LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 28 March 2024

Venture Global to become major LNGC owner - addresses CP2 delay

Venture Global LNG is to become an LNGC owner and operator.

The company has announced that it has acquired a fleet of nine newbuilding LNGCs, currently under construction in South Korea.

Six were already ordered (see *World Orderbook* on page 11), while the other three could be newbuilding resales.

No other details were revealed apart from they will be delivered starting later this year and that six vessels will have a cargo capacity of 174,000 cu m and three of 200,000 cu m.

Venture Global's CEO Mike Sabel said that this investment added to the recent signing of a long-term terminal use agreement for regasification capacity at Europe's largest LNG import terminal at Grain in the UK, and the further advancement the integration of its business across the entire LNG supply chain.

The integration will cover natural gas transmission, liquefaction and export, plus LNGCs and regasification capacity and will be complementary to the company's core business as an LNG supplier to long-term customers, while also enabling optimisation and optionality by allowing for the transport of LNG directly to the customers, Sabel said.

The vessels will be powered by the latest 2-stroke ME-GA/ME-GI engines which, in combination with the use of the most recent hull forms, shaft generator and air lubrication systems, result in the highest fuel efficiency and lowest GHG emissions based on currently available LNGC technology, the company claimed.

This main engine type supported by the shaft generator technology significantly reduces methane slip, compared to the previous generations of 2-stroke and 4-stroke LNGC propulsion units.

CP2 delay

Commenting on a further delay in moving forward its CP2 export plant project, in a statement, the company said: "Venture Global is deeply disappointed that CP2 is yet again absent from the (US) FERC Agenda.

"It has been eight months since FERC issued a Final Environmental Impact Statement (FEIS) for CP2, making it one of the longest to ever sit before the Commission.

"We remain confident that we have met or exceeded all regulatory requirements that are necessary to move forward with the project.

Venture Global's CEO and Founder, Mike Sabel

"Relying on what has historically been a fair and predictable regulatory regime, free from political interference, we have launched off-site construction and spent billions of dollars on the project.

"First LNG is expected in 2026 should the Government act without further delay to approve CP2. Phase One is nearly sold out with 9.25 mill tonnes per annum of 10 mill tonnes contracted.

"Two thirds of this capacity is committed to our allies in Germany and Japan who are counting on the LNG to replace lost Russian volumes.

"We are hopeful that FERC will remain the independent agency it always has been," Venture Global concluded.

SHIPPING NEWS AGENDA

MARKETING

BUSINESS

FINANCE

TECHNOLOGY

LNG ORDERBOOK

NEWS NUDGE

GTT receives Nakilat duo tank orders

During the first quarter of this year, GTT received an order from holding company HD Korea Shipbuilding & Offshore Engineering (HD KSOE) for the tank design of two LNGCs and a Very Large Ethane Carrier (VLEC).

The two 174,000 LNGCs will be built by Hyundai Samho Heavy Industries for Nakilat.

GTT will design the LNGCs' tanks, each incorporating the Mark III Flex membrane containment system.

The LNGCs' deliveries are scheduled in 2026 and 2027.

The 98,000 cu m VLEC will be built by Hyundai Heavy Industries for Purus Maritime and will be fitted with the Mark III membrane containment system.

Her delivery is scheduled for the first quarter of 2027.

Oil giants look to LNG

Middle East oil giants Saudi Aramco (Aramco) and Abu Dhabi National Oil Co (ADNOC) are negotiating to invest in US LNG projects, according to a Reuters report.

Aramco was said to be in talks to take a share in Sempra Infrastructure's Port Arthur LNG project's phase 2 in Texas, which is a planned expansion to the already operational first phase, sources told the newswire.

State-owned ADNOC was also believed to be talking with NextDecade regarding an offtake from the planned Train 4 at its Rio Grande LNG export facility.

US LNG capacity is set to almost double over the next four years, but several projects developers have faced financial hurdles to get their proposed export terminals off the ground, as investors become more demanding and amid increasing regulatory pressures on banks to focus on environmental, social and governance (ESG), Reuters said.

"The message is: If ESG focused banks won't finance US projects, someone will," Kaushal Ramesh, Rystad Energy's LNG Research Vice President said.

It is not yet clear if the talks with the oil giants concern equity stakes or sale and purchase agreements (SPA), or both.

