNG from the US, Qatar, Australia, Indonesia, and UAE. The company operates the Himeji and Sakai LNG import terminals in Japan. Boosting capacity. Oman LNG has been very active in the last two years, signing deals and announcing plans to expand the facility with a new train. The new train will have a capacity of 3.8 mtpa, boosting Oman’s LNG production to 15.2 mtpa. The company currently operates three liquefaction trains at its site in Qalhat near Sur. In 2023, it produced 11.5 mtpa of LNG, exceeding the enhanced nameplate capacity. Shareholders and supply deals Last year, Oman LNG signed shareholding deals with international companies, including Shell and TotalEnergies. Besides Oman LNG and Qalhat LNG shareholding agreements, Oman LNG, in which the government of Oman holds 51 percent, also signed a gas supply agreement with state-owned Integrated Gas Company (IGC) to extend the gas supplies beyond 2024. Oman LNG in collaboration with its shareholders, approved the extension of the company’s operations beyond 2024 that linked these key agreements for a period of 10 years from 2025 to 2034 for Oman LNG and 2026 to 2029 for Qalhat LNG. As a result of these deals, Oman LNG secured sales term commitments up to 10.4 mtpa through the execution of term sheet agreements with several buyers and shareholders, expanding the company’s footprint into new regions across Asian and European markets. Earlier this year, Oman LNG signed

a 10-year SPA with its shareholder TotalEnergies for 0.8 mtpa of LNG from 2025, and a 10-year SPA with Botas for 1 mtpa of LNG. Oman LNG signed a 10-year SPA for 1.6 mtpa of LNG with its shareholder Shell, and it also signed a 10-year SPA for 0.8 mtpa of LNG with Japan's Jera, The LNG producer and German gas importer Securing Energy for Europe (SEFE) also finalized their previously announced LNG deal for 0.4 mtpa of LNG between 2026 and 2029. Most recently, Oman LNG signed a 4-year sales and purchase agreement with a unit of Thailand's PTT. Source: www.lngprime.com

SANTOS, PARTNERS SECURE $800 MILLION FINANCING FOR DARWIN LNG LIFE EXTENSION

Australia's Santos and its partners in the Darwin LNG joint venture have secured $800 million in financing for Darwin LNG life extension works. Santos said on Thursday the Darwin LNG JV, in which the company holds a 43.43 percent operating interest, has achieved financial close of new syndicated bank loan facilities. The facilities comprise a $350 million 7-year, partially amortizing loan maturing in 2031 and a $450 million, 12-year partially amortizing loan maturing in 2036. According to Santos, the facilities are senior secured by Darwin LNG. The shareholders in Darwin LNG, have granted security over their shares in that company. Besides Santos, other partners are SK E&S, Inpex, Eni, Jera, and Tokyo Gas. Santos said the facilities received "strong support" from existing and new syndicated banking relationships and the partners will use the proceeds to fund the DLNG life extension works. Moreover, Santos CEO Kevin Gallagher said this is an "excellent result for Darwin LNG, showing strong support from our bank lenders, and demonstrating their recognition of LNG as a critical part of the energy transition and willingness to support the LNG industry." "The debt raised by the Darwin LNG joint venture is wholly consistent with our strategy of securing flexible, long-duration and competitively priced funding," he said. "With these facilities in place, Darwin LNG is well-funded to complete the life extension works scheduled for mid-2025 and it positions Darwin LNG to consider future expansion of this important infrastructure, including through the potential provision of third-party carbon capture services in Darwin," Gallagher said. Darwin LNG Launched in 2006, the Darwin LNG plant has one train with a capacity of 3.7 mtpa. Following cessation of LNG production from the Bayu-Undan field in late 2023, DLNG is undertaking life extension works. The works aim to extend the plant's design life and provide gas processing and marine loading services under a long-term contract to the Barossa JV. The JV will supply feed gas from an offshore gas and light condensate project situated about 300km north of Darwin. Earlier this year, Santos said the Barossa gas project was more than 70 percent complete and "on track" for first production in the third quarter of 2025. Back in 2021, Santos took a final investment decision for its $3.6 billion Barossa project. Source: www.lngprime.com

ADANI, TOTALENERGIES LAUNCH LNG STATION IN INDIA

India's Adani and France's TotalEnergies have launched their first liquefied natural gas (LNG) station for vehicles in India. Adani Total Gas (ATGL), a JV between the two firms, announced the launch of the first LNG station in a social media post

on Thursday. The station is in Tiruppur in the Indian state of Tamil Nadu. "This marks a significant step forward in our commitment to drive sustainable energy solutions and support India's transition to cleaner fuels," the JV said. "With this milestone, ATGL is further strengthening its leadership in the natural gas sector, offering efficient and eco-friendly alternatives for industries and transportation," it said. ATGL did not provide further information. India's cryogenic tech firm Inoxcva posted on social media earlier this year that ATGL marked a milestone with its first station in Tiruppur. "Supplying CNG via LCVs and PNG for homes and industries, this eco-friendly station will soon offer LNG for heavy-duty trucks too," the company said. In February this year, ATGL picked Inoxcva as a "preferred partner" for the delivery of LNG and LCNG equipment and services. The agreement aims to develop LNG Infrastructure in India, including small-scale LNG plants and LNG stations. According to ATGL's website, the company, which already has a network of CNG stations, aims to build 50 LNG stations across India. Dhamra LNG Adani and TotalEnergies operate the Dhamra LNG import terminal in Odisha, on India's east coast. The Dhamra LNG terminal started supplying natural gas to the grid in April last year as part of the commissioning phase and received the first commercial LNG cargo in May. Besides regasification, the 50/50 JV completed the first truck loading operation at the facility in August last year. The JV said in May this year that the facility had completed 100 truck loading operations and received 20 shipments since then. This facility is India's seventh operational LNG terminal and the second of its kind on the east coast of the country. It has a capacity of five million tonnes per annum (mtpa), with plans to double it in the future. Dhamra LNG features two tanks of 170,000 cbm capacity each, while the facility's jetty is capable of handling LNG carriers from 70,000 cbm to 265,000 cbm capacity. As per capacity takers, the JV entered into 20-year LNG regasification agreements with state-owned Indian Oil Corporation (IOC) and GAIL. source: www.lngprime.com

EU BAN ON RUSSIAN LNG TRANSHIPMENTS THROWS DELIVERIES INTO TURMOIL

The EU's first-ever measures aimed at deliveries of Russian LNG will hit the transhipment industry, including certain European ports, increase the delivery costs of the Yamal plant, and prolong the freeze of the plant's two sanctioned FSUs, according to a consensus of expert opinion. "The EU sanctions affect over three million tonnes a year of Yamal volumes [and] close the door for Arctic LNG2 transhipments," Rystad Energy's senior gas markets analyst, Jan-Eric Fähnrich, told LNG Shipping & Terminals. As the LNG transhipment industry scrambles for alternative arrangements against a tight deadline, an unapologetic EU insists that it "should no longer facilitate the transport and sale of Russian LNG by allowing Russia to reduce its logistical costs by using EU ports." Adopted in late June, the package of sanctions contains three main restrictions. First, in a tactic clearly designed to limit Russia's LNG exports, it prohibits the transhipment of Russian LNG through EU ports to non-EU countries. Second, the import of Russian LNG through terminals that are not connected to the EU natural gas system is also prohibited. And third, the provision of goods, technology or services for the completion of Russian LNG projects is also made illegal, a measure designed to hit the country's production of LNG as well as deter other countries from coming to Russia's

