LNG Shipping News

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High European LNG imports from Russia

Russian LNG exports to Europe remained at very high levels in February of this year amounting to 3.6 mill cu m.

This follows a 13 month high in January of 4.1 mill cu m.

Belgium imported the largest amount of Russian LNG, accounting for 38% of imports to the EU, while Spain ranked second with a share of around 23.9%, followed closely by France with about 23.8%, VesselsValue (VV) said in a report.

Currently, there are no sanctions on Russian LNG imports, but there has been a strong push to source energy from other countries since the start of the conflict with Ukraine last year.

In the drive towards cleaner energy, the LNG sector has come out as the winner, VV said. Sentiment was strong for this sector; although the record breaking seasonal high has come to an end, LNG freight rates remained well above average and were up about 27.2% year-on-year, at around $76,000 per day at the beginning of March (but are now falling - Ed).

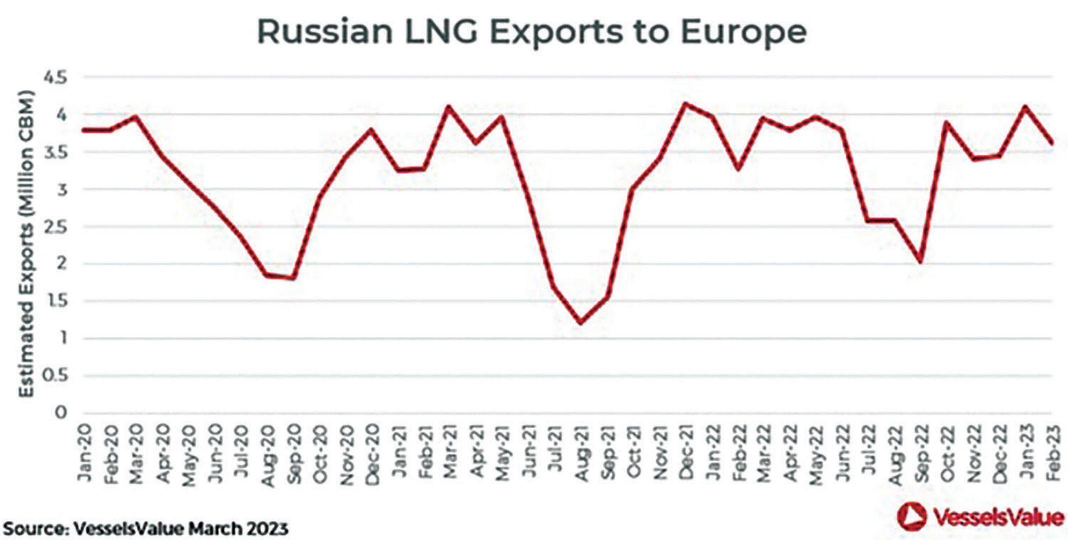
Values for this category continued to strengthen. In the large LNGC sector of 160,000 cu m, price assessments for 20-year old vessels firmed by as much as 20.82% since January to $80.8 mill.

The LNG sector's importance as a transition fuel, especially in the move towards cleaner energy sources, has fuelled the rapid growth in the price of LNGCs over the last few years, along with the global energy crisis, VV said.

Furthermore, a combination of sanctions and disruption to the Nordstream 2 pipeline led to loss of Russian LNG volumes to Europe. This resulted in high demand from European economies seeking to secure energy supplies in the run up to the Northern Hemisphere winter.

Although seasonality led to a fall in earnings from the record breaking peak of over $465,000 per day last November, freight rates were well above average. Rates were around $75,000 per day on 1st February, compared to $29,000 per day at the same time last year.

Values for this sector continued to rise in the first few months of this year, particularly for older vessels. For example, values of 25-year old LNGCs of 130,000 cu m increased by about 25% since the start of the year, from $44.32 mill to an 11-year high of $55.56 mill at the beginning of March, giving owners plenty of reason to trade vessels for as long as possible, VV concluded. ■



Russian LNG Exports to Europe since January 2020

SHIPPING NEWS AGENDA

FID taken for Port Arthur 1

Sempra Infrastructure Partners has taken a final investment decision (FID) on the development, construction and operation of the Port Arthur LNG Phase 1 project.

Sempra has taken FID on Port Arthur Phase 1

In addition, Sempra finalised its joint venture with an affiliate of ConocoPhillips, as well as announced an agreement to sell an indirect, non-controlling interest in the project to an infrastructure fund managed by KKR.

The company also announced the closing of the project's $6.8 bill non-recourse debt financing and the issuing of the final notice to proceed under the project's engineering, procurement and construction (EPC) agreement with Bechtel.

"At Sempra, we believe bold, forward-looking partnerships will be central to solving the world's energy security and de-carbonisation challenges," said Jeffrey Martin, Sempra's Chairman and CEO.

Port Arthur LNG Phase 1 is fully permitted and is designed to include two natural gas liquefaction trains, two LNG storage tanks and associated facilities with a nameplate capacity of around 13 mill tonnes per annum.

Total capital expenditures for the project are estimated at $13 bill.

Long-term contractable capacity of about 10.5 mill tonnes per annum is fully subscribed under binding long-term agreements with strong counterparties, such as ConocoPhillips, RWE Supply and Trading, PKN ORLEN, INEOS and ENGIE, all of which became effective upon reaching FID.

Sempra Infrastructure is also actively marketing and developing the Port Arthur LNG Phase 2 project, which is expected to have similar offtake capacity to Phase 1.

Sempra and ConocoPhillips closed their joint venture whereby an affiliate of ConocoPhillips has acquired a 30% non-controlling interest in the project, is purchasing 5 mill tonnes of LNG offtake from the project under a 20-year sale and purchase agreement (SPA) and is managing the project's overall natural gas supply requirements.

ConocoPhillips will also have certain rights to participate in future expansion projects in both equity and offtake.

"Our strategic LNG partnership with Sempra will help supply growing global demand for natural gas, a lower greenhouse gas emissions-intensity fuel expected to play a critical role in the energy transition and global energy mix going forward," said Ryan Lance, ConocoPhillips Chairman and CEO. "ConocoPhillips has more than 60 years of experience with LNG, and we look forward to continuing to build our LNG portfolio and expanding our role in delivering a lower-carbon future that strengthens US and global energy security."

KKR investment

KKR will acquire a 25% - 49% indirect, non-controlling interest in the project. Under the agreement, Sempra Infrastructure will retain certain economic and other rights with respect to the interest being transferred, while granting KKR certain minority interest protections.

KKR is making this investment primarily through its Global Infrastructure Investors IV fund.

Sempra Infrastructure is also targeting 20% - 30% of indirect ownership interest in the project, subject to the closing of the KKR sale.

The company has contracted Bechtel Energy for the EPC and has issued a final notice to proceed for the project. The expected commercial operation dates for Train 1 and Train 2 are 2027 and 2028, respectively.

The successful completion of the KKR sale is subject to regulatory approvals and other customary closing conditions, and the completion of construction of Port Arthur LNG Phase 1 is subject to a number of risks and uncertainties, Sempra warned.

Bechtel has contracted Baker Hughes to supply two main refrigerant compressors (MRCs) for the project.

Baker Hughes will supply four Frame 7 turbines paired with eight centrifugal compressors across two LNG trains, as well as two electric motor driven compressors for the plant's boosting services.

Packaging of the turbine/compressor train, a unique Baker Hughes service, as well as manufacturing of the compressors and testing of the trains, will take place at the company's Italian facilities.

Citi advised Sempra on various aspects of the transaction and JP Morgan Securities acted as advisor on the project financing.

Law firm Baker Botts represented Sempra Infrastructure in the development of the project, the marketing of LNG, and the joint venture with ConocoPhillips. ■

NEWS NUDGE

Wang to join SSY's LNG team

Justin Wang is to join shipbroker Simpson Spence Young's (SSY) LNG team, effective next month.

Based in Beijing, Wang will be the first active LNG shipbroker in the Chinese capital and will focus on further expanding SSY's LNG presence in the region, backed up by the current team based in London, Singapore, and Stamford (Con), with business development offices in Madrid and Mumbai.

With over 15 years of commercial maritime experience, Wang has built up an extensive CV in the LNG sector having worked previously at NYK Group, BW Group and more recently at Paris-based shipbroking firm BRS. ■

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Rio Grande FID due soon

NextDecade subsidiary Rio Grande LNG (RGLNG) has amended its engineering, procurement construction (EPC) agreements with Bechtel to build the first three trains of the Brownsville export facility.

This also extended the price validity under the agreements to 15th June, 2023.

As disclosed in NextDecade's Annual Report for 2022 filed with the US Securities and Exchange Commission (SEC) on 10th March, 2023, NextDecade estimated that the aggregate lumpsum EPC cost to construct RGLNG's Trains 1-3 will be around $11.5 bill.

