

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

4 July 2024

EC sanctions aimed at Russian LNG operations

The European Commission's 14th package of sanctions against Russia, adopted by the European Council late last week, will target Russia's LNG activities, among other sectors.

Regarding LNG, the package prohibits all future investments in, and exports to, LNG projects under construction in Russia. It will also prohibit, after a transition period of nine months, the use of EU ports for the transshipment of Russian LNG.

In addition, the import of Russian LNG into specific terminals, which are not connected to the EU gas pipeline network, are also prohibited.

The measures also target Putin's tanker 'dark fleet', which circumvent the EU and price cap coalition's caps, while adopting deceptive shipping practices in complete disregard of international standards, the EC claimed.

In a first round of listings, the EU has placed 27 vessels of all types on the list, which can be

updated as needed. Included are the so called 'dark fleet' of tankers carrying Russian oil.

Russia exported 4-6 bill cu m of LNG through EU ports to non-EU countries in 2023, the EC revealed.

"The latest information I have is that somewhere in the range between 4 and 6 bill cu m of Russian energy were transhipped to third countries via EU ports in 2023," EC representative, Tim McPhie, said at a briefing in Brussels.

Nordic gas supplier, Gasum confirmed that the package included a prohibition to, for example, purchase or import LNG originating from Russia through European Union terminals that are not connected to the EU gas network.

This prohibition is due to come into force on 26th July, 2024.

Gasum said that the sanctions

do not allow it to terminate its agreement with Gazprom, but constitute a *force majeure* on the purchase or import of Russian LNG to off-grid terminals.

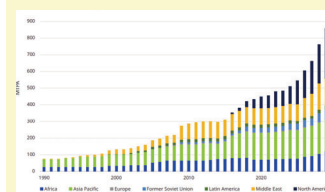
The company stressed that it will comply with all sanctions imposed by the EU and will not purchase or import Russian LNG from 26th July.

Fluxys' Zeebrugge and the French Montoir terminals are known to be involved in the transshipment of Russian LNG by which Arc7s arrived from Sabetta to discharge their cargoes, which are then transhipped to conventional LNGCs for onward shipment to Asia.

Outside the EU, Chinese shipyard, Wison, has also recently announced that it's quitting the Russian market.

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Uncertainties confront the LNG industry - IGU

Despite lower prices, the growing global LNG market has remained tight amid supply constraints, according to a new report.

Global LNG trade grew by 2.1% in 2023, surpassing 401 mill tonnes, the International Gas Union's (IGU) 15th annual World LNG Report said.

The global market now connects 20 exporting with 51 importing markets, but supply is currently the primary growth-limiting factor.

After two years of severe turbulence, the LNG market has a new found but fragile equilibrium, given a lack of spare supply in the near-term.

LNG has become a critical component of the global energy mix, with its role as a flexible, highly efficient, and reliable resource continuing to grow, and as such, de-carbonising the LNG value chain, the IGU claimed.

Several proposed projects are undertaking innovative emissions-reducing measures to meet de-carbonisation by integrating renewable electricity, carbon capture and storage (CCS), partnering to develop e-methane, and grow bio-LNG, or liquefied biomethane, which is produced from capturing and upgrading biogas that would have otherwise been emitted from landfills, agricultural waste, or other feedstock.

LNG receiving capacity growth has been shaping market development over the past two years, as it reached 1,029.9 mill tonnes per year across 47 markets as of the end of February, 2024, adding almost 70 mill tonnes in 2023 and making it the highest year of new additions since 2010.

Europe saw the greatest rise at 30 mill tonnes per annum, followed by Asia's 26.9 mill and Asia/Pacific's 13 mill tonnes per annum, as last

year, the Philippines and Vietnam joined the LNG importers' club.

However, supply remained constrained, with just 0.8% year-on-year growth from Indonesia's 3.8 mill tonnes per year addition at Tangguh LNG.

Global liquefaction capacity is likely to grow to over 700 mill tonnes per annum by 2030, driven by new FIDs and the start-up of projects currently under construction to support growing demand, particularly in the growing Asian markets, where coal-to-gas switching is an important de-carbonisation and air quality improvement strategy.

LNG exports were dominated by the US, which became the largest producer and exporter at 84.53 mill tonnes in 2023 versus 75.63 mill in 2022, followed by Australia (79.56 mill), Qatar (78.22 mill), and Russia (31.36 mill tonnes).

China returned as the largest LNG importer at 71.19 mill tonnes, while Japan and South Korea were second and third, respectively, despite annual declines. India retook fourth place, with more demand responding to the lower spot price.

Europe also cemented its role as an LNG importing heavyweight, maintaining its position as the second largest region at 121.29 mill tonnes in 2023. With LNG supplying almost half of Europe's gas, the competition between Asian

and European markets was a key market dynamic, the IGU said.

The LNG industry is no longer a game only for big markets or large companies, as portfolio players are playing an increasing role.

In 2023, about 180 companies were involved in LNG deliveries under term contracts, while about 35% of the transactions were spot priced.

Market risks

Going forward, several major uncertainties confront the supply constrained market.

These include - the Biden Administration's non-FTA LNG project approvals pause, which could delay over 70 mill tonnes per annum of new capacity; sanctions on Russian LNG, which could impact almost 20 mill tonnes of capacity; the possibility that Ukraine may not extend the Russian gas transit deal at the end of 2024; shipyard bottlenecks; the ongoing security risk in the Middle East; as well as some declining gas field supply.

