



CHARTERERS TRY TALKING TERM ON LNG CARRIERS IN HOPE OF PICKING OFF A BARGAIN

Shipowners and brokers are reporting interest from charterers for LNG carriers to take on term business as they move to cash in on the weakened rate environment, but they say few are biting. Italian energy company Eni is understood to be looking to fix a newbuilding for a period of up to 15 years. Brokers said it is asking for offers on an LNG carrier to take on charter for two years as a bridge vessel to a newbuilding, which it would fix from 2028. One broker highlighted the disparity between the near and longer-term environment. He said it makes sense for Eni to try to lock in a cheap ship for the two-year period when the visibility on the rate environment is clear, before moving on with a newbuilding. The Eni business is said to be attracting considerable interest, particularly in a market in which charter rates are trading at new lows for the winter, when the highest rates are usually recorded. Reflecting the level of interest in Eni's tender, one broker commented that "everyone and their grandmother [is] throwing a vessel into that one". An apparently low rate on the term LNG shipping business has also created market wobbles. Over the past few days, there has been talk of Japanese trader Itochu snapping up a Hyundai Glovis LNG carrier newbuilding at a rate that one broker described as "too low to report". Others said the rate is thought to be in the high \$70,000 to low \$80,000 per day range for a period of between 10 and 15 years in a deal that was concluded off market. One accused Asia-based owners of "crashing the market" with the deal. Equally, shipowning and broking voices cautioned that there could be other factors at work in this business, such as a lower newbuilding price than current levels and cheap South Korean finance, which may mean the figures add up for these parties. Owners said that with charter rates and sentiment both low, this is a natural time

for charterers to try to pick off tonnage. One owner explained that charterers are asking for a matrix of offers on term business so they can assess where it might make sense for them to lock in tonnage now, rather than risk booking a cheap vessel but then having to pay for it during idle time in the current market. Shipbroker Affinity LNG said last Friday: “Negotiations remain active around longer-term business, with interest in both mid- and long-term positions linked to upcoming projects. However, weak front-end sentiment continues to weigh on long-term fixing discussions.” The market is preparing to digest a huge wave of new supply, with more than 200 mtpa of liquefaction capacity under construction. Coupled with this, the LNG shipping sector is undergoing a period of fleet renewal as the steam turbine and some of the least efficient diesel-electric tonnage is slowly squeezed out. These factors are prompting industry players to forecast a sharp uptick in demand for tonnage from 2027, or potentially — as MOL executive Takeshi Hashimoto told a TradeWinds conference last week — from 2028. The current disconnect between the short and mid to longer-term business is playing out against a backdrop of fears of oversupply as the US ramps up approvals of new projects, but China, which is key to long-haul trading for LNG carriers, cuts back on its imports. Source :www.tradewindsnews.com

THIRD-QUARTER LNG CARRIER NEWBUILDING ORDERS TOP THOSE FOR FIRST HALF OF 2025

Contracts for new tonnage running almost neck and neck with those for LNG bunker vessels so far this year. At least 10 LNG carrier newbuildings were contracted in the third quarter of this year, topping the six ordered in the first six months of 2025. Jeppe Jensen-led Celsius Shipping added to its LNG order haul with another two vessels at South Korea’s Samsung Heavy Industries, after inking the first LNG order of this year with the yard in January. George Economou returned to ordering LNG tonnage with a four-ship order at SHI — TMS Cardiff Gas’ first since 2022. GasLog also made a comeback on LNG newbuildings with its first ship at South Korea’s Hanwha Ocean at the beginning of September and at the end of the month. In a more unusual move, US newcomer Hanwha Shipping contracted its first two LNG carriers with affiliated Hanwha Ocean. The vessels are officially on the books of Hanwha Philly Shipyard in the US, but will be largely built in South Korea before being brought Stateside for the final touches and US-flagging. Prices for LNG newbuildings have softened a little, but the most recent order for GasLog was at \$252m, pegging the sector above the \$250m mark. Berth slots are said to be largely for 2028 delivery positions. Orders for LNG bunker vessels, which had been trending in the first half, slowed in the third quarter but still attracted one new entrant. Celsius dived in on the action with Caravel Group for two 20,000-cbm LNGBVs in China in what Jensen said is a purely speculative move. At the end of the third quarter, LNGBV orders for the year to date had still narrowly outstripped those for LNG carriers, running at 17 vessels compared with 16 for their significantly larger cousins. LNG market players said there could be more newbuilding orders to come in the final quarter of 2025, despite the crushingly weak chartering environment. TradeWinds reported last month that Capital Gas has been eyeing a raft of fresh LNG slots, comparing Chinese berths with those at its favoured shipbuilder HD Hyundai Heavy Industries, in South Korea, and its affiliates. Shipowners are also engaged with Norway’s Equinor in a tender process for a series of LNG newbuildings that could number up to four vessels. The spectre of the long-running but still on-hold Mozambique LNG project still hangs over yards and owners, which could promise a further 17 ships. Mozambique has said the security concerns that delayed the TotalEnergies-led project are now not such an issue, and there have been rumblings that the French energy major may greenlight the project this year. Source: www.tradewindsnews.com

OLDEST FSRU DELIVERS DECADE-LONG UNINTERRUPTED REGASIFICATION SERVICE

Operating since 2012 off Jakarta, FSRU Nusantara Regas Satu has completed over 425 cargo transfers and 50 million-m³ send-out without a single dry-dock. Known as one of the longest serving LNG vessels of its type, the FSRU Nusantara Regas Satu was originally built as LNG carrier Khannur at Moss, Norway, in 1977. The vessel entered service when LNG technology was in its relative infancy and pre-dated the IGC Code. At that time, MOSS containment systems dominated, and 125 000 m³ capacity represented the upper limit of cargo volume. The vessel's design reflected the manual standards of the era, with control by analogue instrumentation and navigation by radar and sextant. To put the timeline in context, in 1977, Jimmy Carter assumed the US presidency, the first Star Wars film debuted and the Apple II computer was released without a mouse — reminders that digital design and computer-aided drafting remained rare. At that time, analogue control systems and navigation by radar and sextant prevailed; environmental regulation was minimal under the 1954 OILPOL Convention, while the non-mandatory EGC Code of 1976, SOLAS 1960 and the yet-to-enter-force MARPOL annexes governed her initial regime. After three decades of trading as an LNG carrier, Khannur completed over 120 cargo voyages from ADNOC's Das Island to Japan, later loading from Ras Laffan and Trinidad for discharge in Spain and the United States. In 2011-2012, the vessel underwent conversion and a new name, Nusantara Regas Satu and became the fourth LNG-to-FSRU conversion globally and the second executed at that yard. Outfitted with an open-loop regas system and propane secondary heating, maximum send-out capacity is 500 MMcf/d. Since redeployment 15 km north of Jakarta in 2012, Nusantara Regas Satu has facilitated over 425 cargo transfers through STS operations and delivered more than 50 million m³ of gas to Indonesia's growing power market. In June 2025, cumulative send-out crossed the 50 million m³ threshold, and in December 2024 the vessel completed its 400th STS operation. Remarkably, the vessel has remained on location without gas freeing or dry-dock for the entire 13 years, a record believed to be unmatched among LNG vessels and FSRUs. Maintaining structural integrity over nearly half a century demands rigorous corrosion management and fatigue monitoring. The vessel's hull scantlings, greater than those of modern vessels, have provided a solid foundation, but ongoing challenges include abrasion of mooring lines and corrosion of mooring hardware. Owners and operators rely on bespoke inspections and retrofitted reinforcement to uphold safety margins in accordance with current classification society standards. Technological obsolescence poses further complexity. Legacy control systems and analogue gauges require specialist support amid a sea-change towards digital automation. Crew must be adept in manually driven processes while simultaneously accommodating incremental upgrades to meet present-day operational criteria. Integrating new instrumentation without full system overhauls has entailed phased installations and custom interface solutions. Regulatory compliance has evolved substantially since the vessel's launch in 1977. Originally unregulated for emissions, sewage or ballast water, the unit now operates under stringent Marpol annexes and environmental frameworks that did not exist at its construction. Continuous engagement with Indonesian authorities and charterers ensures adherence to safety and environmental requirements, demanding transparent reporting and inspections under dual-class certification. Operational efficiency cannot match that of purpose-built modern FSRUs; boil-off gas rates stand at 0.25% and operating expenditure is comparatively high. Yet, through tight schedule management and preventative maintenance during limited annual work windows, the vessel maintains availability targets. Crew rotations are aligned with maintenance cycles to minimise downtime while preserving specialist knowledge of the vessel's unique systems. Supply chain constraints for vintage systems present ongoing hurdles. Spare-part procurement often necessitates bespoke manufacturing or cannibalisation from sister vessels, two of which — Hilli and Gimi — were converted to FLNG and remain operational. This scarcity

demands strategic planning, bulk ordering and elevated inventory levels to pre-empt failures. Environmental stewardship is addressed through continuous monitoring for leaks and emissions, supported by periodic upgrades to seals and valves to reduce the unit's footprint. Human resource management balances legacy expertise with modern training. Crews must master systems dating from the 1970s while complying with contemporary LNG safety standards. Operator training programmes combine classroom instruction with onboard drills, fostering proficiency in both historic and modern procedures to maintain uninterrupted service. A key element in the longevity is the mindset of the operator, Equinox Ship Management. As its general manager, Andrew Clifton, commented: "50 years old? No problem!" to underscore the vessel's operational resilience. Ships of that era were constructed with robust scantlings, and this FSRU's service life raises the question: will LNG carriers delivered in the twenty-first century match half-century durability under evolving technical and regulatory regimes? Source: www.rivieramm.com

