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LNG NEWS WEEKLY 27TH OCTOBER 2024

HAS RATES SLUMP CANCELLED LNG SHIPOWNERS' CHRISTMAS?

Whatever is going on in LNG shipping? It is almost November and aside from the odd fixture flurry, spot charter rates across all vessel types appear to have sunk like a stone to unseasonably low levels at a time when they normally reach their highest levels for the year. Brokers are pegging rates in the Atlantic basin for modern two-stroke LNG carriers in the daily range of $20,000 to $30,000, with rates for tri-fuel diesel-electric ships equating roughly to operating expenses and steam turbine ships attracting close to zero. It is a bit of a shocker for LNG owners and operators who have become accustomed to rates shooting up well into six figures with the approach of the usually busy demand season ahead of winter. To counter this, in the past few years, portfolio players have chartered in vessels on period hire to give them cover for demand spikes, with the result that little tonnage is left in the hands of independent owners and operators. But not this year, it seems. Spark Commodities chief executive Tim Mendelssohn said: "Global LNG freight rates continue to fall to their lowest level in the last five years for this time of year, driven by increased vessel availability and lower tonne-miles as vessels stay within the basin." Warm weather in Asia and Europe is adding to the downward pressure on rates. "This winter market comes down to the inter-basin arbitrage and the weather," Fearnley LNG said. Incredibly depressed, It calculates that even with a sustained open arbitrage, the rapid

fleet growth and lack of help from the cargo market mean rate jumps will not be anywhere near as big as those in the past few years. Last week, charterers were gleefully heard telling owners that only the climate phenomenon El Nino — which can bring colder winters in Europe — could save them now. But the picture is complicated. SSY managing director of LNG Toby Dunipace said: "Considering the time of year, it is too soon to rule out a winter recovery completely. But the current market conditions are incredibly depressed for LNG shipping, especially in the Atlantic, where rates continue to tumble week on week. "There is a fundamental oversupply of shipping, which is in the hands of the portfolio players. "Unlike previous years, where these market participants were reluctant to release tonnage to increase trading flexibility, so far this winter, they are being very aggressive in an effort to avoid idle time and keep their vessels employed, either through aggressive bids for free-on-board cargoes or chartering out at ever-lower rates. "Independent shipowners who do not have the option of purchasing cargoes to utilise their vessels are perhaps suffering even more. "This is the current depressed reality we are faced with. But a cold winter in the Far East could yet facilitate a recovery." Howe Robinson Partners said: "These spot rate levels are the lowest seen during the winter period for two-stroke tonnage." The shipbroker noted some unique aspects in today's market: two major global conflicts, the Suez Canal a no-go area for LNG carriers, vessels body-swerving the Panama Canal due to earlier disruptions, a more diversified ownership and ship deliveries running ahead of new LNG projects, some of which are delayed. "There is likely to be a bumpy road ahead for the next 18 months," it added. Not everyone regards the rate slump as entirely negative. One owner said some charterers could have taken a position on their sublets, leaving them short on shipping and vulnerable if the market suddenly turns on any geopolitical shock. He withdrew his initial comment that the LNG market is "screwed up" but said it has grown and is not very transparent. "We've never seen it behave like this because we have never had this kind of market. "On a long-haul flight home from Japan, the ever-upbeat Flex LNG chief executive Oystein Kalleklev said: "It seems like Christmas has been cancelled for LNG shipowners this year, with only coal in their stockings despite owners being on their best behaviour. "We are not too surprised, as a lot of ships were due for delivery this year while [LNG] volume growth is muted." Kalleklev said Flex had stayed out of the spot market this year, instead fixing one of its vessels on a term deal. But he added: "However, looking at the glass half full, finally we can have a bit acceleration in the retirement of steam tonnage, which is long overdue." source: www.tradewindsnews.com

CROWN LNG NEARS SITE SELECTION FOR NEW US OFFSHORE PROJECT

Newly US-listed liquefaction and receiving terminal developer Crown LNG is close to naming the site of its planned offshore LNG production project in the US. Speaking to TradeWinds, Crown chief executive Swapan Kataria said the company plans to build two gravity-based structures (GBS) of 4.5m to 5m tonnes per annum each in the US. These will be located off Louisiana, outside US waters to give a 10-mtpa project. Kataria said the company had looked at 40 different sites outside US waters and had narrowed these down to three. He said Crown is homing in on its preferred location and checking the integrity

of the pipelines that serve it before making an announcement and had already decided on the name of the project. Kataria explained that the company was approaching its US project from a different direction to those who build out US liquefaction and then seek LNG buyers. Instead, he highlighted that Crown is building its planned and permitted 7.2-mtpa Kakinada Terminal Project in India, which will also be a GBS, so it already had market access for its LNG. Kataria said Crown hopes to start the GBS construction next year for the India terminal — which could be open to use by other importers. He hopes it will be in operation by the end of 2028 or in 2029. For the US liquefaction project, Crown is looking for a dock to build the GBS and working on securing a gas supply for the project. Kataria said the company is talking to gas suppliers on a take-or-pay basis on a flat price as it plans to sell its LNG on long-term contracts to price-sensitive Asian buyers in countries such as India and Vietnam. He said while the gas producers are open to this, traders are not as this is where they make their margins. "It's never been done before," Kataria said. But it needs to be done because there's a lot of gas and it is not finding a home on fluctuating and volatile prices." He is clear that Crown will not do its own shipping but will find a partner for this aspect of its business. Kataria revealed that several have been shortlisted. Power plan "Shipping is not something that we will do, but we will be responsible for it because we will be taking the product into the pipeline network of the other country," he said. Kataria revealed that the company is also looking at adding integrated power plants to its offshore regasification GBS design with a subsea cable to provide power onshore. It has employed Bruno Larsen as its head of floaters and power plants. He said Crown is currently looking at projects in Togo, West Africa and the Dominican Republic — both of which are looking for power supply — for its terminal design. "I see a huge growth in that sector," Kataria said. On top of this, the CEO said Crown has applied for permits to site a second GBS-based LNG terminal in Vung Tau, Vietnam. Long life He said the unique selling point of the GBS structures is that they can operate 365 days a year whatever the weather conditions. But Kataria admitted that the upfront cost to develop these — four to five times that of a ship-based floating storage and regasification unit — is the biggest challenge. He said on an mtpa capacity basis the GBS comes in at 15% to 20% more expensive than an FSRU but it has a long-life expectancy of 40 to 50 years and much larger storage. Crown is also looking to site a ship-based FSRU off Grangemouth in Scotland and intends to submit its planning application early in the first quarter of 2025. Company president Gunnar Knutsen said he has identified two companies that could provide LNG carriers for conversion to a regas unit. Announcing its first interim results for the period to the end of June, Crown, which completed a reverse US listing in July, reported a total loss of $17m. Crown stressed that it is still in the early stages and expects to continue to incur "significant expenses" as it expands its project pipeline and moves to bring these to market. In a filing, it stated: "We anticipate our current projects to be operational at the earliest in 2027 for the Grangemouth Project and 2029 for the Kakinada Terminal Project. Once the projects are operational, we expect to begin generating revenues around that period." Kataria said being on the Nasdaq has given the company credibility and is now considering listing its Indian company Krishna Godavari LNG in India.