The final EPC lumpsum contract pricing will be determined prior to a final investment decision (FID) and is subject to change, including if RGLNG does not issue a full notice to proceed to Bechtel on or before 15th June, 2023, unless extended by mutual agreement by both parties.

NextDecade said it is targeting a positive FID on Trains 1-3 before the end of the second quarter of 2023, with the remaining trains' FIDs to follow.

RGLNG's first phase will be able to produce 17.6 mill tonnes per year of LNG. As designed, the facility will include five trains and have a capacity of 27 mill tonnes per year. ■

FID could be taken as soon as June. Source: NextDecade Corp.

JGC awarded Papua LNG FEED

JGC Holdings Corp, which operates overseas engineering, procurement and construction (EPC) business in partnership with Hyundai Engineering & Construction, was awarded the Front End Engineering Design (FEED) and EPC estimation contract for Papua LNG's downstream facilities.

This contract was awarded by ExxonMobil on behalf of the joint venture partners. It calls for the design of about 4 mill tonnes per year of LNG liquefaction capacity adjacent to the existing PNG LNG processing facilities located 20 kilometres northwest of Port Moresby, Papua New Guinea.

The natural gas will be sourced from the Elk Antelope gas field.

It also includes the use of 2 mill tonnes per year of liquefaction capacity from PNG LNG's existing trains.

The new LNG facilities will adopt an 'E-Drive' design, where electric motors drive the natural gas compressors instead of conventional gas turbines, which will help reduce CO2 emissions during operations.

JGC has been responsible for the construction of LNG facilities accounting for more than 30% of world's LNG production and is currently executing three projects - a large-scale LNG project in Canada, an FLNG project in Mozambique, and another in Malaysia. ■

Shell to take more Mexican LNG

Shell Eastern Trading (Pte) Ltd and a subsidiary of Mexico Pacific Limited have signed another sales and purchase agreement (SPA) to offtake around 1.1 mill tonnes per year of LNG from the third train of the Saguaro Energia export facility.

Under the SPA, Shell will purchase LNG on a free on-board (FOB) basis for 20 years. When fully operational, the first phase of the facility will have three trains and a combined capacity of 14.1 mill tonnes per anum.

"We are delighted Shell has chosen to grow with us, building upon their initial 2.6 mill tonnes commitment from Train 1 and Train 2, to also underpin more than 20% of Train 3 capacity," said Ivan Van der Walt, Mexico Pacific CEO.

"Our project will provide Asia with low cost Permian gas, avoiding the Panama Canal to ensure a shorter shipping distance to Asia, to achieve lower transportation emissions and landed pricing versus the US Gulf Coast.

"As we work to deliver a final investment decision (FID) on the first two trains, we are also closing out contracting across the significant commercial momentum in place for Train 3 to ensure that a subsequent Train 3 FID can follow as quickly as possible," he explained.

Steve Hill, Shell's Executive Vice President of Energy Marketing, added: "LNG is an increasingly important pillar of global energy security. Investment in liquefaction projects is needed to avoid a supply-demand gap that is expected to emerge in the late 2020s. We are pleased to be working with Mexico Pacific to provide more LNG to the global market."

Chuck Davidson, Mexico Pacific Chairman and Partner at Quantum Energy Partners, commented: "Mexico Pacific is uniquely facilitating the connection of low cost Permian Basin gas with the lower carbon fuel needs of Asia to deliver de-risked and affordable new LNG supply, resulting in additional energy security for the region.

"We are pleased to have the ongoing support of Shell, one of the largest market participants, to underpin investment in critically needed new supply," he said. ■

Cedar LNG gets federal and provincial nod

Haisla Nation and Pembina Pipeline's Cedar LNG project received a positive decision statement from the Canadian Federal Minister of Environment and Climate Change on 15th March.

This decision follows the issuing of a provincial Environmental Assessment Certificate (EAC) the day before.

Collectively, they represent a significant step forward for Cedar LNG, the developers said.

"We look forward to working in partnership with neighbouring indigenous nations and communities to continue to progress this transformative project towards a positive Final Investment Decision (FID)," they said.

The EAC was received from the British Columbia Environmental Assessment Office.

This project is an FLNG facility to be located on Haisla Nation-owned land in Kitimat (BC) with a capacity to export 3 mill tonnes per year of LNG.

"The receipt of our EAC is the culmination of more than a decade of work by the Haisla Nation and marks a significant milestone for the Cedar LNG project and the Haisla Nation's journey towards economic self-determination," said Crystal Smith, Chief Councillor for Haisla Nation.

"With Cedar LNG, we are setting a new standard of responsible and sustainable energy development. Together with our partner, Pembina, we are committed to advancing an LNG project that protects the environment, respects Haisla Nation values, and meets the highest standards of social and environmental responsibility," Smith added.

"Cedar LNG will benefit Pembina and its customers, the Haisla Nation, and all of Canada, while meaningfully contributing to the transition to a lower-carbon economy," commented Scott Burrows, Pembina's President and CEO. "Pembina is proud of its long history of safe and reliable operations, and we look forward to contributing our expertise as we work together to bring Canadian LNG to the world."

Cedar LNG made several design initiatives to minimise the project's environmental footprint and ensure it is one of the world's lowest-emitting LNG facilities.

One of the most important decisions was to power the facility with renewable electricity from BC Hydro. In addition, the choice of site location allows the project to leverage existing LNG infrastructure, including the Coastal GasLink pipeline, with which Cedar LNG has a long-term transportation agreement, a deepwater port, roads, and other infrastructure.

Service agreement

Cedar LNG has also entered into an MoU for a 20-year liquefaction services agreement with ARC Resources.

The parties are working towards finalising a definitive agreement for 1.5 mill tonnes of LNG per year, or around half of Cedar LNG's production.

EnerMech Canada has been contracted to deliver the project's mechanical pre-commissioning and commissioning services.

The work scope includes temporary commissioning utilities, valve calibration and testing, pneumatic and hydraulic testing of piping systems, pre-start up flushing of rotating equipment lubrication systems, chemical cleaning of process systems and operational pressure testing, drying and inerting of low temperature process systems. ■

Overseas interests circle around Hyundai LNG Shipping

IMM Private Equity and IMM Investment Corp have short listed five overseas companies in a bid to sell South Korea's largest LNG shipping company, according to local newswires.

US, UK, Greek and Danish companies were short listed from a preliminary bid held earlier this month for the sale of Hyundai LNG Shipping Co.

More than 20 worldwide financial investors were believed to have shown interest in the acquisition by signing non-disclosure agreements.

The market expects the sale to garner around Won600 bill ($467.29 mill) to Won700 bill.

Citigroup Global Markets Korea Securities is the lead manager in the sale.

Hyundai LNG Shipping was formerly the gas carrier division of HMM, previously known as Hyundai Merchant Marine. IMM bought the LNG shipping unit from cash strapped HMM for about Won500 bill in 2014.

According to South Korean newswires, IMM initially sought to find a domestic buyer for Hyundai LNG Shipping, as the company contributes to the transport of one of the country's strategic cargoes. However, a suitable buyer was not found.

The company's advantages highlighted were - Korea Gas Corp (KOGAS), the largest customer of Hyundai LNG Shipping, imports the world's largest volume of LNG as a single entity.

In addition, the fleet, consisting of 16 LNGCs, six LPGs and one LNG bunkering vessel, all have long-term shipping contracts of up to 20 years.

After the takeover, IMM expanded its overseas sales resulting in the sales more than doubling to Won398.1 bill last year from Won187.4 bill in 2020, and its operating profit before cost depreciation also more than tripled to Won48.5 bill last year from Won14.3 bill during the same period. ■

IEEFA slams FERC

The US Institute for Energy Economics and Financial Analysis (IEEFA) has accused the US Federal Energy Regulatory Commission (FERC) of omitting issues in its Draft Environmental Impact Statement (EIS) for the CP2 LNG and CP Express projects.

The proposed projects involve the construction of a 20 mill tonnes per annum nameplate liquefaction capacity export terminal and 85 miles of natural gas pipeline to supply feed gas to the Calcasieu Ship Channel terminal, Louisiana.

IEEFA questioned whether the projects aligned with 'public interest'.

FERC should consider that assumptions about global demand for additional LNG export capacity were based on long-term relatively low gas prices prior to the COVID-19 pandemic and old commissioned studies, IEEFA claimed. Global demand conditions have also changed since Russia's February, 2022 invasion of Ukraine.

In addition, a wave of new global LNG facilities is expected to come online by 2026, causing a potential glut. Current events and their economic impacts should be reflected in updated data and used for economic modelling.

Today's shifting global demand outlook, a key determinant of whether an additional LNG export facility will yield local, statewide, or national economic benefits, may not point to the same conclusions as data from five years ago.