aid. Overall, concludes Mr Fähnrich, while the package does not affect regular EU imports – or re-exports where a local consignee takes ownership of the cargo – it will affect Yamal's shipments, mostly to China. "The new rules will not lead to less Russian LNG in Europe but they could lead to less Russian LNG in Asia", he adds, also citing ongoing concerns for the operation of the Yamal LNG plant. "The sanctions package contributes to making the operation of Arctic LNG2 very difficult," he predicts. In another analysis of the long-term implications of the measures, the Oxford Institute of Energy Studies explains that the immediate result is that transhippers of Russian LNG will be pushed out of EU ports and will have to find other ways of delivering LNG cargoes to non-EU destinations. This latest attack on Russian gas follows the massive disruption of shipments through the Suez Canal, with some of Yamal's cargoes being delivered around the Cape of Good Hope. In other consequences, a wave of legal disputes is on the cards if contracted deliveries of Russian gas do not arrive. India's GAIL, the country's largest gas company, has for instance already filed a $1.8Bn suit against SEFE, an India-based unit of Gazprom after it was unable to meet contracts because of sanctions. Also possible, suggests the OIES, is a series of disputes between terminals in the EU and transhippers when the former refuse to accept cargoes under the new regulations. And finally, ports such as Zeebrugge and Montoir are certain to lose business. In Zeebrugge's case, it has an agreement to take upwards of 100 transhipments a year. The industry does not have much time to act – the sanctions apply immediately for any new activities and by late March 2025 for existing ones. In other consequences, Russia's LNG shipping costs are expected to rise as it attempts to circumvent the regulations. And ship-to-ship transfers in remote locations are considered to pose greater environmental risks than those conducted at dedicated ports. Currently, two European ports are processing most of the LNG – Montoir-de-Bretagne in France and Zeebrugge in Belgium. Half of the volumes transhipped to these ports were via shore-to-ship. Overall, concludes the OIES, the prevention of these volumes of LNG transhipment "would clearly present a significant bottleneck for exports from Yamal." Russia still has delivery options though. "Russia could deliver directly with an Arc7 vessel, which would result in volume reduction," explains Mr Fähnrich. "It could tranship somewhere else that is not subject to sanctions, such as Etki LNG in Turkey. Or Russia could operate its floating storage units in Murmansk and Kamchatka, which is highly unlikely because they're sanctioned and then Yamal LNG would also be sanctioned." These 360,000-m3-capacity FSUs arrived in mid-2023 but have not yet been put into operation. It is not yet known exactly how the EU measures will affect Yamal's chartered 15-strong ice-class LNG carriers. The Arc7 vessels have been delivering LNG principally to destinations in the Asia-Pacific region through the Northern Sea Route, slashing times by 40% compared to passing through the Suez Canal. But these latest sanctions could change the game by targeting the transhipment process that takes place by ship-to-ship or ship-to-shore transfers. The latter are effectively reloading operations conducted at import terminals where they are stored before being reloaded onto another LNG vessel. These arrangements have been running for some six years. According to the OIES, transhipment in either form has been of considerable benefit to Yamal, but that could change. "To make the best use of these carriers, it is essential to reduce the amount of time they spend unnecessarily traversing ice-free waters," the study

explains. “Transhipment is understood to cut the tonne-mile utilisation of ice-class tankers in half, freeing them up to carry Russian LNG through Arctic waters more quickly.” In the longer-term, argues OIES, the EU’s prohibition on imports into off-grid terminals within the EU, notably in Sweden and Finland (both of which supported the measures), could lead to an even bigger disruption in the form of a complete EU-wide ban on all Russian LNG. While the OIES doubts that the transhipment ban will reduce Russian LNG flows into the EU because some of the volumes will be stored there, the institute does expect the ban on the provision of technology could lead to cost increases and delays. That would be especially the case if US sanctions bite even further. Source: www.rivieramm.com

LNG FLEET GROWTH OUTPACES LNG PRODUCTION SURGE

Global liquefied natural gas (LNG) production is set to continue its upward trajectory into the winter of 2024-25, driven by new liquefaction capacity in the Atlantic basin. This increase in production is accompanied by a surge in the delivery of new LNG carriers, adding complexity to the supply-demand equation in global LNG shipping, according to the Argus Global LNG 2024 Preview. According to estimates, global LNG production could rise by 5.3M tonnes between October 2024 and March 2025 compared with the previous year, with much of this increase stemming from new liquefaction terminals in the US Gulf Coast, such as Plaquemines LNG and Corpus Christi Stage 3. These new projects are expected to lift supply, particularly during the latter half of the winter. However, this expansion in production is taking place alongside a surge in the LNG carrier fleet, which could dampen any upward pressure on freight rates. The Argus Global LNG 2024 Preview report from Argus Media projects that 44 new LNG carriers will be delivered between Q4 2024 and Q1 2025, far exceeding the number delivered during the same period a year earlier. This rapid fleet expansion, combined with minimal scrappage of older vessels, suggests that shipping capacity may outpace production increases. As a result, “The global fleet of LNG carriers continues to expand more rapidly than liquefaction capacity, keeping freight rates in check.” The implications of this fleet growth are twofold. First, the availability of more vessels may facilitate greater flexibility in global LNG trade, allowing producers and buyers to respond more efficiently to fluctuating demand across regions. For example, Europe, which enters its third winter with high gas storage levels, could still see increased LNG imports if colder weather triggers higher residential demand. Second, the growing competition for marginal spot cargoes between European and Asian buyers may emerge, particularly if the Atlantic and Pacific basins experience simultaneous demand spikes. Coupled with the sheer number of new vessels entering service, this could lead to a softening of freight rates, which may reduce profitability for shipping companies. While the rise in global LNG production will drive increased shipping activity, the oversupply of LNG carriers may outweigh this demand, especially during the first half of the winter when fewer loadings are expected. "The peak freight demand period this winter could shift to the second half of winter from its traditional place in the first half," the report notes. This delay in demand could be attributed to factors such as minimal floating storage and the gradual ramp-up of new liquefaction capacity. The anticipated production growth and fleet expansion are also likely to affect the inter-basin flows of LNG. With the Atlantic basin accounting for a large

portion of the new supply, the ability to move LNG between regions will depend on freight rates and the availability of vessels. While European buyers have built up record stock levels, they may be reluctant to withdraw heavily from storage, particularly in central and eastern Europe, where the cessation of Russian gas flows through Ukraine could exacerbate supply concerns. This may drive demand for additional LNG imports, increasing competition with Asian markets that are also expected to see a rise in demand, particularly from China and South Korea. Ultimately, the interaction between rising production, expanding fleet size, and fluctuating regional demand will create a delicate balance in the LNG shipping market. While the growth in carrier deliveries may keep freight rates from spiking, the interplay between supply and demand across the Atlantic and Pacific basins could still result in localised price and shipping volatility. As the report highlights, "Even if all of these additional loadings required a round-trip delivery of 2-3 months, the fleet additions ahead of winter… would be more than enough to absorb this increase in freight demand." Source: www.rivieramm.com

LNG MARKET FACES SUPPLY STRAINS

The latest IEA Gas Market Report for Q3 2024 presents a mixed picture of the global LNG market, characterised by supply constraints, volatile prices and growing demand centred around Asia. The report outlines that LNG production underperformed in Q2 2024, while Asian demand surged, reshaping global LNG trade flows. These shifts, in turn, are having a profound impact on LNG shipping and freight rates. In the first half of 2024, LNG supply growth slowed considerably, increasing by a mere 2% year-on-year. This marked the first contraction in LNG production since the global Covid-19 lockdowns in 2020. According to the IEA, "LNG output fell by 0.5% in Q2 2024, driven by a combination of feed gas supply issues and unexpected outages." This shortfall was particularly evident in the United States, where production challenges at key liquefaction plants such as Freeport LNG hampered growth. Similarly, African LNG supply contracted due to declining production in Egypt, where exports plummeted by 75% during the first half of the year. Despite these supply challenges, the LNG market saw a surge in demand from Asia. The IEA notes, "Asia accounted for around 60% of the increase in global gas demand in the first half of 2024," with China and India leading the growth. China's LNG imports increased by 18%, setting the country on a trajectory to surpass its previous record for annual LNG imports. India followed closely, with a 31% rise in LNG imports, driven by lower spot prices. These increases in demand have resulted in a reallocation of global LNG cargoes, redirecting flows away from Europe and towards Asian markets, leading to longer shipping routes and increased pressure on LNG freight rates. The sharp rise in Asian demand comes at a time when European LNG imports have notably declined. Europe's LNG intake fell by nearly 20% in the first half of 2024, a trend driven by lower demand, high storage levels, and an increase in piped gas deliveries. As the report highlights, "The share of LNG in Europe's total primary gas supply fell from 39% in H1 2023 to 33% in H1 2024." This reduction has been further exacerbated by geopolitical uncertainties surrounding Russian piped gas supplies, which continue to add volatility to the market. The redirection of LNG cargoes from Europe to Asia is shifting trade patterns and impacting shipping logistics, with carriers needing to optimise for longer voyages to meet the surging Asian demand. Price