source: www.tradewindsnews.com

SK SHIPPING SEEKS SALE OR SCRAP OFFERS ON STRANDED LNG CARRIERS

Two six-year-old LNG carriers are being touted for sale again as SK Shipping looks for a final resolution on what to do with a pair of vessels that have had issues with their cargo containment systems. Brokers said offers have been invited on the 174,100-cbm SK Spica and SK Serenity (both built 2018) by the end of this month. They said bids to buy the vessels for further trading or recycling would be considered. The two LNG carriers have been in lay-up off Labuan in Brunei Bay, east Malaysia, since late April. Earlier invitations for trading bids on the pair are not believed to have attracted any interest, brokers said previously. TradeWinds has contacted SK Shipping for comment. The SK Serenity and SK Spica were the first full-size LNG carriers to be fitted with a South Korean-designed membrane-type cargo containment system, KC-1, in which faults were discovered. While the SK Serenity lifted two US cargoes before -ice was found on its hull, suggesting a possible LNG leak, the SK Spica never traded. For the intervening years since the problems were discovered, the vessels were returned to their builder, Samsung Heavy Industries, where they underwent a series of tests and repairs. These played out against an increasingly bitter series of legal battles between the ships' owner SK Shipping, SHI and KC-1 designer Kogas and its KC LNG Tech arm. In October 2023, the South Korean courts ordered Kogas to pay KRW 72.6bn (then $53m) to SHI in compensation for the repair work carried out on the two ships and SK Shipping KRW 115.4bn for its loss on the vessels being unable to trade. Two months later, SHI was ordered to pay SK Shipping KRW 378.1bn (then $290m) following arbitration. This was based on a valuation of about $180m per vessel on their deliveries and their then-current second-hand values of $45m each. In May this year, it emerged that SHI is now taking Kogas to court to recover the costs it had to pay to SK Shipping. Kogas has struggled with its KC-1 system, which was developed to rival French designer GTT's array of membrane-type systems. The South Korean version was fitted to two small-scale ships, one of which — the 7,654-cbm LNG bunker vessel SM Jeju LNG1 (built 2019) — was involved in a collision with a domestic cargo ship. The repairs were said to be costly as Kogas had then moved on to the next iteration of the design, KC-2. Both 7,654-cbm KC-1 vessels are now listed as "damaged/not in service" on Clarksons' Shipping Intelligence Network database. The KC-2-fitted bunker vessel, the 7,495-cbm Blue Whale (built 2023), remains in service. To date this year, just three LNG carriers have been sold for demolition in what has been a quiet year for recycling. The lack of action is playing out against an unusually depressed LNG shipping market for what is normally a period of heightened demand for vessels.A pile-up of older LNG carriers, particularly steam turbine vessels, is building as some of the smallest and least efficient ships in the world fleet start to be redelivered from long-term charter contracts. This is compounded by the low spot charter rate environment for steam ships, which brokers say are proving unattractive to charterers. source: www.tradewindsnews.com

MOL AND SINGAPORE LNG CONFIRM FSRU CHARTER

Japanese shipowner Mitsui OSK Lines and state-owned terminal operator Singapore LNG (SLNG) have inked a long-term charter contract for an on-order $414m floating storage and regasification unit that will act as a second import unit for the island state. The deal, which has been in the works for months and was first reported by TradeWinds in July, was signed at a launch event for the project in Singapore on Wednesday along with agreements with Jurong Port and Wood Group. MOL has contracted the FSRU at Hanwha Ocean in South Korea. SLNG chief executive Leong Wei Hung said: "The second LNG terminal underscores the continued importance of LNG in Singapore's energy mix, as well as SLNG's continual role and responsibility in helping to ensure Singapore's energy security." MOL president and chief executive Takeshi Hashimoto said: "MOL has been actively engaged in a variety of global FSRU projects, establishing substantial expertise to provide services with assured reliability." This month, MOL was named as the shipowner behind an order for a very pricey KRW 545.4bn ($413.7m) FSRU at the South Korean yard with a delivery date of October 2027. SLNG revealed that the FSRU will have a storage capacity of 200,000 cbm — a new size for a regas unit — and a regasification capacity of 5 mtpa. The FSRU — Singapore's first — will be moored at the Jurong Port where it will receive, store and regasify LNG before sending gas ashore. Currently, about 95% of the state's domestic power generation is fuelled by imported natural gas. The shipowner, which has been expanding its FSRU interests, will own, manage and operate the unit on delivery in 2027, leaving a question mark on how it will be deployed in the interim years before SLNG's planned start-up for its terminal. SLNG said the regas unit is expected to enter into service by the end of the decade, and together with its existing land-based terminal on Jurong Island, it will allow for a combined LNG throughput capacity of up to 15 mtpa. "The FSRU will also offer greater flexibility to SLNG in meeting Singapore's future gas demand," the state-owned terminal operator said.It said it has awarded the front-end engineering and design (FEED) contract to a subsidiary of Wood to define the scope of the onshore connecting infrastructure. The FEED contract will provide the engineering design and comprehensive scope of works required for the engineering, procurement and construction (EPC) contract for the construction of the terminal. The FEED contract is expected to be completed around mid-2025, and the request for proposal process for the EPC contract will follow. source: www.tradewindsnews.com

CELSIUS AND BASALT UNVEIL BIG PLANS FOR LNG TIE-UP

UK investment manager Basalt Infrastructure Partners is eyeing more LNG carrier purchases after founding its new shipping platform with two vessels acquired from Chinese leasing companies. The group has teamed up with Danish shipowner Celsius Shipping to buy back the 180,000-cbm Celsius Copenhagen (built 2020) and Celsius Carolina (built 2021) from China Merchants' CMB Financial Leasing and Cosco Shipping Leasing, respectively. Celsius and Basalt have formed a joint venture to purchase the Samsung Heavy Industries-built pair. The ships are being managed and operated by Celsius and are the first vessels for Basalt's new Vanadis LNG platform. Celsius ordered the ships and financed them through Chinese leases in 2021.

Basalt said the duo is chartered on long-term, fixed-rate time charter contracts with investment-grade counterparties. "In addition to the acquisition of these vessels, Basalt is working on a significant pipeline of follow-on opportunities, aiming to build a larger portfolio of operating and newbuild vessels over the coming months," the investor added. John Hanna, partner and head of Europe at Basalt, said: "LNG continues to play a key role in the global energy mix and we look forward to continuing to service the growing level of demand that presents as we further grow this platform." Vanadis builds on the model used by its Freyja LNG platform, which controls seven LNG carriers managed by Celsius. Basalt also has a 50% stake in UK ferry company Wightlink and backs Italian ferry owner Caronte & Tourist. In 2017, Basalt bought Scottish offshore shipowner North Star and led its push into wind ships, before selling out in 2021. UK-headquartered law firm Norton Rose Fulbright advised Dutch lender ABN Amro and National Australia Bank on the acquisition financing. The amount of the term loan has not been revealed. Vessels Value assesses the Celsius Copenhagen as worth $254m and the sister ship at $264m. Ruben Tas, executive director of syndicated loan origination at ABN Amro, said his bank acted as joint mandated lead arranger alongside National Australia Bank in structuring the financing, before obtaining additional lender commitments with First Citizens Bank. Celsius' group chief financial officer Morten Henriksen said: "ABN Amro took the time to understand this investment opportunity, and, alongside NAB, provided a bespoke financing package to allow us to execute. "The team showed great expertise and commitment to support us — and we look forward to continuing our long-standing partnership with ABN Amro." The Norton Rose Fulbright team advising on the deal was led by London-based partners Andrew Williams and Richard Howley. Successful result Howley said: "We have advised on a number of significant LNG carrier financings, and our multi-jurisdictional team worked closely with our clients and the lenders to deliver the financing within a tight time frame and to achieve a successful result for all parties." In September, Swiss energy company MET Group ordered its first LNG carrier after forging a joint-venture deal with Celsius. MET said the partnership involves a newbuilding that will be constructed at China Merchants Heavy Industry Jiangsu for delivery in 2027 to support its growing LNG activities. Celsius has 10 LNG carriers on the water after announcing the delivery of the 180,000-cbm Celsius Granada (built 2024) from SHI. The delivery leaves 10 LNG carriers on its orderbook in China and South Korea. Celsius and ABN Amro have been contacted for comment. source: www.tradewindsnews.com