The significant risk of mismatches between LNG supply and demand, which can lead to volatility in prices and under utilisation, calls into question the viability and economic benefit to the public. FERC must scrutinise these issues to determine whether or not the project is consistent with public interest, the organisation stressed. ■

IOC looks for Dhamra cargoes

State-owned Indian Oil Corp (IOC) has issued a tender for eight LNG cargoes to be delivered to the new Dhamra LNG terminal over the next 14 months.

This tender signals the startup of the Dhamra terminal located in Odisha State on India's east coast at a time when new terminal openings have slowed, due to the global energy crisis.

It also shows how LNG importers are taking advantage of the current drop in prices to boost procurement, S&P Global said.

"The terminal is getting commissioned and we have capacity booked, so it is a part of routine procurement," an IOC source told S&P Global.

The IOC tender was due to close on 22nd March and was believed to be for deliveries in June, August, October and December, this year and January, February, March and May, 2024 to Dhamra totalling 3.3 trill Btu at a price of around 7% of Brent crude prices, traders said.

IOC was previously thought to have issued a tender seeking an 23rd April delivery that closed on 14th March but this was not awarded.

Adani Ports and Special Economic Zone, part of the Adani Group, announced in 2018 it had signed a long-term agreement with IOC to provide LNG regasification services on a use or pay basis at the Dhamra LNG import terminal.

Under the contract, IOC booked 3 mill tonnes per year of regasification capacity spread over 20 years. IOC is planning to supply the gas to its refineries at Paradip in Odisha and Haldia in West Bengal, according to a statement released at the time.

In the same year, Adani Group and TotalEnergies partnered in a joint LNG business - Adani Total Pvt Ltd - to develop the Dhamra LNG regasification terminal.

Last month, TotalEnergies said that Dhamra was expected to start operations in the second quarter of this year.

Demand resurfaces

The decline in the Platts JKM and the Platts West India Marker in recent weeks has reinvigorated LNG demand among price-sensitive downstream buyers in India, with tender activity also ramping up from other local market players to cater to firm current domestic consumption as well as the impending summer season, market sources told S&P.

Asia/Pacific spot LNG prices have fallen to the low $13s per MMBtu, with Platts assessing the JKM for May at $13.165 per MMBtu on 16th March.

IOC is tendering for Dhamra cargoes

On 28th February, the Indian Meteorological Department said there was an increased probability of heat waves during March/May across many regions of central and northwest India.

Among the buying activity rumoured in recent weeks was a tender by GSPC to buy two LNG cargoes, one in second half of April and the other in the first half of May, that closed 2nd March but was thought not to have been awarded at the prices offered.

GAIL was believed to have awarded a buy tender in the $13s per MMBtu for three DES cargoes for May loading/delivery, while Petronet was recently thought to be seeking a cargo for 22nd to 31st May delivery to Dahej, S&P revealed.

India is also considering the setting up of a strategic LNG reserve to guard against future price hikes or supply shortages.

Vinod Kumar Mishra, Petronet Finance Director told Bloomberg that the company was adding more storage tanks at its import terminals and is working on another floating import terminal in Odisha State.

He also revealed that Petronet was holding talks with Qatar to renegotiate its 7.5 mill tonnes per year contract, which expires in 2028, to add another 1 mill tonnes. ■

Angola LNG withdraws tenders

Angola LNG, has cancelled tenders, due to production issues at its plant, trading sources told Reuters last week.

The company has cancelled two sell tenders that were due to close on 22nd and 27th March for April cargoes because of issues at the plant, the sources said.

Angola LNG is suffering from technical problems

"The plant experienced a pressure surge in the loading line and is currently operating at reduced rates. Upcoming tenders have been withdrawn while this is being investigated," a company spokesperson told Reuters.

Analysts and trading sources expected it would take at least a month to return to full capacity.

Angola's Soyo plant, which has a capacity of 5.2 mill tonnes of LNG per year, exported around 7.59 mill cu m last year, of which 4.8 mill was shipped to Europe, according to data and analytics group Kpler.

The outage comes at a time where Europe is enjoying exceptionally mild winter, high inventory levels and reduced industrial demand.

"Angola LNG has been sending the vast majority of its output to Europe over the past year, primarily to France, the UK, the Netherlands and Spain," said Leo Kabouche, LNG market analyst at research consultancy, Energy Aspects.

"With the continued lack of demand from major Northeast Asian buyers and the approach of the shoulder season (between summer and winter peak demand), the impact on Dutch TTF hub near-term prices is likely to be limited," he added.

The plant has been selling its LNG via competitive tenders into the spot market, partly because the plant's original plan to ship LNG to the US fell through following its shale gas boom.

Chevron is the largest stakeholder in the Angolan project, with partners that include TotalEnergies, BP, ENI and Angola's Sonangol. ■

Dynagas suffers income drop

Dynagas LNG Partners' reported a drop in net income for the fourth quarter of 2022.

Net income for the quarter was $11.6 mill, compared to $16.9 mill for the corresponding period of 2021, a decrease of $5.3 mill, or 31.4%.

This decrease was mainly attributable to the drop in the unrealised gain on the interest rate swap transaction (unrealised loss of $2.2 mill incurred during the quarter against an unrealised gain of $5.9 mill earned during 4Q21), which was partly offset by the gain on debt reduction further to the pre-payment of the entire participation of ATB to the $675 mill credit facility in October, 2022.

Adjusted net income for 4Q22 was $7 mill, compared to $11.4 mill in 4Q21, which represented a net decrease of $4.4 mill or 38.6%. This drop was mainly down to the increase of interest and finance costs, compared to the corresponding period of 2021, which excludes the effect of the realised gain on the interest rate swap transaction.

The Partnership reported average daily hire gross of commissions of around $62,700 per day per vessel in 4Q22, compared to about $64,500 per day per vessel for the corresponding period of 2021. During both periods, the vessels operated at 100% utilisation.

Vessel operating expenses were $7.8 mill, which corresponds to daily opex per vessel of $14,060 in 4Q22, compared to $8.2 mill, or daily operating expenses per vessel of $14,799 in the corresponding period in 2021.

Lower maintenance costs

This decrease was mainly attributable to the lower vessel maintenance costs of the 'Lena River' and 'Yenisei River' in 4Q22.

Adjusted EBITDA was $23.6 mill, compared to $24.7 mill for 4Q21. This fall was mainly attributable to the effect of the drop in voyage revenues as adjusted for the effects of the amortisation of deferred revenue.

CEO, Tony Lauritzen, said; "For the fourth quarter of 2022, we reported net income of $11.6 mill, earnings per common unit of $0.24, adjusted net Income of $7 mill and adjusted EBITDA of $23.6 mill. While future results may vary, we are pleased to report 100% utilisation for our fleet for the 11th quarter in a row, which is a testament to the fleet's performance.

"All six LNG carriers in our fleet are operating under their respective long-term charters with international gas companies with an average remaining contract term of 6.4 years. As of 17th March, 2023, our estimated contracted revenue backlog was $1 bill. The earliest contracted re-delivery date for any of our six LNG carriers is in the first quarter of 2026 (for the 'Clean Energy'), subject to the terms of the applicable charter.

"We were very pleased with the new three-year charter of the 'Arctic Aurora' to Equinor, which has chartered the vessel since her delivery from the shipyard in 2013.

"The Partnership has remained committed to its strategy of reducing debt and has since September, 2019, until the end of December, 2022 successfully repaid $175 mill in debt. Since 31st December, 2019 the Partnership reduced its net leverage from 6.6x to 4.7x, while also improving the book equity value by 35%, now standing at $423.9 mill.

"Going forward, we believe the Partnership's continued efforts to deleverage will further enhance equity value through stable long-term cash flow visibility.

"While we have seen a retraction of gas prices, which is a positive development for the economic sustainability of consumers, term LNG shipping rates remain robust. The shipping rates are driven by a long-term demand for LNG shipping, which is underpinned by long term SPAs and the importance to secure available emission friendly energy.

"In light of these developments, we believe that the outlook for LNG Shipping and the Partnership remains positive," he said.

As of 31st December, 2022, the Partnership reported total cash of $79.9 mill (including $31.3 mill of restricted cash). The Partnership's outstanding debt as of the same date under the $675 mill credit facility amounted to $499.9 mill, gross of unamortised deferred loan fees and including $48 mill, which was repayable within a year. ■

All six LNGCs are operating on long term contracts

Flex LNG refinances two LNGCs

Flex LNG has signed a $290 mill loan agreement to refinance the LNGCs 'Flex Freedom' and 'Flex Vigilant'.

Since the company's fourth quarter 2022 earnings report released last month, Flex LNG has completed the refinancing of 'Flex Aurora', 'Flex Artemi' and 'Flex Amber' in February, while the lease for 'Flex Rainbow' and the refinancing of 'Flex Freedom' and 'Flex Vigilant' were closed this month.

