LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 11 April 2024

Qatar agrees final LNGC operators

QatarEnergy has signed long-term timecharter party (TCP) agreements with four major shipowners to operate 19 newbuilding conventional size LNGCs.

This project formed part of the second shipowner tender under its huge LNG fleet expansion programme, the company explained.

Included are six vessels to be operated by CMES LNG Carrier Investment, six by Shandong Marine Energy (Singapore), and another three vessels by MISC Berhad.

These vessels are being built by Samsung Heavy Industries (SHI).

The remaining four vessels will be operated by a joint venture involving Kawasaki Kisen Kaisha (K-Line) and Hyundai Glovis and constructed by Hanwha Ocean.

Recently in Doha, HE Saad Sherida Al-Kaabi, Qatar's Minister of State for Energy Affairs and President and CEO of QatarEnergy, signed four separate sets of agreements with Wang Yongxin, President & CEO of CMES LNG Carrier Investment; Li Maozhong, Chairman of Shandong Marine Energy; Satoshi Kanamori, Managing Executive Officer of 'K' Line and Jungsuk Kim, Vice President of Hyundai Glovis; plus Capt Rajalingam Subramaniam, President & CEO of MISC Berhad.

HE Saad Sherida Al-Kaabi said: "(These) signings form a significant milestone in QatarEnergy's LNG fleet expansion programme, as it marks the conclusion of the conventional sizes vessels portion of the programme, bringing the total number of ships for which we have signed TCPs to 104 vessels, a massive undertaking that is the largest shipbuilding and leasing programme ever in the history of the industry.

HE Saad Sherida Al-Kaabi

"These ships will support our expanded LNG production capacity from the North Field in Qatar and Golden Pass in the US, while also meeting our long-term fleet replacement requirements.

"The careful shipowner selection process followed a detailed and rigorous global tender, signifying QatarEnergy's commitment to expanding its fleet of modern LNG carriers in collaboration with world class shipowners and in an open and transparent manner.

"We are very proud to strengthen our collaboration with these esteemed shipowners. And, we have full confidence that the 19 vessels will be operated with the latest and most advanced safety, technical and environmental standards.

"This is an important undertaking that will enable QatarEnergy to continue delivering cleaner energy to the world safely and reliably. I would like to thank the shipowners (who were) present, and to extend my thanks and gratitude to the team leaders and members from QatarEnergy and QatarEnergy LNG, who were entrusted with the acquisition and leasing of these vessels, for their dedicated work throughout the past few years," he said.

Project support

This initiative will support QatarEnergy's burgeoning LNG production capacity from the North Field LNG expansion and Golden Pass LNG export projects, as well as meeting its long-term fleet replacement requirements.

Some 43 ships out of the 104 will be chartered by QatarEnergy's affiliate, QatarEnergy Trading, making it the largest one-step ship acquisition programme of any single entity in the history of the LNG industry, and placing QatarEnergy and consequently, QatarEnergy Trading firmly on the road to becoming a leading global LNG trader, the company claimed.

The 19 conventional LNG vessels will each have a capacity of 174,000 cu m. ■

> "This is an important undertaking that will enable QatarEnergy to continue delivering cleaner energy to the world safely and reliably"
>
> *- HE Saad Sherida Al-Kaabi*

SHIPPING NEWS AGENDA

US claims top LNG export slot

Last year, the US rose to the top of the world's LNG export table in terms of volume.

US LNG exports averaged 11.9 bill cu ft per day - a 12% increase on the 1.3 bill cu ft recorded for 2022, according to data from the Energy Information Administration's (EIA) *Natural Gas Monthly*.

LNG exports from Australia and Qatar — the world's two other largest LNG exporters — each ranged from 10.1 bill cu ft to 10.5 bill cu ft per day annually between 2020 and 2023, according to data from Cedigaz.

Russia and Malaysia were in fourth and fifth place over the last five years (2019/23). In 2023, Russian LNG exports averaged 4.2 bill cu ft per day, and Malaysia's averaged 3.5 bill.

US exports increased during the first half of 2023 after Freeport LNG returned to operations in February, ramping up to full production in April.

Relatively strong European demand for LNG amid high international natural gas prices supported increased US LNG exports during the year, the report said.

US LNG exports also set monthly records late last year with 12.9 bill cu ft day exported in November, followed by 13.6 bill cu ft per day in the following month.

The EIA estimated that utilisation of US LNG export capacity averaged 104% of nominal capacity and 86% of peak capacity across the seven LNG export terminals in operation last year.

Similar to 2022, Europe, including Turkey, remained the primary destination for US exports last year, accounting for 66% (7.8 bill cu ft per day), followed by Asia at 26% (3.1 bill cu ft) and Latin America and the Middle East with a combined 8% (0.9 bill cu ft per day).

Europe (EU27 and the UK) continued to import LNG to compensate for the loss of natural gas previously supplied by pipeline from Russia last year.

European expansion

Europe's LNG imports capacity continued to expand, and the EIA expected an increase by more than one-third between 2021 and 2024.

Countries that imported the most US LNG were the Netherlands, France, and the UK, with a combined 35% (4.2 bill cu ft) - all US LNG exports.

Dutch LNG imports increased after the Gate LNG regasification terminal was expanded and two new FSRUs were commissioned. Germany began importing LNG in 2023 when three new FSRUs were commissioned.

FSRUs will come online between 2024 and 2027.

In Asia, Japan and South Korea each received 0.8 bill cu ft per day of LNG from the US, the fourth and fifth highest US LNG import volumes by country in 2023.

Japan, China, and India increased US LNG imports by a combined 0.6 bill cu ft, compared with 2022. In addition, both the Philippines and Vietnam started importing LNG in 2023 - the Philippines only started importing US LNG cargoes in October and November of last year.

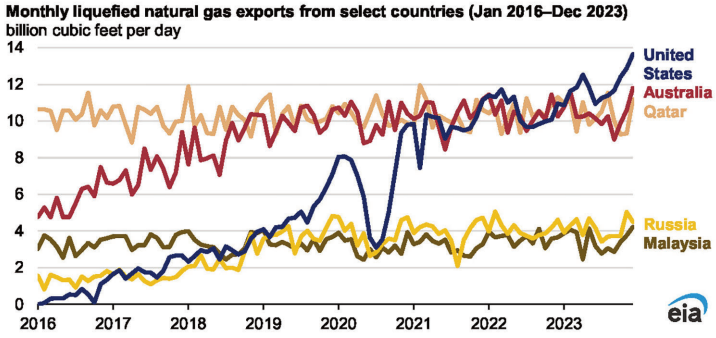
In Latin America, US LNG exports to Brazil continued to decline last year as the country primarily used hydropower for electricity generation. Brazilian US LNG imports peaked in 2021, when the country experienced its worst drought in more than 90 years.

No new North American LNG projects were sanctioned in the first quarter of this year, continuing the trend from the final quarter of 2023.

However, last year saw record new capacity approved involving four projects totalling more than 37 mill tonnes per annum.

For 2024, fewer new North American project announcements are predicted, due to several uncertainties remaining.

With an unsettled backdrop, LNG project developers that are able to overcome mounting risks and challenges are competitively advantaged and more likely to achieve a more elusive FID, the report said. ■



NEWS NUDGE

MOL's Indonesian FSRU comes online

Mitsui OSK Lines (MOL) launched the commercial operation of the FSRU 'Jawa Satu' in Indonesia on 29th March.

The FSRU will be utilised for the Jawa 1 LNG-fired power plant in Indonesia.

MOL owns the FSRU through PT Jawa Satu Regas (JSR), jointly established by PT Pertamina (Persero), Marubeni Corp, Sojitz Corp and other partners.

The 170,000 cu m 'Jawa Satu' will receive LNG for power generation from LNGCs via a ship-to-ship transfer (STS) operation, store it, regasify it, and supply it to PT Jawa Satu Power, which operates a large-scale LNG-fired power plant in West Java, Indonesia, with a generating capacity of 1,760 MW.

This is the first gas-to-power project in Asia, where power generation facilities and gas-related facilities using an FSRU are being developed as an integral element of the power generation process.

Petersen joins Golar as CCO

Golar LNG has appointed Federico Petersen as Chief Commercial Officer.

Petersen has had 20 plus years of business development and M&A experience in the oil and gas industry serving VTTI, Schlumberger, Equinor, BG Group and Wintershall.

He will be based out of Golar's London office and will spearhead the company's commercial efforts as the 'Hilli' re-contracting moves closer and in developing FLNG growth ambitions. ■

LNG Shipping News
2 Prospect Road
St Albans AL1 2AX
United Kingdom
www.lngjournal.com
Tel: +44 (0)20 7253 2700

Publisher
Stuart Fryer

Editor
Ian Cochran
+44 (0)7748 144265
Iancochran74@gmail.com

Ad sales enquiries
David Jeffries
+44 (0)20 8150 5293
djeffries@lngjournal.com

Subscriptions
Stephan Venter
Tel: +44 (0) 20 7253 2700
venter@lngjournal.com

Production
Vivian Chee
Tel: +44 (0) 20 8995 5540
chee@thedigitalship.com

Cedar LNG progress - FID this year

Cedar LNG developer, Pembina Pipeline Corp, together with partner, the Canadian indigenous Haisla Nation, have announced significant progress on the project.