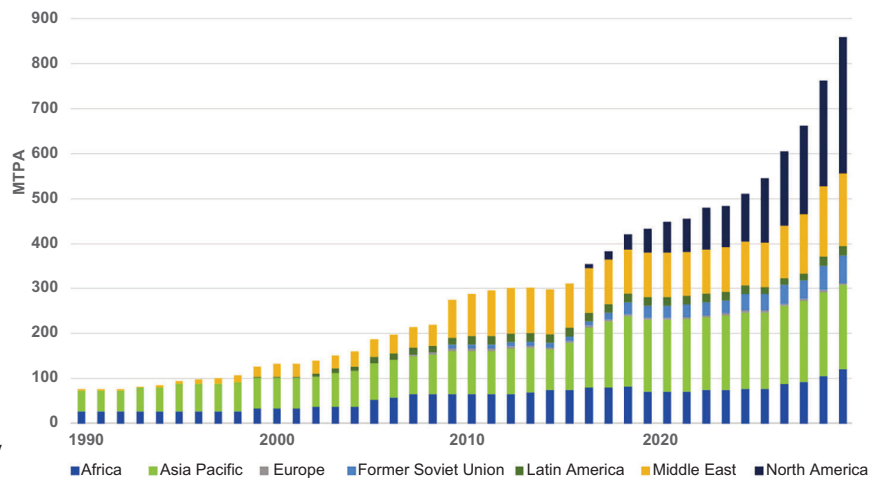
Over 120 mill tonnes per

annum of today's operational liquefaction capacity is over 20 years old, and some of these facilities are being mothballed, due to insufficient upstream gas production, which adds to the supply side risk.

IGU President, Li Yalan, commented: "The LNG industry has demonstrated incredible agility and innovation through some of the toughest tests over the recent years, and this is an industry that continues to play a pivotal role to navigate through an energy crisis that has not yet been fully resolved and an energy transition that has been challenged."

"As the world moves toward a low emissions future, nations are seeking ways to achieve their climate commitments, while keeping energy affordable, available, and secure. LNG is a tool that will be critical to providing greater resiliency for rapidly changing energy systems around the world, and it will have an essential role mitigating the inherent risk of uncertainty through that process," he concluded.

Global reliquefaction capacity growth by region, 1990-2029



Source: IGU

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
lancochran74@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

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China's LNG imports set to slow

China appears to have taken advantage of low prices in the spot market thus far this year to boost its gas storage and absorb some of the extra gas that would otherwise have been sent to Europe.

But as storage facilities fill and spot prices rise, the intake is likely to diminish over the summer, redirecting more LNG cargoes to Europe and accelerating this region's fill rate, Reuters claimed in a report.

China does not publish statistics on gas, oil or coal inventories, as they are considered commercially sensitive and a matter of national security.

However, the country consumed a record 55 mill tonnes of gas from overland pipelines and seaborne LNG in the first five months of 2024, according to data from China's General Administration of Customs.

This intake rose from 47 mill tonnes in the first five months of 2023 and 46 mill in the same period of the previous year, when Russia's invasion of Ukraine sent spot gas prices soaring and comfortably exceeding the pre-invasion record of 50 mill tonnes set in the first five months of 2021.

China's LNG imports were above previous year levels each month between January and May, and pipeline imports were also

above the levels in every month except April.

At the same time, domestic production surged to a record 76 mill tonnes in the first five months of 2024 from 72 mill in 2023, 68 mill in 2022 and 64 mill tonnes in 2021.

Output from Sichuan, easily the largest gas-producing province, has doubled since 2016, as the Chinese Government prioritised expansion of domestic fields to reduce reliance on imports.

Production record

As a result, the total amount of gas available from domestic production and imports hit a record 130 mill tonnes in the first five months of this year, up from 118 mill in 2023 and 114 mill in 2021.

China continued to connect more urban households to its gas network to reduce coal burning and improve air quality. But the huge increase in the amount consumed thus far this year far outstripped additional demand from households and industry.

Much of the extra imported gas

has likely been used to top up domestic storage after inventories were allowed to run down in 2023 and 2022.

China has a long tradition of actively using government run inventories to stabilise commodity prices, which has been seen as a core function of the state. Today, there are signs that this is being applied to gas via changes in LNG imports.

China's importers have contracted large volumes of LNG from Qatar, Australia, Malaysia and many other smaller exporters, but in some cases the buyers have been able to insist on flexibility to resell to third countries. As a result, China can adjust LNG imports and inventories in response to changes in spot market prices.

In 2022/23, flexibility was employed to trim LNG imports and run down inventories in response to surging spot market prices. A year later, this strategy was reversed to take in more cheap gas and refill storage.

However, spot market prices for gas delivered to Northeast Asia

climbed to an average of more than \$12 per MMBtu thus far in June, up from less than \$9 in February and March.

As prices are no longer cheap, compared with previous years. China is likely to reduce discretionary purchases and slow the rate of inventory accumulation.

As it backs away from the spot market, more LNG will be sent to Europe, as well as price-sensitive customers in south and southeast Asia, Reuters said.

Meanwhile, a subsidiary of China National Offshore Oil Corp (CNOOC) has completed the construction of China's largest LNG storage base, located at Yancheng in Jiangsu Province.

The base has a combined LNG storage capacity of 2.5 mill cu m, the company said, according to a Chinese Government post, made up of four 220,000 cu m tanks and six of 270,000 cu m.

Once fully operational, the new storage base will have the capacity to process up to 6 mill tonnes of LNG annually, equivalent to 8.5 bill cu m of natural gas. ■

Eemshaven terminal operations could be extended

Dutch terminal energy operators, Gasunie and Vopak have started market consultations for the installation of LNG, hydrogen and CO2 infrastructure at the EemsEnergyTerminal.

In partnership with the Dutch Ministry of Economic Affairs and Climate Policy, they are exploring options to keep operating the EemsEnergyTerminal, located at Eemshaven, near Groningen, for longer than originally planned.

The survey will not only look at LNG but will also explore ways to bring about a future, rapid transition to a sustainable energy system; one in which hydrogen and carbon capture and storage play key roles.

Following the loss of Russian gas and the end of gas extraction from the Groningen gas field, security of Netherlands and its

neighbouring countries' energy supply has changed drastically.

Currently, roughly 75% of Netherlands' gas needs are met by imports. As imports are expected to continue to be required over the coming years, the LNG terminal is set to play a key role in the transition to renewable energy.

The partners are making plans for further hydrogen development at the Eemshaven site and exploring options for carbon capture and transport in line with the transition to a sustainable energy system.