As announced in the Q4 earnings presentation, the financings will provide Flex LNG with $204 mill in net cash proceeds in 1Q23.

At year-end 2022, Flex LNG had a cash balance of $332 mill thus the latest deals further add to an already substantial cash balance, the company claimed.

Flex LNG Management CFO, Knut Traaholt, commented: "We are pleased to have completed our approx $2 bill refinancing process, according to plan and on schedule, despite the recent turmoil in the financial markets.

"We are grateful for the trust and support from our banks and lease providers, which have resulted in a very attractive funding platform for Flex LNG.

"We have during the last 16 months refinanced all ships in the Flex LNG fleet, not only significantly boosting our cash position in total by $387 mill, but also reduced interest margin significantly and stretched the repayment and maturity profiles with the first loan not due before 2028.

"Our financial strength, together with the substantial charter backlog, provide us with significant commercial and financial flexibility to further develop the company," he said. ■

HSD Engine to maintain Nakilat's LNGCs

Qatar Gas Transport Company (Nakilat) has signed a long-term service agreement with HSD Engine for the provision of spares and maintenance services for the wholly owned LNGCs.

This agreement will further improve the operational efficiency of the vessels' engines and contribute to the overall LNG fleet availability thereby maintaining Nakilat's vision of being a global leader and provider of choice for energy transportation and maritime services, the Qatari company said.

Nakilat's CEO, Eng Abdullah Al-Sulaiti, said: "We are very pleased to sign this agreement with HSD Engine. At Nakilat, our priority is to increase the operational efficiency of our vessels and maintaining the highest reliability and safety standards, as it gives us the competitive advantage at a time when the company is expanding its reach in the global gas shipping market."

HSD Engine CEO, Young Youl Koh, added: "We are honoured and excited to sign this agreement with Nakilat. We will do our best to contribute to the safe operation and profit creation of the Nakilat fleet.

"Through this contract, we will further strengthen our co-operative relationship with Nakilat, and through the successful implementation of this project, we will strive to become a trusted business partner that provides the highest level of technical services in Qatar and the Middle East," he said. ■

> **"At Nakilat, our priority is to increase the operational efficiency of our vessels and maintaining the highest reliability and safety standards..."**
>
> *- Eng Abdullah Al-Sulaiti, CEO, Nakilat*

NEWS NUDGE

Ships - Sales, charters and recycling

Chinese leasing company, China Development Bank Financial Leasing (CDBL) is to purchase two LNGCs from GasLog for a price totalling $284 mill on a five-year lease back basis.

According to a stock exchange filing, CDBL signed vessel purchase agreements with Gas-five, an entity indirectly wholly owned by GasLog Partners, and Gas-nine, indirectly wholly owned by GasLog, on 20th March.

The vessels involved are the 2012-2013-built 155,000 cu m 'Gaslog Saratoga' and 'Gaslog Sydney'.

Following the completion of the deal, CDBL will sign lease agreements with GasLog for five years at an undisclosed fixed rate.

Last year, GasLog sold the LNGC 'GasLog Salem' to a subsidiary of CDBL for $128 mill.

Golar LNG Limited has confirmed that the agreement to acquire New Fortress Energy's (NFE) interest in 'FLNG Hilli', effective 1st January, 2023, has closed.

In return for NFE's 50% common unit holding in Golar Hilli LLC, Golar has transferred its remaining 4.1 mill NFE shares to NFE, paid NFE $100 mill in cash, and assumed about $323 mill of the unit's debt.

Excelerate Energy is to purchase the chartered FSRU 'Excelerate Sequoia'.

She is currently operating under a five-year bareboat charter with a purchase option attached from Maran Gas and is operating near Salvador, Brazil.

Excelerate has negotiated a $250 mill loan, maturing in March, 2027, to purchase the vessel.

She has a storage capacity of 173,400 cu m and is capable of operating as both an FSRU and a fully tradeable LNGC.

Excelerate's CEO, Dana Armstrong, claimed that the acquisition, expected to be completed in April, comes at an attractive price, which is well below current market values.

In addition to the $250 mill loan, the company extended the maturity of its existing $350 mill revolving credit facility, which is expected to be used primarily for letters of credit, working capital and other corporate purposes.

Elsewhere, Höegh LNG Holdings has completed the acquisition of the 2013-built LNGC 'Golar Seal'.

She will be renamed 'Hoegh Gandria'.

Tsakos' 2016-built LNGC 'Maria Energy' was fixed this month for a minimum of 12-years to an undisclosed Asian natural gas operator at a rate reflective of current market conditions.

The vessel is expected to be delivered to her new charterer upon completion of the existing contract in April, 2026 and is expected to generate a minimum of $350 mill in gross revenues.

Meanwhile, the 1993-built, 87,305 cu m LNGC 'Artika', ex 'Seapeak Arctic', was beached at Alang for recycling on 23rd March.

GTT wins sloshing virtual sensor solution contracts

GTT has been chosen by two undisclosed European LNGC owners to equip three vessels with a sloshing virtual sensor, a predictive maintenance solution.

This digital technology assesses a ship's sloshing activity in order to extend the cargo tank entry period. It uses the GTT designed tank digital twin and the vessel's real-time operational data to monitor the evolution of critical tank integrity parameters.

Combined with an appropriate risk analysis, shipowners and charterers are able to optimise the tank maintenance, while complying with strict safety standards, improving operational flexibility and making significant cost savings.

Earlier this year, GTT received an Approval in Principle (AiP) for this technology from Lloyd's Register (LR), following extensive validation work carried out in close collaboration with Shell International Trading and Shipping Company (STASCO).

In addition, GTT has created a new brand - Ascenz Marorka.

This was achieved by joining together its digitisation subsidiaries - Ascenz, a Singaporean company, which has extensive experience in electronic fuel management and Icelandic based Marorka, which is involved in vessel performance management.

GTT also announced that it had received an order from Samsung Heavy Industries (SHI) for the tank design of a new FLNG, on behalf of an Asian company.

With a total storage capacity of 200,000 cu m, this FLNG will be the first fitted with GTT's new membrane containment system Mark III Flex.

Her delivery is scheduled for the first quarter of 2027. ■

GasLog turns on BASSnet Crew app

GasLog Ltd has implemented BASSnet's Crew Portal mobile app for crew 'self-service' on the go.

The app is integrated with BASSnet's Human Resources Manager, an ERP solution to streamline crewing and payroll management.

"At GasLog, we are excited to embrace new technologies that will benefit our most important asset, our personnel," said Gerasimos Brouskos, GasLog's HSSE & Marine HR General Manager. "BASSnet HR Manager will significantly streamline our HR processes and improve ship/shore communication."

"BASSnet's Crew Portal app is a significant step forward to optimise our HR management using remote crew 'self-service'. We are confident BASSnet will make a positive impact on our operations," added Taisa Tsermidou, Marine HR Manager at GasLog.

GasLog's crew can now make use of an app

All of GasLog's crew personal and activity data has been migrated from a third-party system to BASSnet. For the roll-out, BASS's dedicated project management outsourcing service was deployed (in addition to standard implementation) to co-ordinate all tasks and deliverables for both companies within schedule and on budget.

The Crew Portal app will now function as an additional two-way communication channel between the Greek LNGC owner and operator's HR and sea personnel. The app will also allow the crew to take ownership of their data.

"BASSnet's HR Management solutions are designed to elevate efficiency and communication," said Per Steinar Upsaker, BASS Software CEO & Managing Director. "The Crew Portal is a game changer for crew to instantly access information regardless of location. They will be able to view and directly update time sensitive data on personal information, travel arrangements and training."

Customers gain cost-savings by improving HR process efficiency and reducing manual intervention/workload for office HR staff.

For example:

- For crew planning, instantly update crew about their next assignment, travel, etc. Crew members can then confirm/accept assignments via the app.
- Sea personnel can directly renew and update electronic copies of their licenses or certificates into BASSnet, saving valuable time for the company and ensuring compliance.
- Crew can upload travel expenses with supporting documentation and instantly download their payslips. ■

NEWS NUDGE

Piombino slot allocations

As a result of the first tranche of regasification capacity for the 20-year period between the thermal years 2023/2024 and 2043/2044, 37 slots per year were allocated at the FSRU Italia Piombino Terminal.

The 37 slots were out of a total of 43 slots per year subject to offering, equalling more than 86% of the offered capacity at the terminal.

Each slot corresponds to a capacity of 171,920 cu m of LNG or about 105 mill cu m of gas.

This result enables the injection into the national transmission network of significant volumes of gas, substantially contributing to the diversification of supplies and security of the natural gas system, the terminal operator claimed.