This includes the securing of long-term commercial offtake support and issuing a notice to proceed (NTP) to the EPC contractors, Samsung Heavy Industries and Black & Veatch.

These initiatives allow Cedar LNG to start the project financing and the Haisla Nation to commence a process to support its equity contributions in advance of a final investment decision (FID), expected by the middle of this year, Pembina said, adding that the project is due online by late 2028.

The highlights include:-

Commercial Offtake Secured - A 20-year take-or-pay liquefaction tolling services agreement with a fixed toll has been signed with ARC Resources for 1.5 mil tonnes per annum.

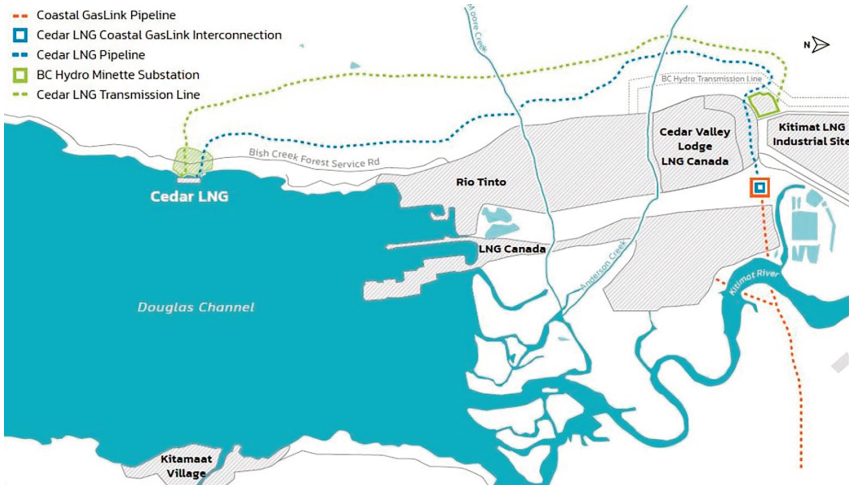
In addition, Pembina has executed an identical bridging agreement with Cedar LNG for 1.5 mill tonnes.

Pembina intends to assign its capacity to a third-party following a positive FID, with commercial offtake discussions continuing with multiple customers.

Issued Notice to Proceed - In order to maintain schedule, an NTP has been issued to the contractors to continue the engineering, procurement and construction (EPC) for the design, fabrication and delivery of the project's FLNG production unit.

Capital Costs - Cedar LNG has completed a detailed Class III level capital cost estimate of around $3.4 bill (gross), including $2.3 bill (gross), or about 70%, which is under a fixed-price, lump-sum agreement.

Advancing Pembina's Strategic Priorities - Subject to a positive FID, Cedar LNG is expected to generate annual run-rate adjusted EBITDA of $200 mill to $260 mill, net to Pembina, derived from low risk, long-term, take-or-pay cash flows, together with potential incremental cargoes and marketing upside.



An overview

Cedar LNG is a planned FLNG export facility at Kitimat, British Columbia, within the Haisla Nation territory.

While the project was originally contemplated as a 3 mill tonnes per annum facility, its nameplate capacity of 3.3 mill tonnes reflects engineering optimisation and a capital efficient option to enhance the project's economics.

This project will provide a valuable outlet for Western Canadian Sedimentary Basin (WCSB) natural gas to access global markets and is expected to achieve higher prices for Canadian producers, contribute to lower overall global emissions, and enhance global energy security, the company claimed.

Given that the project will be an FLNG, built in the controlled conditions of a shipyard, it is expected that the facility will have lower construction and execution risk. Furthermore, powered by BC Hydro, it is expected to be one of the world's lowest emissions' LNG facilities.

Pembina said that Asian markets will be the key growth driver of long-term global LNG demand, with North American projects well positioned to meet this increasing demand.

Cedar LNG was claimed to be competitively advantaged to supply Asian markets, due to a low-cost, abundant natural gas feedstock from the growing Montney play and a shorter shipping route, along with providing offtakers with geographic portfolio diversification, including avoiding Panama Canal transit delays.

ARC Resources will supply Cedar LNG with around 200 mill cu ft per day of natural gas via Coastal GasLink (CGL) from its production base in the Montney.

Baker Botts acted as legal counsel to Cedar LNG with respect to the commercial agreements, while King & Spalding acted as legal counsel to Cedar LNG with the EPC contract.

Cedar LNG is pursuing asset-level debt financing for around 60% of the project cost and has engaged MUFG Bank to act as financial advisor on the financing, with the remaining 40% to be financed through equity contributions from both partners.

Simultaneously, the Haisla Nation, along with its financial advisor CIBC, has initiated the financing process to raise capital to fund its 20% equity contribution to the project.

Pembina's net investment of about $2 bill represents a 50% interest in Cedar LNG, which will be financed through a combination of project debt and around $0.8 bill of equity contributions.

The company had already invested about $150 mill in the project to the end of 2023 and expected incremental net contributions to be around $225 mill through to the expected FID, due in the middle of 2024.

In addition, Baker Hughes has won a contract from Black & Veatch to supply electric driven liquefaction technology for the project.

The company will supply turbomachinery equipment, consisting of four electric driven main refrigeration compressors, two electric driven boil-off gas (BOG) compressors and six centrifugal pumps. ■

NEWS NUDGE

Hill to join Mercuria

Energy trader Mercuria is to take on gas trader Steve Hill, formerly head of LNG at Shell. The trading house is currently expanding its presence in LNG, according to newswires.

Hill will join Geneva-based Mercuria, as the company looks to acquire talent to build on two years of bumper profits. For example, in 2022, Mercuria made a record $3 bill.

LNG proved to be a gold mine for commodity traders with large books opened over the last two years.

After Russia's invasion of Ukraine in 2022, Europe's already tight gas market became even tighter with the loss of most Russian pipeline gas deliveries, which sent prices soaring.

Mercuria has lagged behind its rivals - Trafigura, Gunvor and Vitol - in LNG trading and only opened a desk in 2019, Reuters said. ■

Bangladesh agrees interim cargoes

Bangladesh is to purchase 24 LNG cargoes from Gunvor Singapore in the next two years.

These will be interim shipments until its new long-term LNG contracts due to start in early 2026 kick in, a senior Petrobangla official told S&P Global Commodity Insights on 1st April.

The country is expected to sign a sales and purchase agreement (SPA) with Gunvor soon after a final approval from Bangladesh's cabinet committee on government purchase, he said. The cabinet gave an in-principle approval on 27th March.

"We are now in talks with Gunvor to fix the price of LNG to be procured," said the Petrobangla official. "The pricing will be determined on the basis of Japan Korea Marker (JKM) benchmark index."

This deal will represent Bangladesh's first short-term LNG contract linked to JKM and signals the evolution of its procurement strategy to meet the flexibility needed in the current market environment.

LNG sellers have been reluctant to lower oil-linked price slopes for the next couple of years until a large wave of supply hits the market in the second half of this decade.

The first LNG cargo under the Gunvor SPA is expected to reach Moheshkhali for regasification in either of the two FSRUs within 60 days of the signing, said a senior official at state-owned Rupantarita Praktritik Gas Co (RPGCL), the company in charge of LNG imports.

Gunvor is expected to deliver at least one cargo per month, which, however, can be flexible depending on demand and FSRU regasification capacity, the RPGCL official added.

Spot market reduction

The SPA with Gunvor is likely to reduce Petrobangla's spot procurement over the next two years, as it was signed to reduce spot market exposure and because long-term contracts are about $1.2 per MMBtu higher than JKM prices, according to the sources talking with the news source.

In addition, LNG prices are low in summer and through the shoulder periods - Bangladesh's demand typically rises in summer and JKM surges mainly in winter. As a result, the contract linkage to JKM makes sense, a source said.

The contract also has a downward quantity tolerance allowing the buyer to cancel 10% of the cargoes over the contract period.

In early January, Gunvor had proposed to deliver 12 LNG cargoes in 2024 and 12 in 2025, each with a volume of 3.36 mill MMBtu, along with several short-term proposals from other suppliers, the Petrobangla official said.

Petrobangla might still consider the other proposals if prices are competitive, he added.

Thus far, Gunvor has been supplying spot LNG to Bangladesh through competitive bids with 22 other listed suppliers. It won one out of four spot LNG cargoes in the latest tender for 21st and 22nd April, 2024 delivery for $9.37 per MMBtu.

Petrobangla expects Bangladesh's long-term LNG imports from early 2026 to more than double to 7.5 mill tonnes per year, from the current 3.5 mill tonnes after its new SPAs with Excelerate, QatarEnergy and OQ Trading kick in.