volatility has also become a hallmark of the LNG market in 2024. While gas prices fell to precrisis levels during the first quarter of the year, they rebounded sharply in the second quarter due to tighter supply-demand fundamentals. "Natural gas prices increased across all key markets in Q2 2024," according to the IEA report. This resurgence in prices has impacted LNG freight rates, with the demand for shipping services rising in tandem with increased Asian demand and extended shipping routes. The need for more LNG carriers to meet these shifting market dynamics is likely to push up spot charter rates, adding further complexity to the global LNG shipping sector. Looking ahead, LNG supply is expected to improve in the second half of 2024, with new liquefaction projects coming online in the United States and West Africa. The IEA forecasts "Year-on-year growth in LNG supply is expected to accelerate during the second half of 2024." Notable capacity expansions include the Freeport LNG expansion and the start-up of the Tortue FLNG facility off the coast of West Africa. According to the latest IEA report, the LNG facility developments are anticipated to ease some of the supply pressures that have constrained the market and the anticipated rise in exports from new projects will be welcome news for LNG shipping companies. The interplay between supply constraints and demand growth in Asia presents both opportunities and challenges for LNG shipping. While new liquefaction capacity will help address some of the supply issues, the market remains tight, and freight rates are expected to remain elevated due to the longer voyages required to serve the booming Asian markets. The IEA's outlook underscores the need for flexibility within the LNG shipping sector, as carriers must adapt to evolving trade routes and fluctuating market conditions. As the IEA notes, "The limited increase in global LNG supply will restrain growth in import markets," particularly in Europe, which continues to see declining demand. Source: www.rivieramm.com

BP WINS GTA LNG SALES ARBITRATION CASE

A unit of UK-based energy giant BP has won an arbitration against its partner Kosmos Energy over a dispute related to LNG sales from BP's Greater Tortue Ahmeyim project in Senegal and Mauritania. BP is the operator of the first GTA phase. Besides Kosmos, other partners include PETROSEN and SMH. In 2020, the partners signed a sales and purchase agreement under which BP Gas Marketing will offtake 2.45 million tonnes per annum of LNG from the first phase of the GTA project for an initial term of up to 20 years. BP's unit is the sole offtaker of the project's volumes. Kosmos CEO Andrew Inglis said last year that the company "agreed to move to arbitration to ensure that the interpretation of the contract is aligned between ourselves and BP." "On October 7, 2024, the International Chamber of Commerce informed Kosmos Energy that a final award had been issued in the arbitration proceedings with BP Gas Marketing regarding future LNG sales from the Greater Tortue Ahmeyim project," Kosmos said on Tuesday. According to Kosmos, the final, binding award prohibits the company from selling LNG cargoes to third-party buyers during the contract term of the LNG sales agreement, which the company has an option to end in 2033. "The final award does not change the terms of the LNG sales agreement as presently performed by the parties and is therefore not expected to have an impact on the company's long-term expectations and financial condition," Kosmos said. GTA launch In February, Golar LNG's 2.5 mtpa FLNG Gimi, which was converted from a 1975-built Moss LNG carrier with a

storage capacity of 125,000 cbm, arrived at the GTA hub. After that, the project's floating production, storage, and offloading (FPSO) unit also arrived in May at the GTA project off the coasts of Mauritania and Senegal. With eight processing and production modules, the FPSO will process around 500 million standard cubic feet of gas per day. The gas supplies will then be transported by pipeline to the FLNG unit at the GTA hub where it will be cryogenically cooled in the vessel's four liquefaction trains and stored before transfer to LNG carriers. Kosmos revealed in its second-quarter earnings results that the FLNG is expected to receive a pre-commissioning cargo to accelerate the cool down of the unit in August. Inglis also confirmed in August that the partners expect to produce first LNG cargo in the fourth quarter of this year. Second phase In February last year, the partners confirmed the development concept for the second phase of the GTA LNG project, which they will take forward to the next evaluation stage. The partnership will evaluate a gravity-based structure (GBS) as the basis for the GTA Phase 2 expansion project (GTA2) with total capacity of between 2.5-3 million tonnes per annum. GBS LNG developments have a static connection to the seabed with the structure providing LNG storage and a foundation for liquefication facilities. The concept design will also include new wells and subsea equipment, integrating with and expanding on existing GTA infrastructure. Source: www.lngprime.com

BUNKER ONE IN LNG BUNKERING MOVE, CHARTERS VESSEL FROM ANTHONY VEDER

Bunker Holding's unit Bunker One is set to launch LNG bunkering supply in northwestern Europe. The company has chartered its first LNG bunkering vessel from Dutch shipping firm Anthony Veder. Building on its existing activities supplying alternative fuels, Bunker One is expanding its current fuels portfolio by adding physical LNG and LBM or bio-LNG, according to a statement by Denmark's Bunker Holding. Bunker One expects to be ready to start first physical LNG deliveries in January 2025. With this move, Bunker Holding joins a growing number of companies looking to develop their LNG bunkering business. DNV's Alternative Fuels Insight platform recently revealed that 61 LNG bunkering vessels are in operation and 13 are on order. According to the platform, there are now 609 LNG-powered ships in operation and 565 LNG-fueled vessels on order. These statistics do not include smaller inland vessels or dual-fuel LNG carriers. Bunker One LNG Bunker One has established a new unit Bunker One LNG. The newly established entity will manage the physical LNG fuel portfolio, including last-mile delivery, and will be headed by managing director, Michael Behmerburg. Behmerburg joins from a position as director of new fuels at Germany's Hapag-Lloyd. "We are extremely pleased to be welcoming Michael Behmerburg to steer our Bunker One LNG entity. Michael brings a wealth of experience that is important for us to navigate properly in the upcoming transition," Peter Zachariassen, CEO of Bunker One said in the statement. Vessel charter Bunker One LNG has chartered the 10,000-cbm vessel Coral Fraseri. However, the company did not provide details of the charter deal. The 2009-built LNG and ethylene carrier is 137 meters long and 19.8 meters wide. "We are working hand in hand with the vessel's owner Anthony Veder to bring the vessel into operation. The vessel will undergo a regular class renewal at the end of 2024, during which several

modifications will be carried out to enhance her capabilities as an LNG bunker vessel," Behmerburg said. The purpose of the modification is to prepare the vessel for best-in-class service to the majority of seagoing vessels, including tankers, containerships, and car carriers. Also, Bunker One LNG is currently in the process of securing bunker permits to cover key ports in Northwest Europe. "We are very excited about this move to include physical supply of LNG and LBM as part of Bunker Holding's fuel offering, which builds on our successful activities supplying LNG through third parties," Valerie Ahrens, senior director of new fuels and carbon markets at Bunker Holding said. "Fossil LNG can offer up to 23 percent in greenhouse gas (GHG) reductions compared to conventional fuels and accompanies shipping's transition to a multi-fuel future," she said. "Hence, we regard LNG as a stepping stone to bio-LNG and e-LNG, which will help the industry achieve the mid-century decarbonization targets set by the IMO," Ahrens said. Source: www.lngprime.com