STABILIS INKS 10-YEAR LNG BUNKERING DEAL

Houston-based small-scale LNG player Stabilis Solutions said it had entered into a 10-year agreement with a "leading investment-grade global marine operator" to supply LNG for their marine bunkering operations at the port of Galveston. Stabilis did not reveal the name of the firm in a statement on Thursday. The long-term agreement marks the Company's first marine bunkering contract for liquefaction supply from its planned expansion along the Texas Gulf Coast. According to Stabilis, this agreement enables the company to advance development of a new flagship waterfront LNG liquefaction facility, together with related marine logistics infrastructure, in Galveston, Texas. Stabilis will supply approximately 50 million gallons (or 188,000 cubic meters) per year of LNG for marine bunkering operations in the port of Galveston under the deal. Deliveries under the agreement are expected to commence in the fourth quarter of 2027, subject to the successful financing and construction of the Galveston LNG facility and other conditions precedent. Under the terms of the agreement, Stabilis is required, among other things, to finalize project financing by the first quarter 2026, and complete construction on the Galveston LNG facility by the second quarter 2028.

In talks with other customers

Stabilis said the proposed Galveston LNG facility is expected to be a 350,000 gallon-per-day waterfront LNG liquefaction facility. Upon completion, the facility is anticipated to increase Stabilis' liquefaction capacity from 130,000 gallons per day from its two existing liquefaction facilities to 480,000 gallons per day. The new facility will be strategically located to continue to serve Stabilis' cruise customers as well as additional marine end markets such as container ships, car carriers, tankers, and bulk carriers in the port of Galveston, port of Houston, and surrounding Gulf Coast markets. Stabilis said the bunkering agreement represents approximately 40 percent of the Galveston LNG facility's planned capacity and provides a key anchor contract to advance the project. The company also noted that it is in "advanced" discussions and negotiations with a "diverse base of customers" seeking to source LNG from its Galveston LNG facility.

LNG bunkering vessel

With the construction of its new LNG facility, Stabilis also plans to commission a dedicated Jones Act-compliant LNG bunkering vessel to serve the port of Galveston. This vessel will transport LNG from the facility directly to waterborne customer vessels. Together, the new LNG facility and bunkering vessel are expected to create a fully integrated, last-mile LNG delivery solution for customers, the company said. Stabilis has identified a site for the new facility and has completed initial front-end engineering and design activities. The company expects to complete the necessary financing and begin construction of the plant in early 2026. Last year, Stabilis announced that it was

working to take a final investment decision on a dedicated LNG bunkering facility along the US Gulf Coast. In 2023, the company secured a multi-year contract from cruise operator Carnival to provide LNG fuel for the latter's newest vessel Carnival Jubilee. Stabilis currently owns a liquefier that can produce more than 100,000 LNG gallons per day in George West, Texas, and a liquefier that can produce up to 30,000 LNG gallons per day in Port Allen, Louisiana. Source: www.lngprime.com

GREEK LNG IMPORTS CONTINUE TO RISE

LNG deliveries to DESFA's Revithoussa LNG terminal in Greece surged in January–September this year, with the US supplying 88 percent of the volumes. The Greek gas grid and Revithoussa LNG terminal operator said that LNG shipments during the nine-month period totaled 22.41 terawatt-hours, equivalent to 36 tankers. This marks a 63.6 percent rise compared to 12.34 TWh in the same period last year. However, LNG imports were lower compared to 24.04 TWh in January–September of 2023. The LNG shipments in the first half of this year totaled 14.66 TWh, equivalent to 27 tankers. This means that third-quarter LNG imports reached 7.75 TWh, or nine tankers. Besides LNG imports, DESFA said its Revithoussa LNG truck loading service recorded a “strong” growth, with 494 LNG trucks loaded in the first nine months of 2025 compared to 174 trucks last year, and 148.05 GWh transported in the same period versus 51.28 GWh in 2024, marking a threefold increase. “This dynamic growth confirms that the service is recognized as a flexible and efficient solution for covering the energy needs of remote distribution networks and industrial consumers in Greece and the wider region,” the Greek firm, owned by a consortium led by Snam, said.

US LNG supplies

US LNG volumes reached 19.62 TWh (88 percent of the total), compared to 8.02 TWh last year. Nigeria supplied 1.37 TWh, Norway 0.93 TWh, and Algeria 0.49 TWh. Total gas imports to Greece totaled 56.45 TWh in the nine-month period, reflecting an 16.3 percent increase compared to the same period in 2024. DESFA noted that LNG's role was “significantly” strengthened, covering over 40 percent of total gas imports compared to approximately 26 percent in the first nine months of 2024, with Agia Triada (Revithoussa) being the key entry point and Amphitrite (FSRU Alexandroupolis) following. “Despite the fact the Revithoussa remained offline for scheduled maintenance works between 22/5–11/5, the terminal covered 39 percent of the country's total gas imports,” the company said. “Through Amphitrite (the Alexandroupolis FSRU), a total of 1.03 TWh of LNG was imported until 22/1 when regasification services at the station became temporarily unavailable,” it said. In January, UK-based energy giant BP supplied an LNG cargo to Bulgaria's Bulgargaz via the Alexandroupolis FSRU, in which DESFA is a shareholder as well. In August, Gastrade resumed Alexandroupolis FSRU operations following a technical issue in January this year, but the facility is yet to receive its next LNG shipment. Gastrade expects to receive seven LNG cargoes at the Alexandroupolis FSRU-based terminal, starting from October.

Exports surge

According to DESFA's data, total natural gas demand in Greece, including exports, reached 56.36 TWh, up by 16.66 percent compared to 48.31 TWh in the corresponding period of 2024. This significant increase was mainly driven by the surge in exports, which amounted to 5.06 TWh, from just 0.66 TWh in 2024, marking an increase of more than 660 percent, it said. DESFA also said that domestic gas consumption rose by 7.66 percent to 51.3 TWh, compared to 47.65 TWh last year. Source: www.lngprime.com

ADNOC GAS SEALS \$40 BILLION GAS SUPPLY DEAL WITH RUWAIS LNG

Adnoc's gas and LNG unit, Adnoc Gas, has signed a 20-year gas supply agreement worth \$40 billion with Ruwais LNG, securing feed gas for UAE's second LNG facility. Adnoc Gas said this long-term commitment strengthens its position as a "trusted global LNG supplier and provides strong visibility on future cash flows." "With over 80 percent of Ruwais LNG's production already contracted to long-term customers, the agreement reflects robust market demand and our ability to monetize resources effectively," the company said. Adnoc Gas did not provide further details regarding the agreement. In June 2024, Adnoc made the final investment decision to build its LNG export terminal in UAE's Al Ruwais. The LNG project will more than double Adnoc's existing UAE LNG production capacity to around 15 mtpa, as the company builds its international LNG portfolio. Moreover, BP, Mitsui & Co., Shell, and TotalEnergies agreed to buy a 10 percent equity stake in Adnoc's Al Ruwais LNG export terminal. Adnoc Gas said in November 2024 that it expects to spend about \$5 billion to buy a 60 percent operating interest from its parent company Adnoc in the Al Ruwais LNG plant. Adnoc's Ruwais LNG project is expected to commence commercial operations in 2028. As per offtake deals, Adnoc signed a 15-year sales and purchase deal with Indian Oil in August. By 2029, IndianOil is set to become Adnoc's largest LNG customer, with a total offtake of 2.2 mtpa – comprising 1.2 mtpa from Adnoc's Das Island operations and 1 mtpa from the Ruwais LNG project. This year, Adnoc also signed Ruwais LNG SPAs with Japan's trading house Mitsui & Co, Japan's city gas supplier and LNG importer Osaka Gas, and Chinese independent gas distributor ENN. Source: www.lngprime.com

HANWHA OCEAN SECURES SECOND US\$252M LNG CARRIER ORDER FROM AFFILIATE IN A MONTH

South Korean shipbuilder Hanwha Ocean has secured another order for the construction of an LNG carrier from an affiliated company. On 1 October 2025, the company announced a single-vessel contract valued at approximately US\$252M, with delivery scheduled by the second quarter of 2028. The buyer was identified as a North American shipowner affiliated with Hanwha Ocean. This marks the second such order in a month, following a similar LNG carrier contract from a Hanwha-affiliated North American company. Shipbroking sources later noted that Hanwha Shipping, the group's shipowning subsidiary, was behind the deal. Hanwha has been actively expanding its LNG carrier portfolio in recent months. Since July, Hanwha Shipping has ordered two LNG carriers from US-based Hanwha Philly Shipyard, a deal hailed as a milestone in US-South Korea shipbuilding cooperation. The collaboration has since extended into the MR tanker segment. These moves followed Hanwha's US\$100M acquisition of Philly Shipyard in December 2024. Looking ahead, Hanwha Group has unveiled a US\$5Bn infrastructure investment plan for Hanwha Philly Shipyard, part of South Korea's wider US\$150Bn investment initiative aimed at strengthening US shipbuilding capabilities. Hanwha Ocean has also secured LNG carrier contracts from major global players this year, including a recent order from GasLog, led by Peter Livanos.