The government has also recently approved new SPAs with Summit Oil and Shipping and Malaysia's Perintis Akal Sdn Bhd.

Meanwhile, RPGCL has issued a new tender for three spot LNG cargoes in the 4th to 5th May, 9th to 10th May and 14th and 15th May windows, and has asked for the initial bids to be lowered following negotiations with suppliers, an RPGCL official said, without disclosing the latest prices.

Bangladesh also expects to import three spot LNG cargoes in May, compared with the four in April, that were awarded to Excelerate Energy, Gunvor Singapore and Vitol Asia at between $9 and $10 per MMBtu, S&P reported. ■

Papua LNG FID put back

In a joint statement with the Papua New Guinea Government, Papua LNG operator, TotalEnergies said that following the receipt of the first EPC offers, the partners will need to keep working with contractors to obtain commercially viable contracts and more work was required to reach FID, which has been put back to next year.

As a result, the project partners will review the structure of some packages and open up the project to a larger panel of Asian contractors.

At a meeting, James Marape, the Prime Minister of Papua New Guinea, and Patrick Pouyanné, Chairman and CEO of TotalEnergies discussed the project's status.

They agreed that this delay will not affect the early work planned in Papua New Guinea this year and that the project will maintain its full support for the Gulf Province local population.

Moreover, Pouyanné announced that TotalEnergies intended to drill the first deepwater exploration well on the PPL 576 license in 2025.

He also reaffirmed to the Prime Minister that TotalEnergies, the project's operator and its partners, ExxonMobil, Santos and JX Nippon, are fully committed to Papua LNG.

In particular, he said that there was several LNG buyers expressing high interest for offtaking LNG from the project, due to its strategic location close to key Asian markets. ■

NEWS NUDGE

Craig in Qatar LNG supply contract

Oilfield procurement company, Craig International has won a contract from QatarEnergy LNG to cover the sourcing and supplying of products and services for maintenance, repair, and operations (MRO).

The three-year contract, which also has a two-year extension option, will be delivered by Craig International's Qatar office, whose employees number 45, supported by the company's Aberdeen headquarters.

Craig's team of procurement specialists will work alongside QatarEnergy LNG's end users and technical authorities to ensure sourcing and delivery to sites across Qatar.

"We are thrilled to extend our contract with such a major brand in the region and we are looking forward to building and nurturing a mutually beneficial relationship with QatarEnergy LNG.

"Having increased our headcount in the Middle East, from five in 2018 to over 70 today and expanded our supply chain, we're demonstrating our commitment to the local market and are well-placed to meet the increasing demand for smart, efficient, and sustainable procurement.

"With an increasing focus on the energy transition in the region, there are significant opportunities for our sustainable, digital procurement offering in both the oil and gas and renewables sectors," explained Steve Gibson, Craig International's Director of Middle East operations. ■

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Dynagas reduces debt

Late last month, LNGC owner and operator, Dynagas LNG Partners, released its fourth quarter and full year 2023 results.

Highlights for the full year included net income and earnings per common unit (basic and diluted) of $35.9 mill and $0.66, respectively.

In addition, adjusted net income was $25.8 mill and adjusted earnings per common unit was $0.39; adjusted EBITDA was $94.4 mill, while the fleet performed at 97.8% utilisation.

Fourth quarter highlights included a net income and earnings per common unit of $10.5 mill and $0.21, respectively; adjusted net income of $10.3 mill and adjusted earnings per common unit of $0.20; adjusted EBITDA of $27.4 mill; and 100% fleet utilisation.

The company also declared and paid a cash distribution of $0.5625 per unit on the Partnership's series A preferred units for the period 12th August, 2023 to 11th November, 2023 and $0.546875 per unit on the series B units for 22nd August to 21st November, last year.

Subsequently the company signed a term sheet with a major Asian financial leasing operator for the inancing of four of its six LNGCs of up to $345 mill.

The financing has received counterparty credit approval and is subject to the execution of definitive documentation and the satisfaction of customary closing conditions, which is expected in 2Q24.

Repay debt

Dynagas said it intended to use the proceeds, together with other sources of liquidity, to fully repay its existing secured debt that is scheduled to mature in September, 2024.

CEO, Tony Lauritzen, said: "We are pleased to report the results for the three months and full year ended 31st December, 2023. For the fourth quarter of 2023, we reported net income of $10.5 mill, earnings per common unit of $0.21, adjusted net income of $10.3 mill and adjusted EBITDA of $27.4 mill.

"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 6.9 years. Barring any unforeseen events, the Partnership will have no contractual vessel availability until 2028.

"Our estimated contract backlog currently stands at approximately $1.11 bill equating to approximately $185 mill per vessel as of 28th March, 2024.

"We remain committed to our strategy of creating equity value through reducing debt and have, since September, 2019, repaid $254.4 mill in debt, which includes two voluntary loan prepayments of $18.7 mill and $31.3 mill, effected on 12th October, 2022 and 27th March, 2023, respectively, in agreement with the lenders of our $675 mill credit facility.

"Since 31st December, 2019 we have reduced our net leverage ratio from 6.6 to 3.7, while also increasing our book equity value by 43%, to $448 mill.

"The current debt outstanding under our $675 mill credit facility is approximately $420.6 mill. We are pleased to have entered into a term sheet with a major finance lease operator for a financing amount of up to $345 mill, which is subject to the execution of definitive documentation and the satisfaction of customary closing conditions.

"This new facility, together with other sources of liquidity, will enable the refinancing of our existing debt, which matures in September, 2024," he said. ■

LNG interests boost EXMAR's results

Belgian gas carrier owner EXMAR's Infrastructure division, which includes its LNG interests, reported revenue of $374.7 mill, compared to $323 mil for 2022, while EBITDA was $80.5 mill, compared to $75.7 mill for the previous year.

The infrastructure segment's increase was boosted by revenues from the engineering, procurement, and conversion (EPC) contracts for the Marine XII project in Congo, while the full period employment of 'Eemshaven LNG' and 'Excalibur' also helped the revenue increase in 2023.

Making abstraction of the gain on disposal upon sale of shares in Export LNG, the owner of the 'Tango FLNG', in August, 2022 ($315.7 mill), the segment's adjusted EBITDA increased by $68.4 mill and is the result of operations in Eemshaven, Netherlands and the Republic of Congo.

The Marine XII project came online one year after the FID was taken by developer Eni, and featured the liquefaction facility, 'Tango FLNG', with a capacity of about 1 bill cu m per year.

Moored alongside, is EXMAR's FSU 'Excalibur', which uses an innovative configuration developed in-house called 'split mooring', implemented for the first time in a FLNG terminal.

Eemshaven LNG performed as per expectations, EXMAR said. In parallel, the company is working on various new FLNG liquefaction projects and FLNG regasification projects. ■

NEWS NUDGE

NOVATEK slashes Arctic LNG 2 gas output

Russian LNG producer, NOVATEK has cut the gas output from its Arctic LNG 2 project, Vedomosti newspaper reported last week, citing two sources.

Arctic LNG 2's gas production was at 83 mill cu m in February, the news source said. However, according to the two sources, that was a fraction of the 425 mill cu m produced in December and 250 mill cu m in January.

The fall is due to a delay in the start of LNG shipments, it was claimed.

Russian Deputy Prime Minister, Alexander Novak, said recently that the project, which started tentative production in December, remains in talks about LNG deliveries, as Western sanctions hinder the availability of Arc7 LNGCs for the project.

Meanwhile, Russian LNG exports rose to 8.7 mill tonnes in the first quarter of this year, up 4.3% from a year earlier.

European Union shipments increased but Asian shipments were less going to Asia, the Russian Kommersant daily reported earlier this week, citing Kpler data.

Russian LNG exports to Asia fell by 7% to 3.16 mill tonnes, while EU supply increased by 4% to almost 5 mill tonnes. Around 550,000 tonnes did not have a destination.

In March, according to Kommersant, the fall in exports to Asia was more marked – supplies to the region declined by 30% to 860,000 tonnes, while exports to Europe increased by 3% to 1.55 mill tonnes. Some 470,000 tonnes were not nominated. ■

Adriatic LNG's ownership changes hands

Dutch-based energy storage and energy infrastructure developer, VTTI and German asset management group IKAV, have joined a consortium to acquire the majority ownership of Terminale GNL Adriatico (Adriatic LNG).

Adriatic LNG operates a regasification terminal located 15 km off the coast of the Italian Veneto region.

The terminal has a regasification capacity of 9.6 bill cu m of natural gas per year (equal to half of Italy's current LNG import capacity), supplying around 14% of the country's consumption of natural gas.

Both VTTI and IKAV aim to further explore growth opportunities in Italy, they said.

The closing of the transaction is expected in the second half of this year.

Mizuho Securities acted as financial advisor to IKAV, while Natixis Partners Iberia acted as financial advisor to the consortium. Natixis and Intesa Sanpaolo act as underwriters for the acquisition financing facility and Herbert Smith Freehills acts as legal advisor to the consortium.

