



SOUTH KOREAN YARDS TO SPLIT \$1.6BN ADNOC LNG HAUL

Letters of intent inked with Hanwha Ocean and Samsung Heavy Industries on six firm newbuildings. Adnoc Logistics & Services has opted to divide its planned order for six firm LNG carrier newbuildings worth an estimated \$1.6bn between two South Korean shipbuilders. The company has signed letters of intent with Hanwha Ocean and Samsung Heavy Industries for three vessels each plus four optional vessels, divided between the two yards, shipbuilding sources said. The deal was concluded during a visit by United Arab Emirates President Mohamed Al Nahyan to Seoul this week, where he signed a comprehensive economic partnership agreement with South Korean President Yoon Suk Yeol that covered a wide range of industrial sectors. The choice of South Korean yards to build Adnoc L&S LNG carriers is likely to disappoint China's Jiangnan Shipyard, which has previously built similar vessels for the company and had been bidding for the work. Adnoc L&S booked six 175,000-cbm LNG newbuildings with Jiangnan in 2022, with the ships then priced at around \$200m each as the Adnoc-parented company moved to replace its older steam turbine LNG carriers. The Chinese yard is due to deliver the first of these vessels in February 2025, with two to follow later that year and the remaining trio in 2026. Adnoc L&S launched a huge tender for gas carrier tonnage in January in a hunt for vessels worth up to \$3bn. The enquiry invited offers from shipbuilders for up to 10 LNG carriers of around 175,000 cbm and four very large ammonia carrier newbuildings.

This month, Adnoc L&S signed up with Jiangnan for the four VLACs, contracting two firm 93,000-cbm ships and securing optional berths for an additional pair. The yard had been marketing its berths for VLACs at around \$120m. These newbuildings, which will be fitted with type-B cargo tanks, were contracted through Adnoc L&S' joint venture with Chinese polyurethane producer Wanhua Chemical Group, AW Shipping. They will be delivered in 2026. Stocklisted Adnoc L&S has previously said that it does not comment on commercial activities or market speculation. The company operates a large and diverse fleet for which it has been pursuing a large renewal and expansion plan. Parent Adnoc has also been expanding on LNG. This month, the company signed an agreement to acquire a 10% equity stake in the Area 4 concession in Mozambique's Rovuma basin from Portugal's Galp in a move that will give the company a share of the existing and planned LNG production. This comprises the operational Coral Sul FLNG facility, the proposed Coral North FLNG development and the Rovuma LNG onshore facilities.