Focus on naval expansion

In addition to its growing LNG and commercial shipping business, Hanwha Ocean is advancing in naval ship design. The shipbuilder recently signed a memorandum of understanding (MoU) with POSCO, South Korea's leading steelmaker, to jointly develop next-generation ultra-high-strength steel for naval vessels. According to Hanwha Ocean, this partnership marks the start of "full-scale reparations" to enter the global advanced naval ship market. "We will position ourselves as a leading total naval solution provider," a company representative said. Source: www.rivieramm.com

ENI TAKES FID ON CORAL NORTH FLNG PROJECT OFF MOZAMBIQUE

Second FLNG-based gas production project for the Italian oil major in Mozambique is set to be completed in 2028. Eni and its partners have reached a Final Investment Decision (FID) to develop the Coral North FLNG project, deepwater offshore Cabo Delgado, north of Mozambique. The project will be implemented by the Joint Venture formed by Eni (50%), CNPC (20%), Kogas (10%), ENH (10%) and ADNOC's subsidiary XRG (10%), and will bring into production the gas volumes from the northern part of Area 4's Coral gas reservoir, in the Rovuma basin, through a floating LNG facility. "With Coral North we will contribute to supply the worldwide growing demand for LNG, doubling both Mozambique's contribution to global energy security, and the benefits for the country and its citizens in terms of economic and industrial growth," Eni CEO Claudio Descalzi commented. Coral North is Eni's second development in Mozambique and the second large-scale FLNG delivered in ultra-deep waters worldwide, with Coral South being the first. "Leveraging the experience gained with Coral South, which has been in production since 2022, Coral North will offer competitive advantages in terms of schedule, costs, performance optimisation, and minimization of execution risks, aiming to deliver the project within schedule in 2028," Eni said. With a production liquefaction capacity of 3.6MTPA, the newly built Coral North FLNG – coupled with its predecessor Coral South – will bring Mozambique's overall LNG production to exceeding 7MTPA, making the country the third-largest LNG producer in Africa. Source: www.rivieramm.com

ESCORT TUGS MEET ESCALATING FLOATING LNG NEEDS

How purpose-built escort tugs leverage advanced hull forms, propulsion layouts and rigorous training to ensure precision handling during FLNG and FSRU operationsDeployment of floating LNG (FLNG) facilities and floating storage regasification units (FSRUs) continues to accelerate as developers seek faster timelines, lower environmental footprints and greater adaptability to global energy markets. These projects are introducing rising demand for specialised tugs to support LNG carriers docking at these offshore and coastal terminals and ship-to-ship transfers. Escort tugs are vessels purpose-built to deliver the steering and braking forces necessary to control large LNG carriers during critical approach and departure manoeuvres. "A specially designed tug that exerts high steering and braking forces on a ship, must satisfy stability, strength and performance requirements," explained Mr Brendan Smoker, manager, escort-tug performance, Robert Allan Ltd, speaking at the TugTechnology'25 conference in Antwerp in May 2025. He emphasised that the distinction between class-mandated stability and strength criteria and port-specified performance demands is crucial. Classification societies grant an escort-tug notation once a vessel demonstrates compliance with both stability under heel and structural loads. "A notation is no indication of performance. Technically, you could have next to no performance or very high performance and still hold the same notation," he said. This underscores the need for operators to state explicitly whether they require steering, braking, or combined capabilities. Mr Smoker noted that indirect steering is the most commonly used mode and that in an Azimuth Stern Drive (ASD) tug, the vessel kites off to one side and exploits the hydrodynamic lift generated by its Holland skeg (a fixed hydrodynamic appendage beneath an escort tug's hull that, by generating lift from water flow, produces the large lateral forces required for precise steering and braking) to produce large lateral forces without direct tow-line pull. The efficacy of this mode increases with speed until keel-imbalance or heel-limit constraints intervene. When deceleration is required, indirect braking combines hull lift with thruster thrust. This achieves "very high braking force" in open-water manoeuvres. At higher speeds, transverse arrest is employed by vectoring propeller thrust at 90° or 120°, generating a hydrodynamic arresting effect. Should conditions slow below the threshold where indirect forces diminish, the tug resorts to direct pull, delivering full bollard-pull via conventional tow-line tension. To interpret these varied modes and compare different tug

configurations, designers at Robert Allan produce escort-performance butterfly plots. These overlay the steering and braking force envelopes for all operational modes into a single, top-down view. Such diagrams allow operators to identify whether a tug offers pure steering near the bow or combined high braking further aft, and to assess how much of its hydrodynamic capability is curtailed by stability or towing-system limits. Every escort-tug design at Robert Allan is validated in computational fluid-dynamics (CFD) simulations. Mr Smoker described how any change in underwater skeg geometry, propeller vendor, or hull form triggers a full CFD re-analysis to predict performance and stability across all heel angles and speeds. He remarked that although the industry holds full-scale trials in high regard, consistent repeatability is so difficult that CFD has become the primary method for ensuring reliability. He added that escort tugs are delivered with placards that summarise three critical limits: the maximum rated escort speed (typically 8–10 knots); heel-angle thresholds for given loading conditions; and the towing-system load rating across wrap angles. An example at Port Hedland shows placards installed beside the tension meter and inclinometer in the wheelhouse, allowing tug masters to monitor performance in real time and avoid exceeding design envelopes. Clearly, understanding, creating and maintaining the performance envelope for the escort tug's task is crucial but there are times when operations are at the limit of the envelope or beyond. Then training takes over. Smit Lamnalco LNG business and project development director, Mr Andrew Brown, confirmed the changes taking place in escort tug demand. "We see growing demand for LNG-specific towage solutions, especially in areas with floating units where sea conditions are variable," he said. He highlighted that mooring and unmooring "must be conducted quickly, safely and often in tandem with ship-to-ship transfers" and noted that remote locations introduce further complexity in co-ordination and logistics. Operating vessels further offshore, where wave heights can exceed 3 m, drives up operating expenditure on marine services, pilotage and logistics. Mr Brown emphasised that "emergency response planning is needed for each facility. The role of marine services should be interlocked into these emergency response plans." Retaining competent crews poses a challenge. "We need more training, such as side-by-side training for pilots, tug masters and LNG carrier captains in simulators, so they can see what is happening," Mr Brown said. He cautioned that many simulator models remain poorly calibrated and urged operators to "match your tug model performance with the actual tug performance to ensure proper simulator results." This will become even more important as LNG FSRU and gravity-based systems are ventured into more hostile waters. Tug designers are ready for these demands. Mr Smoker observed that design tools exist to push performance ever higher. He said: "Not everyone needs 150 tonne steering force. If you need 80 tonne, we can balance stability, strength and performance to suit port requirements." The discipline of specifying an escort tug demands clarity in risk analysis and simulator scenarios. Operators must define whether the primary aim is emergency steering, braking, or both. Bundling a generic requirement such as "100 tonne of tow-line tension" without distinguishing directional needs risks delivering an asset unsuited to prevent the very incidents it is intended to mitigate. Mr Smoker forecast ongoing innovation in hull forms and propulsion layouts driven by advanced simulation tools and growing industry proficiency. He predicted that as operator understanding deepens, adoption of escort-tug capabilities will rise. "They are so effective you cannot remove them from a system where they are in place and expect your system to still function," he remarked, recalling multiple occasions where absence of proper escort support led to multimillion-dollar damages and environmental harm. The convergence of rigorous design verification, precise placard-based limit monitoring and joint simulator training programmes between pilots and tug masters represents the best path to safe LNG operations. As FLNG and FSRU deployments venture into ever more remote and challenging environments, these escort tugs will remain indispensable assets, balancing engineering exactitude with operational readiness. Source: www.rivieramm.com

OPEARL SECURES DECADE-LONG MAINTENANCE FOR LNG FLEET

O Pearl LNG Management will maintain 14 carriers with flexible scheduling, remote support, and data-driven planning over ten years.