In addition, Italian energy company, Snam has exercised its pre-emption right to increase its stake in Adriatic LNG from 7.3% to 30%.

The pre-emption right was exercised following VTTI signing the agreement to acquire a majority stake in the company.

Upon the closing of this transaction, the corporate capital of Adriatic LNG will be held by VTTI (70%) and Snam (30%).

"This operation strengthens Snam's presence in LNG infrastructure, which is increasingly strategic for the security and diversification of Italy's energy supplies," CEO, Stefano Venier, commented. "We look forward to working together with VTTI to ensure continuous and world class management of Adriatic LNG, which is fundamental for the Italian energy system, and to support its expansion projects."

Adriatic LNG ramps up shareholding

Snam now holds stakes in all the Italian regulated LNG regasification plants; the Panigaglia terminal, in operation since 1971 near La Spezia; the OLT FSRU 'Toscana' off Livorno, operational since 2013; and the FSRU 'Golar Tundra', operating in Piombino since July. 2023, giving a total regasification capacity of about 23 bill cu m.

Snam has also acquired the FSRU 'BW Singapore', which will commence activities off the Ravenna coast in the first few months of 2025.

Italy's total regasification capacity will rise to 28 bill cu m, evenly distributed between the Tyrrhenian and Adriatic sides, an amount corresponding to overall volumes imported via pipeline from Russia in 2021. ■

Höegh to manage Klaipeda FSRU

On 29th March, the energy terminals operator KN Energies (KN) signed a contract with Höegh LNG Klaipėda, by which the company became the technical operator of the FSRU 'Independence'.

Höegh LNG Klaipėda is part of the Höegh LNG Group, which has been operating and maintaining the vessel since 2014.

The subsidiary won the tender to become the technical operator of the 'Independence' last year, ahead of two other international shipping companies.

The newly concluded contract also reflected the changed responsibilities of the parties - KN Energies became the owner of the vessel, and Höegh LNG Klaipėda, the FSRU's technical operator, KN explained.

Under the contract, Höegh LNG Klaipėda was entrusted with the FSRU's technical operations and maintenance for five years, with the possibility of an extension for another five years.

"Since the geopolitical situation has changed, the last couple of years have clearly shown that the Klaipėda LNG terminal is not only the main source of gas supply for Lithuania, but also an infrastructure of regional importance, ensuring gas supply to other countries as well.

"With the signed contract, we are implementing the decision taken by the Lithuanian state to purchase an FSRU and to ensure its continuous operation after the end of the lease contract. I am sure that by choosing a reliable partner with many years of experience in the operation of FSRUs, we will be able to smoothly take over the ownership of the vessel and ensure the safe and reliable operation of the terminal," said Darius Šilenskis, KN Energies CEO.

10-year contract

The maximum service provision period stipulated in the contract covers 10 years, and the maximum amount of the contract that can be used during this period is €225 mill, which consists of the FSRU's fixed and variable operating costs.

The cost's fixed portion - the crew's remuneration and other crew related expenses, excluding taxes applicable in Lithuania, and the fee to the technical operator for the FSRU - will amount to about €5 mill per year.

As before, variable costs will depend on the unit's repair needs, the volumes of regasification and the price of emission allowances directly related to them, and other components.

Related to the technical maintenance and repair of the vessel, the variable costs will include the ensuring of a sufficient quantity of spare parts, the need for pollution permits planned annually and reimbursed according to the actual figure.

Variable costs also directly correlate with the utilisation rate of the LNG terminal. Therefore, the estimated maximum value of the contract is indicative, and the actual costs incurred will be calculated according to the actual situation.

After taking over the ownership of the FSRU and ensuring its operation with a third party service company, the terminal users price for services will not change substantially.

In the years 2025/2033, the forecast average regasification rate is €1.77 per MWh (about €0.02 per cu m of regasified natural gas) and is lower than the rate approved in 2024 of €1.83 per MWh.

In another move, Höegh LNG took over the management of the 'Hoegh Gandria' from CoolCo.

The vessel was purchased last year and is currently employed as an LNGC. ■

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MDL delivers equipment for Gastrade's FSRU project

UK-based Maritime Developments Ltd (MDL) was contracted by Saipem to deliver equipment to Gastrade's FSRU and its connections offshore Greece.

The project consisted of an FSRU and a mooring and pipeline system, connecting the floating unit to the Greek National Natural Gas Transmission System (INGS).

An MDL flex-lay spread was used for the installation of two flexible risers, a dynamic control umbilical and associated jewellery, connecting into a pipeline end manifold (PLEM) from the FSRU. Subsea pipelines then connected the PLEM back to the coastal valve station onshore.

The equipment spread consisted of a horizontal lay system (HLS), enabled with a TTS-4/180 series tensioner and an MDL adjustable deck deflector, integrated with the client's own equipment on board the supply vessel 'Island Victory'.

Scott Stewart, MDL Project Manager, said:."This has been a very interesting - and also challenging - project from start to finish, which makes it that much more rewarding to see it through to successful completion.

"Saipem needs no introduction and they own an impressive fleet of specialist assets to undertake a wide range of offshore operations. In this instance, they required MDL's support, equipment and expertise with laying three products for the Gastrade project.

"With it being winter in the Mediterranean, we faced weather setbacks; but thanks to our modern technology and expert field service personnel, we were quick to respond to the changing conditions and progress with the installation as soon as it was safe to do so.

"It has been a pleasure to work with Saipem and assist with the delivery of the Gastrade project - eventually providing natural gas to the Greek transmission system and onwards to final consumers in Greece, Bulgaria, Romania, North Macedonia, Serbia, Moldova, Ukraine, Hungary and Slovakia.

"I'm pleased that we have been able to support Saipem with our engineering and back-deck expertise at the different stages of this project - on and offshore - and hope to be able to do so on another scope in the near future," he said. ■

DNV gives nod to independent tank support system

DNV has awarded HD Hyundai a general approval for ship application (GASA) for a new high-strength composite hybrid support system for independent tanks fitted on board LNGCs.

In what is claimed to be a world-first, HD Hyundai's concept is fabricated with a fusion of carbon fibre-reinforced plastics (CFRP) with a tensile strength 10 times greater than steel, significantly enhancing structural stability.

The new system offers robust structural supports, enabling independent tanks to withstand upward force from floatation in case of hold space flooded.

Designed jointly by Korea Shipbuilding and Offshore Engineering (KSOE), HD Hyundai Heavy Industries (HD) and Hyundai Mipo Dockyard (HMD), and approved by DNV and the Liberian International Ship & Corporate Registry (LISCR), the concept allows for the reallocation of the existing support structure layout, minimising the need for high-risk work and inspections.

Lee Hyun-Ho, Executive Vice President of Hyundai Maritime Research Institute at HD, said: "This is the result of another effort to apply composites to shipbuilding. It is expected to contribute to the competitiveness and safety of vessels with independent tanks and generate more orders as the design can be easily constructed."

Thomas Klenum, LISCR's Executive Vice President of Innovation and Regulatory Affairs, added: "This innovation is a great achievement and demonstrates HHI, KSEO, and HMD's dedication to performance, safety, and continuous improvement. The Liberian Registry is proud to have collaborated closely on this project with HD Hyundai and DNV."

Vidar Dolonen, DNV's Regional Manager, Korea & Japan, commented: "DNV is very pleased to be supporting forward looking partners like HD Hyundai on this exciting project. The use of new materials in this concept shows how continuous technological innovation in the maritime sector can enhance shipping's drive to be even more efficient, improve safety, and enhance the structural stability of vessels." ■

NEWS NUDGE

Fortis welcomes new Chair

FortisBC has appointed Peter Blake as the new Chair of the Board of Directors of FortisBC Energy and FortisBC Inc, which came into effect 1st April, 2024.

Fortis undertakes a regular rotation of this role, which is part of the Board's succession planning process.

Blake succeeded Tracy Medve, who has been in the Chair since 2019. She will remain on the Board.

"Tracy Medve has brought immensely valuable knowledge and insights to our Board table and has been a skillful and effective leader in her role as Chair," said FortisBC President and CEO, Roger Dall'Antonia. "I would also like to welcome Peter Blake to his new role. Our company will continue to benefit from his expertise and seasoned leadership as we continue move forward."

He previously served on FortisBC's Board as the Chair of the Audit Committee from 2019 to 2023 and has been on the Board since 2017.

South Korean LNG pump to be produced

Korea Gas Corp (KOGAS) is to co-operate with Hyundai Heavy Industries Turbomachinery to support the production of the ultra-low temperature LNG pump in South Korea.

This partnership aims to bolster the country's self-sufficiency in energy infrastructure technology and features a support agreement for actual testing of the equipment.

Under the agreement, KOGAS will open its facilities at the Pyeongtaek LNG production base to Hyundai Heavy Industries Turbomachinery from April, 2024 until September, 2025.