To assess the viability of this option, Gasunie and Vopak have

launched a consultation to gauge the market's interest in hydrogen and CO2 and to see what would be possible, including the importing LNG through the terminal beyond 2027, as well as to get an idea of the conditions market players would set.

It will also look at permit regulations and the required technical aspects. The results of the consultation may lead to an 'open season' where the required capacity is offered to the market in a transparent manner.

Operational since September, 2022, EemsEnergyTerminal was initially contracted for a period of

five years - through to September, 2027. The LNG import terminal was developed by Gasunie to increase the security of gas supply and reduce dependence on Russian gas.

In December, 2023, Vopak became a co-shareholder in the project and now the companies hold 50% each.

The terminal can import 8 bill cu m of LNG annually, which covers around 25% of the Netherlands' total annual gas demand.

Work is currently underway to gradually raise the terminal's capacity to roughly 10 bill cu m per year. ■

FSRU boom in LNG demand growth

FSRU demand is expanding on the back of a shift in global LNG trades.

FSRU capacity will grow at a CAGR of 6%, supported by robust LNG trade growth of 8.3% between 2024 and 2029, Drewry Maritime Research said in a report.

While Europe's LNG demand is immediate, Asia is seeking more long-term growth.

However, FSRU availability is tight, due to European projects acceleration, and this trend will continue, as plans for more LNG import projects emerge.

Increasing unit supply will be challenging, due to the unavailability of shipbuilding slots, which will spur demand for LNGC conversions. Drewry also expected that some FSRUs deployed in Europe will be re-assigned, as the region's LNG demand growth becomes saturated.

Following the Russian/Ukraine war, a surge in FSRU usage became evident, as six units (24.4 mill tonnes per year capacity) came online in 2023, preceded by three FSRUs (9.8 mill tonnes) in 2022, compared to just one (1.2 mill tonnes) in 2021 and none during 2019/20.

However, it brings with it signs of uncertainty, as other factors begin to influence demand for LNG in Europe. These are weather conditions, industrial production, energy efficiency measures and renewable energy output.

Europe continues to expand its

regasification capabilities, with three FSRUs - Stade FSRU, Alexandroupolis FSRU and Mukran FSRU - adding 12 mill tonnes per annum of new import capacity, in 1Q24.

Around 85% of Europe's new regasification capacity since 2022 has utilised

FSRUs, a trend that will continue, as the current and planned European units will cater for robust LNG demand until the end of this decade, Drewry said, when about 100 mill tonnes per annum of FSRU-based regasification capacity will be available.

Drewry also warned that a widening gap is expected between the expanding regasification capacity and LNG demand growth after peaking in early 2030.

This imbalance will lead to significant underutilisation of the existing infrastructure.

Any potential over investment will encourage FSRU-based terminals utilisation, as they offer operational flexibility and lower cost, compared to onshore terminals.

The current utilisation rate will be reduced in the long run once the reliance on LNG begins to wane, leading to a reduction in investor interest and thus, Drewry

was pessimistic for FSRU usage post 2030.

In Asia, the demand outlook is bright, with potential investments on the horizon, supporting LNG import infrastructure expansion, particularly FSRUs.

Despite Europe absorbing most of the operational FSRUs since 2022, Asia started two FSRU projects in 2023 - the Hong Kong Off-shore terminal (4.4 mill tonnes) and Batangas FSRU LNG terminal (5.2 mill tonnes). In addition, India is set to launch its first off-shore terminal- Jafrabad FSRU (5 mill tonnes per annum) this year.

Emerging markets

Apart from the major players, such as China and India, emerging markets, including the Philippines, Vietnam and Sri Lanka, are encouraging FSRU developments to support their snowballing LNG requirements, as these countries aim to introduce additional gas-fired power plants.

The current utilisation rate of FSRUs averaged around 50-55% in Asia in 2023, which could be attributed to - intensified competition from Europe in securing LNG cargoes, lower LNG intake and elevated and volatile LNG prices.

However, lower prices were expected post-2027, while the region's growing LNG demand will boost imports, expanding regional FSRU utilisation.

This will also be supported by the rising conversion opportunities during 2025/26, as several steam turbine vessels (constituting 30%

FSRU growth estimates



Source: Drewry Maritime Research

of the current fleet) will become unoperable, due to ageing and growing environmental regulations.

Drewry identified about 20 planned projects and 28 potential projects that could require an FSRU. This will keep newbuilding prices elevated, encouraging market players to opt for conversions.

About 25 mill tonnes per annum of under construction and planned FSRUs will be in service by 2027/28 in South and Southeast Asia, which will cash in on lower LNG prices or competitive supplies by 2028.

Growing regional LNG trade and increasing strategic alliances could also accentuate the FSRU's role. For example, India's Petronet has signed an alliance with Sri Lanka to provide LNG.

The company will build an FSRU terminal in Sri Lanka, which will provide impetus to the government to accelerate the development plans for the Colombo LNG terminal (2 mill tonnes per annum).

Overall, Drewry predicted that FSRU utilisation will be higher than that of onshore LNG terminals in Europe as opposed to Asia. However, Asian FSRU utilisation will improve, as the continent is expected to lead the growth in LNG demand, supported by the expansion and improvement of domestic infrastructure.

In the long run - beyond 2035 - European utilisation will decrease, as the region moves away from fossil fuels, while it will continue to grow in Asia, Drewry said.

NEWS NUDGE

Argent LNG selects Chart's technology

US energy developer, Argent LNG, has selected Chart Industries' mid-scale modular liquefaction solution for its planned 20 mill tonnes per year LNG facility at Port Fourchon, Louisiana.

This move represents a significant departure from conventional large-scale LNG facilities, challenging the industry's traditional operational paradigm, the company claimed.

Chart Industries' patented IPSMR (integrated pre-cooled single mixed refrigerant) process technology is at the core of the system.

IPSMR enables Argent LNG to tailor its liquefaction systems precisely to site specific conditions. This capability optimises the matching of gas turbine power with single cold box capacity.