O Pearl LNG Management has agreed a ten-year lifecycle contract to support the maintenance and operational reliability of 14 liquefied natural gas carriers operated under its management. The arrangement is designed to enable flexible maintenance scheduling and optimise time between overhauls, ensuring the vessels meet the tight delivery commitments characteristic of today's rising global LNG demand. The agreement covers vessels to be delivered between Q3 2025 and Q2 2027. Each vessel will be equipped with two six-cylinder and two eight-cylinder dual-fuel engines, together with four gas valve units, reflecting O Pearl's requirement for minimal downtime and reduced maintenance interruptions. O Pearl LNG Management was established as a Hong Kong-based joint venture between NYK Line, CMES LNG Shipping Co Ltd and CETS Investment Management (HK) Co Ltd. Technology group Wärtsilä will deliver the service package under its Lifecycle Agreement framework, a form of service agreement offering a reliable partner with specialist expertise in vessel asset management. The agreement includes remote operational support, contract management and dynamic maintenance planning, underpinned by real-time vessel data and advanced diagnostics. Wärtsilä's Data-driven Maintenance Planning analyses actual engine performance and inspection results to determine optimal overhaul intervals. This condition-based approach seeks to reduce unnecessary inspections and extend maintenance intervals safely, backed by original-equipment-manufacturer statements for classification compliance. O Pearl LNG Management general manager Captain Nomura said: "We currently manage tight delivery schedules and require operations with minimal downtime and reduced maintenance interruptions." He added, "This long-term agreement with Wärtsilä is intended to support these operational requirements and assist us in reliably meeting our delivery commitments to our customers." Wärtsilä Marine vice president of performance services Andrea Morgante commented, "The maritime industry has grown increasingly complex, requiring advanced technology, real-time data, and analytics to ensure efficient and competitive operations while also staying in line with decarbonisation objectives. Our Lifecycle Agreements are designed with all of these factors in mind and are invaluable to our clients' operations."

Source: www.rivieramm.com

EXCELERATE LOOKS TO DEVELOP FIRST FLNG TERMINAL FOR IRAQ

Iraqi government has engaged the US-based firm in an initial step toward developing the floating liquefied natural gas import terminal. Excelerate Energy has received an official award letter from the Government of Iraq to develop an integrated floating liquefied natural gas (LNG) import terminal. The company said the move by Iraq marked "a significant milestone in the country's energy diversification strategy". An award letter is a preliminary step, and development of the terminal remains subject to the successful negotiation and execution of binding commercial agreements. With approval from Iraqi Prime Minister Mohammed Shia' al-Sudani, Iraq's Deputy Prime Minister and Foreign Minister Fuad Hussein met with a senior official from the US State Department, Thomas Lersten and Excelerate President and CEO Steven Kobos in late September during a meeting on the margins of the 80th United Nations General Assembly in New York City. Excelerate will lead on the development of the integrated floating import terminal, in coordination with the Iraqi government. The deal, according to Excelerate, "represents a landmark opportunity to enhance Iraq's energy security and infrastructure". "The proposed terminal will enable the importation of LNG to support domestic power generation, help stabilise the national grid, and allow Iraq to diversify from unreliable natural gas supply sources," Excelerate said. Mr Lersten cited the terminal's potential to shift Iraq away from importing Iranian natural gas. "This terminal opportunity demonstrates US energy leadership and represents a vital step in advancing Iraq's energy security

and reducing its reliance on Iranian pipeline gas.” Exceleerate said it is “actively engaged with Iraqi authorities to finalise the necessary contracts and ensure timely implementation of this critical energy infrastructure”. Source: www.rivoeramm.com

CAPACITY DEMAND DIVERGENCE WILL DRIVE LNG SHIPPING TRANSFORMATION

A projection of 270bn m³ of liquefaction capacity by 2030 is prompting shipowners to order newbuild LNG carriers, rethink trade lanes and adjust charter structures. The International Gas Union’s *2025 Global Gas Report* projects that 270bn m³ of liquefaction capacity is approved or under construction for commissioning by 2030, even as actual global gas demand growth since 2015 has averaged 1.7% annually – outpacing the 1.3% – 1.5% projected by leading scenario pathways. This divergence between capacity build-out and forecast demand will force a transformation in LNG shipping, with implications for vessel ordering, routing strategies and commercial structures through to the end of the decade.

Forecast landscape and capacity pipeline

Approved projects in the United States, Qatar and Australia will collectively add around 270Bn m³ of capacity by 2030, equivalent to the output of over 50, 175,000-m³ carriers per year. In the United States alone, developments such as Cameron LNG Train 4 and Port Arthur 2 will progressively come online between 2026 and 2029, contributing roughly 40Bn m³ of incremental throughput. Qatar’s North Field South expansion is scheduled to deliver 32Bn m³ by 2027, while Australia’s Scarborough and Browse fields will add a further 28Bn m³ by 2028. Demand projections diverge markedly. The IEA’s Stated Policies and Announced Pledges scenarios envisage gas consumption rising by 1.3% and 1.5% annually to 2030 respectively, reaching 3,700 – 3,800Bn m³. A simple historical trendline – excluding the volatility of 2020–21–suggests growth of 1.8%, which would take demand towards 3,900Bn m³ by 2030. If realised, this higher-growth case would absorb much of the new liquefaction capacity, but any slip towards the lower scenarios could yield a surplus, pressuring freight markets and charter rates.

Fleet composition and newbuilding imperatives

The report’s pre-final investment decision outlook for United States projects indicates cumulative output moving towards 100Bn cbm by 2050, with mid-scale schemes accounting for nearly 60% of total planned capacity. The commissioning schedules of these projects imply a sustained order run-rate of 20 – 30 LNG carriers per year from 2025 to 2030. This requirement will be split between large tonnage – 180,000-m³ Q-Flex and Q-Max types – for long-haul trades, and smaller 100,000-m³ vessels to serve flexible, short-haul markets such as small-scale distribution and bunkering. Regulatory drivers further shape newbuild specifications. IMO’s 2030 carbon-intensity targets will compel dual-fuel propulsion systems, battery-hybrid auxiliary power and hull optimisations. Shipowners placing orders in 2025–26 must balance the economies of scale offered by mega-vessels against the versatility and emission compliance of mid-scale designs.

Trade-route realignments and chokepoint pressures.

Global trade-flow dynamics will shift as new export hubs in the US Gulf and East Africa enter the market. The Panama Canal, an important link between the Atlantic and Pacific basins, faced drought-induced constraints, with reduced water levels limiting daily vessel transits. These disruptions led LNG vessels to avoid both the Suez and Panama canals, opting for the longer but more reliable Cape of Good Hope route. The resulting increase in tonne-miles is likely to exert downward pressure on time-charter rates, particularly during

seasonal restocking periods. Europe's repeated "dunkelflaute" events in late autumn and winter – periods of low winds and limited sunlight that lead to reduced renewable power generation – necessitated ramp-ups in gas-fired power and fresh LNG imports. These factors underscore the need for flexible shipping capacity and reinforce seasonal freight peaks despite an overall surplus of tonnage.

Commercial models and decarbonisation imperatives

The report forecasts the spot-market share of global LNG trade rising from roughly 15% today to 25% by 2030. This shift reflects charterers' preference for destination flexibility and price-linkage in response to tariff volatility and potential oversupply. Hybrid sale-and-purchase agreements, combining fixed-price volumes with spot-priced optional cargoes, will become prevalent, altering cash-flow profiles for both sellers and vessel operators. Decarbonisation imperatives intersect with commercial strategy. Emerging methane-intensity regulations under the EU's Corporate Sustainability Reporting Directive and Carbon Border Adjustment Mechanism will extend emissions reporting to maritime carriers. Anticipating future charterer demands, shipowners must consider retrofits for ammonia-capable fuel systems or biomethane-ready tanks. Investment in CCUS-enabled liquefaction trains and supporting infrastructure also signals opportunities for carriers to partner on low-carbon cargo corridors.

Conclusion and strategic implications

IGU's capacity pipelines and demand scenarios frame a dual-case outlook: a high-demand scenario that absorbs new tonnage and sustains freight rates, and a policy-constrained pathway that yields surplus capacity and depressed time-charter levels. Vessel owners must calibrate newbuild timing and design choices to navigate these outcomes. Charterers and traders should refine contract tenors, freight-derivative strategies and routing flexibility. Terminal operators and financiers must align infrastructure investments with regulatory trajectories and the pace of liquefaction commissioning to avoid stranded assets and ensure resilient supply chains through

2030. Source: www.rivieramm.com

SNAM PLANS TO BUY ITALIAN SMALL-SCALE LNG TERMINAL AND INSTALL FSRU

Italian LNG terminal operator Snam has signed an agreement for the potential acquisition of the Higas small-scale LNG terminal located on the Italian island of Sardinia. Snam plans to install a floating storage and regasification unit (FSRU) at the facility in cooperation with Hoegh Evi. Snam said in a statement that it has signed an agreement with the shareholders of Higas to initiate a period of exclusive assessment and negotiation regarding the potential acquisition of 100 percent of the company's share capital, as well as the expansion and conversion of the current coastal storage facility into an FSRU-based facility. Higas, the owner of the small-scale facility which features six horizontal low-pressure cryogenic type C tank storage tanks with a total capacity of 10,800 cbm, was spun off from Avenir in October 2024. Norway's Stolt-Nielsen now fully owns Avenir after it bought stakes from Golar LNG and Hoegh family holding company Aequitas. Once finalized, the Higas transaction would enable the injection of regasified natural gas from the future Oristano FSRU into the upcoming natural gas transmission network which will serve the industrial and thermoelectric districts in central-southern Sardinia, as well as end-users in the provinces of Cagliari, Oristano, Medio Campidano, and Sulcis Iglesiente, Snam said. The new FSRU would also support the supply of natural gas volumes necessary for the methanization of Sardinia, while increasing storage capacity by approximately ten times with respect to current levels, it said.