The 'FSRU Italia' is the former 'Golar Tundra', which arrived onsite Piombino recently.

Rovuma LNG moves ahead

ExxonMobil Moçambique has issued a tender for front-end engineering and design (FEED) work for the Rovuma LNG export plant.

This project involves a number of 1.5 mill tonnes per year liquefaction modules, with a total capacity of around 18 mill tonnes per year.

The FEED contractor would potentially lead to engineering, procurement and construction (EPC) work, the tender advised and it is subject to improvement in the security conditions and a decision on return of activities to the Afungi area of Mozambique.

ExxonMobil issued the notice on behalf of Mozambique Rovuma Venture (MRV), the operator of Area 4 in the Rovuma Basin.

Platts to add Bilbao and Mugardos to base delivery ports

Platts, part of S&P Global Commodity Insights, plans to add Bilbao and Mugardos in northern Spain as base delivery ports reflected in its Market on Close (MoC) assessment process for DES Northwest Europe LNG Marker, effective 18th May.

The proposed additions reflect changing trade practices around flexibility provided for cargoes historically categorised as having flexibility for delivery into Northwest Europe, following Platts analysis of market and trade data.

Under the proposal, Platts DES NWE Marker assessment would reflect deliveries into Isle of Grain, Zeebrugge, Gate LNG, Dragon LNG, Montoir, South Hook, Dunkirk, Bilbao and Mugardos.

Bids and offers into other Northwest European destinations would continue to be considered for publication.

Platts is also seeking feedback on whether to remove Bilbao and Mugardos from the Platts DES MED Marker assessment for cargoes into the Mediterranean, which includes all other ports in the Iberian Peninsula and up to Fos Cavaou, it said.

Additionally, Platts proposes 30 days ahead of delivery for the seller to state a specific quantity (eg 3.5 TBtu plus/minus 5% operational tolerance) for offers, bids and trades reported in a quantity range in the Atlantic LNG price assessment process.

Platts would continue to publish quantity ranges no greater than 0.3 TBtu in offers reported in the MoC process. ■

LR's AiP for CCS

Lloyd's Register (LR) has awarded Approval in Principle (AiP) to Nordic hydrogen production company, Rotoboost, for its pre-combustion carbon capture system (CCS) Rotobox.

Rotobox uses thermocatalytic decomposition process (TCD) on board vessels, where part of the natural gas fuel supply is converted into hydrogen and graphite with a liquid catalyst.

The TCD process significantly reduces CO2 emissions, particulate matter and methane slip by producing hydrogen while capturing carbon in its solid form.

Rotobox has the capacity to reduce overall carbon emissions by up to 100%, depending on the heating method used, the company claimed.

Converted CCS hydrogen can be used for fuel cells or as blend-in fuel for combustion engines or gas-fired boilers.

This solution is claimed to be easily scalable to meet future emission regulations, with lower electrical power requirements, compared to conventional CCS and less storage space needed for solid carbon, allowing the system and associated storage to remain compact even for long voyages.

It is suited to LNGCs and other LNG-fuelled vessels, offering an additional option for shipowners for de-carbonising, LR said.

AiP validation

The AiP validates Rotoboost's CCS system as compliant with LR's goal-based and comprehensive prescriptive requirements, marking a further milestone in the development of carbon capture technology.

Andy McKeran, LR's CCO, said: "I believe that the de-carbonisation of shipping starts now, and we need to find solutions that reduce emissions today. Therefore, I am pleased to award the Approval in Principle to Rotoboost for their innovative carbon capture system.

"Solving the methane emissions perception in the industry, through technology and evidence enables LNG to become a future fuel that is readily available today, subject to affordability – which ranks higher than any other alleged lower emissions fuel available today," he said.

Kaisa Nikulainen, Rotoboost CEO, added: "We are delighted to present the shipping industry with a novel approach to tackle emissions without compromising cargo efficiency and overall economy.

"Our technology introduces a new perspective on fossil fuels, demonstrating how they can be equally green when used innovatively. In addition to hydrogen as a green blend-in fuel, our by product, pyrolytic graphite, is also an excellent battery-grade anode material for electric cars and green steel production.

"This circular economy creates a powerful tool to combat global warming and climate change on both land and sea. Our technology also demonstrates great potential in cost-effective production of green methanol and ammonia in land-based facilities, which further provides the shipping industry with other affordable alternative fuel options," she said. ■

LR has awarded an AiP for Rotoboost's CCS solution

Autonomous LNGC design on the drawing board

Samsung Heavy Industries (SHI) has signed a development agreement with Norwegian technology provider, Kongsberg Maritime to develop autonomous ships.

The two companies plan to collaborate on 174,000 cu m LNGC designs that will be fitted with remote and low carbon technologies to improve safety and efficiency.

This project is part of SHI's strategy to expand upon its digital and green product portfolio and tap into the growing autonomous ship market, the company said.

Kongsberg has been involved in several autonomous ship projects, such as the world's first fully electric and autonomous containership - 'Yara Birkeland'.

SHI performed autonomous sea trials with a 9,000 tonne ship along the South Korean coast last year. ■

LNG rate assessments

Spot market (155,000-165,000 cu m)

Region	This week	Change*
East of Suez	$65,000	- $13,000
West of Suez	$39,000	- $21,000
12 mos T/C	$123,000	- $29,000

**Since last report (16/03/23)* *Source: Fearnleys (29/03/23)*

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	$270.60 mill
Five years old (174,000 cu m)	$225.31 mill
Total Fleet (566 ships)	$94.16 bill
Orderbook (306 ships)	$81.52 bill

**Source: VesselsValue (29/03/23)*

**The above is updated each month courtesy of VesselsValue*

WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hudong-Zhonghua H1829a	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/01/2024
Wen Cheng	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/04/2024
Alexey Kosygin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/03/2024
Pyotr Stolypin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/09/2024
Samsung 2315	SinoKor	Samsung	01/12/2019	173,400	XDF	01/12/2023
Samsung 2316	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/12/2026
Samsung 2317	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/03/2027
Samsung 2318	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/06/2027
Kun Lun	ULT	Hudong-Zhonghua	30/06/2020	174,000	XDF	01/04/2023
Lng Harmony	JP Morgan	Hyundai Heavy	20/07/2020	174,000	XDF	01/07/2023
Orion Jessica	JP Morgan	Hyundai Heavy	20/07/2020	174,000	XDF	01/06/2023
Daewoo 2517	MOL, COSCO	DSME	01/08/2020	172,500	TFDE - Azipod	01/11/2023
Daewoo 2518	MOL, COSCO	DSME	01/08/2020	172,500	TFDE - Azipod	01/02/2024
Daewoo 2519	MOL, COSCO	DSME	01/08/2020	172,500	TFDE - Azipod	01/05/2026
Sm Golden Eagle	Korea Line	Hyundai Heavy	12/08/2020	174,000	XDF	01/09/2025
Sm Kestrel	Korea Line	Hyundai Heavy	12/08/2020	174,000	XDF	01/10/2023
Grazyna Gesicka	Knutsen	Hyundai Heavy	30/10/2020	174,000	XDF	01/06/2023
Samsung 2425	Maran Gas Maritime	Samsung	01/11/2020	174,000	XDF	01/08/2023
Hyundai Samho 8100	Knutsen	Hyundai Samho	14/12/2020	174,000	ME-GA	01/11/2024
Orion Sky	JP Morgan	Hyundai Heavy	14/12/2020	174,000	XDF	01/11/2024
New Brave	Pan Ocean	Hyundai Heavy	15/12/2020	174,000	XDF	01/09/2024
New Nature	Pan Ocean	Hyundai Heavy	15/12/2020	174,000	XDF	01/10/2024
Energy Fidelity	Alpha Gas	Hyundai Samho	08/01/2021	174,000	XDF	01/04/2023
Puteri Saadong	Hyundai LNG Shipping	Hyundai Heavy	15/04/2021	174,000	XDF	01/02/2024
Puteri Santubong	Hyundai LNG Shipping	Hyundai Heavy	29/04/2021	174,000	XDF	01/06/2024
Puteri Sejinjang	Hyundai LNG Shipping	Hyundai Heavy	29/04/2021	174,000	XDF	01/07/2024
Gordon Waters Knutsen	Knutsen	Hyundai Samho	30/04/2021	174,000	XDF	01/06/2023
Mulan Spirit	Jovo Energy	Jiangnan	01/05/2021	79,800	XDF	01/12/2023
Samsung 2473	Maran Gas Maritime	Samsung	01/05/2021	174,000	XDF	01/09/2024
Samsung 2474	Maran Gas Maritime	Samsung	01/05/2021	174,000	XDF	01/09/2024
Daewoo 2521	Hyundai LNG Shipping	DSME	28/05/2021	174,000	MEGI	01/09/2023
Clean Destiny	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/11/2023
Clean Future	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/03/2024
Clean Resolution	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/09/2023
Clean Vitality	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/02/2024
MOL Coral	MOL	DSME	01/06/2021	174,000	ME-GA	01/10/2023
Amore Mio I	Capital Gas	Hyundai Heavy	18/06/2021	174,000	ME-GA	01/10/2023
Axios II	Capital Gas	Hyundai Heavy	18/06/2021	174,000	ME-GA	01/12/2023
Celsius Geneva	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/07/2023
Energy Fortitude	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/05/2024
Hyundai Samho 8106	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/07/2024
Hyundai Samho 8147	H-Line	Hyundai Samho	01/07/2021	174,000	XDF	01/11/2023
Samsung 2460	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/10/2023
Samsung 2461	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/02/2024
Hyundai Samho 8101	Knutsen	Hyundai Samho	13/07/2021	174,000	ME-GA	01/12/2023
Hyundai Samho 8102	Knutsen	Hyundai Samho	13/07/2021	174,000	ME-GA	01/09/2025
Orion Gaugin	JP Morgan	Hyundai Heavy	13/07/2021	174,000	ME-GA	01/09/2025
Orion Hugo	JP Morgan	Hyundai Heavy	13/07/2021	174,000	ME-GA	01/07/2025
New Green	Pan Ocean	Hyundai Heavy	14/07/2021	174,000	ME-GA	01/10/2024
New Oasis	Pan Ocean	Hyundai Heavy	14/07/2021	174,000	ME-GA	01/12/2024