Chart has begun the engineering work for the project and anticipates booking the IPSMR technology and equipment order next year.

Cedar LNG takes FID

Haisla Nation and Pembina Pipeline Corp, partners in Cedar LNG have agreed a final investment decision (FID) on the project located at Kitimat, British Columbia.

This is an FLNG facility with a nameplate capacity of 3.3 mill tonnes per annum, in Haisla Nation's territory, on Canada's West Coast.

The developers claimed that this project is strategically positioned to leverage Canada's abundant natural gas supply and deliver a lower-carbon energy option to global markets.

Cedar LNG will be powered by renewable electricity from BC Hydro, making it one of the lowest emitting LNG facilities in the world.

"Today, the Haisla Nation, with our partner Pembina, have made history as the world's first indigenous community to develop an LNG facility as majority owners," said Crystal Smith, Haisla Nation's Chief Councillor. "Because of our Nation's determination and environmental leadership, Cedar LNG will make the most significant mark on economic reconciliation ever in our country.

"With Cedar LNG, we have proven that indigenous communities can successfully forge a path to economic independence and generational prosperity. We have created a model for how sustainable energy development should be done, with indigenous nations as owners, balancing environmental interests with global demand for cleaner energy," he said.

"Together with our partner, the Haisla Nation, we are honoured to have made Cedar LNG a reality. This is a historic moment, and we are proud to be moving forward with a project that will deliver industry-leading, low-carbon, cost-competitive Canadian LNG to overseas markets and contribute to global energy security, while delivering jobs and economic prosperity to the local region," added Scott Burrows, Pembina's President and CEO. "Cedar LNG aligns perfectly with our strategy and where we want to be as a company moving forward.

"The Cedar LNG project will enhance the resiliency of Pembina's business, provide much needed new egress and greater access to global markets for our customers, and reflects the Haisla Nation and Pembina's shared values and commitment to supporting a more sustainable future," he said.

"As a result of the Haisla Nation's vision and determination, today we are demonstrating Canada's ability to sustainably grow its LNG export sector to support the global clean energy transition," commented Doug Arnell, Cedar LNG CEO. "Moreover, the Haisla Nation and Pembina, as true partners, are demonstrating a new model for how industry and Indigenous communities can work

together for mutual benefit."

Finance

The partners also revealed that the project is expected to be funded with asset level debt financing for about 60% of the cost. Cedar LNG has already secured a construction term loan with a syndicate of banks.

The remaining 40% is expected to be financed through equity contributions from both partners.

Haisla Nation has obtained committed capital through the First Nations Finance Authority to fund its 20% equity contribution. Pembina anticipated its equity contribution will be funded from cash flow from operating activities.

Cedar LNG has secured 20-year take-or-pay liquefaction tolling services agreements with ARC Resources and Pembina for 1.5 mill tonnes per annum each.

Commercial discussions are continuing with other prospective customers, as Pembina intends to assign its contracted capacity to a third-party.

Cedar LNG was represented by Latham & Watkins with a team led by Los Angeles partner, Jeff Greenberg, New York partner, Hamad Al-Hoshan, and Houston partner, Chris Peponis, with associates, Meredith Strike, Dominika Kovacicova, and Victoria Gross. ■

NEWS NUDGE

TMC wins more contracts

TMC Compressors (TMC) has been awarded compressor contracts by Hyundai Heavy Industries (HHI) and Hanwha Ocean.

The Hyundai contract calls for the delivery of marine air lubrication system (ALS) compressors to four 174,000 cu m LNGCs under construction for Japanese shipowner NYK.

Each of the four vessels will be equipped with HHI's proprietary Hi-ALS, which will be utilised in combination with HHI's system.

TMC's equipment will be manufactured in Scandinavia and shipped to HHI in South Korea.

The LNGCs are scheduled for delivery in 2027 and will go on charter with German controlled EnBW Energie Baden-Wuerttemberg.

Meanwhile, the Hanwha contract involves a complete marine compressed air system being supplied to three 174,000 cu m LNGCs under constructing for an undisclosed Asian shipowner.

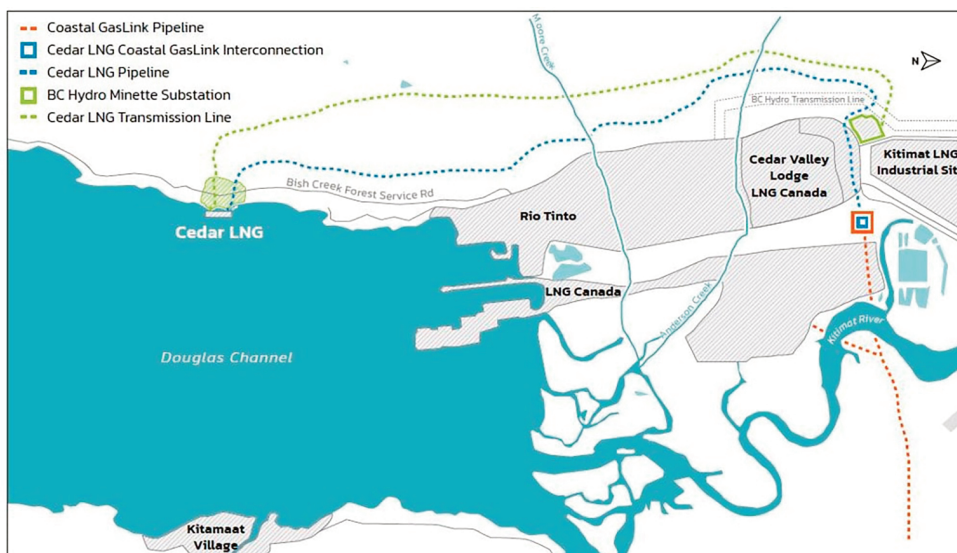
TMC will supply the compressed air system, which will include control and service air compressors, plus nitrogen feed air compressors, to each of the three vessels. This system is designed to allow the vessels' crew to undertake maintenance.