One of the sources said Aramco is in talks to purchase some or all volumes from one of the two liquefaction units at Port Arthur's second phase, both capable of producing up to 13.5 mill tonnes per annum of LNG.

"Both Aramco and ADNOC are the oil heavyweights who could have always done more in LNG...It wouldn't be a surprise that they will happily unlock their wallet for the right project," Ramesh added.

Pavilion Energy sale

Sources had also told Reuters earlier this month that Aramco has been short listed along with Shell and other companies to purchase most of the assets of Singapore-based LNG trader Pavilion Energy, which could kick start its LNG business.

"This transaction would underpin the demand side of the equation to build a global LNG portfolio, likely linked to US Gulf Coast supply purchases in the near future," said Felix Booth, head of LNG at energy intelligence firm Vortexa.

In its annual results presentation this month, Aramco announced its first international investment in LNG, following the signing of definitive agreements to acquire a minority stake in MidOcean Energy.

Completion of the transaction is subject to closing conditions, which includes regulatory approvals.

Amin Nasser. Aramco President and CEO, said;" Announcements of our first international investment in LNG, the growth of our international retail operations, continued progress in major overseas refining and chemical projects, and our emerging new energies portfolio, all serve to highlight our ability to capitalise on new market opportunities and advance our strategic objectives." ■

Indian LNG import terminal nears startup

India is seeking to purchase the first shipment for its latest LNG terminal.

Gujarat State Petroleum Corp (GSPC) has issued a tender to buy a commissioning cargo for the Chhara terminal for delivery in April, according to traders talking with newswires.

The import facility locatred in Gujarat state is being developed by Hindustan Petroleum Corp, and will have an LNG capacity of 5 mill tonnes per year.

Together with the Chhara facility, Swan Energy's Jafrabad import facility is expected to begin operations this year, according to BloombergNEF.

However, the Chhara terminal isn't expected to operate at full capacity this year, due to the monsoon season. A breakwater is due to be completed in April, 2025, which will allow for higher imports.

Overall, India's dependency on imported LNG is expected to fall by 45% of the country's total consumption in 2025/2026, a gradual decline from 53% seen in 2020/2021, according to a report published by CareEdge Ratings. ■

NEWS NUDGE

Cyprus Government to monitor Vassiliko's progress

The Cypriot Government has formed a monitoring team, led by Energy Minister, George Papanastasiou, to oversee every aspect of the delayed Vassiliko LNG terminal's construction.

Minister Papanastasiou, accompanied by a delegation from the Chinese CPP consortium developing the FSRU terminal, agreed to continue its construction, including the jetty and other facilities, following a series of disputes, which have delayed the project.

"This group, equipped with the necessary expertise, will supervise and monitor the project, working in various capacities as empowered by the Ministry," Minister Papanastasiou, explained.

He also said that the CPP-Metron Consortium will announce an updated construction timetable within the next few weeks.

The monitoring body will include one to two engineers who will be responsible for the project's supervision. They will maintain continuous communication with the Ministry, DEFA, ETYFA, and the contractor, and handle any forthcoming disputes.

"This group will act as the Ministry's eyes on the project, ensuring on-field presence rather than just office oversight, without interfering in the contractual obligations of the involved parties," he added. ■

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

Republicans attack Biden's LNG pause

Last week, 16 US Republican-led states filed a lawsuit to challenge the federal government's ban on approving future applications to export LNG.

The lawsuit was filed in a federal court in Lake Charles, Louisiana, by the Republican attorneys representing a coalition of states, which include Texas, Louisiana and Florida.

They claimed that the US Department of Energy's (DoE) pause on exports will harm the US economy and undermine efforts to supply foreign allies in Europe with steady supplies of LNG, as the region seeks to move away from importing Russian piped gas.

The states alleged that the pause on new approvals for LNG exports oversteps the DoE's authority under the Natural Gas Act, which they said requires the agency to affirmatively show projects are inconsistent with the public interest before denying applications.

They also argued the ban jeopardises billions of dollars in investments planned to build the export facilities.

An initial LNG export review is expected to last for months. The last review was in 2018 when export capacity was 4 bill cu ft per day. Capacity has since tripled and is set to go much higher by 2030 given the number of projects under construction.