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 28 March 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2522	Hyundai LNG Shipping	DSME	15/07/2021	174,000	MEGI	01/05/2024
Ignacy Lukasiewicz	Knutsen	Hyundai Samho	22/07/2021	174,000	ME-GA	01/03/2024
Puteri Ledang	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/05/2024
Puteri Mahsuri	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/11/2024
Puteri Mayang	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/01/2025
Saint Barbara	Knutsen	Hyundai Samho	22/07/2021	174,000	ME-GA	01/02/2024
Samsung 2579	Celsius Shipping	Samsung	26/07/2021	180,000	ME-GA	01/04/2024
Samsung 2584	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/08/2024
Samsung 2585	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/09/2024
Aktoras	Capital Gas	Hyundai Samho	01/09/2021	174,000	ME-GA	01/07/2024
Hudong-Zhonghua H1838a	K-Line	Hudong-Zhonghua	01/09/2021	79,960	XDF	01/09/2023
Daewoo 2523	MOL	DSME	14/09/2021	174,000	ME-GA	01/02/2024
Daewoo 2524	MOL	DSME	14/09/2021	174,000	ME-GA	01/04/2024
Daewoo 2525	MOL	DSME	14/09/2021	174,000	ME-GA	01/08/2024
Daewoo 2526	MOL	DSME	14/09/2021	174,000	ME-GA	01/10/2024
Daewoo 2527	MOL	DSME	01/10/2021	174,000	ME-GA	01/07/2024
Hudong-Zhonghua H1790a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/09/2024
Hudong-Zhonghua H1791a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/12/2024
Hudong-Zhonghua H1792a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/03/2025
Hudong-Zhonghua H1793a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/05/2025
Samsung 2580	NYK	Samsung	01/10/2021	174,000	XDF	01/09/2023
Samsung 2581	NYK	Samsung	01/10/2021	174,000	XDF	01/11/2023
Samsung 2582	NYK	Samsung	01/10/2021	174,000	XDF	01/12/2023
Samsung 2583	NYK	Samsung	01/10/2021	174,000	XDF	01/02/2024
Samsung 2592	JP Morgan	Samsung	01/10/2021	174,000		01/04/2024
Samsung 2593	JP Morgan	Samsung	01/10/2021	174,000		01/07/2024
Samsung 2594	JP Morgan	Samsung	01/10/2021	174,000		01/10/2024
Samsung 2595	JP Morgan	Samsung	01/10/2021	174,000		01/01/2025
Samsung 2596	JP Morgan	Samsung	01/10/2021	174,000	ME-GA	01/11/2024
Samsung 2597	JP Morgan	Samsung	01/10/2021	174,000	ME-GA	01/12/2024
Apostolos	Capital Gas	Hyundai Heavy	04/11/2021	174,000	ME-GA	01/06/2024
Assos	Capital Gas	Hyundai Heavy	04/11/2021	174,000	ME-GA	01/05/2024
Daewoo 2528	Maran Gas Maritime	DSME	10/11/2021	174,000	MEGI	01/08/2024
Daewoo 2529	Maran Gas Maritime	DSME	10/11/2021	174,000	MEGI	01/11/2024
Daewoo 2530	BWGas	DSME	25/11/2021	174,000	MEGI	01/03/2025
Daewoo 2531	BWGas	DSME	25/11/2021	174,000	MEGI	01/05/2025
Samsung 2600	JP Morgan	Samsung	01/12/2021	174,000		01/07/2024
Samsung 2601	JP Morgan	Samsung	01/12/2021	174,000		01/01/2025
Samsung 2598	Celsius Shipping	Samsung	07/12/2021	180,000	ME-GA	01/01/2025
Samsung 2599	Celsius Shipping	Samsung	07/12/2021	180,000	ME-GA	01/05/2025
Hudong-Zhonghua H1834a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/09/2024
Hudong-Zhonghua H1835a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/12/2024
Hudong-Zhonghua H1836a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/03/2025
Samsung 2604	NYK	Samsung	27/12/2021	174,000	XDF	01/12/2024
Daewoo 2532	GasLog	DSME	01/01/2022	174,000	MEGI	01/05/2024
Daewoo 2533	GasLog	DSME	01/01/2022	174,000	MEGI	01/08/2024
Daewoo 2534	GasLog	DSME	01/01/2022	174,000	MEGI	01/06/2025
Daewoo 2535	GasLog	DSME	01/01/2022	174,000	MEGI	01/08/2025
Samsung 2602	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024
Samsung 2603	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 28 March 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hyundai Samho 8173	SK Shipping	Hyundai Samho	04/01/2022	174,000	ME-GA	01/09/2024
Daewoo 2537	Maran Gas Maritime	DSME	06/01/2022	174,000	MEGI	01/09/2025
Daewoo 2538	Maran Gas Maritime	DSME	06/01/2022	174,000	MEGI	01/11/2025
Hudong-zhonghua H1880a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/10/2024
Hudong-zhonghua H1881a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/08/2025
Hudong-zhonghua H1882a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/10/2025
Hudong-zhonghua H1883a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/03/2026
Hudong-zhonghua H1884a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/06/2026
Hudong-zhonghua H1885a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/09/2026
Daewoo 2536	MOL	DSME	17/01/2022	174,000	ME-GA	01/09/2024
Hyundai Samho 8175	H-Line	Hyundai Samho	26/01/2022	174,000	XDF	01/04/2025
MOL 1	MOL	Samsung	01/02/2022	174,000		01/12/2026
MOL 2	MOL	Samsung	01/02/2022	174,000		01/01/2027
Samsung 2607	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/03/2025
Samsung 2608	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/05/2025
Samsung 2609	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/06/2025
Samsung 2610	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/09/2025
Daewoo 2539	Maran Gas Maritime	DSME	07/02/2022	174,000	MEGI	01/11/2025
Daewoo 2540	Maran Gas Maritime	DSME	07/02/2022	174,000	MEGI	01/12/2025
Hyundai Samho 8170	Hyundai Glovis	Hyundai Samho	21/02/2022	174,000	ME-GA	01/08/2024
Daewoo 2541	Venture Global LNG	DSME	01/03/2022	200,000	ME-GA	01/07/2025
Daewoo 2542	Venture Global LNG	DSME	01/03/2022	200,000	ME-GA	01/10/2025
Daewoo 2543	Venture Global LNG	DSME	01/03/2022	200,000	ME-GA	01/12/2025
Jiangnan H2700	ADNOC	Jiangnan	01/03/2022	175,000	XDF	01/01/2025
Jiangnan H2701	ADNOC	Jiangnan	01/03/2022	175,000	XDF	01/05/2025
Samsung 2619	Celsius Shipping	Samsung	01/03/2022	180,000	ME-GA	01/10/2025
Clean Levant	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/04/2025
Clean Mistral	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/03/2025
Clean Srocco	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/12/2025
Hyundai Samho 8179	Knutsen	Hyundai Samho	31/03/2022	174,000	ME-GA	01/03/2025
Hyundai Samho 8180	Knutsen	Hyundai Samho	31/03/2022	174,000	ME-GA	01/06/2025
Daewoo 2544	BWGas	DSME	01/04/2022	174,000	MEGI	01/11/2025
Daewoo 2545	BWGas	DSME	01/04/2022	174,000	MEGI	01/12/2025
Samsung 2635	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/09/2024
Samsung 2636	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/03/2026
Daewoo 2550	MOL	DSME	15/04/2022	174,000	ME-GA	01/09/2025
Daewoo 2551	MOL	DSME	15/04/2022	174,000	ME-GA	01/09/2026
Dalian No 1 G175k-1	China Merchant	Dalian Shipbuilding	19/04/2022	175,000	XDF	01/09/2025
Dalian No 1 G175k-2	China Merchant	Dalian Shipbuilding	19/04/2022	175,000	XDF	01/12/2025
Hyundai Samho 8181	Knutsen	Hyundai Samho	20/04/2022	174,000	ME-GA	01/12/2025
Shanghai Jiangnan Changxing SB H1889A		Hudong-Zhonghua	28/04/2022	174,000	XDF	01/03/2027
Shanghai Jiangnan Changxing SB H1890A		Hudong-Zhonghua	28/04/2022	174,000	XDF	01/05/2027
NYK CNOOC 1	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/04/2027
NYK CNOOC 2	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/03/2027
NYK CNOOC 3	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/01/2027
NYK CNOOC 4	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/05/2026
NYK CNOOC 5	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/08/2026
NYK CNOOC 6	NYK	Hudong-Zhonghua	29/04/2022	174,000		01/11/2026
Jiangnan H2702	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/09/2025
Jiangnan H2703	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/01/2026
Jiangnan H2704	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/06/2026