NORTH AMERICAN LNG EXPORTS SET FOR MASSIVE EXPANSION

The North American liquefied natural gas (LNG) export market has witnessed exponential growth in recent years, solidifying its critical role in global energy supply chains. The US has long been a significant exporter of LNG, with various facilities already operational, while others are under development or planned for expansion. Now, Mexico-based LNG facilities are coming online, and Canada is developing its own. North America has become a major player in the global LNG market and according to the EIA, North American LNG export capacity is projected to rise from approximately 85 million tonnes per annum (mtpa) to around 181 mtpa by 2028. Riviera's own analysis of the current and projected expansions of LNG export facilities suggest

a far higher estimate. As at October 2024, the individual LNG facilities across Canada, the US and Mexico had a total nominal capacity of 132.8 mtpa, but few will be running at utilisation levels that would achieve that figure. Based on information from public sources, including annual reports and project proposals and local submissions, Riviera estimates that there is, in theory, a further 254.8 mtpa under development or proposed.

Analysis of key US LNG facilities

Alaska Gasline LNG

Located in Nikiski, Alaska, the Alaska Gasline LNG project is still in the planning stages, with an anticipated export capacity of 20 mtpa. The project aims to transport natural gas from Alaska's North Slope to global markets, but it has faced several delays. A FID is expected in 2025, and full operations are projected to begin by 2031. The remoteness and cost of the project presents challenges, and no detailed information regarding the number of escort tugs has been disclosed.

Cheniere Corpus Christi LNG

One of the largest and most prominent LNG export terminals in the US, Cheniere Corpus Christi LNG in Texas has been operational since 2019. With an export capacity of 15 mtpa and an ongoing expansion project (Stage 3), it is expected to add 10 mtpa upon completion. Cheniere's CEO, Jack Fusco, noted the facility's critical role in supplying LNG to global markets. The expansion projects are part of Cheniere's broader strategy to increase US LNG exports and capitalise on growing demand.

Sabine Pass LNG

Also operated by Cheniere, the Sabine Pass LNG terminal in Louisiana is one of the largest and most important LNG export facilities in North America, with an operational capacity of 30 mtpa. Sabine Pass recently completed Train 6, and expansion plans under the Sabine Pass Stage 5 Expansion Project will add another 20 mtpa once permitted. This terminal remains a cornerstone of US LNG exports, particularly to Europe and Asia. Cheniere's leadership recently stated that the facility has "reached a significant milestone" by loading its 3,000th cargo. Cheniere Marketing, a subsidiary of Cheniere Energy, has announced a long-term LNG sale and purchase agreement (SPA) with Galp Trading, a subsidiary of Galp Energia of Portugal. Under the terms of the agreement, Galp will purchase approximately 0.5M tonnes per annum (mta) of LNG for 20 years. The purchase price is indexed to the Henry Hub price, with a fixed liquefaction fee. Deliveries are set to commence in the early 2030s, contingent on a positive FID for the second train of Sabine Pass. Cheniere president and chief executive, Jack Fusco, expressed his enthusiasm, stating: "We are pleased to enter into this long-term agreement with Galp, a leader across Iberia's energy sector, which reinforces the critical role US natural gas is expected to play in Europe's energy mix into the second half of this century."

Commonwealth LNG

The Commonwealth LNG project is another key LNG development in Louisiana. Kimmeridge, the developer, has indicated that the facility will have an export capacity of 9.5 mtpa once operational. A recent agreement with Glencore for 2 mtpa of LNG

over a 20-year period has helped bring the FID closer, with first production anticipated by 2028. Commonwealth LNG will use modular construction techniques to ensure cost-effective and timely completion.

Freeport LNG

Freeport LNG, located in Freeport, Texas, is operational with an export capacity of 15 mtpa. Following a temporary closure due to a fire in 2022, the facility resumed full operations in 2023. Further expansion is planned, which would increase the terminal's capacity to 20 mtpa. Freeport LNG is among the largest export terminals in the U.S., contributing significantly to North America's LNG export capacity.

Golden Pass LNG

Golden Pass LNG, a joint venture between ExxonMobil and QatarGas, is under construction in Sabine Pass, Texas. With an expected start of operations in 2025, this terminal will add an additional 18.1 mtpa to US export capacity. Golden Pass represents a critical infrastructure project that will enhance US LNG supply, particularly to Asia and Europe. It is one of the largest new LNG export terminals being built in North America.

Magnolia LNG

The Magnolia LNG project, developed by the Glenfarne Group, is in Lake Charles, Louisiana, and will have an export capacity of 8.8 mtpa. This project is still in development, awaiting financial and regulatory approvals. The terminal is expected to cater to demand in Europe and Asia once it becomes operational.

Mexico

In Mexico, Sempra Energy's Energia Costa Azul project is progressing, with operations expected to commence by 2025, adding 2.50 mta of export capacity. This will mark Mexico's first LNG export terminal, providing an important new source of supply for global markets. New Fortress Energy has received non-free trade agreement approval from the US Department of Energy for its FAST LNG export facility in Altamira, Mexico. However, the approval is only valid until August 2029. The first cargo load and sail operation was achieved in August 2024. The first cargo was loaded onto the gas carrier Energos Princess and delivered to the Pichilingue import terminal in La Paz on Mexico's Pacific Coast. Another noteworthy project in Mexico is the planned Saguero LNG facility, developed by Mexico Pacific. The company recently signed a 20-year supply agreement with Posco of Korea for 0.70 mta of LNG. Additionally, Amigo LNG has signed a Heads of Agreement with OQ Trading of Oman for the supply of LNG from its planned Sonoro facility in Mexico. Although details on capacity and timelines remain limited, the agreement highlights Mexico's potential to increase its LNG export capacity in the coming years.

Developing Canadian LNG

Canada is also making strides in the LNG export market, with several key projects in the pipeline with a Riviera estimate of 30 mtpa when all the current projects are developed.

Cedar LNG

A joint venture between Delfin Midstream and the Haisla Nation, the Cedar LNG project in British Columbia, Canada, is a floating LNG facility with a planned capacity of 3 mtpa. This project is still in the development phase, with a focus on providing sustainable LNG solutions. The floating technology of Cedar LNG is expected to reduce its environmental impact, which has been a growing concern in Canada's LNG sector.

LNG Canada

Located in Kitimat, British Columbia, LNG Canada is one of the largest LNG export projects under development in Canada. The facility, led by Shell, will have an export capacity of 14 mtpa upon completion. Shell has announced it has begun introducing gas into the facility, with the first LNG production anticipated by 2025. LNG Canada is positioned to play a critical role in supplying LNG to Asian markets, particularly China and Japan.

Woodfibre LNG

The Woodfibre LNG project in British Columbia is another key development in Canada's LNG landscape. Expected to be operational by 2027, this facility will have a smaller export capacity of 2.1 mtpa but will focus on using hydroelectric power to reduce its environmental footprint. It reflects a broader trend toward sustainability in Canadian energy infrastructure.