Hoegh Evi to work with Snam

Norwegian FSRU player and Higas shareholder, Höegh Evi, said in a separate statement that it will collaborate with Snam on the new floating LNG terminal in Sardinia. Hoegh Evi will provide support with the engineering, construction, and commissioning of a tailored floating storage and regasification unit (FSRU), which will be an integral part of the future terminal. “As a proud shareholder in Higas, we look forward to working with the teams from Higas and Snam to unlock LNG and natural gas access to the island of Sardinia in support of a diversified energy system in Italy,” the company said.

Snam's LNG business

Snam holds significant stakes in all the regulated LNG regasification terminals currently operating in Italy, including the Adriatic LNG terminal and the OLT FSRU Toscana terminal. In April, Snam launched commercial operations at its FSRU-based LNG import facility in Italy's Ravenna. The 2015-built 170,000-cbm FSRU BW Singapore is moored 8.5 kilometres offshore Ravenna. Such as the 170,000-cbm FSRU Italis LNG, previously known as Golar Tundra, which operates in Piombino, BW Singapore has an annual regasification capacity of 5 billion cubic meters. With this unit, Italy's total regasification capacity rose to 28 billion cubic meters. Snam recently said that Italy received over 160 LNG cargoes from January to September this year, as the country's LNG imports continue to rise.

Source: www.lngprime.com

MOLGAS BUYS DUTCH LNG SUPPLIER TITAN

European small-scale LNG player Molgas, backed by French infrastructure fund investor InfraVia, has finalized the full acquisition of Dutch LNG supplier Titan. Madrid-based Molgas announced on Tuesday that it has acquired Titan Energy Holding, the parent company of Titan Clean Fuels. The transaction follows Molgas' initial 45 percent minority stake purchase in Titan in 2023, and marks a “major” step forward in the group's strategic growth in the “clean marine” fuels sector. Molgas did not provide the pricing details of the deal. Titan supplies liquefied biomethane (LBM/bio-LNG) and LNG, serving both maritime and industrial customers. Its fleet of small-scale bunkering vessels operates across key global markets, with a strong base in the Northwest European region. Titan's LNG bunkering operations will merge with Molgas' existing operations in Norway, and all truck-to-ship supply across Norway and continental Europe will now be combined.

Seven LNG bunkering vessels and over 70 stations

With the integration of Titan, the Molgas Energy Group now operates a fleet of seven LNG bunkering vessels and manages a proprietary network of over 70 road-fueling stations, with more than 200 points of sale including associated partner stations. Molgas said this expanded footprint positions the group as a “pan-European leader” in downstream LNG and bio-LNG solutions for industrial, road transport, and marine customers. Following the transaction, Niels den Nijs, CEO of Titan, will lead Molgas' marine business as executive VP, marine. He will oversee all marine activities, delivering integrated end-to-end ship-to-ship and truck-to-ship bunkering services across Europe. “Niels and the Titan team started as true pioneers, showing remarkable innovation and have grown Titan into one of the sector's most reliable LNG bunkering operators,” Sofoklis Papanikolaou, CEO of Molgas, said. “The success of our initial collaboration laid the groundwork for this acquisition, which significantly extends our reach and capabilities,” he said. “We are welcoming to the group a very experienced team, with leading specific expertise in marine fuels and decarbonisation. Together, we will build a robust platform to deliver LNG and bio-LNG solutions across Europe and beyond,” Papanikolaou said. Source: www.lngprime.com

SHELL EXPECTS ‘SIGNIFICANTLY HIGHER’ LNG TRADING RESULTS IN Q3

LNG giant Shell expects trading and optimization results for its integrated gas business in the third quarter of 2025 to be "significantly higher" compared to the previous quarter. Shell announced this in its third-quarter update note on Tuesday, but it did not provide further details. The company's integrated gas segment reported adjusted earnings of about \$1.73 billion in the second quarter. This compares to \$2.67 billion in the same period in 2024 and \$2.48 billion in the prior quarter. Overall, Shell's adjusted earnings reached \$4.26 billion in the second quarter, down compared to \$6.29 billion in the comparable quarter last year and \$5.58 billion in the prior quarter.

Liquefaction volumes

Shell also said in the quarterly update that it expects liquefaction volumes to reach 7 – 7.4 million tonnes in the third quarter. The company previously expected liquefaction volumes to reach 6.7 – 7.3 million tonnes in the third quarter. Shell's liquefaction of 6.72 million tonnes in the second quarter were lower compared to 6.95 million tonnes in the same quarter last year. Liquefaction volumes were 2 percent higher compared to 6.60 million tonnes in the first quarter of 2025. It is worth mentioning here that Shell and its partners in LNG Canada are nearing the launch of the second liquefaction train at the 14 mtpa LNG export plant in Kitimat. The facility has loaded 15 cargoes to date.

Gas production

Shell expects integrated gas production to reach 910 – 950 kboe/d in the third quarter, while upstream production is expected to be at 1,790 – 1,890 kboe/d. The company previously expected gas production to be between 910 – 970 kboe/d and upstream production to be between 1,700 – 1,900 kboe/d. Shell also said that non-cash post tax impairments and provisions of approximately \$0.6 billion are expected in the marketing segment due to the Rotterdam HEFA project cancellation. Shell's results are scheduled for publication on October 30, 2025. Source: www.lngprime.com

VENTURE GLOBAL SHIPPED 100 LNG CARGOES IN Q3

US LNG exporter Venture Global LNG shipped a total of 100 LNG cargoes from its Calcasieu Pass and Plaquemines LNG export terminals in the third quarter of this year. Venture Global revealed this in an SEC filing on Monday, saying the 100 cargoes total 371.8 TBtu, while the company realized a weighted average fixed liquefaction fee of \$5.07/MMBtu. This compares to 89 LNG cargoes in the second quarter and 63 LNG cargoes in the first quarter of this year. For the quarter ended September 30, 2025, Venture Global exported 36 cargoes totaling 133 TBtu from its Calcasieu Pass facility, realizing a weighted average fixed liquefaction fee of \$1.97/MMBtu. In April, Venture Global launched commercial operations at its Calcasieu Pass LNG terminal in Louisiana, some 68 months from its final investment decision and 38 months after production start. The Calcasieu Pass facility consists of 18 modular units configured in 9 blocks. Customers of the Calcasieu Pass facility include Shell, BP, Repsol, Edison, Galp, PGNiG, now part of Orlen, Sinopec's unit Unipet, and CNOOC. Venture Global also received approval from the US FERC to increase the peak liquefaction capacity of its Calcasieu Pass LNG terminal. It also received DOE approval for an uprate amendment. Calcasieu Pass proposed to increase the project's authorized export capacity from 12 million metric tons per annum (mtpa) to 12.4 mtpa, or approximately 620 billion cubic feet per year (Bcf/y) to 640.7 Bcf/y, to reflect the project's actual capabilities under optimal conditions.

Plaquemines LNG

Venture Global said in the filing that it has exported 64 cargoes totaling approximately 238.8 TBtu from its Plaquemines LNG facility in Louisiana during the third quarter. The company realized a weighted average fixed liquefaction fee of \$6.79/MMBtu. “For the quarter ended September 30, 2025, we exported two DES cargoes from our Plaquemines LNG facility on our owned or chartered LNG vessels that will be recognized in the following quarter,” Venture Global said. Additionally, the firm recognized revenue from 2.88 TBtu from a partially loaded cargo at the Plaquemines facility. Venture Global took a final investment decision on the first phase of the Plaquemines project with a capacity of 13.3 mtpa and the related pipeline in May 2022, while the company sanctioned the second phase in March 2023. The full project, including the second stage, features 36 modular units, configured in 18 blocks. Each train has a capacity of 0.626 mtpa. Earlier this year, Venture Global also received approval from FERC to boost the capacity of its Plaquemines LNG terminal to 27.2 mtpa. In December 2024, Venture Global shipped the first Plaquemines LNG cargo. The facility exported 29 LNG cargoes during the first quarter of this year and 51 cargoes during the second quarter. The company is targeting a COD (commercial operations date) for the Plaquemines project in the fourth quarter of 2026 for Phase 1 and in mid-2027 for Phase 2. Source: www.lngprime.com

SHELL, PURUS SEAL CHARTER DEAL FOR LNG BUNKERING DUO

UK-based LNG giant Shell has signed charter deals with Purus for two 18,900-cbm LNG bunkering vessels which will be built in China. Shell’s VP global downstream LNG, Dexter Belmar, announced the signing of the charter agreements in a social media post on Monday. He said that China’s Nantong CIMC Sinopacific Offshore & Engineering (CIMC) will build the vessels and deliver them in 2028. Belmar did not provide further details regarding the agreements. He said this follows Shell’s earlier agreements with Spain’s Ibaizabal Group for two other 18,000-cbm bunker vessels, under construction at South Korea’s HD Hyundai Mipo, which are set for delivery in 2027. “With 14 LNG bunker vessels already operating across 28 locations in 13 countries, these four newbuilds will strengthen our presence in key regions: Europe, the US, the Caribbean, and Singapore. The vessels will be positioned based on customer demand when they come on water,” Belmar said. “As marine LNG demand is projected to exceed 16 mtpa by 2030, this investment reflects our commitment to staying ahead of the curve – expanding capacity, improving accessibility of LNG and bio-LNG, and reinforcing Shell’s leadership in the LNG bunkering market,” he said. According to the Purus website, these will be the first LNG bunkering vessels in its fleet. Earlier this year, Purus ordered one LNG carrier from HD Hyundai Heavy Industries, bringing its newbuilding program to a total of ten gas carriers under construction at Hyundai Group-affiliated shipyards.