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 28 March 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Jiangnan H2705	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/09/2026
Samsung 2631	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/07/2025
Samsung 2632	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/12/2025
Samsung 2633	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/01/2026
Hyundai Samho 8188	SK Shipping	Hyundai Samho	16/05/2022	174,000	ME-GA	01/07/2025
Hyundai Samho 8189	SK Shipping	Hyundai Samho	16/05/2022	174,000	ME-GA	01/08/2025
Hyundai Ulsan 3370	SK Shipping	Hyundai Heavy	16/05/2022	174,000	ME-GA	01/02/2025
Hyundai Ulsan 3371	SK Shipping	Hyundai Heavy	16/05/2022	174,000	ME-GA	01/03/2025
Petronas K-line 1	K-Line	Hudong-Zhonghua	17/05/2022	174,000	XDF	01/10/2026
Petronas K-line 2	K-Line	Hudong-Zhonghua	17/05/2022	174,000	XDF	01/12/2026
Petronas K-line 3	K-Line	Hudong-Zhonghua	17/05/2022	174,000	XDF	01/03/2027
Petronas K-line 4	K-Line	Hudong-Zhonghua	17/05/2022	174,000	XDF	01/06/2027
Daewoo 2559	SK Shipping, Pan Ocean, H-Line	DSME	01/06/2022	174,000	ME-GA	01/05/2024
Daewoo 2560	H-Line, Pan Ocean, SK Shipping	DSME	01/06/2022	174,000	ME-GA	01/04/2025
Daewoo 2561	Pan Ocean, SK Shipping, H-Line	DSME	01/06/2022	174,000	ME-GA	01/05/2025
Daewoo 2562	SK Shipping, Pan Ocean, H-Line	DSME	01/06/2022	174,000	ME-GA	01/06/2025
Daewoo 2563	H-Line, Pan Ocean, SK Shipping	DSME	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2564	Pan Ocean, SK Shipping, H-Line	DSME	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2565	Pan Ocean, SK Shipping, H-Line	DSME	01/06/2022	174,000	ME-GA	01/02/2026
Hyundai Samho 8196	EPS	Hyundai Samho	02/06/2022	174,000	ME-GA	01/09/2024
Hyundai Samho 8197	EPS	Hyundai Samho	02/06/2022	174,000	ME-GA	01/12/2024
Hyundai Ulsan 3380	Knutsen	Hyundai Heavy	03/06/2022	174,000	XDF	01/05/2025
Hyundai Ulsan 3381	Knutsen	Hyundai Heavy	03/06/2022	174,000	XDF	01/06/2025
Daewoo 2546	H-Line, Pan Ocean, SK Shipping	DSME	07/06/2022	174,000	ME-GA	01/12/2024
Daewoo 2547	H-Line, Pan Ocean, SK Shipping	DSME	07/06/2022	174,000	ME-GA	01/12/2024
Daewoo 2548	H-Line, Pan Ocean, SK Shipping	DSME	07/06/2022	174,000	ME-GA	01/01/2025
Daewoo 2549	H-Line, Pan Ocean, SK Shipping	DSME	07/06/2022	174,000	ME-GA	01/02/2025
Daewoo 2552	Maran Gas Maritime	DSME	08/06/2022	174,000	MEGI	01/05/2026
Daewoo 2553	Maran Gas Maritime	DSME	08/06/2022	174,000	MEGI	01/06/2026
Agamemnon	Capital Gas	Hyundai Samho	14/06/2022	174,000	ME-GA	01/03/2026
Archimidis	Capital Gas	Hyundai Samho	14/06/2022	174,000	ME-GA	01/01/2026
Samsung 2634	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/05/2025
Samsung 2637	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/07/2025
Samsung 2638	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/08/2025
Samsung 2641	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/11/2025
Samsung 2642	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/01/2026
Samsung 2643	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/02/2026
Samsung 2644	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/05/2026
Samsung 2645	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/06/2026
Samsung 2646	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/07/2026
Samsung 2647	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/08/2026
Hudong-Zhonghua H1892A	COSCO	Hudong-Zhonghua	01/07/2022	174,000	XDF	01/10/2025
Hudong-Zhonghua H1893A	COSCO	Hudong-Zhonghua	01/07/2022	174,000	XDF	01/03/2026
Hyundai Samho 8200	TMS Cardiff Gas	Hyundai Samho	06/07/2022	174,000	XDF	01/03/2026

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Data last updated = 28 March 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hyundai Samho 8201	TMS Cardiff Gas	Hyundai Samho	06/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3382	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/07/2025
Hyundai Ulsan 3383	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/11/2025
Hyundai Ulsan 3384	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/02/2026
Hyundai Ulsan 3385	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/04/2026
Hyundai Ulsan 3386	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/05/2026
Hyundai Ulsan 3387	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3393	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/10/2026
Hyundai Ulsan 3394	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/11/2026
Hyundai Samho 8049	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/03/2025
Hyundai Samho 8174	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/10/2025
Hyundai Ulsan 3395	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/08/2025
Hyundai Ulsan 3396	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3397	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/01/2026
Hyundai Ulsan 3398	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/07/2026
Hyundai Ulsan 3399	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/09/2026
Hyundai Ulsan 3400	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2026
Hyundai Ulsan 3401	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2026
DAEWOO 2558	MOL	DSME	01/09/2022	174,000	ME-GA	01/09/2026
Dalian No 1 G175k-3	China Merchant	Dalian Shipbuilding	01/09/2022	175,000	XDF	01/11/2025
Dalian No 1 G175k-4	China Merchant	Dalian Shipbuilding	01/09/2022	175,000	XDF	01/01/2026
Hudong-Zhonghua H1794A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/02/2027
Hudong-Zhonghua H1795A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/07/2027
Hudong-Zhonghua H1796A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/12/2027
Hudong-Zhonghua H1797a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/09/2025
Hudong-zhonghua H1798a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/11/2025
Hudong-zhonghua H1799a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/02/2026
Hudong-zhonghua H1800a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/05/2026
Hudong-zhonghua H1801a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/07/2026
Samsung 2611	H-Line, Pan Ocean, SK Shipping	Samsung	01/09/2022	174,000	ME-GA	01/01/2025
Samsung 2612	H-Line, Pan Ocean, SK Shipping	Samsung	01/09/2022	174,000	ME-GA	01/03/2025
Samsung 2639	JP Morgan	Samsung	01/09/2022	174,000	ME-GA	01/09/2025
Samsung 2640	JP Morgan	Samsung	01/09/2022	174,000	ME-GA	01/09/2025
MOL ENN 1	MOL	Hudong-Zhonghua	08/09/2022	174,000		01/06/2027
MOL ENN 2	MOL	Hudong-Zhonghua	08/09/2022	174,000		01/10/2027
MOL ENN 3	MOL	Hudong-Zhonghua	08/09/2022	174,000		01/12/2027
Dalian n5	China Merchant	Dalian Shipbuilding	26/09/2022	175,000	XDF	01/04/2026
Dalian n6	China Merchant	Dalian Shipbuilding	26/09/2022	175,000	XDF	01/02/2025
Daewoo 2566	Meiji Shipping	DSME	30/09/2022	174,000	XDF	01/08/2025
Daewoo 2567	Meiji Shipping	DSME	30/09/2022	174,000	XDF	01/09/2025

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Data last updated = 28 March 2023