During this period, Hyundai Heavy Industries Turbomachinery will have access to the necessary environment for testing ultra-low temperature LNG pumps, while KOGAS will offer support funds to assist in the technology's commercialisation.

KOGAS said that this technology will enable the expansion of business operations into related fields, such as LNGCs, South Korean LNG production plants, and overseas LNG liquefaction units. ■

Vanzetti introduces small scale LNG pump

Vanzetti Engineering has introduced a new family of submerged pumps - the ESK-IMO retractable series.

These have flow rates from 70 cu m per hour up to 500 cu m and a head of up to 240 m.

As the entire hydraulic and mechanical parts derive from the Vanzetti's ARTIKA series, the new pump inherits the reliability and quality of a product that is well-established in the market, the company cliamed.

The ESK-IMO series has been designed for use in the industrial field in small-scale LNG terminals with a capacity of around 1 mill tonnes per annum and in the marine field where the retractable pumps can be used as emergency pumps or cargo/stripping pumps for emptying tanks in the event of malfunction and/or necessary maintenance on the main pumps.

In contrast to the ARTIKA series, which is mounted directly at the bottom of the tank or inside a cryostat, the ESK-IMO pump is installed inside a column that is isolated from the rest of the tank by a foot valve.

By isolating the pump's location, the LNG remains confined in the tank outside of the column, allowing the pump to be removed by opening a cover at the top of the column.

Vanzetti is offering the new pump series with all the accessories required for its operation - ie, the foot valve, column cover, cables required to lift the pump and remove it from the tank, plus the electrical connectors.

Optional extra

As an optional extra, a vibration monitoring system is also available to display and signal malfunction alarms.

A special feature of the new retractable pump is that it does not require the tank to be emptied for maintenance, the company claimed.

This is an important added value considering that the tanks of small scale LNG terminals are subject to very long maintenance intervals (over 25 years), Vanzetti added.

As the maintenance interval of the pump is generally shorter than that of the tank, it is a huge advantage to be able to remove the pump and carry out maintenance without taking the tank out of service, as it makes the process quicker and easier for both the user and the terminal itself. In addition, all potential related risks are thus avoided.

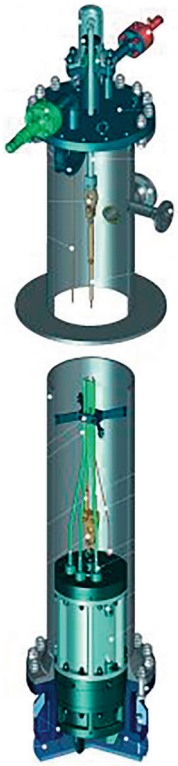
In the marine sector, the ESK-IMO series allows for greater flexibility in maintenance activities, making it possible to empty atmospheric tanks (operating at a pressure of less than 1 bar) in order to service the tank itself or the installed pumps.

Moreover, the new pump does not require a large space above the tank - a feature that is compatible with environments normally found below deck - to be extracted from the column.

Vanzetti said that the small scale LNG terminal and marine markets are experiencing unprecedented growth, with particular emphasis in the Americas and Southeast Asia regions.

With an increasing demand for alternative energy and growing pressure to reduce emissions, terminals are proving to be a flexible solution that can bring LNG to where it is needed, especially in the industrial, commercial, civil and shipping contexts.

In parallel, the LNG shipping market is also experiencing significant growth. LNG-fuelled ships offer an alternative to traditional fuel, helping to reduce emissions to comply with increasingly stringent regulations, in turn generating growing demand for port infrastructure and dedicated terminals. ■



Vanzetti has introduced a new LNG pump

NEWS NUDGE

Egypt plans FSRU terminal

Egypt is planning to lease an FSRU to ramp up overseas purchases to avoid energy shortages this summer.

The state-run Egyptian Natural Gas Holding Co (EGAS) is in talks with FSRU operators, according to sources talking with Bloomberg.

It was thought that EGAS was seeking a five year contract with possible extensions.

EGAS has bought at least one LNG shipment for delivery in the next month and is looking for several more, traders had earlier said.

This will be imported through a terminal in Jordan, after a deal was signed between the two countries last year to jointly use the terminal in Aqaba.

The country, which uses gas for air conditioning plants to escape the extreme heat, is securing supply early to potentially avoid the chronic power blackouts of last summer.

EGAS' charter of the FSRU, 'BW Singapore', ended last year. Egypt's LNG imports marked a major shift after it largely stopped purchasing gas in 2018 when the giant Zohr field boosted domestic production and turned the country into an exporter.

However, local gas output has dropped to the lowest level in years, which Oil Minister Tarek El-Molla said in February was because of a natural decline at the fields. ■

LNG rate assessments

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

Region	This week	Change*
East of Suez	$34,000	-$1,000
West of Suez	$34,000	-$8,500
12 mos T/C	$54,000	-

Since last report (28/03/24) *Source: Fearnleys (10/04/24)*

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	$267.96 mill
Five years old (174,000 cu m)	$221.05 mill
Total Fleet (588 ships)	$93.95 bill
Orderbook (372 ships)	$100.92 bill

Source: VesselsValue (25/03/24)

*The above is updated each month courtesy of VesselsValue

Seatrium wins FSRU conversion contracts

Singapore-based engineering company, Seatrium has secured major contracts with an aggregate value of Sing$350 mill, all of which are to be completed by the end 2025.

Included are contracts in the LNG space involving the conversions of three LNGCs to FSRUs for Turkish energy company, Karpowership, with an option for a fourth.

The conversion work involves installing a regasification skid, as well as other supporting systems, such as cargo, utility, spread-mooring, offloading, electrical, and automation systems.

An earlier Karpowership conversion

Scheduled to commence in the second quarter of 2024, these contracts exemplifies a succession of FSRU conversions executed by Seatrium for Karpowership, including the 'Karmol LNGT Powership Africa', 'Karmol LNGT Powership Asia' and 'Karmol LNGT Powership Europe'.

These contracts also reinforced Seatrium's position as a pioneer and market leader in the highly specialised FSRU conversion market, the company claimed.

Alvin Gan, Seatrium Repairs and Upgrades Executive Vice President, said, "We thank our customers for their confidence in Seatrium's capabilities and for entrusting us with these important projects.

"Each of these projects demand strong project management, engineering and strong Health, Safety, Security and Environment (HSSE) and quality standards. With our expertise and extensive track records, we are committed to deliver safe, timely and reliable projects to our customers," he said.

The diverse range of complex contracts secured by Seatrium Repairs and Upgrades include FSRU upgrades and conversions, life-extension and remedial works for floating production systems and LNGC repairs, plus other work on various ship types and offshore structures. ■

Silverstream completes ALS retrofit at Singapore

Maritime clean technology company, Silverstream Technologies, has completed another retrofit of its air lubrication technology (ALS) - Silverstream® System.

The retrofit, which was on an oil major-owned 174,000 cu m LNGC was completed in just 30 days at Seatrium's Admiralty Yard in Singapore.

This marks the 11th retrofit of an ALS system delivered worldwide by Silverstream.

Seatrium is a Silverstream co-operation partner, which helped to facilitate a smooth retrofit. The yard was formed after last year's merger of Sembcorp Marine and Keppel Offshore & Marine.

The Silverstream® System releases a carpet of air to reduce the frictional resistance between the hull and the water, reducing average net fuel consumption and GHG emissions by 5-10%. Moreover, in the case of LNGCs, these savings result in increased delivered volumes, the company claimed.

Tightening regulations

With regulations, such as EEXI and CII, tightening de-carbonisation targets, clean technology retrofits on board LNGCs will become increasingly relevant for the segment.

Unprecedented demand for LNG shipping capacity is restricting fleet renewal opportunities and minimising the vessels' time in drydock, further reinforcing the case for improving the energy efficiency of the existing LNG fleet.

Silverstream said that it is now receiving repeat orders within framework agreements across LNG and other vessel types based on the technology's independently verified performance and its track record of successful retrofit installations.

Noah Silberschmidt, Founder & CEO, Silverstream Technologies, said: "This successful retrofit at Seatrium of our technology on board another LNG carrier is yet further proof of our deep experience in the LNG segment.

"The market conditions and operational factors unique to LNGCs make them perfectly suited to our air lubrication technology, and we will continue to work with energy majors and our yard partners to ensure smooth installations on board any vessel that chooses us as an efficiency-boosting option," he said.

Alvin Gan, Seatrium's Executive Vice President, Repairs and Upgrades, added: "As the premier yard in LNGC repairs, upgrades and conversions, Seatrium is committed to working with our customers and partners to provide turnkey, one-stop solutions in energy efficiency retrofits for LNG carriers.

"Our collaboration with Silverstream Technologies is successfully delivering another retrofit of their air lubrication technology and further solidifies our position in the industry. By providing comprehensive engineering services through excellent project execution, we aim to continue to lead and play a key role in assisting our customers to achieve their energy efficiency targets," he said.