SINGAPORE'S EMA, SOUTH KOREA'S KOGAS INK NEW LNG COOPERATION DEAL

Singapore's Energy Market Authority and South Korea's Kogas have signed a new memorandum of understanding to collaborate in liquefied natural gas (LNG) procurement. In June this year, EMA and Kogas agreed to share best practices and knowledge on the procurement and management of LNG supplies and exchange personnel for training and learning purposes. The new MoU was signed on Tuesday during the Singapore-Korea Business Forum by Puah Kok Keong, chief executive of EMA, an Choi Yeon-Hye, president and CEO of Kogas. EMA said in a statement the deal has an expanded scope to explore joint procurement of LNG. Both parties have agreed to strengthen their collaboration further to explore joint procurement of LNG supplies, as well as cooperation in chartering or operating LNG carriers, EMA said. EMA noted that while Singapore continues to pursue alternative energy sources, natural gas will continue to account for a significant share of its energy mix during the energy transition. "This partnership with Kogas is an important one for us in enhancing our knowledge and expertise in the management and procurement of LNG supply," Puah Kok Keong said. "Joint procurement with other LNG buyers can potentially bring benefits to all parties such as better contract terms and pricing," he said. Singapore LNG projects. Singapore's first LNG terminal on Jurong Island, operated by Singapore LNG, began commercial operations in May 2013. It currently operates with two jetties, three storage tanks of 180,000 cbm each, a fourth storage tank of 260,000 cbm, and a peak sendout capacity of around 11 mtpa. In October last year, SLNG also secured approval from the Singapore government to develop and operate the country's second LNG import facility. A recent $413 million FSRU order at South Korea's Hanwha Ocean is being linked to MOL and SLNG. 77 LNG storage tanks On the other hand, Kogas operates 77 LNG storage tanks at five LNG import terminals in South Korea. The large terminals include Incheon, Pyeongtaek, Tongyeong, and Samcheok, while the firm has a small-scale regasification terminal at the Aewol port on Jeju Island as well. In addition to these facilities, the firm is building a large terminal in the western port city of Dangjin and expects to launch the first phase in 2025.Kogas recently completed lifting the roofs on all four 270,000-cbm tanks at its Dangjin LNG import facility. Source: www.lngprime.com

BP DELIVERS FIRST LNG CARGO TO ZHEJIANG ENERGY'S WENZHOU TERMINAL

A unit of UK-based energy giant BP has delivered its first liquefied natural gas cargo to Zhejiang Energy's Wenzhou LNG terminal in Zhejiang. According to a statement by BP China, the shipment arrived at the Wenzhou LNG terminal on October 7. BP China did not provide further details regarding the shipment. BP has created a fully integrated gas value chain in southern China for the second time, directly connecting upstream resources with downstream gas customers, the company said. Also, this move further boosts BP's cooperation with Zheijiang Energy. In July, the two firms, via their joint venture Zhejiang Yingneng LNG, started supplying LNG via trucks from Zhejiang Energy's Wenzhou LNG terminal. The trucked LNG supplies are used by industrial and commercial users. Last year, BP China and Zhejiang Energy agreed to establish a company to supply and sell LNG via trucks. BP China said this is the first cooperation between the two firms and BP's third marketing and sales venture in China for trucked LNG, including Shenzhen Dapeng LNG Marketing. In 2021, BP started directly supplying customers in China with regasified LNG from the Guangdong Dapeng LNG terminal in Shenzhen, where it owns a 30 percent stake. Zhejiang Energy launched its 3 mtpa Wenzhou LNG terminal in August last year. The terminal has four 200,000 cbm storage tanks, a jetty for ships of up to 266,000 cbm capacity, a truck loading facility, and a 25km pipeline linked to the grid. According to GIIGNL data, Zhejiang Energy holds a 51 percent stake in the terminal, while Sinopec holds a 41 percent stake. Liuheng LNG storage tank. Zheijang Energy said in a separate statement on its website that it has recently raised roofs on two LNG storage tanks at its Liuheng LNG terminal in Zhejiang. The operation of lifting the roofs using air pressure on the second and third LNG tank took place on September 9. The firm said it now plans to lift the roofs on the first and the fourth tank. Zhejiang Energy is building four 220,000-cbm LNG tanks and associated facilities. Upon completion, the project will increase the capacity of natural gas supply by 8.4 billion cubic meters per year, ensuring stable supply of natural gas in the Zhejiang province and neighboring regions, the company said. Source: www.lngprime.com

GTT CLINCHES NEW LNG TANK JOB

French LNG containment giant GTT has secured a new tank design order from South Korean shipbuilder Samsung Heavy Industries. GTT received the order during the third quarter of 2024. Under the order, Samsung Heavy contracted GTT to design tanks for two 174,000-cbm LNG carriers. These vessels will be fitted with GTT's Mark III Flex membrane containment system. Also, the delivery of the vessels is scheduled between the first and second quarters of 2027. GTT said the yard will build these LNG carriers for an Asian shipowner. Malaysia's LNG shipper MISC, a unit of Petronas, recently ordered two LNG carriers at Samsung Heavy. In parallel, MISC signed a letter of intent with Petronas LNG to charter the two vessels. MISC said the newbuild LNG carriers will be delivered in 2027, but it did not provide further details regarding the shipbuilding deal with Samsung Heavy. Samsung Heavy announced in a stock exchange that it had won an order from an Asian owner for two

LNG carriers scheduled for delivery by April 2027. The order is worth 678.3 billion won ($514 million) or about $257 million per vessel. Prior to this order, GTT secured a contract from Samsung Heavy to design tanks of four 174,000-cbm LNG carriers. These vessels will also be fitted with GTT's Mark III Flex membrane containment system. This order and an order for four LNG carriers at Hanwha Ocean are related to the eight vessels Adnoc Logistics & Services, a unit of UAE's energy giant Adnoc, ordered at Samsung Heavy and Hanwha Ocean. Adnoc L&S said on July 1 that each of the shipbuilding deals includes four firm vessels and one optional LNG carrier, for a total of 10 vessels. The shipbuilding deals are worth $2.5 billion (AED 9.2 billion). Source: www.lngprime.com

JIANGNAN FLOATS OUT ADNOC'S LNG CARRIER

China's Jiangnan Shipyard has launched the second 175,000-cbm LNG carrier it is building for a unit of UAE's Abu Dhabi National Oil Co (Adnoc). According to CSSC's Jiangnan, the launching ceremony for the LNG carrier Al Rahba took place on October 8. In addition to the LNG carrier, Jiangnan also launched the third of four 14,000-teu LNG-powered containerships it is building for Singapore's Pacific International Lines. The LNG carrier is the second in a series of six vessels Adnoc L&S ordered during 2022 from Jiangnan, and they will all be delivered by the end of 2026. The entire order is worth more than $1.2 billion. The shipbuilder aims to deliver the first LNG carrier in this series, Al Shelila, in December this year. These "LNG Jumbo" dual-fuel carriers feature GTT's Mark III Flex membrane system and a partial reliquefication system. Adnoc is investing heavily in its LNG business and made the final investment decision in June to build its LNG export terminal in Al Ruwais. The LNG project will consist of two 4.8 mtpa trains with a total capacity of 9.6 mtpa, more than doubling Adnoc's existing UAE LNG production capacity to around 15 mtpa, as the company builds its international LNG portfolio. Adnoc currently owns a 70 percent stake in Adnoc LNG, that produces about 6 mtpa of LNG from its facilities on Das Island. Adnoc L&S's existing fleet of Moss-type, steam turbine LNG carriers serves its terminal on Das Island. In May, the company also selected two South Korean shipbuilders to build six LNG carriers following a tender. These LNG carriers are expected to serve Adnoc's second LNG terminal in Al Ruwais. Source: www.lngprime.com