US domestic industries, including chemical, steel and agriculture businesses, have also opposed unrestricted exports, which they say can raise concerns about the reliability of the domestic supply and fuel prices.

Before the lawsuit was filed, efforts by Republicans in Congress to strip the DoE's power to approve the exports and leave the Federal Energy Regulatory Commission (FERC) with the sole responsibility for approving LNG projects, stalled.

FERC assessment

Meanwhile, FERC has prepared an environmental assessment for the Port Arthur Liquefaction Project Amendment, proposed by Port Arthur LNG and Port Arthur LNG Common Facilities Co (PALNG).

PALNG proposes to increase the peak construction workforce from its currently authorised 3,000 personnel up to 6,000 personnel per day at the PALNG Terminal site in Jefferson County, Texas.

In addition, it would implement a 24 h per day building schedule for the remaining construction period at the site.

FERC concluded that the proposed amendment, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment.

In another move related to LNG export projects, the Maritime Administration (MARAD) and the US Coast Guard (USCG) announced the cancellation of all actions related to the processing of a license application for the proposed Grand Isle LNG Export Deepwater Port Development Project. ■

Japan's short term LNG needs to increase

Commodities consultancy, ICIS has predicted that Japanese LNG demand will firm in the short term, compared to previous forecasts.

This followed pressure on LNG storage, as a result of a late winter cold snap and weak coal availability forecast for the second quarter of this year.

Some restocking activity is therefore expected as utilities prepare for potentially high cooling demand in the third quarter and weaker year-on-year (y-o-y) margins for nuclear availability.

Running into its third week towards the middle of March, the cold snap had been the longest in an otherwise predominantly mild 2023/24 winter season.

The forecasters are predicting near normal temperatures in the second half of this month but heating demand is still expected to be higher y-o-y considering the exceptionally mild conditions in the same period in 2023.

The Japan Meteorological Agency said that the northern island of Hokkaido could see a 40% chance of colder than normal temperatures.

Power demand rose 18% higher y-o-y in the week ended 10th March and up by 4%, compared to the 2018/22 average for the same period.

Partly as result of the cold snap, Japan's LNG storage for power generation fell for a second consecutive week, to 1.83 mill tonnes on 10th March, down by 0.55 mill tonnes from 12th March, 2023 and up by just 0.1 mill tonnes from 13th March, 2022.

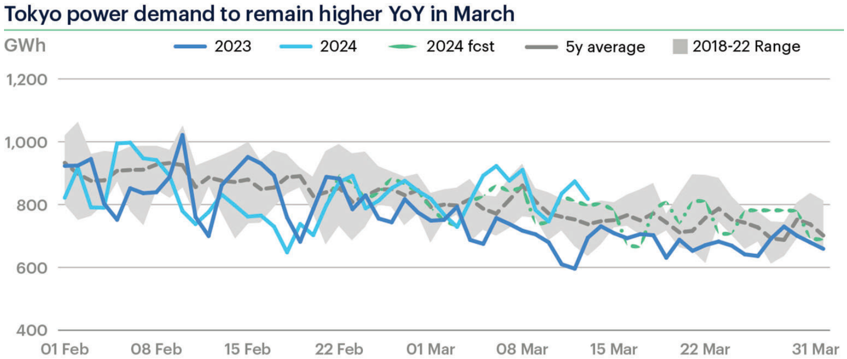
Nuclear is making a come back in Japan's energy mix. For example, Kansai Electric has announced that its Takahama 4 reactor will restart on 26th April.

Nuclear generation is forecast to be 15% higher y-o-y in 2Q24 but could fall lower in the third quarter, depending on the timing of the nuclear restarts.

As for coal, weak availability could also lift LNG demand in 2Q24.

Plant availability for March is currently down by about 5% from last year, with JERA's 1.07 GW Taketoyo 5 offline since a fire incident on 31st January and J-Power's 1.05 GW Tachibana-wan 1 since 22nd February. ■

Tokyo power demand to remain higher YoY in March



Source: ICIS, OCCTO, JMA

NEWS NUDGE

Portovaya cargo discharged in Spain

Gazprom has shipped an inaugural LNG cargo from its small-scale Baltic Portovaya LNG plant to Spain, LSEG data showed, according to Reuters.