Silverstream head Noah Silberschmidt

The LNGC will now move into post-drydock sea trials for the Silverstream® System.

Silverstream supports customers throughout the lifecycle of the system, including crew training during the commissioning phase and through lifecycle agreements for servicing, maintenance and upgrades. ■

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WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Agamemnon	Capital Gas	Hyundai Samho	01/06/2022	174,000	ME-GA	01/03/2026
Aktoras	Capital Gas	Hyundai Samho	01/09/2021	174,000	ME-GA	01/07/2024
Alcaios I	Capital Gas	Hyundai Samho	01/01/2023	174,000	ME-GA	01/09/2026
Alexey Kosygin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/03/2024
Al-kharrarah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/02/2025
Al-kheesah	Pan Ocean, SK Shipping, H-Line	Samsung	01/09/2022	174,000	ME-GA	01/01/2025
Al-slaimi	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/04/2025
Antaios I	Capital Gas	Hyundai Samho	01/01/2023	174,000	ME-GA	01/11/2026
Apostolos	Capital Gas	Hyundai Heavy	01/11/2021	174,000	ME-GA	01/06/2024
Archimidis	Capital Gas	Hyundai Samho	01/06/2022	174,000	ME-GA	01/01/2026
Archon	Capital Gas	Hyundai Samho	01/03/2023	174,000	ME-GA	01/03/2027
Assos	Capital Gas	Hyundai Heavy	01/11/2021	174,000	ME-GA	01/05/2024
Athlos	Capital Gas	Hyundai Samho	01/03/2023	174,000	ME-GA	01/02/2027
Celsius 6	Celsius Shipping	China Merchants HI Jiangsu	24/10/2023	180,000	ME-GA	01/09/2027
Celsius Gandhinagar	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/03/2024
Celsius Greenwich	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/06/2024
Celsius Grenada	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/07/2024
China Merchants Jiangsu Cmhi-282-01	Celsius Shipping	China Merchants HI Jiangsu	01/05/2023	180,000	ME-GA	01/03/2026
China Merchants Jiangsu Cmhi-282-02	Celsius Shipping	China Merchants HI Jiangsu	01/05/2023	180,000	ME-GA	01/07/2026
China Merchants Jiangsu Cmhi-282-03	Celsius Shipping	China Merchants HI Jiangsu	01/05/2023	180,000	ME-GA	01/11/2026
China Merchants Jiangsu Cmhi-282-04	Celsius Shipping	China Merchants HI Jiangsu	01/05/2023	180,000	ME-GA	01/03/2027
China Merchants Jiangsu Cmhi-282-05	Celsius Shipping	China Merchants HI Jiangsu	01/02/2024	180,000	ME-GA	01/06/2027
Clean Astraeus	Dynagas	Hyundai Heavy	01/04/2023	200,000	XDF	01/05/2027
Clean Azeus	Dynagas	Hyundai Heavy	01/04/2023	200,000	XDF	01/07/2027
Clean Brownsville	Dynagas	Hyundai Heavy	01/01/2023	200,000	XDF	01/07/2026
Clean Future	Dynagas	Hyundai Heavy	01/05/2021	200,000	ME-GA	01/03/2024
Clean Levant	Dynagas	Hyundai Heavy	01/03/2022	200,000	ME-GA	01/04/2025
Clean Mistral	Dynagas	Hyundai Heavy	01/03/2022	200,000	ME-GA	01/03/2025
Clean Rio Grande	Dynagas	Hyundai Heavy	01/01/2023	200,000	XDF	01/04/2026
Clean Srocco	Dynagas	Hyundai Heavy	01/03/2022	200,000	ME-GA	01/12/2025
Clean Texas	Dynagas	Hyundai Heavy	01/01/2023	200,000	XDF	01/12/2025
Clean Vitality	Dynagas	Hyundai Heavy	01/05/2021	200,000	ME-GA	01/02/2024
Cosco 1	COSCO	Dalian Shipbuilding	31/08/2023	175,000		01/03/2027
Cosco 2	COSCO	Dalian Shipbuilding	31/08/2023	175,000		01/06/2027
Cosco 3	COSCO	Dalian Shipbuilding	31/08/2023	175,000		01/04/2028
Daewoo 2522	Hyundai LNG Shipping	Hanwha Ocean	01/07/2021	174,000	MEGI	01/05/2024
Daewoo 2523	MOL	Hanwha Ocean	01/09/2021	174,000	ME-GA	01/02/2024
Daewoo 2524	MOL	Hanwha Ocean	01/09/2021	174,000	ME-GA	01/04/2024
Daewoo 2525	MOL	Hanwha Ocean	01/09/2021	174,000	ME-GA	01/08/2024
Daewoo 2526	MOL	Hanwha Ocean	01/09/2021	174,000	ME-GA	01/10/2024
Daewoo 2527	MOL	Hanwha Ocean	01/10/2021	174,000	ME-GA	01/07/2024
Daewoo 2528	Maran Gas Maritime	Hanwha Ocean	01/11/2021	174,000	MEGI	01/08/2024
Daewoo 2529	Maran Gas Maritime	Hanwha Ocean	01/11/2021	174,000	MEGI	01/11/2024
Daewoo 2530	BWGas	Hanwha Ocean	01/11/2021	174,000	MEGI	01/03/2025
Daewoo 2531	BWGas	Hanwha Ocean	01/11/2021	174,000	MEGI	01/05/2025
Daewoo 2532	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/07/2024
Daewoo 2533	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/09/2024
Daewoo 2534	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/06/2025
Daewoo 2535	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/09/2025
Daewoo 2536	MOL	Hanwha Ocean	01/01/2022	174,000	ME-GA	01/09/2024
Daewoo 2537	Maran Gas Maritime	Hanwha Ocean	01/01/2022	174,000	MEGI	01/09/2025
Daewoo 2538	Maran Gas Maritime	Hanwha Ocean	01/01/2022	174,000	MEGI	01/11/2025

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 = 19 February 2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2539	Maran Gas Maritime	Hanwha Ocean	01/02/2022	174,000	MEGI	01/11/2025
Daewoo 2540	Maran Gas Maritime	Hanwha Ocean	01/02/2022	174,000	MEGI	01/12/2025
Daewoo 2541	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/07/2025
Daewoo 2542	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/10/2025
Daewoo 2543	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/12/2025
Daewoo 2544	BWGas	Hanwha Ocean	01/04/2022	174,000	MEGI	01/11/2025
Daewoo 2545	BWGas	Hanwha Ocean	01/04/2022	174,000	MEGI	01/12/2025
Daewoo 2547	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/12/2024
Daewoo 2548	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/01/2025
Daewoo 2550	MOL	Hanwha Ocean	01/04/2022	174,000	ME-GA	01/09/2025
Daewoo 2551	MOL	Hanwha Ocean	01/04/2022	174,000	ME-GA	01/09/2026
Daewoo 2552	Maran Gas Maritime	Hanwha Ocean	01/06/2022	174,000	MEGI	01/05/2026
Daewoo 2553	Maran Gas Maritime	Hanwha Ocean	01/06/2022	174,000	MEGI	01/06/2026
DAEWOO 2558	MOL	Hanwha Ocean	01/09/2022	174,000	ME-GA	01/09/2026
Daewoo 2559	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/02/2025
Daewoo 2561	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/05/2025
Daewoo 2562	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/06/2025
Daewoo 2563	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2564	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2565	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/02/2026
Daewoo 2566	Meiji Shipping	Hanwha Ocean	01/09/2022	174,000	XDF	01/08/2025
Daewoo 2567	Meiji Shipping	Hanwha Ocean	01/09/2022	174,000	XDF	01/09/2025
Daewoo 2568	Meiji Shipping	Hanwha Ocean	01/09/2022	174,000	XDF	01/06/2026
Daewoo 2569	Meiji Shipping	Hanwha Ocean	01/09/2022	174,000	XDF	01/09/2026
DAEWOO 2570	MISC	Hanwha Ocean	01/09/2022	174,000	XDF	01/01/2026
DAEWOO 2571	MISC	Hanwha Ocean	01/09/2022	174,000	XDF	01/05/2026
Daewoo 2572	TMS Cardiff Gas	Hanwha Ocean	01/09/2022	174,000	ME-GA	01/04/2026
Daewoo 2573	TMS Cardiff Gas	Hanwha Ocean	01/09/2022	174,000	ME-GA	01/07/2026
Daewoo 2574	Venture Global LNG	Hanwha Ocean	01/03/2023	200,000	MEGI	01/09/2026
Daewoo 2575	Venture Global LNG	Hanwha Ocean	01/03/2023	200,000	MEGI	01/12/2026
Dalian No 1 G175k-1	China Merchant	Dalian Shipbuilding		175,000	XDF	01/09/2025
Dalian No 1 G175k-12	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding	21/08/2023	175,000		01/01/2027
Dalian No 1 G175k-13	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding	21/08/2023	175,000		01/07/2027
Dalian No 1 G175k-2	China Merchant	Dalian Shipbuilding	01/04/2022	175,000	XDF	01/12/2025
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
DALIAN NO 1 G175K-5	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/08/2026
DALIAN NO 1 G175K-6	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/10/2026
DALIAN NO 1 G175K-7	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/12/2026
DALIAN NO 1 G175K-8	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/02/2027
Energy Fortitude	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/04/2024
Hanwha Ocean 2580	MOL	Hanwha Ocean	01/02/2023	174,000	ME-GA	01/03/2027
HANWHA OCEAN 2581	Maran Gas Maritime	Hanwha Ocean	01/04/2023	174,000	MEGI	01/04/2027
HANWHA OCEAN 2582	Maran Gas Maritime	Hanwha Ocean	01/04/2023	174,000	MEGI	01/06/2027
Hanwha Ocean 2583	MOL	Hanwha Ocean	01/04/2023	174,000	ME-GA	01/08/2027
Hanwha Ocean 2584	MOL	Hanwha Ocean	01/08/2023	174,000	ME-GA	31/01/2027
Hd Hyundai Ulsan 3441	NYK	Hyundai Heavy	28/04/2023	174,000		01/03/2027
Hd Hyundai Ulsan 3442	NYK	Hyundai Heavy	28/04/2023	174,000		01/06/2027
Hd Hyundai Ulsan 3443	NYK	Hyundai Heavy	28/04/2023	174,000		01/08/2027
Hd Hyundai Ulsan 3444	NYK	Hyundai Heavy	01/05/2023	174,000		31/08/2027
Hd Hyundai Ulsan 3454	Evalend Shipping	Hyundai Heavy	02/08/2023	174,000	XDF	01/12/2026
Hd Hyundai Ulsan 3455	Evalend Shipping	Hyundai Heavy	02/08/2023	174,000	XDF	30/06/2027
HD Hyundai Ulsan 3456	Evalend Shipping	Hyundai Heavy	14/11/2023	174,000		01/12/2027
Hd Hyundai Ulsan 3457	Evalend Shipping	Hyundai Heavy	14/11/2023	174,000		01/02/2028
Hd Hyundai Ulsan 3476	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/01/2027
Hd Hyundai Ulsan 3477	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/02/2027
Hd Hyundai Ulsan 3478	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/04/2027