Abandoned and shelved projects

Several ambitious LNG export projects in North America have been shelved or abandoned due to regulatory, financial, and environmental challenges. The Goldboro LNG project in Nova Scotia, Canada, was intended to have an export capacity of 10 mtpa, primarily to serve European markets. However, due to financial constraints and delays, the project was abandoned by Pieridae Energy in 2023. The company pivoted to focus on natural gas production in Alberta, effectively shelving its East Coast LNG aspirations. The Énergie Saguenay project in Quebec, Canada, was cancelled in 2021 due to environmental concerns. The proposed facility had an expected capacity of 11 mtpa, but the Quebec government rejected the project, citing the risks of greenhouse gas emissions and potential harm to the local marine environment, including endangered beluga whales. Source: www.rivieramm.com

DARK LNG FLEETS UNDERMINE SANCTIONS AND GLOBAL SAFETY

The rise of a 'dark LNG fleet' is raising concerns about the effectiveness of sanctions aimed at curbing Russia's energy exports. As the West imposes further restrictions, including bans on LNG transhipments, Russia continues to find ways to sustain its lucrative energy trade. Already a familiar concept in the crude oil shipping sector, 'dark fleets' are now emerging in LNG shipping, relying on ownership turnover and flag-hopping tactics. A prime example is the 2003-built, 138,000-m3 steam turbine LNG carrier Everest Energy, recently involved in shipping Russian LNG from the Arctic. This trend underscores the challenges faced by European countries like Belgium and France, which are increasingly limiting access to their ports for LNG

transhipment. The European Union's 14th sanctions package, which includes a ban on Russian LNG transhipments, has been welcomed by organisations such as the Institute for Energy Economics and Financial Analysis (IEEFA). Set to take full effect in March 2025, the ban aims to prevent Russia from exploiting European LNG terminals for its own benefit. According to IEEFA, this aligns with the EU's broader objective of phasing out Russian fossil fuels by 2027, as outlined in the REPowerEU plan. The ban targets two main forms of transhipment: direct ship-to-ship transfers and indirect transfers involving storage at European terminals, primarily in Belgium and France. These operations have enabled Russian LNG to reach non-EU markets, but this should change once the ban is enforced. Nevertheless, Russia is finding alternative routes. The use of the Northern Sea Route, as demonstrated by Everest Energy, bypasses European ports entirely. Though challenging due to icy conditions, this route reduces shipping times to Asia by up to 40%. This shift raises concerns that Russia will continue to evade sanctions and sustain its LNG trade through dark fleet operations. Beyond logistical strategies, the environmental and safety risks associated with dark fleet activities are considerable. There is a pattern of development seen with the crude oil dark fleets which leads to unregulated ship-to-ship transfers in remote areas and increases the risk of environmental damage. Geopolitically, the rise of a dark LNG fleet threatens to undermine international sanctions and allow Russia to maintain its energy revenues. This could destabilise global LNG markets, as seen in the legal dispute between India's GAIL and SEFE (formerly Gazprom Germania), following missed LNG deliveries caused by sanctions-related complications. The real challenge lies in enforcing these sanctions and ensuring transparency. Several EU countries have called for greater transparency in Russian LNG imports to bolster the latest sanctions. They are pushing for the release of information on traders and suppliers importing Russian LNG into European terminals and transhipping it out. Terminal operators in Belgium and the Netherlands are being urged to publicly account for the source of LNG being stored and transhipped. The rise of a dark LNG fleet poses a threat to the reputation of LNG shipping, which has long been regarded as a leader in safety. This development risks undoing decades of progress and stability in the LNG industry, making robust enforcement of sanctions and transparency measures more crucial than ever. Source: www.rivieramm.com

SMALL-SCALE LNG MOVES ONTO THE BIGGER STAGE

The increasing focus on small-scale LNG shipping operators reveals a strategic shift in the maritime sector as companies ramp up investment in floating assets, last-mile delivery, and broaden their investor bases. These developments are indicative of a move towards positioning as pure-play entities in the small-scale LNG space, with companies such as Bunker One, and Avenir LNG leading the charge, with support from global energy partners such as TotalEnergies. As global energy demands evolve, particularly in decarbonising shipping, these companies are setting a new pace in LNG bunkering, supply chain development, and market positioning. TotalEnergies' recent charter agreement with Ibaizabal to expand its LNG bunkering fleet represents a critical step in bolstering the company's global presence. This deal, centred on an 18,600-m³ LNG bunker vessel currently

under construction at Hudong-Zhonghua Shipbuilding in China, showcases the company's commitment to meeting the growing demand for LNG as a marine fuel. Expected to be delivered by late 2026, the vessel is poised to operate primarily in the Middle East, reinforcing TotalEnergies' Marsa LNG project in Oman. This region is earmarked to be a global LNG bunkering hub, with the Marsa project aimed at catering to the Gulf's increasing LNG fuel needs. According to TotalEnergies' senior vice president of aviation and marine fuels. Louise Tricoire: "With new LNG-fuelled vessels coming on stream at a rapid pace, we are committed to playing our part in responding to the sector's increasing demand for this fuel." The strategic alignment between TotalEnergies and Ibaizabal positions both companies at the forefront of the global LNG market. The vessel's ability to cater to a variety of ships — containerships, tankers, and cruise vessels — ensures that LNG as a marine fuel continues to grow in prominence. Ibaizabal Group's CEO, Jorge Zickermann, added that the project aligns with the owner's broader strategy of transitioning to a focus on supporting decarbonisation. This strategic move reflects the broader trend of expanding LNG as a marine fuel across critical regions. TotalEnergies' project in Oman and its increasing number of bunker vessels, such as the 2020-built, 18,774-m3 Gas Agility in Rotterdam and the 2021-built, 18,600-m3 Gas Vitality in Marseille, illustrate how LNG is evolving as a key fuel for the maritime industry. However, the significant growth expected in this space also depends on the seamless delivery of LNG to ships in diverse locations. This is where Bunker One is positioning itself as a critical player in last-mile delivery solutions for LNG and liquefied bio-methane (LBM). Bunker One's venture into physical LNG and LBM supply is a notable development. Starting from January 2025, Bunker One LNG BV, the newly established entity under the Bunker Holding umbrella, will manage the company's LNG fuel portfolio. This includes chartering the 2010-built, 10,000-m³ Coral Fraseri, a bunker vessel specifically modified to enhance its capabilities in LNG delivery. The company's collaboration with Anthony Veder, the vessel's owner, will focus on ensuring high-quality service for last-mile delivery, crucial for transitioning seagoing vessels to cleaner fuels. Bunker One LNG BV's managing director, Michael Behmerburg, stressed the significance of this move, noting the vessel's ability to cater to a wide range of ships, including tankers and car carriers. "We are working hand-in-hand with the vessel's owner to bring Coral Fraseri into operation," Mr Behmerburg stated, highlighting the vessel's class renewal and upgrades scheduled for 2024 to further optimise its LNG bunkering capabilities. This operational readiness is essential for Bunker One as it aims to secure bunker permits for key ports in Northwest Europe, ensuring that it meets the growing demands of a decarbonising shipping industry. Bunker Holding's senior director of new fuels and carbon markets, Valerie Ahrens, pointed out: "Fossil LNG can offer up to 23% in greenhouse gas (GHG) reductions compared to conventional fuels and accompanies shipping's transition to a multi-fuel future." This underscores the importance of LNG as a stepping stone towards bio-LNG and e-LNG, fuels that are expected to play a critical role in achieving IMO's mid-century decarbonisation goals. While companies such as TotalEnergies and Bunker One are driving LNG infrastructure development, Avenir LNG is transitioning into a pure-play small-scale LNG shipping and trading entity. Avenir's recent announcement of its intent to list on the Euronext Growth Oslo market marks a significant moment for the company as it seeks to raise US$50M in new equity.