The LNGC 'Cool Rover', which loaded the LNG via a ship-to-ship transfer (STS) from the FSRU 'Marshal Vasilevskiy' off Kaliningrad, discharged the cargo at Huelva's Enagas LNG terminal.

Portovaya, with a capacity of 1.5 mill tonnes per year was opened in September, 2022. ■

Texas LNG signs Gunvor offtake agreement

Glenfarne's Texas LNG Brownsville has signed a Heads of Agreement (HoA) with Gunvor Singapore for a 20-year LNG FOB sale and purchase agreement (SPA) for 0.5 mill tonnes per year.

"We're thrilled to welcome Gunvor to our portfolio of customers, connecting Texas LNG, one of the lowest-emitting liquefaction facilities in the world, with global economies in need of reliable, sustainable energy," said Brendan Duval, CEO and Founder, Glenfarne Energy Transition and Co-President of Texas LNG.

"With the previously announced commencement of the execution phase of the project financing process, this agreement aligns with our plan to take a final investment decision (FID) on Texas LNG this year," added Vlad Bluzer, Co-President of Texas LNG.

"We are pleased to have executed this agreement and become one of the foundation buyers of the Texas LNG project. Gunvor continues to support US LNG export projects, unlocking new supplies for the global energy market and providing energy security especially to our customers in Europe and Asia," commented Kalpesh Patel, Gunvor's Co-Head of LNG Trading.

Earlier, Texas LNG's had announced an LNG tolling agreement with EQT Corp, plus partnerships with Baker Hughes, ABB and Gulf LNG Tugs of Texas.

These partnerships amount to nearly $1 bill of investment into the project.

The 4 mill tonnes per year Texas LNG project will achieve financial closure and construction will begin in 2024, while commercial operations are scheduled to start in 2028.

A rendering of the planned LNG export plant

Project finance

Glenfarne had also earlier announced that it had agreed the project finance for Texas LNG with a group of lenders.

The company appointed Latham & Watkins as borrower's counsel and Milbank as lenders' counsel for the issuance.

The lenders are key supporters of Glenfarne, having led over $4 bill of financing to the Group's businesses over the last 10 years, supporting the acquisition and/or construction of various energy transition focused assets, the company explained.

Furthermore, all of the banks are active in LNG, having participated in around $44 bill of project finance debt to the US LNG sector alone over the last 24 months, Glenfarne added.

"Texas LNG's financing consortium will be comprised of the world's leading institutions that recognise the attributes of the project and Glenfarne's excellent history of building energy transition infrastructure," Duval said when announcing the finance.

The first LNG exports from the Brownsville plant are expected to be shipped in 2028.

Glenfarne Energy Transition is also the sole owner and developer of the 8.8 mill tonnes per annum Magnolia LNG at Lake Charles, Louisiana. ■

Petronas starts construction of Argentine FLNG

Malaysia's state energy firm Petronas has started to build a floating FLNG earmarked for Argentina.

This unit will allow Argentina to export LNG by 2027, a senior executive told Reuters at the recent CERAweek in Houston.

The FLNG will be able to produce up to 2 mill tonnes per annum of the gas, said Petronas Senior Vice President of LNG, Abang Yusuf.

Petronas could expand the operation to produce up to 9 mill tonnes from three FLNGs moored off the coast, he added.

The Malaysian energy giant also has another project with Argentina's state-controlled energy firm YPF to build an LNG facility on land. YPF is expected to own between 25% and 30% of the joint project.

The two companies have begun the front end engineering and design (FEED) study for this second Argentine project that is expected to produce another 20 mill tonnes per annum.

"We have done a lot of studies with our partner YPF ... the next step is to mature the project, but we are now waiting for the new investment law," said Yusuf.

Petronas is also considering new LNG investments in the Atlantic Basin, he revealed.

He told the CERAWeek conference that Petronas is aiming to increase its share of the global LNG market to 10%, but there was no set time frame to achieve that goal.

Petronas is also looking at taking an equity stake in the second phase of LNG Canada's gas export plant in Kitimat, British Columbia, on the west coast of Canada, he revealed. The plant's first phase is scheduled to start producing LNG in the second half of this year. ■

Freeport LNG to increase output by 10%

Following repairs, due to be completed in early May, Freeport LNG is to increase its LNG production, the company's CEO said in an interview with Bloomberg.