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 = 19 February 2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hd Hyundai Ulsan 3479	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/05/2027
Hd Hyundai Ulsan 3480	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/07/2027
Hd Hyundai Ulsan 3481	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/08/2027
Hd Hyundai Ulsan 3482	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/09/2027
Hd Hyundai Ulsan 3483	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/10/2027
Hd Hyundai Ulsan 3484	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/11/2027
Hd Hyundai Ulsan 3485	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/12/2027
Hd Hyundai Ulsan 3486	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/05/2028
Hd Hyundai Ulsan 3487	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/07/2028
Hd Hyundai Ulsan 3488	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/09/2028
Hd Hyundai Ulsan 3489	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/11/2028
Hd Hyundai Ulsan 3490	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/03/2029
Hd Hyundai Ulsan 3491	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/06/2029
Hd Hyundai Ulsan 3492	Qatar Energy Trading	Hyundai Heavy	01/09/2023	174,000	XDF	01/09/2029
HI Alyssa Warner	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/03/2025
HI Edward Austin	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/05/2025
HL Fortuna	H-Line	Hyundai Samho	01/01/2022	174,000	XDF	01/04/2025
HI Puffin	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/09/2025
HI Sea Eagle	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/06/2025
HLS Bilbao	Hyundai LNG Shipping	Hanwha Ocean	01/05/2021	174,000	MEGI	01/03/2024
Hudong Qatar 1	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/03/2028
Hudong Qatar 2	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/06/2028
Hudong Qatar 3	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/09/2028
Hudong Qatar 4	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/12/2028
Hudong Qatar 5	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/03/2029
Hudong Qatar 6	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/06/2029
Hudong Qatar 7	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/09/2029
Hudong Qatar 8	Qatar Energy Trading	Hudong-Zhonghua	12/01/2024	271,000		01/12/2029
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
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
Hudong-zhonghua H1835a	ULT	Hudong-Zhonghua	01/12/2021	174,000	XDF	01/12/2024
Hudong-zhonghua H1836a	ULT	Hudong-Zhonghua	01/12/2021	174,000	XDF	01/03/2025
Hudong-zhonghua H1880a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/10/2024
Hudong-zhonghua H1881a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/08/2025
Hudong-zhonghua H1882a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/10/2025
Hudong-zhonghua H1883a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/03/2026
Hudong-zhonghua H1884a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/06/2026
Hudong-zhonghua H1885a	MOL	Hudong-Zhonghua	01/01/2022	174,000	XDF	01/09/2026
Hudong-zhonghua H1886a	NYK	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/08/2026
Hudong-zhonghua H1887a	NYK	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/10/2026
Hudong-zhonghua H1888a	NYK	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/12/2026
Hudong-zhonghua H1889a	NYK	Hudong-Zhonghua	01/04/2022	174,000	XDF	01/03/2027
Hudong-zhonghua H1890a	NYK	Hudong-Zhonghua	01/04/2022	174,000	XDF	01/05/2027

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 = 19 February 2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hudong-zhonghua H1891a	NYK	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/10/2027
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
Hudong-zhonghua H1894a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/10/2026
Hudong-zhonghua H1895a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/12/2026
Hudong-zhonghua H1896a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/03/2027
Hudong-zhonghua H1897a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/06/2027
Hudong-zhonghua H1898a	MOL, COSCO, ENN	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/10/2027
Hudong-zhonghua H1899a	MOL, COSCO, ENN	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/12/2027
Hudong-zhonghua H1900a	MOL, COSCO, ENN	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/03/2028
Hudong-zhonghua H1901a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	31/05/2028
Hudong-zhonghua H1902a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/09/2028
Hudong-zhonghua H1903a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/12/2028
Hudong-zhonghua H1908a	ULT	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/11/2025
Hudong-zhonghua H1909a	ULT	Hudong-Zhonghua	01/06/2023	174,000	XDF	01/12/2025
Hyundai Samho 8049	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/03/2025
Hyundai Samho 8100	Knutsen	Hyundai Samho	01/12/2020	174,000	ME-GA	01/11/2024
Hyundai Samho 8170	Hyundai Glovis	Hyundai Samho	01/02/2022	174,000	ME-GA	01/08/2024
Hyundai Samho 8174	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/10/2025
Hyundai Samho 8179	Knutsen	Hyundai Samho	01/03/2022	174,000	ME-GA	01/03/2025
Hyundai Samho 8180	Knutsen	Hyundai Samho	01/03/2022	174,000	ME-GA	01/06/2025
Hyundai Samho 8181	Knutsen	Hyundai Samho	01/04/2022	174,000	ME-GA	01/12/2025
Hyundai Samho 8182	TMS Cardiff Gas	Hyundai Samho	01/10/2022	174,000	XDF	01/01/2026
Hyundai Samho 8188	SK Shipping	Hyundai Samho	01/05/2022	174,000	ME-GA	01/07/2025
Hyundai Samho 8189	SK Shipping	Hyundai Samho	01/05/2022	174,000	ME-GA	01/08/2025
Hyundai Samho 8200	TMS Cardiff Gas	Hyundai Samho	01/07/2022	174,000	XDF	01/03/2026
Hyundai Samho 8201	TMS Cardiff Gas	Hyundai Samho	01/07/2022	174,000	XDF	01/08/2026
Hyundai Samho 8204	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/05/2026
Hyundai Samho 8205	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/06/2026
Hyundai Samho 8208	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2026
Hyundai Samho 8209	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/07/2027
Hyundai Samho 8210	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2027
Hyundai Samho 8238	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/05/2027
Hyundai Samho 8239	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/10/2027
Hyundai Ulsan 3380	Knutsen	Hyundai Heavy	01/06/2022	174,000	XDF	01/05/2025
Hyundai Ulsan 3381	Knutsen	Hyundai Heavy	01/06/2022	174,000	XDF	01/06/2025
Hyundai Ulsan 3382	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/07/2025
Hyundai Ulsan 3383	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/11/2025
Hyundai Ulsan 3384	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/02/2026
Hyundai Ulsan 3385	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/04/2026
Hyundai Ulsan 3386	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/08/2025
Hyundai Ulsan 3387	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3393	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3394	Knutsen	Hyundai Heavy	01/07/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3395	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/08/2025
Hyundai Ulsan 3396	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3397	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/01/2026
Hyundai Ulsan 3398	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/07/2026
Hyundai Ulsan 3399	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/09/2026
Hyundai Ulsan 3400	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/12/2026
Hyundai Ulsan 3401	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	01/08/2022	174,000	XDF	01/12/2026