source : www.tradewindsnews.com

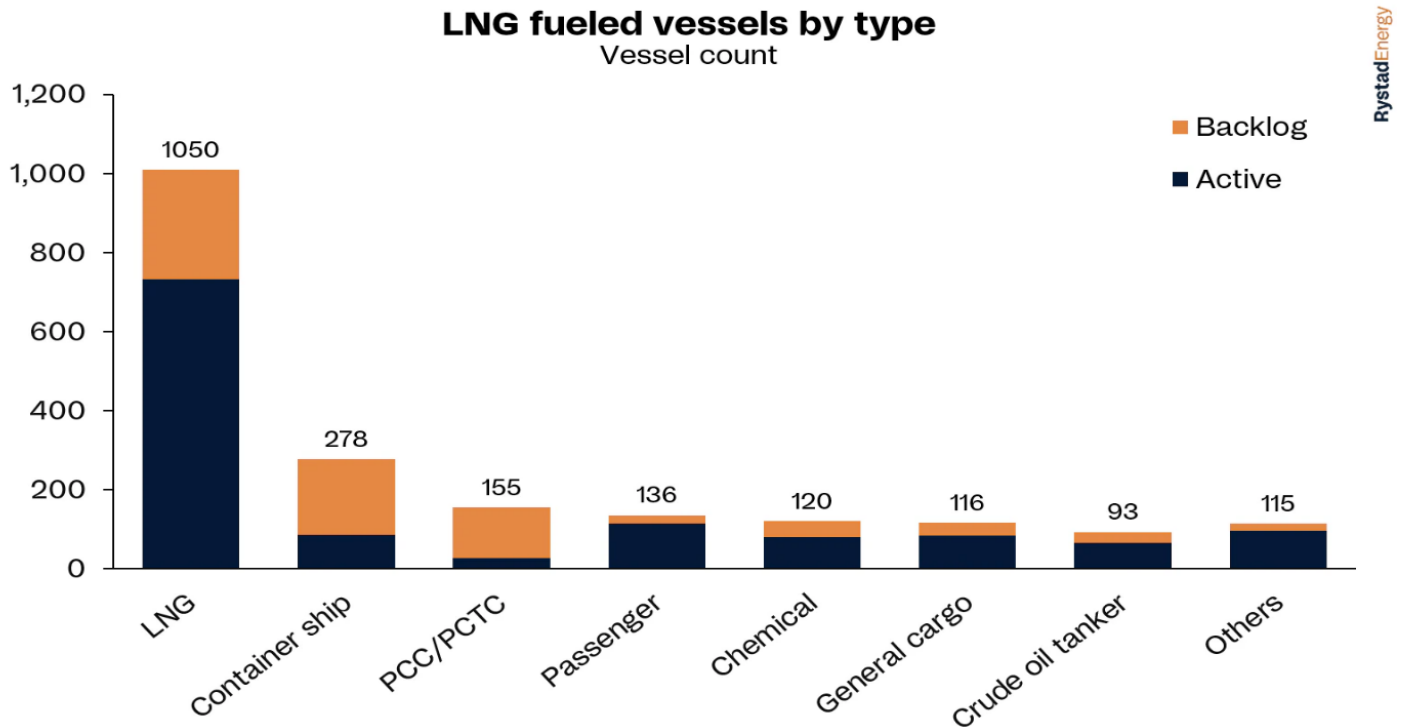
SECOND LNG DEMO DEAL THIS YEAR

Small-scale vessel's high aluminium content and bunkers attract premium price. A second LNG carrier has been sold for scrap in a year in which the expectation of demolition sales for the ageing steam turbine fleet is rising. Brokers said the Indonesian-controlled 19,474-cbm steam turbine-driven Surya Aki (built 1996) was sold to cash buyers for \$655 per ldt on an "as is" basis in Batam, Indonesia, with the option to send it to Chittagong or Alang for scrapping. The deal on the 8,039-ldt vessel, designated for compliant demolition under the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, equates to a sale price of around \$5.3m. Brokers said the Moss-type vessel achieved a premium price due to its high aluminium content and 1,100 tonnes of bunkers. TradeWinds reported on 13 May that scrap offers had been invited on the small-scale vessel. The Surya Aki was previously recorded under Mitsui OSK Lines' fleet and was used to ship cargo from Indonesia to Japan. Clarksons Shipping Intelligence Network lists it on its database as owned by Indonesia's PT Humpuss Intermoda Transportasi since 2001. The 28-year-old Surya Aki is one of the 50 oldest LNG carriers in the fleet. Clarksons lists 46 LNG carriers of 25 years and older, of which 20 are aged 30 years or more. The sale of the Surya Aki swiftly follows the first LNG demolition sale of 2024. Earlier this month, South Korea's SK Shipping sold its 127,125-cbm, Moss-type steam turbine-driven YK Sovereign (built 1994) for scrap at a lump sum price of \$18.7m, which equates to \$620.80 per ldt. Steam turbine vessels make up the oldest part of the global LNG fleet and are smaller and less efficient than their modern two-stroke, 174,000-cbm cousins. Source : www.tradewindsnews.com

KARPOWERSHIP EMERGES AS BUYER OF TWO FORMER MISC LNG VESSELS

Midsize elderly vessels have been renamed under Turkish owner's gas-to-power branding Turkey's Karpowership has bought two midsize steam turbine LNG carriers from Malaysia's MISC as it expands its fleet to supply gas to its powerships. TradeWinds has learned that Karadeniz-controlled Karpowership concluded its purchase of the 65,000-cbm Portovenere (built 1997) and

such fuels. We also see these segments taking actions in opting for other alternative fuels, such as ammonia and methanol,” Junlin Yu, senior analyst at Rystad Energy, told NGW. Yu highlighted several reasons for the preference for LNG, including significant reductions in SOx emissions (around 80%), near elimination of NOx and particulate matter (PM), effective methane slip management resulting in lower carbon intensity compared to conventional fuel oil, cost advantages over alternative fuels like e-ammonia and e-methanol, and mature LNG bunkering infrastructure. Despite the growth in LNG-fuelled fleets and bunkering, methane slip – unburned methane emissions – remains a significant challenge for the maritime sector. Addressing this issue is crucial for realising the full environmental benefits of LNG.