Shell’s LNG bunkering business continues to grow

Belmar recently announced that Shell expanded its LNG bunkering network to Portland, UK. Shell delivered 1.1 million tonnes of marine LNG last year, hitting a new record and more than doubling the amount delivered in 2023. This was achieved with 1000 bunkering operations across 26 bunkering locations in 12 countries, by 12 bunker barges, Belmar said earlier this year. Shell worked with Carnival, CMA CGM, Eastern Pacific Shipping, K Line, Northern Lights JV, Seaboard Marine, ZIM, and others on the LNG bunkering operations. Last month, the company also signed a deal with Germany’s Hapag-Lloyd to supply the latter’s dual-fuel container vessels with bio-LNG. The agreement builds on a strategic collaboration established in 2023, under which Shell agreed to supply LNG to Hapag-Lloyd’s giant LNG-powered containerships in the Dutch port of Rotterdam. Source: www.lngprime.com

ITALIAN FSRU OPERATOR OFFERS SMALL-SCALE LNG SLOTS

Italy's OLT Offshore LNG Toscana, the operator of the FSRU Toscana, is offering small-scale slots following the launch of its new service which enables small vessels to load LNG at the FSRU. OLT Offshore announced on Monday the publication of available capacity for the new small-scale LNG service (SSLNG). For the first time in Italy, interested companies will be able to participate in an auction for the allocation of slots dedicated to this service, the LNG terminal operator said. The auctions will be held on October 29, 2025. A product consisting of 12 small-scale slots, each with a capacity of 7,500 liquid cubic meters, will be made available to operators. The slots will be distributed monthly from November 2025 to November 2026. Operationally, the SSLNG service provides for the loading of LNG from the FSRU onto small LNG carriers which will then be able to refuel, directly at sea, LNG-fueled naval units, or discharge the fuel at coastal storage facilities in major Mediterranean ports, OLT Offshore said. Furthermore, the plant's features will also allow it to receive LNG from small LNG carriers, which will then be regasified and fed into the grid (complementary slots). OLT Offshore said these slots will be offered in subsequent auctions, once the available regasification capacity has been confirmed, on an infra-annual basis.

Life extension

Earlier this year, OLT Offshore said that the FSRU Toscana will be in operation until the end of 2044 due to life extension work carried out on the FSRU in 2024. In November 2024, the 137,100-cbm FSRU resumed operations about 22 km off the coast between Livorno and Pisa following completion of "extraordinary" maintenance at SGdP's yards in Italy and France. OLT said that while the FSRU was in the yard, the firm also carried out a set of works aimed at extending the useful life of the FSRU Toscana. After that, RINA (Italian Naval Registry) issued the "declaration certifying the extension of the useful life of the terminal for an additional 20 years, ensuring operability and reliability until 2044." The FSRU has a maximum regasification capacity of 5 bcm a year and sends natural gas to Italy's national grid via a 36.5-kilometer-long pipeline. Italy's Snam holds a 49.07 percent stake in the LNG terminal, while Igneo Infrastructure Partners owns a 48.24 percent share. Also, Golar LNG, which provided the 2003-built FSRU, has a minor 2.69 percent stake in the LNG import facility. Source: www.lngprime.com

NEW ZEALAND'S LNG IMPORT PLANS INCLUDE FSRU AND FSU OPTIONS

New Zealand's plans to begin importing liquefied natural gas (LNG) in the winter of 2027 include installing a floating storage and regasification unit or a floating storage unit with onshore regasification facilities. Last year, New Zealand's government revealed plans to start importing LNG, with options including the former Marsden Point oil refinery, the Port of Taranaki, and an offshore option. The government of New Zealand announced last week that it plans to launch a formal procurement process for an LNG import facility, as the country's energy system is facing a fuel shortage, brought about in part through a faster-than-expected decline in domestic natural gas reserves.

Taranaki region

The Ministry of Business, Innovation and Employment (MBIE), on behalf of the New Zealand government, has just released a registration of interest (ROI) and a project information memorandum (PIM) for LNG import facility services. There will be two supplier briefings for interested parties – on the 14th and 15th of October (New Zealand time). LNG Prime contacted MBIE's LNG Project Team, which is responsible for the process, to provide further details on the LNG import options and the location of the facility. "We are not pre-judging what sort of technical solution would be best to employ in a New Zealand setting," the LNG Project Team said in emailed comments. "As

noted in the PIM, the most likely location for an LNG facility in New Zealand is in the Taranaki region, and potentially in Port Taranaki itself. Feasibility studies undertaken thus far have not identified a single preferred location for an import facility,” they said. “It may be that the best solution to deploy is an FSRU, or it might be that an FSU with onshore regasification facilities is best,” according to the LNG Project Team. “The documents include the possibility of an accelerated delivery solution (ADS) being deployed – in time for the Southern hemisphere winter of 2027. For a proposal to be considered as a valid ADS option, proponents must demonstrate they are able to provide at least 12 PJs throughput over any three-month period,” they said. Source: www.lngprime.com

CHART SHAREHOLDERS APPROVE \$13.6 BILLION ACQUISITION BY BAKER HUGHES

Shareholders of US LNG equipment maker Chart Industries have approved the pending \$13.6 billion acquisition by compatriot energy services firm Baker Hughes. Chart and Baker Hughes announced the approval in separate statements on Monday. In July, the two firms entered into a definitive deal. At the special meeting of Chart shareholders held on Monday, a majority of the outstanding shares of Chart common stock were voted in favor of the adoption of the definitive merger agreement, Chart said. Moreover, under the terms of the merger agreement, Chart shareholders will be entitled to receive \$210 per share of common stock in cash upon the completion of the transaction. “We are pleased to deliver this transaction to Chart shareholders and thank them for their support,” said Chart president and CEO Jill Evanko. “With this important milestone now achieved, we look forward to moving forward with the completion of the transaction,” she said.

Mid-year 2026

Baker Hughes said the completion of this transaction, anticipated for mid-year 2026 pending regulatory approvals, represents a “significant” step forward in its strategy to position itself as a “premier” energy and industrial technology company. Additionally, in connection with the acquisition, the Baker Hughes board of directors continues to review additional value creation opportunities. “The acquisition of Chart is one of several steps that is accelerating the company’s strategy of becoming a leading energy and industrial solutions provider focused on delivering substantial value to shareholders,” it said. Baker Hughes said the acquisition of Chart will transform its industrial and energy technology (IET) segment, bolstering the company’s capabilities across a wider array of energy and industrial applications. According to the firm, the transaction will expand Baker Hughes’ presence in high-growth markets, including LNG, data centers, and clean energy, and is expected to further support resilient earnings and cash flow. “We are pleased that Chart shareholders have approved our pending acquisition as we aim to capitalize on the momentum of both companies,” said chairman and CEO Lorenzo Simonelli. “Our strategy has delivered total shareholder returns of 340 percent over the past five years, 150 percent over the past three years and 38 percent in the last 12 months, significantly outperforming our peers,” he said. “With the pending acquisition of Chart, we are undertaking a comprehensive evaluation of our capital allocation focus, business, cost structure, and operations, with a view toward delivering additional value for our shareholders,” Simonelli said. Source: www.lngprime.com

CROATIAN FSRU GETS NEW REGAS MODULE

Türkiye’s Kuzey Star yard has installed an additional regasification module onboard the 140,000-cbm FSRU, LNG Croatia. LNG Croatia’s managing director, Ivan Fugaš, revealed this in a social media post on Monday. He noted that this is the final week for the FSRU in the yard, and the work is “almost over.” In August, the FSRU left its Krk base and departed for Kuzey Star. This is the first time for the vessel

to leave its base on the island of Krk in five years. In addition to installing the extra regasification module, all work on the five-year class renewal will be completed, along with maintenance of the FSRU vessel, LNG Croatia said. The state-owned firm announced in a separate social media post that September 20 was the last day for the unit in dry dock. In January this year, LNG Croatia awarded a contract to Kuzey Star. The contract awarded to Kuzey Star is worth about 14.6 million euros (\$17 million) and the scope of services includes installation, implementation, and commissioning of the new module and equipment on the FSRU.