MIQ CERTIFIES GRAIN LNG IMPORT TERMINAL

MiQ, a leading provider of emissions certification, said October 8 it had certified National Grid's Grain LNG terminal in the UK, Europe's largest LNG import facility. The certification will enable US producers to service demand from EU and UK buyers who want transparency on emissions from their LNG purchases, MiQ CEO Georges Tibosch said. The certification will be announced by MiQ October 9 at the BloombergNEF London Summit. "The certification of Grain LNG provides UK and European natural gas buyers with additional transparency about the level of emissions from imported LNG," he said. "US exporters can service the demand for lower emissions LNG by undergoing third-party certification of their facilities." The certification of Grain LNG follows the announcement last month of a pilot transaction involving European energy trader Uniper, US natural gas producer EQT and MiQ to move 4bn ft3 of certified natural gas as LNG to the European market. Tibosch said that transaction,

and the Grain LNG certification, will help ensure LNG exports to Europe meet the EU's new regulations. "We anticipate more facilities in Europe undergoing certification shortly and expect to see the first certified LNG cargo travel from the US to Europe before the end of the year," Tibosch said. Source: www.naturalgasworld.com

NORWAY'S EQUINOR REMAINS COMMITTED TO TANZANIA LNG PROJECT

CAPE TOWN, Oct 8 (Reuters) - Norway's Equinor remains committed to a $42 billion liquefied natural gas (LNG) project in Tanzania that has stalled after proposed government changes to a financial agreement reached last year, a senior company executive said on Tuesday. Negotiations have been delayed for the East African country's mega gas project after changes to the agreement, a government spokesperson and two company sources told Reuters in May. "Our focus now is to agree on the commercial agreements for Tanzania LNG," Equinor senior vice president Nina Koch said on the sidelines of an African oil and gas conference in Cape Town. "We are very much committed to the project, and we will continue to work and have the dialogue with the partnership and government to get alignment," she said, adding that there were no timelines for a resolution. The Tanzanian government did not respond immediately to a request for comment. Source: www.naturalgasworld.com

BANGLADESH CANCELS LNG TERMINAL, SUPPLY CONTRACT WITH SUMMIT GROUP

Bangladesh has terminated its agreement with domestic conglomerate Summit Group to build a second floating liquefied natural gas (LNG) terminal in the country, the company said. Summit received a termination notice for the development on Monday evening, it said in a statement to Reuters sent late on Monday. The LNG import terminal would have been Bangladesh's third and was estimated to have been operational by the second quarter of 2026. Summit operates one of Bangladesh's two LNG import terminals. The cancellation follows a recommendation from a government committee earlier this month to void the contract, which was signed in March under a law that was meant to ensure uninterrupted power supply for the country, but which critics say was not a transparent process. Summit said in its statement it has a proven track record of developing long-term infrastructure projects in Bangladesh in a responsible and transparent manner "We believe this is unjustified and will appeal for review," the company said. An official from state-owned energy company Petrobangla, who asked to remain unidentified because they are not authorised to speak to the media, confirmed the Summit deal had been cancelled. The cancellation of Summit's contract will also end a 15-year LNG supply agreement tied to the terminal's construction, the Petrobangla official said. Muhammad Fouzul Kabir Khan, the power and energy adviser to the government, did not immediately reply when contacted for a response on the cancellation. Bangladesh's interim government led by Nobel Peace Prize winner Muhammad Yunus, which came to power after widespread protests forced the resignation of Prime Minister Sheikh Hasina, raised concerns over the financial risks associated with agreements like the one with Summit. Last month, Petrobangla began issuing tenders to buy spot LNG cargoes from the international market via an open tender process rather than a private tender.

Source: www.naturalgasworld.com

VOPAK, TRANSNET MOVING FORWARD WITH SOUTH AFRICAN LNG TERMINAL PLANS

Dutch terminal operator Vopak and its partner Transnet Pipelines are moving forward with their plans to develop a liquefied natural gas (LNG) import terminal in South Africa's Richards Bay. In January, South Africa's Transnet National Ports Authority appointed the two firms to build and operate the import facility at the Port of Richards Bay. Both TNPA, which is developing an LNG import terminal in the Port of Ngqura, and Transnet Pipeline are part of the South African rail, port, and pipeline company Transnet, which is owned by the South African government. Vopak is developing the project via its 70 percent owned joint venture Vopak Terminal Durban. In March, Vopak Terminal Durban and Transnet Pipelines invited parties interested in booking capacity at their proposed LNG import terminal, named Zululand Energy Terminal, in Richards Bay to submit their expression of interest. The duo now completed the EOI process. As a part of the next steps, Zululand Energy Terminal has formally launched the request for proposal (RFP) on September 23, according to a statement. The RFP outlines the project's scope, objectives, and evaluation criteria. The statement said that all parties selected from the EOI submissions have been given the opportunity to respond to the RFP. The deadline to submit the RFP response is October 18. Wood wins contract, The duo said in a separate statement that they picked UK-based engineer Wood to undertake the pre-FEED phase for the project, which is "pivotal" for the detailed planning and execution of the LNG project. The contract award followed a comprehensive and competitive bidding process. Moreover, the scope of work for the pre-FEED phase includes detailed engineering and design, cost estimation, scheduling, and risk assessment. The partners said this phase will set the foundation for the subsequent front-end engineering design (FEED) and eventual construction of the LNG facility. In addition to this contract, the partners also selected Standard Bank as the LNG project's financial advisor. As the appointed financial advisor, Standard Bank will play a "critical" role in structuring the financial framework for the project, securing the necessary funding, and managing financial risks to ensure long-term sustainability and value creation, the partners said. Two phases Vopak and Transnet Pipelines plan to develop the project in two phases. According to Zululand Energy Terminal's website, the first phase includes a floating storage unit (FSU) of at least 170,000 cbm capacity and an onshore regasification system with an indicative capacity of 2 mtpa, or about 400 mmscfd. Vopak and Transnet Pipelines target the commercial operations date (COD) for this phase in 2028. The second phase includes an onshore LNG tank with an indicative capacity of 220,000 cbm. The onshore tank will potentially replace the FSU and provide additional regas capacity to increase the total capacity up to 5 mtpa, or about 600 mmscfd. Source: www.lngprime.com

EQUINOR SAYS COSTS CLIMB FOR HAMMERFEST LNG UPGRADE PROJECT

Norway's Equinor reported an increase in costs for the Snohvit Future project, which involves upgrading the 4.3 mtpa Hammerfest LNG export facility on Melkoya island. The project includes onshore compression and electrification of the

Hammerfest LNG terminal. "Since the PDO (plan for development and operation) the cost increase is 1.9 billion 2024-NOK," Equinor said in a statement on Monday. According to the firm, more than 500 million Norwegian krone of this relates to currency effects. "One of the main reasons for the higher costs is the joint venture's decision to change the design of an electric boiler as a result of safety considerations," Equinor said. The firm did not provide further information. In August last year, Equinor and its partners Petoro, TotalEnergies, Neptune Energy, and Wintershall Dea received an approval for the Snohvit Future project to upgrade the LNG export facility. The Norwegian firm and its partners said in December 2022 they would invest 13.2 billion Norwegian krone ($1.24 billion) to upgrade the facility. Moreover, the project will extend the productive life of Hammerfest LNG past 2030. Hammerfest LNG liquefies natural gas coming from the Snohvit field in the Barents Sea. Gas reaches Hammerfest LNG via a 160-kilometer gas pipeline which became operational in the autumn of 2007. Equinor is the operator of both the Snohvit field and Hammerfest LNG with a 36.8 percent stake. Other license owners of Snohvit are Petoro (30 percent), TotalEnergies EP Norge (18.4 percent), Neptune Energy Norge (12 percent), and Wintershall Dea Norge (2.81 percent). Source: www.lngprime.com