This capital injection is expected to fund the construction of two 20,000-m³ LNG bunker and supply vessels, which were first announced in April 2024. Avenir's decision to divest from the HIGAS LNG terminal in Sardinia signals a clear shift towards focusing solely on small-scale LNG shipping and trading. This move allows the company to streamline its operations and sharpen its competitive edge in a rapidly growing market. According to Avenir LNG managing director, Jonathan Quinn: "The divestment from HIGAS will enhance our position as a leading owner of LNG bunker vessels and allow us to streamline our operations to better align with market opportunities." The listing on Euronext Growth Oslo also opens the door for Avenir to broaden its shareholder base and improve liquidity, positioning the company to capitalise on burgeoning market trends, such as increased demand for LNG bunkering vessels, which the company believes will grow from approximately 400 in 2023 to over 1,000 by 2028. According to VesselsValue statistics, the current small-scale LNG fleet is approximately 50 vessels with a further 18 vessels on order – suggesting there is room to grow this sector. Avenir LNG's fleet expansion and refocus on LNG shipping comes at a time when the industry is undergoing a transformative shift, supporting an expansion of the small-scale LNG sector. By listing on Euronext Growth Oslo and raising capital to expand its fleet, Avenir is positioning itself to take advantage of the rising demand for LNG as a marine fuel, especially in the context of decarbonisation. Source: www.rivieramm.com

NAKILAT REPORTS STRONG Q3 PROFIT GROWTH

Nakilat has reported a net profit of QAR 1.28Bn (US$340M) for the third quarter of 2024, marking a 7.2% increase compared to the same period in 2023. The company said its growth is being driven by strategic partnerships and fleet modernisation efforts. Nakilat is progressing with its construction of advanced LNG and LPG / ammonia carriers, with deliveries scheduled in the coming years. As of August 2024, the Qatari gas ship owner had inked contracts to build six gas carriers – two LNG carriers and four modern LPG/ammonia carriers. State-backed QatarEnergy placed a major order with China State Shipbuilding Corp (CSSC) to construct 18 271,000-m3 LNG carriers. The 18-vessel order for the Q-Max vessels represents the largest single order for newbuild vessels in CSSC's history. Nakilat has since signed long-term contracts with QatarEnergy to charter and operate nine of those Q-Max LNG carriers, in addition to 25 conventional, 174,000-m3 LNG carriers. In all, this will see Nakilat's fleet swell to 114 vessels as it aims to consolidate and grow its position in the gas and new energy markets. At the time, Nakilat chief executive Abdullah Al-Sulaiti said, "2024 is a milestone year for Nakilat's expansion projects, and our latest financial results with an increase in net profit by 7%, is a testament to the company's two decades of global operational excellence in maritime services." One of the largest LNG fleet owners globally, Nakilat's chief executive officer said of the company's Q3 2024 results, "I would like to express my gratitude to the Nakilat team for their dedication, especially in preparing for the implementation of our new fleet construction, the world's largest LNG vessel-building program for a single owner." Source: www.rivieramm.com

QATAR LNG SALES TO KEY ASIAN MARKETS CONFRONTED BY US, UAE RIVALRY

Qatar is finding it hard to agree new deals to supply liquefied natural gas (LNG) to Japan and South Korea as rising competition from the U.S. and elsewhere with more flexible contract terms challenges Doha's decades-old dominance of the market. Qatar was once the top LNG supplier to Japan and South Korea, but buyers are showing preference for supplies from the United States, the United Arab Emirates and Oman. These suppliers all offer shorter-term contracts and unlike Qatar do not restrict the cargoes' destination. This gives buyers flexibility to sell cargoes elsewhere in the future if they no longer need the cargoes. Negotiations between Japanese and South Korean buyers and Qatar have stalled over Qatar's insistence on destination clauses, the sources said. "The Qataris try to achieve a lot in how they sell their LNG, in terms of retaining control over the market, whereas (others such as) the UAE's ADNOC and Oman are kind of happy to just get a good price," a senior trading source said. "ADNOC has taken advantage of the current situation, which is that people want diversification of supply," the source added. If state-owned QatarEnergy (QE) does not sign new agreements with Japan and South Korea – the world's second and third largest LNG importers after China – Qatar's role would be further diminished. It was knocked off the top spot as global LNG supplier by the United States in 2023. Qatar's major 4.92 million tons-per-year deal to supply Korea Gas Corp (KOGAS) expires this year. Another 2.1 mtpa supply deal expires in 2026, official data showed. QatarEnergy said it does not comment on market speculation. Japan's LNG demand is falling due to nuclear reactor restarts, more renewable energy and a slowing economy. Imports fell to 66 million metric tons in 2023, from 83 tons in 2018, Japan customs data shows. Qatar's market share in Japan fell to 4% in 2023 from 12% in 2018. Meanwhile, the United States' share in Japan rose to 8% from 3% during the same period. Qatar's share of South Korea's market fell to 19% in 2023 from 32% in 2018, with Australia's share rising to 24% from 19% and Malaysia's growing to 13% from 8% in the same period, data from consultancy Energy Aspects showed.

TOUGH TALKS

QatarEnergy is working to sign deals to supply European and Asian buyers with fresh supplies of LNG expected to come onstream from its North Field expansion, which will boost its overall production by 85%. Chief Executive Saad Al-Kaabi said that he sees a bright future for LNG for at least 50 years, especially in Asia. Between 2022-2023, QatarEnergy agreed a series of 27-year deals to supply Chinese buyers with new gas from North Field. Taiwan and Kuwait have also signed up for more LNG since Qatar announced the latest expansion. But little else has been sold. Analysts estimate around 48% of total Qatar LNG from North Field and its project in the United States has no contract. Meanwhile, ADNOC and Oman have struck long-term deals with buyers from Japan, China and India. Another sticking point for Japan is QatarEnergy's insistence that buyers sign contracts for at least 1 million metric tons per annum (mtpa) for 10-15 years, one of the sources said. Such terms are at odds with Japan's uncertain long-term LNG outlook because of nuclear power station restarts and renewable energy production, making it challenging for Japanese buyers to commit to long-term LNG deals in case demand falls. Qatar has

shown some flexibility in the negotiations, offering smaller cargoes with flexible terms and a lower price which, for contracts starting in 2028, is around 13% of the price of a barrel of oil per million British thermal units (mmBtu), the same source said. Japan's JERA did not renew a 5.5 mtpa supply agreement with Qatar when it lapsed in 2021."For buyers, being restricted with a destination clause can be challenging, especially when demand decreases, forcing them to find domestic buyers for excess supplies," a Japanese government official said. "Compared to other gas-producing countries, this puts Qatar at a competitive disadvantage." Tokyo Gas, Japan's largest city gas provider, could buy LNG from Qatar if the economics, contract flexibility and timing are right, said senior general manager for LNG Yumiko Yao. "Those factors will guide our future procurement decisions," she said.