6.1 bcm

Chinese shipbuilder Nantong CIMC Sinopacific Offshore & Engineering completed Wartsila's regasification module, which was installed onboard the FSRU, in March this year. The 17m/15m/17m module weighs 421 t, and is equipped with two LNG booster pumps, one BOG re-condenser, two LNG vaporizers, and other key equipment, according to CIMC SOE. Norway-based Wartsila Gas Solutions, a unit of Finland's Wartsila, awarded the module contract to CIMC SOE, a unit of CIMC Enric, in 2023. Before that, Wartsila Gas Solutions won the contract worth about 22.9 million euros (\$26.8 million) to supply the regasification module for the FSRU. The new module supplements the vessel's existing onboard Wartsila regasification system and will increase the FSRU terminal's capacity with 212 mmscfd (million standard cubic feet per day) or 250,000 cbm per hour. The current three LNG regasification units have a maximum regasification rate of 451,840 cbm per hour. Following the upgrade, the Krk LNG facility will have a capacity of about 6.1 bcm per year. Source: www.lngprime.com

HANWHA OCEAN: LNG CARRIER DUO COMPLETES FIRST STS TRANSFER DURING TRIALS

South Korean shipbuilder Hanwha Ocean has completed what it claims is the world's first ship-to-ship (STS) transfer of liquefied natural gas (LNG) between vessels under sea trials. Hanwha Ocean said in a social media post on Monday that this breakthrough not only reduces environmental impact but also resolves the risk of schedule delays caused by terminal congestion. Traditionally, LNG carriers conducting gas trials must first load LNG from a terminal and later return the remaining LNG once trials are complete. Now, with this innovation, LNG can be directly transferred to another vessel under trial at sea — “significantly” improving efficiency and flexibility, Hanwha Ocean said. “Following our earlier success with the world's first ship-to-ship LNG bunkering operation within a shipyard, this achievement once again proves Hanwha Ocean's differentiated expertise in gas trial technologies,” the shipbuilder said. Hanwha Ocean did not provide further details regarding the STS operation. According to the image above, published by Hanwha Ocean, the LNG carriers involved in the STS operation are Maran Gas Syros, owned by Greece's Maran Gas, and Woodside Jirrubakura. Last month, Hanwha Ocean hosted a naming ceremony for the 174,000-cbm LNG carriers Woodside Jirrubakura and Woodside Barrumbara. The shipbuilder built these vessels for owner Greece's GasLog and charterer Australia's Woodside. Hanwha Ocean booked two LNG carriers in the first half of this year. The shipbuilder will build the vessels for its US shipping unit Hanwha Shipping. In addition, Hanwha Ocean signed a contract with its US affiliate Hanwha Philly Shipyard to build one LNG carrier in July. According to the shipbuilder, this project marks the first export-type LNG carrier order from a US shipyard since the late 1970s. Hanwha Ocean also signed a deal with its US yard for a second LNG carrier in August, while it recently secured a contract to build one LNG carrier for about \$252 million. As of the end of June 2025, Hanwha Ocean had 65 LNG vessels worth \$15.7 billion in its orderbook. Source: www.lngprime.com

GASUM KICKS OFF WORK ON NEW BIO-LNG STATIONS

Finnish state-owned energy company Gasum has begun construction work on three new liquefied biogas (LBG) or bio-LNG filling stations in Finland. Gasum said on Monday that it will build an LBG filling station in Ylivieska to serve heavy-duty transport. The Raseborg station, on the other hand, will offer both liquefied and compressed biogas (CBG), which means that all kinds of gas cars can be refueled at the station, according to Gasum. Until now, the Gasum station in Joensuu has only provided lighter vehicles with CBG, but with the construction work, LBG for heavy-duty vehicles will also be available at the station. Construction work at all three sites began at the beginning of October, and the stations are expected to open during the beginning of next year, Gasum said. After completion, Gasum will have a total of 23 stations in the LBG refuelling network for heavy-duty vehicles in Finland. The company said that the stations currently being built are also based on "customers' wishes to increase the availability of biogas on important routes." The Raseborg station is located along the route to Finland's southernmost port in Hanko. Moreover, the Ylivieska station will be built along the road to the City of Oulu to support traffic throughout the Ostrobothnia region, while the Joensuu station improves the relatively sparse station network in Eastern Finland. Gasum's long-term infrastructure investments have enabled heavy-duty vehicles to switch to renewable biogas in Finland. The market share of biogas of all registrations of new trucks is almost eight percent this year, and the share is expected to grow "significantly" in the next few years, Gasum said. Source: www.lngprime.com

ENGIE INKS HUNGARIAN LNG SUPPLY DEAL

French energy firm Engie has signed a deal with Hungarian gas trader MVM CEEnergy to supply the latter with liquefied natural gas (LNG) for 10 years. Hungary's foreign minister, Peter Szijjarto, announced the signing of the deal in a social media post on Thursday. He said this is Hungary's "longest-term LNG contract." Under the deal, Hungary will buy 4 bcm of gas over 10 years from 2028. "Our energy supply is safe only if we can import from as many sources and routes as possible," Szijjarto said. "Diversification means adding new sources while keeping existing ones," he added. Before this deal, UK-based LNG giant Shell signed a natural gas supply deal with MVM CEEnergy. This agreement is for two billion cubic meters of natural gas for ten years, starting from 2026. In 2020, Shell signed a supply deal with Hungary to supply the nation with LNG via the Croatian Krk FSRU-based LNG import terminal. Under the deal, Hungary buys 250 million cubic metres of gas equivalent per annum for a period of six years. This was the first time for Hungary to enter a long-term deal with a Western energy company. The country has previously only imported Russian pipeline gas under long-term deals with Gazprom and its export arm. MVM CEEnergy Croatia is one of the largest users of the Croatian FSRU. The firm imports natural gas through the Hungary-Croatia interconnector and the Slovenia-Croatia interconnector, ensuring diversification of the supply sources. The 140,000-cbm FSRU LNG Croatia is currently at Türkiye's Kuzey Star yard to receive an additional regasification module. Following the upgrade, the Krk LNG facility will have a capacity of about 6.1 bcm per year. Source: www.lngprime.com

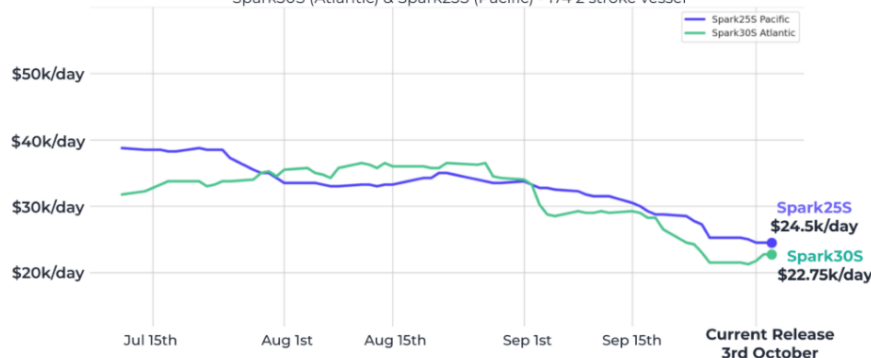
ATLANTIC LNG SHIPPING RATES SLIGHTLY UP THIS WEEK

Atlantic spot LNG shipping rates rose slightly this week, while European prices dropped for a second consecutive week. Spark's product and pricing analyst, Janusz Rydzewski, told LNG Prime on Spark30S (Atlantic) LNG freight increased \$1,250 week-on-week to \$22,750 per day.



Spark Freight - 3-month Historical LNG Spot Rates

Spark30S (Atlantic) & Spark25S (Pacific) - 174 2 stroke vessel



“Spark25S (Pacific) rates softened, declining \$750 per day week-on-week to \$24,500 per day and marking a sixth consecutive weekly rate decline, and the lowest rate since mid-June,” Rydzewski said.

European prices down

In Europe, the SparkNWE DES LNG dropped compared to last week. “The SparkNWE DES LNG front month price for November decreased for a

second consecutive week, declining by \$0.334/MMBtu to \$10.183/MMBtu,” Rydzewski said. Moreover, the basis of DES LNG to TTF “held relatively steady over the week around -\$0.615/MMBtu,” he said. “The US front-month arb to NE-Asia (via the Cape of Good Hope) is priced at -\$0.065/MMBtu, still narrowly incentivising US cargoes to deliver to Europe,” Rydzewski said. “The US front-month arb to NE-Asia (via Panama) is priced at -\$0.096/MMBtu,” he said. Data by Gas Infrastructure Europe (GIE) shows that volumes in gas storages in the EU rose from last week and were 82.57 percent full on October 1. Gas storages were 79.86 percent full on September 24, 2025, and 94.31 percent full on October 1, 2024.