MOL to buy LNG Rose Shipping

Mitsui OSK Lines (MOL) is to acquire the remaining 50% stake in LNG Rose Shipping Corp from Itochu Corp.

The Japanese major already owns 50% of Rose Shipping and once the deal is completed, it will become a wholly-owned subsidiary of MOL.

Rose Shipping, registered in the Marshall Islands, was established in December, 2014 as a joint venture between MOL and Itochu to own LNGCs and to execute timecharters. ■



The planned Cedar LNG facility

CP2 LNG gets the go ahead

Despite the Biden Administration's pause, the US Federal Energy Regulatory Commission's (FERC) has approved Venture Global's CP2 LNG, the company's third export facility.

"Venture Global applauds the Commission and FERC staff for their independent and thorough review and approval of CP2 LNG," said Mike Sabel, Venture Global LNG CEO. "This project will be critical to global energy security and supporting the energy transition, as well as provide jobs and economic growth across Louisiana and the United States."

"We appreciate Commissioner Clements' service on the Commission and look forward to continuing to work with Chairman Phillips, Commissioner Christie, and the newly confirmed commissioners, as well the outstanding FERC staff."

"I'd like to thank the Venture

Global team who has worked with professionalism and great resolve to answer all requests from our regulators. We look forward to a swift non-FTA approval from the US Department of Energy for this project that is critical to both global and national security," he said.

Thus far, CP2's initial phase has been sold through 20-year sales and purchase agreements (SPAs) with ExxonMobil, Chevron, JERA, New Fortress Energy, INPEX, China Gas, SEFE and EnBW. In addition, CP2 LNG has recently signed an HoA

with DTEK of Ukraine for LNG.

Venture Global also said that it is in active discussions for the re-

maining capacity and has launched significant off-site construction of the project. ■



Venture Global has taken delivery of its first LNGC, 'Venture Gator' (see News Nudge page 9)

NYK to co-operate with Pertamina

NYK and PT Pertamina International Shipping (PIS), a marine logistics subsidiary of Indonesian state-owned energy company, PT Pertamina (Persero), have signed a memorandum of understanding (MoU) to jointly develop LCO2 and LNG projects.

The two partners will also establish a shipmanagement company.

NYK said that it aimed to develop a strong co-operative relationship with PIS in the field of LCO2 and LNG transportation, which is a priority for the Indonesian government and is expected to grow in the future towards a low-carbon and de-carbonised society.

Furthermore, by jointly establishing a shipmanagement company, NYK planned to contribute to stable ocean transportation and create opportunities for training and employment for seafarers in the country.

Under the MoU, based on the partnership agreements signed in 2022, both parties will collaborate to obtain business opportunities through assessments and feasibility studies for the transport of LCO2 to and from Indonesia. ■

As for LNG, NYK and PIS agreed to begin full-scale discussions on joint ownership of LNGCs.

Based on NYK's more than 40 years of experience in owning and operating LNGCs, the Japanese major will work with PIS to meet Indonesian LNG transport demand, where further expansion of LNG production and consumption is expected.

Through the establishment of a shipmanagement company, NYK said that it aimed to build a stronger relationship with PIS and provide advanced shipmanagement services to meet the expected increase in demand for ships in Indonesia.

Pertamina Presiden, Nicke Widyawati, PIS President, Yoki Firnandi, and NYK Managing Executive Officer, Hironobu Watanabe attended the signing ceremony at Pertamina's headquarters in Jakarta, Indonesia. ■

Sempra and Texas LNG sign SPAs

Two more SPAs have been reported recently.

Saudi energy giant, Aramco has signed a non-binding heads of agreement (HoA) with Sempra, which involves a 20 year sales and purchase agreement (SPA) for 5 mill tonnes of LNG per year.

The LNG will be supplied from Sempra's Port Arthur LNG Phase 2 expansion project.

In addition, the HoA could lead to Aramco taking a 25% interest in the project.

Both companies expect to sign a binding SPA and equity agreement, subject to a number of conditions, they said.

Port Arthur LNG Phase 1 is currently under construction and will consist of two trains, as well as storage tank capacity, plus associated facilities.

Port Arthur LNG Phase 2 consists of up to two extra trains capable of producing up to 13 mill tonnes per year of LNG.

Sempra Infrastructure's Port Arthur energy hub will have the potential to expand to eight trains, which would position the

project as one of the largest export facilities, the company said.

Elsewhere, Glenfarne's Texas LNG Brownsville has signed a non-binding HoA with an undisclosed party for a long term free-on board (FOB) SPA for 500,000 tonnes per year.

"This agreement positions Texas LNG on the verge of full sell out, and we look forward to finalising our offtake partnerships in the near future," said Brendan Duval, CEO and Founder, Glenfarne Energy Transition and Co-President of Texas LNG.

Texas LNG claimed that it is in advanced negotiations with several potential offtakers for the project's remaining volume.

Construction will begin this year and commercial operations will start in 2028. Glenfarne Energy Transition's LNG portfolio also includes the 8.8 mill tonnes per year Magnolia LNG export facility under development in Lake Charles, Louisiana. ■

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Kimmeridge takes majority stake in Commonwealth

Kimmeridge has announced the closing of a follow-on control investment in Commonwealth LNG through its affiliate, Kimmeridge Texas Gas (KTG).

The funding will support the 9.5 mill tonnes per annum LNG export facility in Cameron, Louisiana, through an anticipated final investment decision (FID) in the first half of next year.

It will also raise Kimmeridge's equity ownership in Commonwealth to over 90%.

KTG has also appointed David Lawler as CEO effective immediately.

Lawler brings more than 30 years of experience in the energy sector. Most recently, he served as Chairman and President of BP America, which accounted for nearly 40% of corporate global revenue.

In addition, he served as CEO of BPX Energy, BP's onshore unconventional and midstream business.

Ben Dell, Kimmeridge Managing Partner and KTG Director, said, "We welcome David to the KTG team as it enters a compelling

new era of growth, while accelerating carbon neutrality through the development of environmentally responsible, low-cost energy assets.