DIGGING IN HEELS

To provide stable revenues, Qatar prefers long-term contracts of up to 27 years - the current lifespan of the North Field expansion project and usually linked to the oil price. U.S. sellers, ADNOC and Oman generally offer LNG volumes on a free-on-board (FOB) basis, which allows buyers to resell cargoes. Deals are usually linked to U.S. natural gas prices at the Henry Hub benchmark, which tend to be cheaper than contracts linked to oil. Competition between Qatar and the U.S. intensified following Europe's decision to end dependence on Russian pipeline gas following Moscow's invasion of Ukraine. U.S. exporters filled most of the supply vacuum, surpassing Qatar to establish themselves as the world's biggest LNG exporter in 2023. In the absence of many credit-worthy buyers signing large and long-term contracts with Qatar's conditions, one option for QatarEnergy could be to sell more supply in the spot market, said Anne-Sophie Corbeau, researcher at Columbia University's Center on Global Energy Policy. "Now, we have about 39% (of global supplies in) spot and short term, but Qatar could move that to 60% if they were to change. The question is: do they want to?" Source: www.naturalgasworld.com

EQUINOR SEES UPWARD GAS PRICE PRESSURE, LOWER STORAGES NEXT YEAR

European gas prices are still subject to upward pressure due to rising demand in Asia and concerns over future supply of Russian and liquefied natural gas (LNG), the CEO of Norwegian oil and gas producer Equinor said on Thursday. "Winter is approaching, and European demand will depend on the weather and temperature. A normal or cold winter will put upward pressure on prices," CEO Anders Opedal told reporters after the company reported third quarter earnings. Demand for LNG in Asia, which is driving competition with Europe, and imports of Russian gas will also affect prices, he added. In addition, there is "considerable uncertainty" related to when new LNG projects will start, according to the CEO. "In this picture, Equinor is well positioned in the gas market," Opedal said. Even with a normal winter, European gas storage sites should be around 40% full in April 2025, compared with 60% at the same time this year, CFO Torgrim Reitan said during an earnings call with analysts. The gas market remains "fragile" despite storage being almost full ahead of the winter, Reitan said. European gas storage sites are currently around 95% full, according to data from Gas Infrastructure Europe. The benchmark front-month

contract at the Dutch TTF gas hub hit a ten-month high of 42.57 euros per megawatt hour (EUR/MWh) on Thursday, LSEG data showed, on geopolitical risks. Earlier on Thursday, Equinor reported a sharper-than-expected 13% decline in third-quarter profit, citing weaker oil prices and lower production. Source: www.naturalgasworld.com

AUSTRALIA'S WOODSIDE SAYS OPEN TO SUPPLYING LNG TO JAPAN FROM US

Australia's top energy firm Woodside Energy sees an opportunity to beef up LNG sales to Japan, including supply from the United States, where the company just bought Tellurian and its LNG export project, CEO Meg O'Neill said on Monday. With this new position in the U.S., Woodside will be able to "offer our Japanese buyers even more supply for the long term", O'Neill said at a media briefing on the sidelines of the Singapore International Energy Week conference. Japanese LNG importers have been saying they are looking for shorter term LNG contracts with more flexible terms as their demand outlook remains uncertain. Several Japanese importers also have contracts with Russia's Sakhalin LNG that will expire from 2026 onwards. As part of LNG Japan's entry into Woodside's Scarborough joint venture in Australia, there is a memorandum of understanding for additional LNG offtake with the consortium, O'Neill said, adding that those discussions are under way. "So we know Japan is thinking very carefully about how to get the balance right in energy security, and we look forward to being a reliable supplier to Japan," she said. Woodside's current focus is on bringing in partners to invest in the Louisiana LNG project rather than marketing its LNG, O'Neill said. It wants to sell 50% of the project and aims to be ready for a final investment decision from the first quarter of 2025. Source: www.naturalgasworld.com

ROTTERDAM LNG BUNKERING VOLUMES CONTINUE TO INCREASE

LNG bunkering volumes in the Dutch port of Rotterdam continue to rise as the global fleet of LNG-fueled vessels expands. Europe's largest bunkering port and home of the Gate LNG import terminal reported LNG volumes of 220,120 cubic meters in the third quarter of this year, the second-highest quarterly volumes. Second-quarter volumes rose 7.7 percent compared to 204,418 cbm in the third quarter last year. LNG bunkering volumes dropped 9.4 percent compared to 242,931 cbm in the second quarter, which marked a new record, while the volumes rose 2.3 percent compared to 215,247 in the first quarter. During the first nine months of this year, LNG bunkering volumes increased 44.2 percent year-on-year to 678,298 cbm, the data shows. In 2023, LNG bunkering volumes reached a record level as prices dropped from 2022 and demand continued to increase. LNG bunkering volumes stood at 619,243 cubic meters in 2023, a rise of 53 percent compared to 406,599 cbm in 2022 when volumes dropped considerably due to high prices. Besides lower prices, the global LNG-powered fleet continues to increase. DNV's latest data shows that there are now 609 LNG-powered ships in operation and 565 LNG-fueled vessels on order. The classification society added 117 LNG-powered ships to its Alternative Fuels Insight platform in the July-September

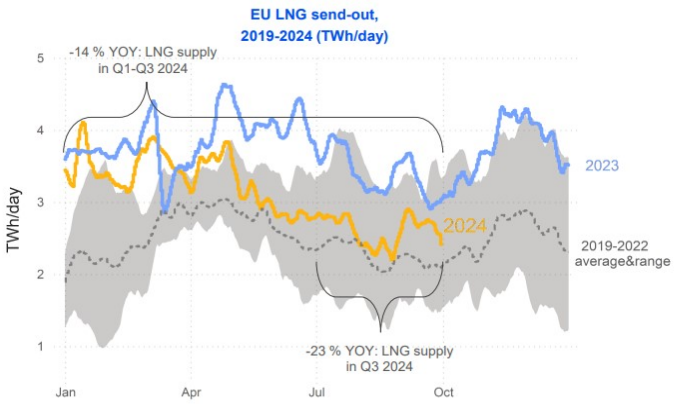
period. Order uptake continues to be dominated by the container segment. These statistics do not include smaller inland vessels or dual-fuel LNG carriers. Due to increasing demand for LNG as fuel, Gasunie's and Vopak's Gate LNG import terminal is also planning to build a second small-scale jetty. The new jetty would be located across the existing small-scale jetty, which handled record 151 vessels, loading close to 900,000 cbm of LNG last year. source: www.lngprime.com

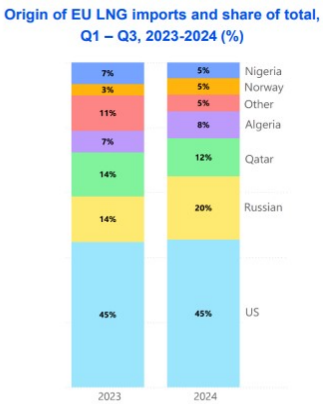
EU'S ACER SAYS EUROPE AVOIDED GAS PRICE VOLATILITY IN Q3

The EU Agency for the Cooperation of Energy Regulators (ACER) said that Europe avoided "severe" gas price volatility in the third quarter of this year despite re-emerging supply uncertainty. ACER said in its quarterly review of key developments in European gas wholesale markets that European gas wholesale prices rose in the third quarter but remained less volatile than last year due to increased Norwegian supply, healthy storage levels, and low demand. According to the report, price integration across most EU gas hubs remained consistent, although some divergence occurred due to the rising German storage levy. ACER said stagnant household demand and a modest increase in industrial demand were outweighed by a reduced call on gas-fired electricity generation, leaving overall EU gas demand slightly lower than in 2023 and well below pre-crisis levels. In addition, increased renewables' output limited the opportunities for conventional power plants (gas and coal) to run profitably. According to ACER, this lowered carbon emissions, loosened the EU gas demand-supply balance, and reduced instances of gas setting marginal prices in electricity markets. ACER noted that the EU reached its 90 percent gas storage target ahead of schedule, despite lower year-on-year injections throughout the quarter. Also, gas transmission tariffs have been rising in some EU countries, with little evidence so far of impacting price convergence. ACER said more tariff increases are expected in the near-term, warranting monitoring of the effects of tariff changes on cross-border trade and market integration.