SparkNWE DES LNG



JKM

In Asia, JKM, the price for LNG cargoes delivered to Northeast Asia in November 2025 settled at \$11.025/MMBtu on Thursday. Last

week, JKM for November settled at 11.295/MMBtu on Friday, September 26. Front-month JKM dropped to 11.200/MMBtu on Monday, 11.050/MMBtu on Tuesday, and 11.045/MMBtu on Wednesday. State-run Japan Organization for Metals and Energy Security (Jogmec) said in a report earlier this week that JKM for last week “fell to low-\$11s/MMBtu on September 26 from mid-\$11s/MMBtu the previous weekend.” “Spot LNG demand in Northeast Asia remained weak, due to ample LNG inventories and sufficient supply in the region. With little change in fundamentals, the price showed only minor fluctuations throughout the week,” Jogmec said. Source: www.lngprime.com

PERU LNG SENT FIVE CARGOES IN SEPTEMBER

Peru LNG’s liquefaction plant at Pampa Melchorita has shipped five liquefied natural gas cargoes in September, one more than in the previous month. According to shipment data by state-owned Perupetro, during September, the 4.4 mtpa LNG plant sent three shipments to Japan, and one shipment each to the Netherlands and China. The shipments loaded onboard the LNG carriers Paris Knutsen, Ferrol

Knutsen, SM Albatross, BW Pavilion Aranthara, and Kool Boreas equal about 363,636 tonnes, the data shows. These five LNG cargoes, which were loaded at the Peru LNG plant last month, compare to four LNG cargoes in August this year and six cargoes in September 2024. Peru LNG previously said it expects to load 60 cargoes equivalent to 218 TBtus (trillion British thermal units) in 2025. There were 57 vessels equivalent to 205 TBtus in 2024. This is some 3.98 million tons of LNG. In 2023, Peru LNG loaded 55 vessels. This equals 190.3 TBtu or about 3.69 million tons of LNG, a rise from 51 vessels or 179.05 TBtus in 2022. LNG giant Shell holds 20 percent in Peru LNG and offtakes all the volumes. US-based Hunt operates the LNG plant with a 35 percent stake, while Japan's Marubeni has 10 percent in the LNG terminal operator. Last year, MidOcean Energy, the LNG unit of US-based energy investor EIG, completed the purchase of an additional 15 percent interest in Peru LNG from Hunt Oil. MidOcean's interest in Peru LNG now stands at 35 percent. Source: www.lngprime.com

US WEEKLY LNG EXPORTS CLIMB TO 32 CARGOES

US liquefied natural gas (LNG) plants shipped 32 cargoes during the week ending October 1, one cargo more compared to the prior week, according to the Energy Information Administration. EIA said in its weekly report, citing shipping data provided by Bloomberg Finance, that the total capacity of these 32 LNG vessels is 122 Bcf. This compares to 31 LNG vessels and 119 Bcf in the week ending September 24. EIA noted that it "will be able to operate for a period of time during the lapse in appropriations." The agency said that certain sections of the natural gas weekly update are currently unavailable. The affected sections include the LNG pipeline receipts section. Data from S&P Global Commodity Insights previously showed that average natural gas deliveries to US LNG export terminals in the week ending September 24 increased 0.1 Bcf/d from the prior week to 16.3 Bcf/d. During the week under review, Cheniere's Sabine Pass plant shipped nine LNG cargoes, and the company's Corpus Christi facility sent five shipments, according to the report. Moreover, Venture Global LNG's Plaquemines terminal and the Freeport LNG terminal each shipped five cargoes, while Semptra Infrastructure's Cameron LNG terminal shipped four cargoes. Venture Global's Calcasieu Pass facility shipped three cargoes, and the Elba Island LNG facility shipped one cargo during the week under review. There were no shipments from the Cove Point LNG facility.

Henry Hub climbs

EIA reported that the Henry Hub spot price rose 36 cents from \$2.88 per million British thermal units (MMBtu) last Wednesday to \$3.24/MMBtu this Wednesday. The October 2025 NYMEX contract expired Friday at \$2.835/MMBtu, down 2 cents from last Wednesday. EIA said the November 2025 NYMEX contract price increased to \$3.476/MMBtu, up 34 cents from last Wednesday to this Wednesday. The price of the 12-month strip averaging November 2025 through October 2026 futures contracts climbed 22 cents to \$3.898/MMBtu.

TTF averaged \$10.99/MMBtu

The agency said that international natural gas futures decreased this week. Bloomberg Finance reported that average front-month futures prices for LNG cargoes in East Asia decreased 17 cents to a weekly average of \$11.17/MMBtu. Natural gas futures for delivery at the Title Transfer Facility (TTF) in the Netherlands decreased 15 cents to a weekly average of \$10.99/MMBtu. In the same week last year (week ending October 2, 2024), the prices were \$13.16/MMBtu in East Asia and \$12.58/MMBtu at TTF, EIA said. Source: www.lngprime.com

BALEARIA POWERS THREE SHIPS WITH BIO-LNG

Spanish shipping firm Balearia said that its three dual-fuel ferries will use only bio-LNG as fuel until December, as part of its plans to reduce emissions further. According to Balearia, Margarita Salas, Abel Matute, and Rusadir, have been powered exclusively by this



renewable fuel since the beginning of September. The company has procured 132 gigawatt-hours (GWh) of bio-LNG, which will allow the three ships to sail “emissions-free” until December 2025, Balearia said. This volume, supplied over just four months, is equivalent to 13 percent of the LNG fuel consumed by Balearia’s entire gas-powered fleet in 2024. Balearia said the use of this biofuel between September and December will prevent the emission of 80,300 tonnes of CO₂, the annual equivalent of taking 153,500 cars off the roads or planting 160,650 trees. Biomethane, produced from livestock waste, captures and recovers methane that would otherwise be released into the atmosphere, transforming it into useful energy for shipping. The biomethane supplied is converted into bio-LNG thanks to the conversion service at Enagás’ regasification plants, which is already up and running in Huelva, Barcelona, and Cartagena. Balearia noted that in the first quarter of 2025, it carried out the first bio-LNG supply tests at Spanish port terminals. The company also said that it has become the first ferry company in Europe to receive the ISCC EU (International Sustainability & Carbon Certification). Balearia added that this standard international accreditation is recognised by both the European Commission and the international community, guaranteeing the traceability and sustainability of the biofuels and other renewable energies used by a company in its operations.

LNG fleet

Spanish shipbuilder Armon Gijon recently launched Balearia’s third LNG dual-fuel fast ferry, Mercedes Pinto. Balearia expects the new ferry to start operations next summer. Capable of transporting 1,200 passengers and 400 vehicles, the 123-meter-long ferry is a twin vessel of Eleanor Roosevelt and Margarita Salas, also built by Armon Gijon. Last year, Balearia took delivery of this high-speed aluminium structure catamaran Ro-Pax ferry, Margarita Salas, from Astilleros Armon Gijon yard in Spain. The vessel operates with four Wartsila 31DF dual-fuel engines, four WXJ hydraulic waterjets, and features two Wartsila LNGPac fuel storage and supply systems. Its sister ship, Eleanor Roosevelt, was delivered earlier with the same Wartsila scope. Balearia owns 11 LNG-powered ferries, including converted vessels. In December 2023, the firm purchased the LNG dual-fuel ferry, Rusadir. Source: www.lngprime.com

DISCLAIMER: The news, opinions, reports, updates and data or views contained on the Reports page may not represent : www.lngprime.com news of CYGNUS ENERGY, ITS OWNERS, ITS employees or its agents or affiliates. CYGNUS ENERGY makes no representation, warranty or guarantee as to the accuracy or completeness of the information contained in any News, Research, Analysis or Opinion provided by this service. The information has been taken and credited and cited to the sources as per the citation given in the report/newsletter herein. Under no circumstances will CYGNUS ENERGY, its owners, employees, agents or affiliates be held liable by any person or entity or institution or company for decisions made or actions taken by any person or entity that relies upon the information provided here. While every care has been taken to ensure that the information in this publication is accurate, CYGNUS ENERGY, can accept no responsibility for any errors or omissions or any consequences arising therefrom. Figures are based on latest available information, which is subject to subsequent revision and correction. The views expressed are those of CYGNUS ENERGY and do not necessarily reflect the views of any other associated company. NEWS AND SOURCE: LNGWORLDNEWS, LNG INDUSTRY, NATURAL GAS WORLD, LNG JOURNAL, RIVIERAMM, THE HINDU BUSINESS, ARGUS MEDIA, PETROWATCH, REUTERS, IGU LNG REPORT, TRADEWINDS, MONEYCONTROL, LNG JOURNAL, RIVIERAMM, LNG JOURNAL

CYGNUS ENERGY

GAS & OIL

**LEVEL 43/44, CHAMPION TOWER,
3 GARDEN ROAD, CENTRAL, HONG KONG
SANDP@CYGNUS-ENERGY.COM (SALE & PURCHASE)
GAS@CYGNUS-ENERGY.COM (GAS PROJECTS)**