Maintenance will increase the Texas facility's capacity to 16.5 mill tonnes per year, up from around 15 mill tonnes a year currently, CEO Michael Smith said during CERAWeek.

"We're adding 10% of production capacity," Smith said, noting that Train 4 will add another 25% once operational. "It's an exciting future," he added.

The three-train plant has been undergoing maintenance since late January, following a deep freeze in Texas that caused an issue on one of its trains.

This additional output will double Freeport LNG's fuel exports directly to customers to 3 mill tonnes per year, as the remaining volume is currently under long-term contract.

Freeport LNG's Train 4 expansion is currently permitted, but still undergoing customer discussions, Smith added. ■

HEH takes Stade FID

Hanseatic Energy Hub (HEH) has taken a final investment decision (FID) to construct Germany's first land-based terminal for liquefied gases at Stade on the River Elbe.

After successfully concluding the permitting- and commercial phase in late 2023, the company´s shareholders Partners Group, on behalf of its clients, Enagás, Dow and the Buss Group, have now secured financing for the large-scale infrastructure project.

EPC specialist Técnicas Reunidas and its partners, FCC and Enka, were awarded the contract to build the energy hub.

Around €1 bill will be invested in the construction of the terminal. Its commissioning is planned for 2027.

Initially, HEH will serve as an import terminal for LNG, SNG (synthetic natural gas) and liquefied biomethane and, subsequently, for ammonia, as a carbon-neutral, hydrogen-based energy carrier.

Once the HEH is operational, the FSRU 'Energos Force', chartered by Germany's federal government will sail from Stade. The FSRU will continue to secure the gas supply in the short term until the land-based terminal is completed.

HEH's capacity will be 13.3 bill cu m of natural gas per year. Around 90% of the volume has been booked long-term by three European energy majors, EnBW, SEFE and ČEZ. The remaining capacity is reserved for short-term bookings.

Long-term contracts include the option to switch to hydrogen-based energy carriers at a later stage. The terminal has also been certified by permitting bodies as being ammonia-ready.

Technical expertise

Enagás is providing the technical expertise for its construction and will also be the terminal operator. The Spanish energy company is also increasing its share in the project from 10 to 15%.

Carsten Koenig, Managing Director Infrastructure, Partners Group, said: "We are pleased to reach this important milestone for HEH, after several years of thorough planning and development. As an LNG terminal in a strategic location, HEH will play a significant role in securing the energy supply and supporting the energy transition in both Germany and wider Europe in the future. Partners Group has a strong thematic focus on the energy transition sector, where we have made a number of investments over the last year alone."

Arturo Gonzalo, Enagás CEO, commented: "Enagás has strengthened its entry into Germany by increasing its stake in the Hanseatic Energy Hub, up to 15%, which is fully aligned with the company's strategy to contribute to the security of energy supply and to drive the process of de-carbonisation in Europe.

"Enagás will operate the Stade LNG terminal allowing us to support this strategic project with all our broad expertise," he said.

Current German LNG terminal operator, DET, is working on HEH's commissioning, as well as the Wilhelmshaven 2 terminal.

However, given the current market situation and due to various delays in project commissioning, DET has deferred the April auctions of its 2024 capacity.

DET said that it will provide a status update in early April.

Energos Infrastructure's FSRU 'Energos Force' had arrived at the Stade LNG terminal on 15th March.

She was one of two FSRUs sold by Dynagas to Energos earlier this year.

Earlier, Dutch-based mooring specialist Straatman had commissioned the entire mooring system for the Stade LNG terminal.

In addition, partner SEFE has signed a Sales and Purchase Agreement (SPA) for 0.4 mill tonnes per annum of LNG with Oman LNG for delivery between 2026 and 2029.

The SPA was executed following a binding term-sheet agreed in August, 2023.

This follows SEFE's signing of a 15-year agreement with Abu Dhabi National Oil Co (ADNOC) to supply 1 mill tonnes a year of LNG.

The LNG will be shipped from the Ruwais LNG project and deliveries are expected to begin in 2028, ADNOC said.

Early preparation work has already begun at Ruwais, and ADNOC is expected to take a final investment decision (FID) this year.