LNG imports down

ACER said EU LNG imports registered the lowest quarter since the fourth quarter of 2021, despite improved production of the super-chilled fuel (up 3 percent globally compared to the third quarter in 2023). The EU share of the global LNG import market shrank to 18 percent from 24 percent in the third quarter of 2023.





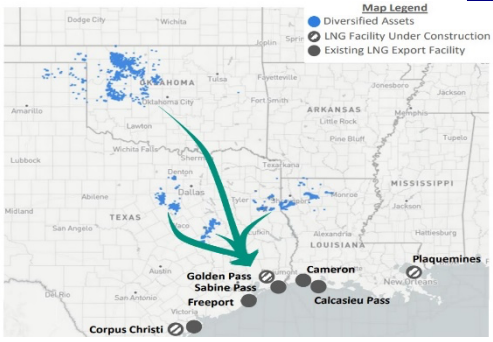
"While demand from other LNG importing regions increased, an otherwise balanced European gas market saw EU buyers shy away from competing for higher priced spot cargoes," ACER said. ACER noted European LNG terminals saw their highest historical utilization less than two years ago (i.e., in the fourth quarter of 2022), but additional terminal capacity coupled with lower demand saw Q3 2024 pass with "substantial" spare LNG capacity. Questions around EU LNG capacity saturation notwithstanding, spare LNG capacity is one of the key flexibility resources for managing the gas supply-demand balance both seasonally (e.g., in Greece) and structurally (e.g., any additional decline of Russian pipeline supply will largely be substituted by LNG), ACER said.

Challenges ahead

ACER said the Russian gas transit agreement through Ukraine expires in 2024, pushing Central Europe to seek alternative supply routes. "If gas withdrawals this winter significantly exceed the previous years, the EU may face increased competition in LNG markets for 2025, potentially driving up wholesale gas prices," it said. Several LNG production projects are under construction, but ACER said major new LNG volumes are expected only from 2026 onwards. Source: www.lngprime.com

DIVERSIFIED ENERGY TO SUPPLY GAS TO GULF COAST LNG EXPORT FACILITY

US producer Diversified Energy has secured a natural gas supply contract with a major Gulf Coast LNG export facility. According to a statement by Diversified, the company will provide about 40 Bcf of natural gas under a fixed pricing construct indexed to Gulf Coast pricing for a period of three years. The supplies will begin in November 2024. Diversified did not reveal the name of the Gulf Coast LNG facility. The company said this "significant contract collaboration encompasses the commitment to ensure energy security for global trading partners who are facing supply disruptions, geopolitical tensions, rising regional demands, and changing consumption patterns." Additionally, the company has been able to strategically take advantage of the recent strength of the natural gas price curve to add to its multiple-year hedge portfolio in 2025 through 2027, with an average NYMEX hedge price of about $3.45 per MMBtu. Diversified will provide additional disclosures and an updated hedging schedule with its Q3 trading statement. "This supply agreement to a Gulf Coast LNG export facility is a great example of the market's recognition of Diversified's reliable natural gas production and operational efficiency while providing another lever for the company to enhance margins and deliver consistent cash flows," CEO Rusty Hutson, Jr. said "The agreement not only reflects the critical need and strong global demand for natural gas but also the importance natural gas plays in powering global economies for decades to come," he said.



According to Diversified's latest corporate presentation posted on its website, its portfolio consists primarily of natural gas production from mature assets within Appalachia (55 percent of production) and the Central Region (45 percent of production). Diversified's asset portfolio has grown to include about 17,700 miles (28,425 km) of gathering and transportation lines and associated compression stations. The presentation shows that Diversified expects LNG exports will potentially represent 20-25 percent of current US natural gas production by 2026. The projects include Cheniere's Sabine Pass and Corpus Christi terminals, the Freeport LNG terminal, the Golden Pass LNG terminal, Sempra's Cameron LNG terminal, and Venture Global's Calcasieu Pass and Plaquemines LNG terminals. Source: www.lngprime.com

EPS TAKES DELIVERY OF LNG-FUELED PCTC IN CHINA

Singapore's Eastern Pacific Shipping took delivery of the third LNG-fueled pure car and truck carrier which will serve a charter deal with CMA CGM's unit CEVA Logistics. China Merchants Jinling Shipyard in Weihai handed over the LNG dual-fuel PCTC, CMA CGM Monza, to EPS on Wednesday. The shipbuilder owned by China Merchants said this is the third ship of its 7000 ceu dual-fuel car carrier series. China Merchants Jinling Shipyard in Weihai is building six LNG-powered PCTCs for EPS. At nearly 200 meters in length and 38 meters in width, the new vessel can transport 7,000 cars, and its deck surface is spread across 12 levels. Also, the ship has a gross tonnage of 72,000 tons and will move at a max speed of 19 knots. The RoRo vessels' hybrid power system includes both LNG and electric battery capabilities, and it is equipped with two 2000 cbm LNG tanks. Last year, CMA CGM's unit CEVA Logistics entered the car carrier segment with a charter deal for four of these LNG-powered PCTCs owned by EPS and CMA CGM Monzda is the third vessel in this batch. The Chinese shipbuilder delivered the first PCTC, CMA CGM Indianapolis, in December 2023, and the second, CMA CGM Silverstone, in July. These four vessels will allow CEVA to transport about 140,000 vehicles annually between global markets, especially China and Europe, it previously said. CEVA expects to take delivery of the fourth vessel, CMA CGM Monaco, by the end of 2024. Source: www.lngprime.com

GTT SCORES SERVICE CONTRACT FOR ENI'S CORAL SUL FLNG

French LNG containment giant GTT has secured a service contract for Eni's 3.4 mtpa Coral Sul FLNG offshore Mozambique. Eni operates the Coral Sul (Coral South) FLNG project along its Area 4 partners ExxonMobil, CNPC, GALP, Kogas, and ENH. The FLNG has a storage capacity of 238,700 cbm and its tanks are equipped with GTT's Mark III membrane containment system. Under the agreement, GTT will provide technical support services to ensure the efficient operation and maintenance of the LNG storage tanks. GTT said in a statement these services include on-site and remote technical assistance, on-site testing, inspection, emergency assistance, engineering services, and specialized training programs. According to GTT, the

main objective of its support is to ensure the continued operation of the FLNG while maintaining the appropriate level of safety throughout the project life cycle. GTT did not provide the contract price.