"David has shaped and led large-scale, best-in-class operations that align with Kimmeridge's commitment to enhancing capital efficiency and reaching net-zero operations. Additionally, we would like to thank Mike Wieland for all his contributions as CEO of KTG since September, 2022, helping to build it into the high-quality, scaled asset it is today."

"We are excited to take a controlling interest in Commonwealth LNG, as we integrate our business from well-head to water, and look forward to the completion of a best-in-class LNG export facility in Louisiana," he said.

Farhad Ahrabi, Commonwealth CEO and President, added, "We are delighted to integrate into the

Kimmeridge team as we work towards FID in 2025. Kimmeridge shares our vision of bringing a differentiated offering to the LNG market, and we look forward to commencing delivery to our customers in 2028."

Lawler, commented, "I am very pleased to join the KTG team and look forward to advancing the company's plans of becoming a fully integrated provider of LNG from well-head to water, including through our expanded partnership with Commonwealth, with an option for net zero cargoes.

"When produced responsibly, LNG is a reliable, easily accessible energy source. In the future, KTG will export clean energy across the world, helping economies accelerate their transition ambitions," he concluded.

Founded in 2012, Kimmeridge is an alternative asset manager focused on the energy sector.



Kimmeridge has appointed David Lawler as CEO of KTG

Affiliate Kimmeridge Texas Gas is a conventional producer of natural gas. With around 148,000 net acres in Texas, the company produces around 400 mill cu ft equivalent of natural gas and oil per day, selling into the South Texas market with access to Mexican export channels, to LNG terminals for global sales, and into pipelines directly servicing Gulf Coast petrochemical facilities. ■

Dynagas lease finances four LNGCs

Dynagas LNG Partners has reported net income and earnings per common unit (basic and diluted) of \$11.8 mill and \$0.23, respectively for the first quarter of this year.

Adjusted net income was \$12.4 mill and adjusted earnings per common unit (basic and diluted) was \$0.25, while adjusted EBITDA came in at \$29 mill.

Dynagas also claimed 100% fleet utilisation and declared and paid a cash distribution of \$0.5625 per unit on its Series A preferred units for the period from 12th November, 2023 to 11th February, 2024 and \$0.71764025 per unit on the Series B preferred units from 22nd November, 2023 to 21st February, 2024.

Following the results announcement, the LNGC operator declared a quarterly cash distribution of \$0.5625 on the series A preferred units for 12th February, 2024 to 11th May, 2024, which was paid on 13th May, 2024 and de-

clared a quarterly cash distribution of \$0.69853375 on the series B preferred units for 22nd February, 2024 to 21st May, 2024, which was paid on 22nd May.

LNGC financing

On 19th June, 2024, the Partnership entered into definitive documentation with subsidiaries of China Development Bank Financial Leasing (CDBL) for a \$345 mill lease financing agreement of four out of its six LNGCs.

Eight days later, the new lease facility, together with available cash, were used to fully prepay Dynagas' \$675 mill credit facility, scheduled to mature in September of this year.

CEO, Tony Lauritzen commented: "For the first quarter of

2024, we reported net income of \$11.8 mill, earnings per common unit of \$0.23, adjusted net income of \$12.4 mill and adjusted EBITDA of \$29 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 6.6 years. Barring any unforeseen events, the Partnership will have no contractual vessel availability until 2028.

"Our estimated contract backlog currently stands at approximately \$1.07 bill, equating to approximately \$178 mill per vessel as of 27th June, 2024.

"We are pleased to announce a new lease financing agreement with China Development Bank Fi-

nancial Leasing for four of our LNG carriers. This financing, totalling \$345 mill, along with our available cash reserves, has enabled us to fully prepay our existing outstanding debt in the amount of \$408 mill before its maturity in September, 2024.

"After a protracted period of strategic deleveraging, we now enjoy significantly lower debt levels and a flexible financing package with two of our LNG carriers debt free. This positions us well in the next phase of the Partnership's development," he said.

The Partnership also said that it is currently assessing the impact of the EU's 14th round of Russian sanctions (see page 1) will have on its operations. ■

Navarino wins Höegh LNG IT contract

Höegh LNG has chosen Navarino's IT-as-a-service platform, Quazar to replace its vessels' current systems.

The LNGC and FSRU owner said that it was looking for a standardised and cost-efficient set-up that would meet the company's strict cyber security requirements.

Quazar comes as a complete on board IT infrastructure, including hardware, software, support and maintenance, all for a single monthly fee.

Certified by Bureau Veritas (BV), it offers seamless deployment and a cost-effective way for maritime companies to handle their IT needs without the complexities of technical management, Navarino claimed.

Kjell Erik Hofland, Höegh LNG's IT Senior Vice President, said: "We were seeking to standardise our operations - which we have achieved with Quazar. It not only meets our requirements but also provides full insight and control over our on board IT infrastructure.

"We enjoyed a smooth transition to this new solution with Navarino and we enjoy a very good working relationship.

"Höegh LNG has an advanced vessel IT environment and, as it becomes more and more complex, having a certified and fully supported IT service like Quazar

brings both new efficiencies and functionalities.

"Quazar has provided standardisation, which provides advantages, including quicker resolution of issues, ease of knowledge-transfer between ships and of course, cost efficiencies. The Quazar services have also provided cost predictability with a fixed monthly fee approach. All support or maintenance tickets are very transparent.

"We are a company that treats cyber security with very high priority, we feel we are in good hands with Quazar Information Security Management System,"

he said.

Ivo Terhell, Navarino's Vice President of Sales for Europe, added: "We are delighted to be working with one of the biggest names in Norwegian shipping on such a complex and game changing project.

"At Navarino, we believe that Quazar is the future of maritime IT, and to partner with Höegh LNG on implementing that future is very exciting. I would like to thank Kjell Erik and his team for choosing Navarino and I look forward to continuing working closely with them in the coming years," he said. ■

NEWS NUDGE

Ships - Newbuildings, deliveries

ADNOC Logistics and Services has awarded Samsung Heavy Industries and Hanwha Ocean four LNGC newbuilding contracts each.