BANGLADESH'S RPGCL LAUNCHES NEW LNG CARGO TENDER

Bangladesh's Rupantarita Prakritik Gas (RPGCL), a unit of state-owned Petrobangla, has released a new tender inviting firms to submit bids for two spot LNG cargoes for delivery in November. RPGCL issued the tender to "23 organizations that we have signed the MSPA (master sale and purchase agreement) with Petrobangla." According to a tender document posted on RPGCL's website, the delivery windows for the spot LNG cargoes are November 3-4 and November 10-11. The tender will close on October 14. Prior to this tender, RPGCL invited bids for two spot LNG cargoes for delivery during October 27-28 and November 3-4. This means that RGPCL is again seeking bids for the November 3-4 delivery. This tender closed on October 6. RPGCL also previously invited bids for three LNG cargoes with delivery windows October 10-11, October 17-18, and October 27-28. This tender closed on September 29. Bangladesh currently imports LNG via two FSRU-based facilities, both of which feature Excelerate Energy's FSRUs. The 138,000-cbm FSRU Excellence serves Bangladesh's first LNG import facility, Moheshkhali Floating LNG or MLNG, operated by Petrobangla. Launched in 2018, the FSRU-based terminal completed its 100th STS transfer offshore Bangladesh in 2021. Excelerate's 138,000-cbm FSRU Summit LNG serves as the second LNG import facility operated by Summit. Last month, Summit said the FSRU was ready to resume sendout to the grid in Bangladesh. The FSRU sustained damage on May 27 during cyclone Remal and was again damaged on July 10 after it returned from a repair yard in Singapore. Besides chartering FSRUs, Exclerate previously delivered spot LNG cargoes to Bangladesh. Last year, the firm signed a 15-year LNG supply deal with Petrobangla. Under the SPA, Petrobangla has agreed to purchase 0.85 to 1 million tonnes per annum of LNG from Excelerate beginning January 2026. Excelerate joined forces with state-owned LNG giant QatarEnergy to supply Bangladesh with LNG. Qatar is already the largest LNG supplier to Bangladesh. Source: www.lngprime.com

TOTALENERGIES TO SUPPLY TWO MORE LNG CARGOES TO BULGARGAZ

A unit of French energy giant TotalEnergies will supply two more liquefied natural gas (LNG) cargoes to Bulgaria's Bulgargaz via Greece following the completion of a recent tender. Bulgargaz recently launched three tenders for the delivery of five cargoes during the upcoming autumn-winter season. The company previously awarded the October LNG cargo to TotalEnergies and this shipment was already delivered to Gastrade's FSRU-based LNG terminal off Alexandroupolis. According to a statement by Bulgargaz on Friday, thirteen international companies showed interest in supplying LNG to the company via the Alexandroupolis FSRU during November and December. Six of these companies submitted binding offers. "TotalEnergies Gas and Power Ltd. was ranked first among the participants in this tender as well, as it offered the most competitive terms for supply, taking into account all the criteria set by Bulgargaz," the company said. Bulgargaz sought two LNG cargoes, each of about 150,000 cbm, for delivery during November 23-31 and the other during December 23-30, 2024. Bulgargaz is also seeking two LNG cargoes for delivery during January 24-31 and February 21-28, 2025. "The deadline for interested parties to register in the tender procedure for LNG supply for the months of January-February 2025 is still running and a supplier for these cargoes is expected to be selected in mid-November," the company said. First commercial LNG cargo to Alexandroupolis FSRU Last week, Gastrade's FSRU-based LNG import terminal off Greece's Alexandroupolis received its first commercial LNG shipment. The 2009-built 165,500-cbm, Seapeak Magellan, which is on charter to France's TotalEnergies, docked at the 153,600-cbm FSRU, Alexandroupolis, on October 3. Seapeak Magellan brought the cargo from Equinor's Hammerfest LNG export terminal in Norway, where TotalEnergies is a shareholder. As mentioned above, TotalEnergies delivered the cargo to Bulgargaz, which previously booked capacity at the FSRU-based LNG import facility. Gastrade officially launched commercial operations at its FSRU-based LNG import terminal on October 1. 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 has a capacity of up to 5.5 bcm. Gastrade said the terminal will deliver natural gas to Greece, Bulgaria, Romania, North Macedonia, Serbia, Moldova, and Ukraine in the east, as well as Hungary and Slovakia in the west. source: www.lngprime.com

SHELL EXPECTS Q3 LNG TRADING RESULTS TO BE IN LINE COMPARED TO PREVIOUS QUARTER

NG giant Shell expects trading and optimization results for its integrated gas business in the third quarter of this year to be in line compared with the previous quarter. Shell revealed this in its third-quarter update note on Monday. The company's adjusted earnings reached $6.29 billion in the second quarter, a rise of 24 percent compared to the second quarter in 2023, while Shell's integrated gas segment reported adjusted earnings of about $2.67 billion in the second quarter. This compares to $2.50 billion in the same period a year ago and $3.68 billion in the prior quarter. Liquefaction volumes Shell said in the quarterly

update that it expects liquefaction volumes to reach about 7.3 – 7.7 million tonnes in the third quarter. The company previously expected liquefaction volumes to reach about 6.8 – 7.4 million tonnes in the third quarter of 2024 saying the outlook reflects scheduled maintenance across the portfolio. Shell's liquefaction volumes decreased to 6.95 million tonnes in the second quarter this year compared to 7.17 million tonnes in the comparable quarter and 7.58 million tonnes in the prior quarter. The company sold 16.41 million tonnes of LNG in the April-June period, a rise compared to 16.03 million tonnes in the same period last year. LNG sales dropped 3 percent compared to 16.87 million tonnes in the prior quarter. Gas production Shell expects integrated gas production to reach 920-960 kboe/d in the third quarter, while upstream production is expected to be at 1,740-1,840 kboe/d. The company previously expected gas production to be between 920 – 980 kboe/d and upstream production to be between 1,580 – 1,780 kboe/d, saying the outlook reflects higher scheduled maintenance across the portfolio. Shell's quarterly results are scheduled to be published on October 31, 2024. source: www.lngprime.com

JERA GLOBAL MARKETS CLOSES $1.5 BILLION CREDIT FACILITY TO SUPPORT LNG BUSINESS

Singapore-based LNG trader Jera Global Markets, a joint venture of Japan's Jera and France's EDF, has closed its one-year syndicated revolving credit facility at $1.495 billion. "This facility, which follows on the success of last year's RCF, was substantially oversubscribed by more than 180 percent from the initial launch amount of $900 million with Jeragm choosing to scale back lender commitments," Jeragm said in a statement. Thirty financial institutions participated in the transaction, which included 10 new lenders. Moreover, Jeragm said the facility will be used for general corporate purposes, including the company's global LNG trading business, which operates a diverse portfolio. "This facility enhances our ability to pursue strategic growth initiatives even as we continue our focus on delivering robust shareholder returns," said Justin Rowland, CEO of Jeragm. Rowland said the commitment from 30 banks reflects "strong support from Jera Global Markets' network of financial partners across this region and the Middle East." Jeragm's LNG trading business. Last year, Jeragm appointed Rowland as its new CEO. Rowland joined Jeragm in 2019 from EDF Trading, where he spent 18 years in various leadership positions, including chief finance and risk officer. Jera, a joint venture of Tepco and Chubu Electric, owns 66.67 percent of Jeragm, while EDF Trading, a unit of French state-controlled utility EDF, holds the rest. In April 2019, Jera and EDF Trading merged their LNG trading and optimization activities. Last year, Jeragm boosted the size of its chartered fleet of LNG carriers by adding a newbuild vessel owned by Greece's Alpha Gas. The firm has a fleet of 18 carriers supporting its global trading operations. Jeragm also agreed last year to buy LNG from UAE's Adnoc Gas, a unit of Adnoc. Jeragm manages and operates third-party supply agreements from Australia, Southeast Asia, the Middle East, and the US Gulf and optimizes term contracts on behalf of Jera and EDF Trading. According to its website, its gross executed LNG trade volume reached about 46 million tons in fiscal 2023. Earlier this year, Jera said it plans to invest 1-2 trillion yen ($6.75-$13.5 billion) in its LNG business by fiscal