Source: Rystad Energy’s Clean Shipping Solution, April 2024
A Rystad Energy graphic

LNG bunkering shows strong growth

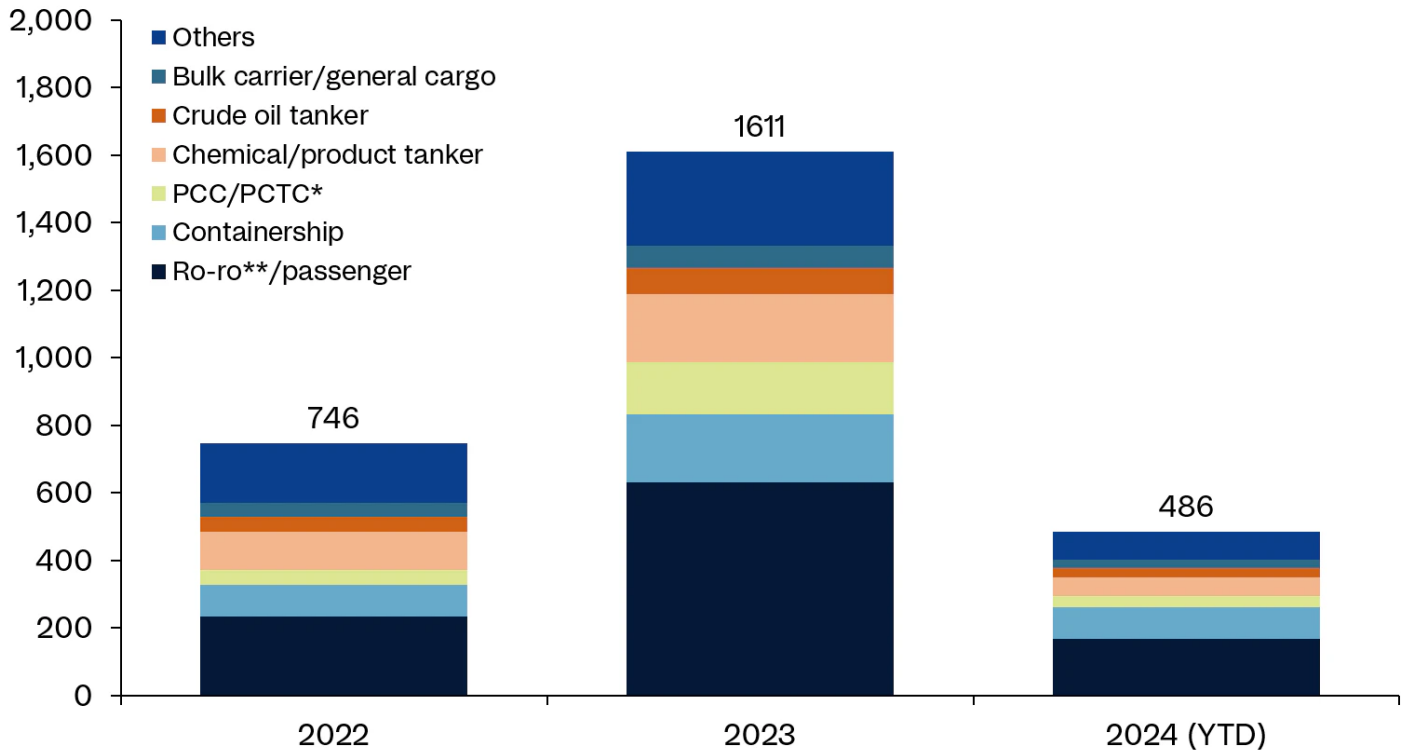
LNG bunkering is performed using three main methods: truck-to-ship (TTS), pipeline-to-ship (PTS), and ship-to-ship (STS). In 2023, LNG bunkering reached a record high of 4.7mn m³ globally, up 62% compared to 2022. This surge was primarily driven by a strong increase in STS deliveries, which doubled in 2022. By contrast, PTS and TTS volumes saw modest year-on-year growth. STS bunkering is expected to accelerate, particularly in Europe, which has 85 LNG bunkering ports and an increasing number of ports offering STS capabilities. In Asia, China, Japan, and South Korea lead with 26 ports offering LNG bunkering. While LNG bunkering facilities exist in Africa and South America, these regions have yet to see significant activity. Ro-Ro/passenger vessels and container ships have consistently held the top two positions in STS LNG bunkering. In 2023, passenger vessels saw 632 STS LNG bunker operations, closely followed by container ships with 201 operations. This dominance can be attributed to their regular refuelling needs and the growing presence of LNG-powered vessels within their

fleets. For example, in 2023, a Ro-Ro/passenger vessel operating between Finland and Sweden led with 240 bunkering events. “STS will still remain the most popular method for deep sea vessels at least. The main reason why STS is becoming increasingly popular is because it offers great flexibility with bunker locations and bunker capacity, which improves operational efficiency for both vessels and ports. This is especially important for container vessels and car carriers when they want to load/unload cargo and bunker simultaneously,” Yu said.