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Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Ilya Mechnikov	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/03/2024
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
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
Jiangnan H2705	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/09/2026
JIANGSU YANGZI XINFU YZJ2022-1475	Hammonia Reederei	Yangzijiang	01/10/2022	175,000	ME-GA	01/11/2025
JIANGSU YANGZI XINFU YZJ2022-1476	Hammonia Reederei	Yangzijiang	01/10/2022	175,000	ME-GA	01/05/2026
Kool Panther	Cool Co	Hyundai Samho	01/06/2022	174,000	ME-GA	01/12/2024
Kool Tiger	Cool Co	Hyundai Samho	01/06/2022	174,000	ME-GA	31/08/2024
Lev Landau	Hanwha Ocean	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/03/2024
Lng Ping Hu	Zhejiang Huaxiang	Jiangsu Yixiang	01/07/2023	78,900	XDF	01/12/2024
Marseille Knutsen	Knutsen	Hyundai Samho	01/07/2021	174,000	ME-GA	01/09/2025
Marvel Dove	SK Shipping	Hyundai Samho	01/01/2022	174,000	ME-GA	01/09/2024
Mulan Spirit	Jovo Energy	Jiangnan	01/05/2021	79,800	XDF	01/03/2024
Nakilat 1	Nakilat	Hyundai Samho	09/01/2024	174,000		01/12/2026
Nakilat 2	Nakilat	Hyundai Samho	09/01/2024	174,000		01/03/2027
New Brave	Pan Ocean	Hyundai Heavy	01/12/2020	174,000	XDF	01/09/2024
New Green	Pan Ocean	Hyundai Heavy	01/07/2021	174,000	ME-GA	01/10/2024
New Nature	Pan Ocean	Hyundai Heavy	01/12/2020	174,000	XDF	01/10/2024
New Oasis	Pan Ocean	Hyundai Heavy	01/07/2021	174,000	ME-GA	01/12/2024
Nikolay Basov	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/03/2024
Nikolay Semenov	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/05/2026
North Wind	NYK	Samsung	01/10/2021	174,000	XDF	01/02/2024
Nuaijah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/12/2024
Orion Gaugin	JP Morgan	Hyundai Heavy	01/07/2021	174,000	ME-GA	01/09/2025
Orion Hugo	JP Morgan	Hyundai Heavy	01/07/2021	174,000	ME-GA	01/07/2025
Orion Sinead	JP Morgan	Hyundai Heavy	01/12/2020	174,000	XDF	01/11/2024
Pacific Success	SinoKor	Samsung	01/12/2019	173,400	XDF	01/03/2024
Puteri Ledang	Hyundai LNG Shipping	Hyundai Heavy	01/07/2021	174,000	XDF	01/05/2024
Puteri Mahsuri	Hyundai LNG Shipping	Hyundai Heavy	01/07/2021	174,000	XDF	01/11/2024
Puteri Mayang	Hyundai LNG Shipping	Hyundai Heavy	01/07/2021	174,000	XDF	01/01/2025
Puteri Saadong	Hyundai LNG Shipping	Hyundai Heavy	01/04/2021	174,000	XDF	01/02/2024
Puteri Sabah	SK Shipping	Hyundai Heavy	01/05/2022	174,000	ME-GA	01/02/2025
Puteri Santubong	Hyundai LNG Shipping	Hyundai Heavy	01/04/2021	174,000	XDF	01/06/2024
Puteri Sarawak	SK Shipping	Hyundai Heavy	01/05/2022	174,000	ME-GA	01/03/2025
Puteri Sejinjang	Hyundai LNG Shipping	Hyundai Heavy	01/04/2021	174,000	XDF	01/07/2024
Pyotr Kapitsa	Hanwha Ocean	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/03/2024
Pyotr Stolypin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/06/2024
Samsung 2316	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/09/2026
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
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
Samsung 2592	JP Morgan	Samsung	01/10/2021	174,000		01/04/2024
Samsung 2594	JP Morgan	Samsung	01/10/2021	174,000		01/09/2024
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
Samsung 2598	Celsius Shipping	Samsung	01/12/2021	180,000	ME-GA	01/01/2025
Samsung 2599	Celsius Shipping	Samsung	01/12/2021	180,000	ME-GA	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 2602	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024

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Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Samsung 2603	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024
Samsung 2604	NYK	Samsung	01/12/2021	174,000	XDF	25/11/2024
Samsung 2612	Pan Ocean, SK Shipping, H-Line	Samsung	01/09/2022	174,000	ME-GA	01/02/2025
Samsung 2619	Celsius Shipping	Samsung	01/03/2022	180,000	ME-GA	01/10/2025
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
Samsung 2634	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/05/2025
Samsung 2635	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/08/2024
Samsung 2636	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/03/2026
Samsung 2637	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/07/2025
Samsung 2638	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/08/2025
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	01/10/2025
Samsung 2641	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/11/2025
Samsung 2642	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/01/2026
Samsung 2643	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/02/2026
Samsung 2644	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/05/2026
Samsung 2645	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/06/2026
Samsung 2646	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/07/2026
Samsung 2647	JP Morgan	Samsung	01/06/2022	174,000	ME-GA	01/08/2026
Samsung 2651	Celsius Shipping	Samsung	01/10/2022	180,000	ME-GA	01/11/2025
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	01/11/2022	174,000	ME-GA	01/03/2027
Samsung 2657	Seapeak	Samsung	01/11/2022	174,000	ME-GA	01/05/2027
Samsung 2658	Seapeak	Samsung	01/11/2022	174,000	ME-GA	01/08/2027
Samsung 2659	Seapeak	Samsung	01/11/2022	174,000	ME-GA	01/09/2027
Samsung 2660	Seapeak	Samsung	01/11/2022	174,000	ME-GA	01/12/2027
Samsung 2662	MOL	Samsung	20/01/2023	174,000	ME-GA	01/09/2026
Samsung 2663	MOL	Samsung	20/01/2023	174,000	ME-GA	01/01/2027
Samsung 2664	K-Line	Samsung	31/03/2023	174,000	ME-GA	01/05/2026
Samsung 2665	K-Line	Samsung	31/03/2023	174,000	ME-GA	01/09/2026
Samsung 2668	Chevron	Samsung	01/06/2023	174,000		01/11/2027
Samsung 2669	Chevron	Samsung	01/06/2023	174,000		01/01/2028
Samsung 2687	MOL	Samsung	01/11/2023	174,000		01/09/2026
Samsung Qatar 1	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/06/2026
Samsung Qatar 10	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/12/2027
Samsung Qatar 11	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/02/2028
Samsung Qatar 12	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/04/2028
Samsung Qatar 13	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/06/2028
Samsung Qatar 14	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/08/2028
Samsung Qatar 15	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/10/2028
Samsung Qatar 2	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/08/2026
Samsung Qatar 3	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/10/2026
Samsung Qatar 4	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/12/2026
Samsung Qatar 5	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/02/2027
Samsung Qatar 6	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/04/2027
Samsung Qatar 7	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/06/2027
Samsung Qatar 8	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/08/2027
Samsung Qatar 9	Qatar Energy Trading	Samsung	06/02/2024	174,000		01/10/2027
Sergei Witte	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/08/2024
Shandong 1	Shandong Marine	Jiangnan	01/03/2023	175,000		01/03/2027
Shandong 2	Shandong Marine	Jiangnan	01/03/2023	175,000		01/07/2027
Venture Gator	JP Morgan	Samsung	01/10/2021	174,000		01/06/2024
Zhores Alferov	Hanwha Ocean	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/03/2024

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 = 19 February 2024

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	Titan Vision	12,000	LNG/LPG/Ethylene	Europe	No	Titan LNG
2011	Titan Unikum	12,000	LNG/LPG/Ethylene	Europe	No	Titan LNG
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
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2019	Blue Whale	7,500	LNG	Korea	Yes	Korea Line

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Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
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	
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	Levante LNG	12,500	LNG	Spain	Yes	Knutsen OAS
2023	SM Jeju LNG3	7,500	LNG	Korea	Yes	Korea Line
2023	New Frontier 2	18,000	LNG	USG	Yes	Shell
2023	Krios	4,200	LNG	Benelux	Yes	Titan LNG
2023	Alice Cosulich	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	Clean Everglades	5,500	LNG	USG	Yes	PNE
2023	FueLNG Venosa	18,000	LNG	Singapore	Yes	FuelLNG
2023	LNG Erasmus	8,000	LNG	NWE	Yes	Shell
2023	Energy Stockholm	8,000	LNG	NWE	Yes	Shell
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Coral Evolution	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 Garbaldi	7,600	LNG	Panama	Yes	Seaspan ULC
2024	Paolina Cosulich	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2024	Anhui Changjiang TBN	14,000	LNG	China	Yes	Anhui Changjiang LNG
2024	Keys Azalea	3,000	LNG / Oil	Japan	Yes	Keys Bunkering West Japan Co
2025	Seaspan TBN 2	7,600	LNG	Canada	Yes	Seaspan ULC
2025	Axpo TBN	7,500	LNG	Italy	Yes	Axpo
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	ScaleGas TBN	12,500	LNG	Spain	Yes	ScaleGas

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