2035. Jera targets more than 35 million tons of LNG transaction volume, aims to achieve 20 GW (gigawatts) of renewable capacity, and targets about 7 million tons of hydrogen and ammonia handling volume by fiscal 2035. Source: www.lngprime.com

GLADSTONE LNG EXPORTS DOWN 1.6 PERCENT IN SEPTEMBER

Liquefied natural gas (LNG) exports from the Gladstone port in Australia's Queensland decreased 1.6 percent year-on-year in September, according to the monthly data by Gladstone Ports Corporation. Curtis Island is home to the Santos-operated GLNG plant, the ConocoPhillips-led APLNG terminal, and Shell's QCLNG facility. These are the only LNG export facilities on Australia's east coast. About 1.99 million tonnes of LNG or 31 cargoes left the three Gladstone terminals on Curtis Island last month, GPC's data shows. This compares to about 2.02 million tonnes of LNG or 31 cargoes in September 2023. September LNG exports rose compared to the month before when LNG exports reached some 1.98 million tonnes of LNG or 30 cargoes. Most of September's LNG exports (1.26 tonnes) landed in China, an 11 percent increase from 1.13 million tonnes last year. Other destinations for Gladstone LNG exports in September include South Korea (311,091 tonnes), Malaysia (186,413 tonnes), Philippines (103,202 tonnes), Japan (66,235 tonnes), and Singapore (64,839 tonnes). GPC's data shows that volumes to South Korea rose compared to 297,638 tonnes last year, and volumes to Malaysia increased compared to 125,136 tonnes last year. Volumes to Japan dipped compared to 263,640 tonnes in September 2023. The three Gladstone terminals shipped about 22.97 million tonnes of LNG or 350 cargoes in 2023. This compares to about 22.64 million tonnes of LNG or 354 cargoes in 2022. It is worth mentioning here that the Australian Competition and Consumer Commission (ACCC) recently said Queensland LNG producers may need to commit more gas to the east coast market to mitigate the risk of shortfalls. The gas supply surplus in the Australian east coast gas market is forecast to be between 12 and 27 petajoules (PJ) in the first quarter of 2025. ACCC said the exact size of the surplus would largely depend on how much uncontracted gas Queensland LNG producers would export. Source: www.lngprime.com

ENI INKS LNG PACT WITH JAPAN'S JOGMEC

Italian energy firm Eni has signed a memorandum of understanding with Japan Organization for Metals and Energy Security (JOGMEC) to collaborate on LNG supply as part of Japan's plans to diversify its supply sources. Eni and JOGMEC signed the deal in Japan on Sunday. "The memorandum aims to promote the role of gas and LNG in the energy transition pathway, emphasizing the importance of achieving carbon neutrality in the context of economic growth and the protection of energy security," Eni said in a statement. This includes LNG supply opportunities by Eni to Japan, it said. Japan is the world's second-largest LNG importer after China. The country's LNG imports rose slightly in August, logging a year-on-year increase for the fifth month in a row. According to provisional data released by the country's Ministry of Finance, the country's LNG imports rose 1 percent year-on-year to 5.72 million tonnes last month. Coral North FLNG In addition to LNG supplies, Eni said the memorandum includes the support of Japanese financial institutions for the Coral North FLNG project in Mozambique. Eni's

3.4 mtpa Coral Sul FLNG located offshore Mozambique recently reached 5 million tons of LNG production since its launch in 2022. Eni discovered Coral back in May 2012 and it operates the Area 4 along its partners ExxonMobil, CNPC, GALP, Kogas, and ENH. The partners are now working on the second FLNG project offshore Mozambique, called Coral Norte (Coral North). Coral Norte would be a replica of Coral South. CLEAN Eni also said in the statement it supports the Coalition for LNG Emission Abatement toward Net zero (CLEAN Initiative), launched by major Japanese and Korean importers and supported by their respective governments. The initiative aims to facilitate global assessments of LNG projects and share information and know-how on industry best practices to reduce emissions along the entire value chain. At the same time, the CLEAN Initiative highlights the commitment of Tokyo and Seoul, the world's second and third-largest LNG importers, respectively, to the decarbonization challenge, Eni said. Source: www.lngprime.com

GASLOG TAKES DELIVERY OF LNG CARRIER IN SOUTH KOREA

Greece's GasLog has taken delivery of a new liquefied natural gas (LNG) carrier from Hanwha Ocean in South Korea. According to a social media post by GasLog, the naming ceremony for the 174,000-cbm Marvel Phoenix took place on September 30. On October 2, Marvel Phoenix was officially delivered. This delivery marks the newest addition to the GasLog fleet, following the successful delivery of her sister vessel, GasLog Italy. The 294.9 meters-long and 46.4 meters-wide ice-class vessel has HP-2S ME-GI engines, two shaft generators, and a full reliquefication system (FRS). GasLog chartered this LNG carrier to Japan's Mitsui for a period of nine years. Hanwha Ocean, previously known as DSME, launched this vessel and its sister ship GasLog Italy in February this year. GasLog Italy serves a charter deal with Italy's Eni. Peter Livanos-led GasLog ordered these vessels and two other 174,000-cbm LNG carriers at Hanwha Ocean in December 2021.The last two LNG carriers in this batch, scheduled for delivery in the second half of 2025, will serve Australia's Woodside under charter deals. All of the LNG carriers have ME-GI propulsion. ME-GI is short for M-type, electronically controlled, gas-injection propulsion. In addition, the vessels also feature a carbon capture and storage system. Source: www.lngprime.com

RISING PRODUCTION, CONSUMPTION SHOW CHINA IS GAINING GROUND IN ITS NATURAL GAS GOALS [GAS EXPERT INSIGHTS]

China's latest Natural Gas Development Report shows the nation made gains last year in efforts to restructure its natural gas market, increasing domestic production and consumption; boosting imports of liquefied natural gas; adopting technologies to boost domestic exploration and production and cut emissions; and reforming pipeline transmission tariffs.[1] The new tariffs are likely to help grow natural gas supplies, reduce end-user costs and increase consumption. The world's top importer of natural gas now supplies about 60 percent of its demand with domestic supplies, thanks in part to reforms aimed at increasing domestic supplies and consumption. As the world takes on many challenges from climate change and energy transition, China's use and views of natural gas in its energy mix are critically important. In this blog, the authors explore these key takeaways from the 2023-2024 report.

Industry and city-gas drove China's natural gas consumption in 2023

In 2023, China consumed 394.5 billion cubic meters (bcm) of gas, a year-on-year increase of 7.6 percent. Industry and city gas, which includes residential and transport use, accounted for most of the incremental demand growth of 28.2 bcm. While industry was the largest contributor to this growth (12.3 bcm) and the largest sectoral consumer, city gas was the fastest-growing sector (Table 1). Its double-digit increase was partly due to the "explosive growth" of heavy-duty trucks powered by LNG. Indeed, 152,000 LNG-powered heavy-duty trucks were sold in 2023, a year-on-year increase of 307 percent. This growth continued in the first half of 2024, with sales of LNG-fueled heavy-duty trucks surging by 104 percent year-on-year. These sales contributed to an 8.7 percent year-on-year increase in China's natural gas consumption to 210.8 bcm in the first half of 2024. Sales continued to grow year-on-year in July but fell in August due to the increase in LNG prices, the narrowing of oil and gas price differentials and the absence of new policy support.