Ship-to-ship (STS) activity by vessel type

Activity count

RystadEnergy



Source: Rystad Energy’s Clean Shipping Solution, April 2024
A Rystad Energy graphic

Factors driving LNG bunkering demand

Several factors are fuelling the surge in LNG bunkering demand, including stricter regulations, economic benefits, and expanding infrastructure. As of the end of March, LNG bunkering sales in 2024 are off to a strong start, with 1.9mn m³ already sold—nearly matching the total volume sold in 2022, the Rystad report said. This trend suggests the potential for a significant increase by year-end, with total LNG bunker sales possibly surpassing 7mn m³ by the end of 2024. The growing number of LNG-powered vessels in the global fleet, attractive pricing relative to conventional marine fuels such as very low-sulfur fuel oil (VLSFO), and the continued push for cleaner fuel alternatives from regulatory bodies are expected to drive further growth.

“By the end of 2024, it is expected that around 1,500 LNG vessels will be in operation, with over 200 vessels delivered in 2024 alone,” Yu said.

VITOL EXTENDS LNG SUPPLY DEAL WITH SOUTH KOREA'S KOMIPO

Energy trader Vitol has extended its existing liquefied natural gas (LNG) supply deal with Korea Middle Power (Komipo). The original SPA was signed in 2011. Deliveries started in 2015, with Vitol supplying Komipo with over 4 million tons of LNG over 10 years. Under this extension agreement, Vitol will continue to supply Komipo with LNG from 2025 to 2028, the Geneva-based trader said in a statement on Tuesday. Vitol will supply three LNG cargoes per year. "The extension confirms the trust and strength of the relationship developed over years of reliable LNG deliveries," Vitol said. Vitol, which entered the LNG market in 2006, said it is expanding its LNG presence globally and last year traded over 17 million tonnes of LNG worldwide. The firm revealed in its full-year report in March that its natural gas and LNG volumes grew by 19 percent and 24 percent respectively, but it did not reveal the quantities. In 2022, Vitol's traded LNG volumes increased to about 17.6 million tonnes of oil equivalent, or some 14 million tonnes of LNG, as the company's portfolio responded to increased demand from Europe. This means that Vitol's LNG volumes in 2023 reached some 17.3 million tonnes of LNG. The firm reported LNG volumes of 12.9 million tonnes in 2021, 10 million tonnes in 2020, and 10.5 million tonnes in 2019. Vitol has a global LNG portfolio with long-term LNG supply from North America, Africa, Middle East, and Asia, and charters a fleet of LNG carriers. In February, Vitol signed a long-term deal to buy natural gas from US oil and gas producer EOG. It also signed a deal with India's GAIL to deliver 1 mtpa of LNG to the latter for a period of about 10 years starting in 2026. source : www.lngprime.com

GOLAR SAYS PROGRESS MADE ON NEW FLNG DEAL

Floating LNG player Golar LNG is working to sign definitive agreements for an up to 20-year FLNG deployment. In February, the LNG firm led by Tor Olav Trøim said in its 2023 results report that it had signed a framework agreement with a "potential customer" for a long-term opportunity that could utilize either the 2.4 mtpa FLNG Hilli or a 3.5 mtpa FLNG. Golar said on Tuesday in its first quarter report that the framework agreement has now "progressed to detailed contract negotiations for an up to 20-year FLNG deployment". The next steps of the project development include signing of definitive detailed agreements, obtaining necessary third-party approvals including governmental and environmental, amongst others, and a mutual final investment decision (FID), the company said. According to Golar, the FLNG development has a planned start-up during 2027. The company's CEO **Karl Staubo** said during the earnings call later on Tuesday that the development could include more than one FLNG over time. Golar is working with the client whether Hilli or the MKII 3.5 mtpa FLNG should be the first one, Staubo said. Cameroon FLNG offloads 112 cargoes, additional FLNG developments. Golar said it focus is on redeployment of its FLNG Hilli following the end of the FLNG's current charter in July 2026, and thereafter ordering and securing commercial terms for a contemplated MKII FLNG. Last year, FLNG Hilli, located offshore Cameroon's Kribi, offloaded its 100th cargo of liquefied natural gas since it started operations in 2018.