This up to \$2.5 bill (AED 9.2 bill) investment project is part of the company's growth strategy and fleet expansion plan.

Each shipyard also has an option for a fifth vessel.

They are expected to be delivered by the beginning 2028 and will be timechartered to ADNOC Group subsidiaries for 20 years to support the growing export volumes of Abu Dhabi's natural gas.

The new vessels will increase the company's fleet of LNG carriers from 14 to at least 22 vessels.

They will each have a capacity of 174,000 cu m and feature MEGA and XDF2.2 engines, which will produce the best fuel economy and lowest emissions in the company's fleet.

They will also be fitted with a cargo conditioning system designed to reduce LNG evaporation while in transit, systems to

direct cargo boil off gasses to the engines that will increase fuel efficiency and decrease fuel consumption, a real-time emissions monitoring system, and new cargo containment systems to reduce methane emissions.

Venture Global has announced the launch of its first LNGC, 'Venture Gator' at a ceremony which took place at the Samsung Heavy Industries shipyard in Geoji-si, South Korea.

She is the first of nine LNGCs for Venture Global to be completed in quick succession across three shipyards in South Korea over the coming 24 months, to ship LNG from the US to its global partners and destinations.

'Venture Gator' has a capacity of 174,000 cu m, is fitted with an on board reliquefaction system; air-lubrication systems; an auxiliary shaft generator and exhaust gas recirculation systems.

New entrant, Hyundai Glovis has taken delivery of the 174,000 cu m 'Woodside Scarlet Ibis', the motor group's subsidiary's first LNGC.

Built by HD Hyundai Samho Co

she is chartered to Australia's Woodside Energy Group.

In April, 2022, Hyundai Glovis and Woodside signed a 10-year charter deal for a new LNGC. The charter includes an option for an additional five years.

Egypt's LNG tenders awarded

Egypt's recent tender for 17 LNG cargoes for delivery this summer has been fully awarded.

The price was at \$1.60-\$1.90 premium to the benchmark Dutch TTF hub gas price, traders told Reuters last week.

Egypt is seeking three more cargoes for delivery in August/September, the sources also said.

This marks the country's largest LNG purchase for many years and returns it to being a net importer of gas.

Egypt's state-owned Natural Gas Holding Co (EGAS) had sought the cargoes, which comprised seven in July, six in August and four in September on an ex-ship (DES) basis, with deferred payments of up to six months.

They were primarily awarded to trading houses, including Glencore and Vitol. Other major

players, including BP and Total-Energies, as well as smaller companies, including commodity trader Hartree, won a few cargoes, they said, without providing further details.

GTT receives LNGC and FSRU orders

GTT has received orders for the tank design of 10 new large 271,000 cu m LNGCs, plus an FSRU.

The 10 LNGCs will be built at Hudong-Zhonghua Shipbuilding (Group) and will be fitted with the NO96 Super+ membrane containment system.

Their delivery is scheduled for between the first quarter of 2030 and the fourth quarter of 2031.

The FSRU order came from HD Hyundai Heavy Industries on behalf of the Japanese shipowner Mitsui OSK Lines (MOL).

This FSRU will have a total capacity of 170,000 cu m, while she will be fitted with the Mark III membrane containment system.

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

Galileo to supply BOG recovery systems

Galileo Technologies has won a contract to supply equipment to Canada's Saint John LNG, a fully owned subsidiary of Repsol.

The equipment is for a project aimed at addressing the challenge of boil-off gas (BOG). Traditionally, BOG is compressed and sent back to the pipeline.

However, by installing of Galileo Technologies' reliquefaction solu-

tion, Saint John LNG will be able to recover and store the BOG to serve the market, especially during times of high demand.

The contract involves the design, fabrication and installation of eight BOG compressors, 15 Cry-

obox™ units and associated utility packages, which will be provided from Galileo's manufacturing centre in Middlesex, New Jersey.

Galileo said that the impact of this project is substantial, as it has the potential to re-liquefy about 10

mill cu ft per day of natural gas.

By implementing the new compression and re-liquefaction technologies, the systems will enhance operational efficiency and improve service to local customers, the company said.

"This project represents a significant investment in the future of our operations. By optimising our processes and harnessing innovative technologies, we are poised to deliver greater value to our customers while advancing our sustainability objectives," said Courtney Jones, Saint John LNG's General Manager.

Ty Webb, Galileo North America's Senior Vice President, added, "We are very proud that we have been selected to support Saint John LNG in their significant project venture. Our experienced team of LNG and project professionals will utilise their extensive experience and our innovative solutions to ensure a successful project for all parties."



Galileo is to supply BOG equipment to Saint John (NB)

Steelhead gains patents - sues LNG developers

Vancouver (BC) based LNG developer, Steelhead LNG has recently received patents in the US and South Korea.

These awards were in relation to its proprietary near-shore floating LNG production facility system and are in addition to others already issued to Steelhead in Canada, Australia and Mexico.

The patents cover pivotal aspects of Steelhead LNG's unique solution; a cost-effective method of liquefying natural gas for export, the company said.

Through the incorporation of electric drive compressors, air cooling modules and integrated storage, among other features, Steelhead's LNG's patented solution can achieve virtually unparalleled carbon emission reductions and avoid harmful environmental impacts associated with cooling water systems in such facilities, the company claimed.

"We are delighted to receive these patents in the US and South Korea," said Victor Ojeda, Steelhead LNG President. "This recognition validates our decade-long efforts to pioneer sustainable LNG solutions that meet the evolving needs of the industry and society."

Litigation

In parallel, Steelhead LNG is currently engaged in patent infringement litigation with Cedar LNG Partners and Pembina Pipeline Corp in respect of the Cedar LNG project in Western Canada.

Steelhead LNG alleged that Cedar LNG infringes its Canadian patent and is seeking an injunction preventing the use of its patented solution, as well as

significant damages.

"We strongly prefer open dialogue and constructive collaboration," added Ojeda, "but there must be respect for Steelhead LNG's intellectual property portfolio."