Table 1: China natural gas consumption by sector in 2023

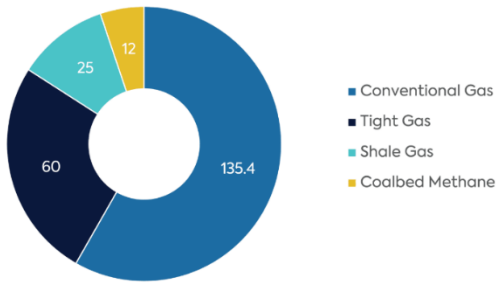
Sector	Consumption (bcm)	Increase 2023 vs 2022 (bcm)	% China Total	% Change Over 2022
Industrial fuel	165.7	12.3	42%	8%
City gas	130.2	11.8	33%	10%
Power generation	67.1	4.4	17%	7%
Fertilizer	31.6	0.0	8%	0%
Total	394.5	28.2	100%	7.6%

Source: China Natural Gas Development Report (2024)

More than 40 percent of Chinese domestic gas production was from unconventional sources in 2023

In 2023, China produced 232.4 bcm domestically, an increase of 12.3 bcm or 5.6 percent over 2022. Domestic output met some 59 percent of China's total demand, keeping import dependence at 41 percent, unchanged from last year. According to the report, 43 percent of domestic gas production, 97 bcm, was from unconventional sources (Figure 1). China has been investing heavily in domestic oil and gas exploration, development and production (E&P) since 2019, partly due to Chinese leader Xi Jinping's July 2018 instruction to China's national oil companies (NOCs) to increase domestic E&P. In 2019, the three major NOCs released their first ever seven-year plans to intensify E&P in 2019-2025. Xi subsequently announced that China must reduce dependence on imported oil and gas.Chinese NOCs have implemented this strategy with significantly higher capital investment in domestic E&P. The three major NOCs collectively increased their domestic gas production by 43 percent in 2018-2023, setting new production records last year.

Figure 1: China Gas Production 2023 (Total 232.4 bcm)



Source: China Natural Gas Development Report (2024)

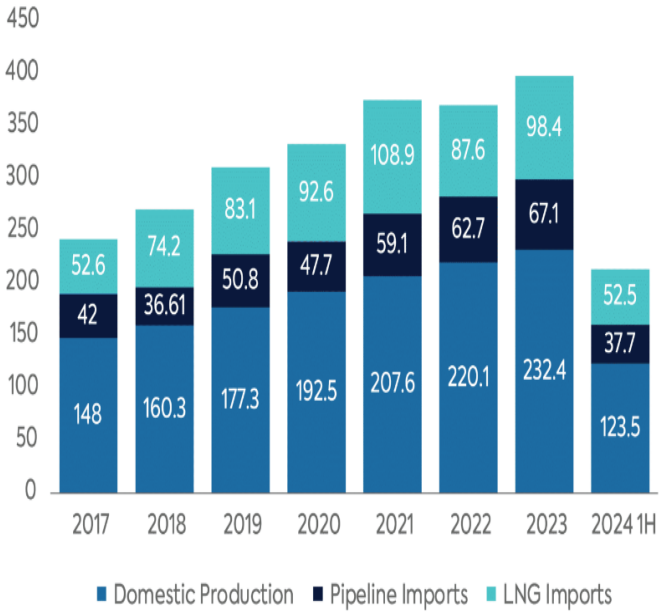
China's LNG imports rose by over 12 percent

China continues to import more LNG than pipeline gas (Figure 2). In 2023, 59 percent of China's natural gas imports of 165.5 bcm were LNG and 41 percent were pipeline gas. The country's LNG imports rebounded by growing 12.3 percent, and

China replaced Japan as the world's largest LNG importer on an annual basis. However, China LNG imports remained below their peak of 108.9 bcm (or 79.5MT) in 2021.

Australia, Qatar, Russia, and Turkmenistan supplied nearly three-quarters of China's natural gas imports. New long-term supply contracts signed by Chinese buyers and growth in China's regasification capacity indicate that China's LNG imports will probably continue to grow. Chinese imports increased by over 14 percent during the first half of 2024.

Figure 2: China Gas Supply from 2017-2024 1H (in billion cubic meters)



Sources: China Natural Gas Development Reports

China made technological breakthroughs to promote natural gas production and consumption

The report highlighted several technological breakthroughs consistent with China's emphasis on independent research, design and production of key equipment to counter the perceived risk of potential Western technology export bans directed at China. Four new technologies are worth noting. The first two aim to facilitate energy transition and emission reduction, while the second two aim to explore and develop oil and gas either in deepwater settings or deep-seated reservoirs:

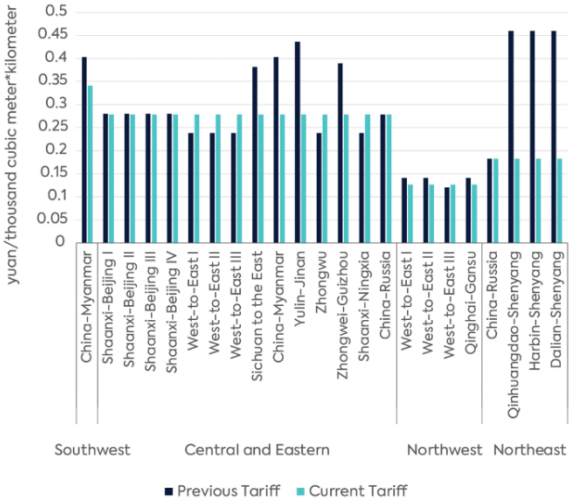
1. Simultaneous power generation using geothermal energy from hot water, encountered in deep oil and gas development wells
2. Power generation by using pressure differentiation from natural gas. This is claimed to be a net zero emission technology.
3. Independently developed "Hai-Jing" system to reduce noise levels to conduct high-resolution 3D seismic surveys in ultra-deepwater (>3,000m) areas such as the South China Sea.
4. Automated rigs for ultra-deep (>12,000m) drilling, deployed in the Tarim Basin in western China.

Pipeline transmission tariff reform moves forward

On January 1, 2024, China implemented a new pipeline transmission tariff system for inter-provincial pipelines operated by PipeChina, which controls more than 60 percent of the country's oil and natural gas pipelines. The new system replaces 20 tariffs with one each for four zones: Northwest, Northeast, Southwest, and Central and East. It aims to further the objective for which Beijing established PipeChina in 2019 – the creation of a unified national pipeline network to increase supplies, lower end-user costs and boost consumption. Although the new system has reduced

tariffs across China, some pipelines now have higher tariffs while others have lower ones (Figure 3).The Northwest is the zone with the lowest tariff, probably because it is a strategic import channel for natural gas from Central Asia. The second lowest tariff is for the Northeast, which is a strategic import channel for Russian gas. The highest tariff is for the Southwest; it only contains the China-Myanmar pipeline, the tariff for which has declined by 15 percent. Several pipelines in the Central and East, the country's main natural gas consumption center and a transit zone, now have higher tariffs. The new system is likely to lead to an increase in China's natural gas supply and consumption. The zonal tariffs should make it easier for downstream companies to shop around for cost-competitive supplies because it is easier to compare prices. This, in turn, should lead to lower upstream costs as producing companies compete against each other to secure customers.

Figure 3: Changes in Transmission Tariffs for Select Pipelines



Source: "China to Cut Gas Pipeline Tranmission Tariffs from Jan. 1, 2024," Mysteel, January 1, 2024, https://finance.sina.cn/futuremarket/qszx/2023-12-29/detail-imzzsuqw3464304.d.html?source=hfquote

Gas market conditions in 2024 seen as favorable to China's goals

China sees a well-supplied global gas market, leading to a volatile but generally declining price environment it believes will be supportive of the "recovery and improvement" of its gas market. The report anticipates lower global gas demand growth due to weak global economic recovery, especially in the manufacturing sector. There are, however, a number of risk factors such as geopolitical tensions, sanctions and anti-sanction moves, and extreme weather conditions. The report projects that China will consume 420 – 425 bcm of gas in 2024, an increase of 6.5 – 7.7 percent over 2023. It also expects domestic gas production to reach 246 bcm, and imports to rise to 174-179 bcm. As Table 2 indicates, these projections indicate that China gas demand might grow more slowly in 2024 than in 2023 and the previous six years, whereas growth in total gas imports might be significantly lower than in 2023 and in the past 6 years, as domestic production continues to rise at a pace higher than that of 2023. Source: www.naturalgasworld.com

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