More than 75 LNG cargoes

In August, Eni announced the achievement of 5 million tons of LNG produced from the Coral Sul FLNG, located in the ultra-deep waters of the Rovuma Basin. Eni said at the time that the FLNG had exported 70 cargoes of LNG and 10 of condensate since starting production in October 2022. According to a recent statement by Mozambique's ENH, the FLNG has shipped 70 LNG cargoes and 11 condensate cargoes. ENH said the FLNG is currently producing about one LNG shipment per week and one condensate shipment every two months. The TJS consortium, consisting of Technip Energies, JGC, and Samsung Heavy, built the unit for Eni, the first floating LNG facility ever to be deployed in the deep waters of the African continent. In addition to this unit, 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. According to Arnaud Pieton, CEO of LNG engineering giant Technip Energies, there is a "high possibility" Italy's Eni will make a final investment decision on its second floating LNG production project in Mozambique in 2024. Source: www.lngprime.com

PNG'S KUMUL EYES FLNG FID IN 2026 OR 2027

Papua New Guinea's national oil and gas company, Kumul Petroleum, expects to make a final investment decision on PNG's first FLNG project in 2026 or 2027, according to Kumul's managing director Wapu Sonk. China's FLNG builder Wison New Energies, announced on Friday it had secured a pre-FEED contract from Kumul for the FLNG with an expected capacity of 1.5 mtpa. Wison said pre-FEED will be completed by June 2025, but the company did not provide further information regarding the deal. According to a statement by Kumul, Sonk revealed more information about the project during the contract signing ceremony on Friday. He said Kumul had for some time been investigating how to commercialize stranded gas resources, particularly those in its Petroleum Retention Licenses (PRLs 47 &50) over the Pandora and Uramu gas fields, offshore of Gulf Province. Kumul had evaluated these gas discoveries and completed reserve certification, which had "given us confidence to move to this stage of the commercialization plan," Sonk said According to Sonk, the company is 100 percent license holder of the two PRL offshore licenses at the moment and intends to farm down post this study to interested partners who see value in the 1.5 mtpa FLNG project in PNG. "This Pre-FEED study is a necessary step to ensure that we understand the full scope, cost, schedule, risk and the full economic value before making a decision on moving to FEED and final investment decision," he said. "The Pre-FEED study is expected to take 8-12 months, leading to entry of FEED thereafter, and FID sometime in 2026 or 2027," Sonk said.

PNG LNG

Kumul is the third largest shareholder in the ExxonMobil-led PNG LNG project with a 16.8 percent stake. ExxonMobil holds a 33.2 percent operating interest in PNG LNG which is able to produce more than 8.3 million tonnes of LNG annually, an

increase of 20 percent from the original design specification of 6.9 mtpa. Australia's Santos currently has a 42.5 percent stake in the LNG export plant in Caution Bay following the Oil Search merger, and it agreed earlier this year to amend the terms of sale of its 2.6 percent stake in the LNG project to Kumul. Besides PNG LNG, France's TotalEnergies and its partners are working to make a final investment decision on the Papua LNG export project. The project calls for the design of about 4 mtpa of liquefaction capacity adjacent to the existing PNG LNG processing facilities. Source: www.lngprime.com

RPGCL ISSUES 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 three spot LNG cargoes for delivery in November. According to a tender document posted on RPGCL's website, the delivery windows for the spot LNG cargoes are November 12-13, November 16-17, and November 23-24. RPGCL issued the tender to "23 organizations that we have signed the MSPA (master sale and purchase agreement) with Petrobangla." The tender will close on October 27. Prior to this tender, RPGCL invited bids on October 7 for two spot LNG cargoes for delivery on November 3-4 and November 10-11. RGPCL issued this same tender again on October 14. This tender closed on October 20. 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 after it sustained damage on May 27 during cyclone Remal.

LNG terminal cancelations

Summit said in a statement on October 9 that its unit Summit LNG Terminal II has urged the government of Bangladesh to reverse its decision to terminate the third FSRU project in the country. SLNG II said it had received a notice from Petrobangla on October 7 notifying the termination of the project situated at Moheshkhali in Cox's Bazar. The Moheshkhali terminal in southeast Bangladesh is the second floating gas terminal project undertaken by Summit with a planned regasification capacity of 600 million standard cubic feet per day. Last year, Summit received approval for the project. In addition to this project, RPGCL said in a statement on October 19 that the government of Bangladesh had decided to cancel the shortlisting for the development of the land-based LNG terminal at Matabari, Cox's Bazar. The project was processed under "quick enhancement of electricity and energy supply act as revised on 2021," RPGCL said. source: www.lngprime.com

MAN WILL NO LONGER OFFER ME-GA ENGINE

German engine maker MAN Energy Solutions said it will no longer offer its ME-GA engine, which was designed for the liquefied natural gas (LNG) carrier market. Volkswagen's MAN unveiled the ME-GA dual-fuel engine in March 2021, describing it as

an Otto-cycle variant of the company's ME-GI engine. "With a view to expected changes in IMO regulations (IMO Green House Gas Strategy, MARPOL Annex VI, and the NO Technical Code 2008), to be adopted in April 2025, and the performance of our engines, we are constantly reviewing our product portfolio," MAN said in a letter sent to its customers dated October 17. According to MAN, this review would call for "significant" technical updates and investments for the G7OME-C10.5-GA type engine. "Therefore, we have decided to no longer offer the G7OME-C10.5-GA engine as of October 18, 2024," the engine maker said. MAN said its commitment to provide "reliably operating engines is unaffected by this." "We will keep you updated about any other changes stemming from reviews of our engine portfolio," MAN said. "Please note that our ME-GI engine, which is commonly used on merchant ships, can serve as an alternative on large LNG carriers thanks to its high thermal efficiency and low methane emissions," the company added.

More than 270 orders

In 2022, MAN said it had received 100 orders for its ME-GA engine since introducing it in 2021, all for LNG carriers. Last year, MAN announced that the first ME-GA engine had completed gas trials aboard an LNG carrier built by HD Hyundai Samho for Norwegian shipping company Knutsen. "Built by HHI-EMD, the Knutsen ME-GA engine comes equipped with exhaust gas recirculation (EGR) that reduces methane slip emissions compared to first-generation, Otto-cycle engines without EGR," MAN said at the time. According to MAN's website, the company has received more than 270 orders for ME-GA engines since May 2021. Sources told LNG Prime the orders were mostly from South Korean yards, but one Chinese shipyard also booked MAN ME-GA engines for LNG carriers. LNG Prime invited MAN to comment on the matter. Source: www.lngprime.com

HUDONG-ZHONGHUA LAUNCHES LNG CARRIER DUO

Chinese shipbuilder Hudong-Zhonghua has launched two 174,000-cbm liquefied natural gas (LNG) carriers. According to a statement by Hudong-Zhonghua, the launching ceremonies for the two LNG vessels took place on October 18. The first vessel is hull 1882A, which will be named Greenenergy Star. Hudong-Zhonghua only said this vessel is part of the CNOOC project without providing further information. This vessel is one of six LNG carriers being built for Japan's MOL, COSCO Shipping unit CSLNG, and CNOOC. Earlier this year, Hudong-Zhonghua delivered the first LNG carrier in this batch, 174,000-cbm LNG carrier, Greenergy Ocean. Hudong-Zhonghua said this is the world's first fifth generation "Changheng" series LNG carrier. The 299-meter-long vessel features GTT's NO96 Super+ containment system and WinGD 5X72DF2.1 dual-fuel main engine. All the ships will serve CNOOC's gas and power unit under long-term charter deals and are expected to be delivered by 2026.

QatarEnergy LNG carrier

Hudong-Zhonghua also launched the vessel with hull number 1798A, which will be named Al Mas'habiyyah. This LNG carrier is part of the giant QatarEnergy shipbuilding program. Last month, Hudong-Zhonghua delivered Rex Tillerson and Umm Ghuwailina, the first two LNG carriers built under the program. These two vessels and Al Mas'habiyyah are part of 12 conventional-size LNG vessels contracted with Hudong-Zhonghua.State-run LNG giant QatarEnergy signed charter deals in

April 2022 for these LNG carriers with MOL, completing the first batch of charter contracts awarded under its massive shipbuilding program. The vessels are owned by MOL and and Cosco Shipping Energy Transportation. The LNG carriers are under long-term charter by QatarEnergy Trading, a unit of QatarEnergy. Part of Hudong-Znoghua's fifth-generation Changxeng series, they are 299 meters long and 46.4 meters wide. Source: www.lngprime.com

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