Steelhead LNG has also invoked a series of claims against Rockies LNG, including alleging that its proprietary facility design information was improperly used to initiate the Ksi Lisims LNG project on the West Coast of Canada.

The company said that it remained committed to protecting its intellectual property rights and proprietary information, while continuing to focus on advancing LNG technology solutions and delivering value to its stakeholders.

NEWS NUDGE

Adriatic offers capacity for 20 years

Offshore Italian regasification terminal operator, Adriatic LNG, has launched an accreditation phase for 'Open Season 2024'.

Adriatic LNG is offering regas capacity between January, 2029 and December, 2049.

Interested parties have until 12th July, 2024, to apply to participate in the open season's binding phase, which will start on 17th July and end on 31st July, 2024.

Wison to build Genting FLNG

On June 20, 2024, Wison New Energies (WNE) and PT Layan Nusantara Gas with Genting Oil & Gas, both subsidiaries of Genting Berhad, signed an engineering, procurement, construction, installation, and commissioning (EPCIC) contract for an FLNG.

This contract was signed in conjunction with the visit of Chinese Premier. Li Qiang to Malaysia to commemorate the 50th anniversary of the establishment of diplomatic ties between the two countries.

With a nameplate capacity of 1.2 mill tonnes per annum of LNG production, the FLNG will be one of Wison's standard designs and is planned for West Papua, Indonesia.

Witnessed by the senior leaders of the two countries, Mr. Liu Hongjun, Chairman of Wison New Energies, and Tan Sri Lim Kok Thay, the Chairman and Chief Executive of Genting Berhad together with Dato Sri Tan Kong Han, President & COO & Executive Director of Genting Berhad, signed the EPCIC contract.

Liu Hongjun, Wison New Energies' Chairman, said, "We are very

honoured to co-operate with Genting Group. The successful signing of this project will further promote Belt and Road co-operation, and greatly contribute to Indonesia's energy transition and economic development.

"The Genting Group's FLNG facility is not only the first FLNG facility in Indonesia, but also another milestone FLNG project for WNE, as this will be the third FLNG facility built by us. We will go all out, live up to the expectations of our client, and ensure the timely delivery of this project with high quality," he said.

On 8th September last year, both parties entered into a limited notice to proceed agreement (LNTA) to purchase long lead items for the FLNG.

The first steel for the project was cut on 7th June, 2024 and the project is expected to achieve



A standard Wison designed FSRU

first LNG in the third quarter of 2026.

Genting's Oil & Gas division was founded in 1996. It has identified or acquired exploration & production (E&P) acreage down the years, including production at Zhuangxi Buried-Hill block in China, and the exploration at Muturi production sharing contract

(PSC), Northwest Natuna PSC and Anambas PSC in Indonesia but has since disposed of its interests in all of these assets.

Its existing assets include an oil producing Chengdaoxi Block in the shallow waters of Bohai Bay, China and a gas development field under the Kasuri production sharing contract in Indonesia. ■

Fulcrum selects partners for Guyana LNG

A large natural gas project planned for Guyana by US energy developer, Fulcrum LNG, will involve partnerships with energy service company, Baker Hughes and engineering firm McDermott.

Guyana's President, Irfaan Ali recently revealed that Fulcrum LNG had been chosen from 17 companies to help Guyana develop a plan to design, finance, construct and operate gas processing facilities.

The project will need between \$10 bill and \$15 bill in investment.

According to Reuters, Fulcrum LNG is expected to work with a consortium led by ExxonMobil, which controls all of Guyana's

crude and gas production, plus the government on the project.

Guyana is estimated to have some 16 trillion cu ft of gas off its coast, according to the US Energy Information Administration (EIA).

Fulcrum LNG's proposal would also include financing from the US Export-Import Bank and the participation of private equity interests and an environmental partner, Vice President Bharrat Jagdeo told a media briefing. ■

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$269.54 mill
Five years old (174,000 cu m)	\$231.83 mill
Total Fleet (599 ships)	\$101.34 bill
Orderbook (389 ships)	\$108.29 bill

*Source: VesselsValue (01/07/24)

*The above is updated each month courtesy of VesselsValue

LNG rate assessments

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

Region	This week	Change*
East of Suez	\$39,000	+\$500
West of Suez	\$65,000	+\$20,000
12 mos T/C	\$61,000	+\$500

*Since last report (20/06/24)

Source: Fearnleys (03/07/24)

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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
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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	Knutson	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	Knutson	Hyundai Samho	01/03/2022	174,000	ME-GA	01/03/2025
Hyundai Samho 8180	Knutson	Hyundai Samho	01/03/2022	174,000	ME-GA	01/06/2025
Hyundai Samho 8181	Knutson	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	Knutson	Hyundai Heavy	01/06/2022	174,000	XDF	01/05/2025
Hyundai Ulsan 3381	Knutson	Hyundai Heavy	01/06/2022	174,000	XDF	01/06/2025
Hyundai Ulsan 3382	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/07/2025
Hyundai Ulsan 3383	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/11/2025
Hyundai Ulsan 3384	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/02/2026
Hyundai Ulsan 3385	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/04/2026
Hyundai Ulsan 3386	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/08/2025
Hyundai Ulsan 3387	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3393	Knutson	Hyundai Heavy	01/07/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3394	Knutson	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

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

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

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 Antheia	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 Innvation	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

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	FuelLNG 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 Mendelev	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	FuelLNG 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	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	3,500	LNG	Japan	Yes	Keys Bunkering West Japan
2024	Seaspan Lions	7,600	LNG	Canada	Yes	Seaspan ULC
2024	Hai Yang Shi You 302	12,000	LNG	China	Yes	CETS (CNOOC)
2025	Axpo TBN	7,500	LNG	Italy	Yes	Axpo
2025	Seaspan TBN 3	7,600	LNG	Canada	Yes	Seaspan ULC
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2027	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	ScaleGas TBN	12,500	LNG	Spain	Yes	ScaleGas