Fearnley LNG

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2568	Meiji Shipping	DSME	30/09/2022	174,000	XDF	01/06/2026
Daewoo 2569	Meiji Shipping	DSME	30/09/2022	174,000	XDF	01/09/2026
DAEWOO 2570	MISC	DSME	30/09/2022	174,000	XDF	01/01/2026
DAEWOO 2571	MISC	DSME	30/09/2022	174,000	XDF	01/05/2026
Daewoo 2572	TMS Cardiff Gas	DSME	30/09/2022	174,000	ME-GA	01/03/2026
Daewoo 2573	TMS Cardiff Gas	DSME	30/09/2022	174,000	ME-GA	01/06/2026
MISC EM 1	MISC	Samsung	30/09/2022	174,000	XDF	01/06/2026
MISC EM 2	MISC	Samsung	30/09/2022	174,000	XDF	01/08/2026
Samsung 2651	Celsius Shipping	Samsung	01/10/2022	180,000	ME-GA	01/12/2025
Hyundai Samho 8182	TMS Cardiff Gas	Hyundai Samho	17/10/2022	174,000	XDF	01/01/2026
VG 1	Venture Global LNG	DSME	21/10/2022	200,000	ME-GA	01/10/2026
VG 2	Venture Global LNG	DSME	21/10/2022	200,000	ME-GA	01/12/2026
Shandong 1	Shandong Marine	Jiangnan	26/10/2022	175,000		01/03/2027
Shandong 2	Shandong Marine	Jiangnan	26/10/2022	175,000		01/05/2027
Shandong 3	Shandong Marine	Jiangnan	26/10/2022	175,000		01/12/2027
Yangzijiang 1	Hammonia Reederei	Yangzijiang	26/10/2022	175,000	ME-GA	01/10/2025
Yangzijiang 2	Hammonia Reederei	Yangzijiang	26/10/2022	175,000	ME-GA	01/03/2026
Wideshine 2	CSSC	Hudong-Zhonghua	27/10/2022	174,000	XDF	01/03/2028
Wideshine 3	CSSC	Hudong-Zhonghua	27/10/2022	174,000	XDF	01/06/2028
Wideshine 4	CSSC	Hudong-Zhonghua	27/10/2022	174,000	XDF	01/09/2028
Samsung 2652	Minerva Marine	Samsung	01/11/2022	174,000	ME-GA	01/02/2026
Samsung 2653	Minerva Marine	Samsung	01/11/2022	174,000	ME-GA	01/03/2026
Samsung 2656	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/03/2027
Samsung 2657	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/05/2027
Samsung 2658	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/08/2027
Samsung 2659	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/09/2027
Samsung 2660	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/12/2027
Dalian 7	China Merchant	Dalian Shipbuilding	05/12/2022	175,000	XDF	01/12/2026
Dalian 8	China Merchant	Dalian Shipbuilding	05/12/2022	175,000	XDF	01/06/2027
Celsius 1	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/01/2026
Celsius 2	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/03/2026
Celsius 3	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/05/2026
Celsius 4	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/07/2026
Hyundai Samho 8204	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/01/2026
Hyundai Samho 8205	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/04/2026
Hyundai Ulsan 3433	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/04/2026
Hyundai Ulsan 3434	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/07/2026
Hyundai Ulsan 3435	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/11/2026
Hyundai Samho 8202	Capital Gas	Hyundai Samho	18/01/2023	174,000	ME-GA	01/09/2026
Hyundai Samho 8203	Capital Gas	Hyundai Samho	18/01/2023	174,000	ME-GA	01/11/2026
DAEWOO 2580	MOL	DSME	13/02/2023	174,000	ME-GA	01/03/2027
DAEWOO 2574	Maran Gas Maritime	DSME	01/03/2023	174,000	MEGI	01/09/2026
DAEWOO 2575	Maran Gas Maritime	DSME	01/03/2023	174,000	MEGI	01/12/2026
Samho Mar 1	NYK	Hyundai Samho	02/03/2023	174,000		01/08/2027
Samho Mar 2	NYK	Hyundai Samho	02/03/2023	174,000		01/10/2027
Samho Mar 3	NYK	Hyundai Samho	02/03/2023	174,000		01/12/2027

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WORLD SMALL SCALE LNG FLEET*

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
1974	Seagas	187	LNG	Sweden	Yes	AGA
1988	Kayoh Maru	1,517	LNG	Japan	Yes	Daiichi
1993	Aman Bintulu	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1996	Surya Aki	19,475	LNG	Indonesia - Japan	Yes	MCGC
1997	Aman Sendai	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1998	Pelita Energy	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Coral Favia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2010	Coral Fraseri	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Vision Spirit	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Seapeak Unikum	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvovation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coral Encanto	30,000	LNG	China	Yes	Anthony Veder
2017	JS Ineos Invention	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	JS Ineos Intuition	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	Oizmendi	600	LNG	Spain	Yes	Itsas Gas
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Green Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	New Frontier 1	6,500	LNG	Northwest Europe	Yes	Shell
2018	Kairos	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	LNG London	3,000	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2018	Bunker Breeze	1,200	LNG	Barcelona	Yes	Suardiaz Energy Shipping

Data last updated = 28 March 2023 | For more information please visit http://small-lng.com.

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Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2019	SM Jeju LNG1	7,500	LNG	Korea	Yes	Korea Line
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Avenir Advantage	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Accolade	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Aspiration	7,500	LNG		Yes	Avenir LNG
2020	Kaguya	3,500	LNG	Japan	Yes	CLS
2020	CNTIC VPOWER Global	28,000	LNG	Myanmar	Yes	Dalian Inteh Group
2020	Ecobunker Tokyo Bay	2,500	LMG	Japan	Yes	Ecobunkers
2020	Optimus	6,000	LNG	NWE	Yes	Elenger
2020	FueLNG Bellina	7,500	LNG	Singapore	Yes	FuelLNG
2020	SM Jeju LNG2	7,500	LNG	Korea	Yes	Korea Line
2020	Q-LNG 4000	4,000	LNG	US Coast	Yes	Q-LNG Transport/Harvey Gulf
2020	Flexfueller 002	1,480	LNG	Antwerp	Yes	Titan LNG
2021	Avenir Ascension	7,500	LNG		Yes	Avenir LNG
2021	Hai Gang Wei Lai	20,000	LNG	China	Yes	SSES
2021	Bergen LNG	850	LNG	Norway	Yes	Bergen Tankers
2021	Dmitry Mendeleev	5,800	LNG	Russia	Yes	Gazprom Neft
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2021	Ravenna Knutsen	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	Brassavola	12,000	LNG	Singapore	Yes	MOL
2021	Gas Vitality	18,600	LNG	Mediterranean	Yes	MOL
2021	TG TBN	500	LNG	Korea	Yes	Trans Gas
2021	Titan Hyperion	8,000	LNG	Benelux	Yes	Titan LNG
2022	Xin Ao Pu Tuo Hao	8,500	LNG	China	Yes	ENN
2022	Coral Nordic	30,000	LNG	Worldwide	Yes	Anthony Veder
2022	Avenir Achievement	20,000	LNG	Worldwide	Yes	Avenir LNG
2022	Haugesund Knutsen	5,000	LNG	Spain	Yes	Knutsen OAS
2022	Clean Cañaveral	5,400	LNG	USG	Yes	PNE
2022	K.Lotus	18,000	LNG	Korea	Yes	K Line
2023	Cryopeak TBA	4,000	LNG	West Canada	Yes	Cryopeak
2023	Kuntsen TBN	12,500	LNG	Spain	Yes	Knutsen OAS
2023	SM Jeju LNG3	7,500	LNG	Korea	Yes	Korea Line
2023	Pan Ocean TBN	18,000	LNG	USG	Yes	Pan Ocean Co
2023	Krios	4,200	LNG	Benelux	Yes	Titan LNG
2023	Fratelli Cosulich TBN	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	PNE TBN	5,500	LNG	USG	Yes	PNE
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	TBN	30,000	LNG	Australia	Yes	Anthony Veder ?
2024	Crowley TBN	12,000	LNG	US Coast	Yes	Crowley Maritime
2024	CNOOC TBN	12,000	LNG	China	Yes	CNOOC
2024	TBN	12,500	LNG	Worldwide	Yes	???
2024	Keys TBN	3,500	LNG	Japan	Yes	Keys Bunkering West Japan Co
2024	Seaspan TBN 1	7,600	LNG	Canada	Yes	Seaspan ULC
2024	Fratelli Cosulich TBN	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2024	Anhui Changjiang TBN	14,000	LNG	China	Yes	Anhui Changjiang LNG
2024	LNG Erasmus	8,000	LNG	NWE	Yes	Shell
2025	Seaspan TBN 2	7,600	LNG	Canada	Yes	Seaspan ULC
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG

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