ADNOC had issued a limited notice to proceed (LNTP) to a joint venture, which included Technip Energies, JGC Corp and National Petroleum Construction Co, for early engineering, procurement and construction (EPC) activity. ■

An illustration of the Stade import facility

NEWS NUDGE

Skikda handles larger LNGCs

The LNGC 'Ougarta' has become the first large scale LNGC to arrive at Algeria's Skikda new berth to load.

State-owned Sonatrach said that the vessel arrived on 9th March, following tests at the terminal.

This new berth is part of an expansion project to allow Algeria to access broader markets, especially to Asia.

Previously, the terminal had a maximum vessel capacity of 70,000 cu m and mainly exported LNG to Europe.

Work to expand its capacity included replacing two LNG tanks with a new 150,000 cu m tank and constructing a new jetty to serve the 4.5 mill tonnes per year Skikda LNG production facility.

The new jetty will enable large capacity LNGCs of up to 220,000 cu m (Q-Flex) to load cargoes. ■

Adriatic LNG breaks records

Last year, Adriatic LNG achieved significant results in terms of reliability and regasified volumes delivered to the Italian national grid, the LNG importer claimed.

Located off the Veneto coast, the regasification terminal sent 8.5 bill cu m of natural gas to the national pipeline network (up 7% compared to 2022), covering over 14% of the Italian national gas consumption and confirming the terminal as the third source for Italian gas imports.

These results confirm the increasing relevance of LNG to the Italian energy mix. In 2023, total LNG imports to Italy amounted to 16.6 bill cu m - a 16.8% increase compared to 2022, and meeting 27% of the Italian national gas demand (61.5 bill cu m).

More than 50% of Italian LNG imports came through Adriatic, which claimed an operational reliability rate of 99.6%.

Alfredo Balena, Adriatic LNG's Director of External Relations, said: "In 2023, our terminal confirmed to be a strategic energy infrastructure for Italy and Europe. Simplifying, we can say that the 8.5 bill cu m of natural gas injected by Adriatic LNG into the national grid represented an energy quantity equivalent to approximately 93 mill MWh, equivalent to the total energy consumed by Veneto and Lombardy regions for a year."

In 2023, 75 LNGCs berthed at the offshore terminal, mainly coming from Qatar and the US, plus other exporting countries, including, for the first time, Mozambique.

In total, from its opening in 2009 to 2023, 1,058 LNGCs have arrived at the regasification terminal, resulting in a total of 92 bill cu m of gas sent into the national gas grid.

Balena added; "The security of energy supplies in Europe and Italy is and will increasingly be based on LNG. The significant growth in LNG imports occurring over the last two years is linked to efforts being made to reduce dependence, and increase resilience, of the European gas system.

"These efforts are driving Italy and Europe to maximise the use of existing LNG infrastructure and, in many cases, add new LNG import capacity.

"For this reason, we have submitted a request to authorise a project to increase the regasification capacity of our terminal by 0.5 bill cu m per year. This new capacity, which could be available starting from 2026, has already been allocated for the next 20 years if the authorisation process concludes positively," he confirmed.

With a maximum regasification capacity of 9.6 bill cu m per year (including 0.6 bill cu m of not constant capacity), Adriatic LNG is the main Italian regasification terminal and the only one able to receive LNGCs of up to 217,000 cu m, resulting in benefits in terms of optimising discharged volumes. ■

Adriatic LNG has reported record imports

Gazprom takes Shell's Sakhalin stake

Russian state-controlled energy giant Gazprom has acquired Shell's former 27.5% stake in LNG producer Sakhalin Energy for around $1 bill, according to a government statement, analysed by Reuters.

Earlier this week, the government said that the 27.5% stake in Sakhalin Energy was due to be sold to a company called Sakhalin Project for Roubles94.8 bill ($1.02 bill).

Sakhalin Project is wholly owned by Gazprom, according to company filings.

Gazprom owns 50% in Sakhalin Energy located in Russia's Far East. Other shareholders are Japan's Mitsui (12.5%) and Mitsubishi (10%).

Following Moscow's decision to invaid Ukraine in February, 2022, Shell said it would quit the project, in which it held a stake worth 27.5% minus one share.

Shell declared a $1.6 bill impairment charge related to the Russian LNG project in the first quarter of 2022.

In June, 2022, the Sakhalin-2 operating company was transformed into a Russian entity via a presidential decree.

Shell, Mitsui and Mitsubishi were then asked to re-apply to keep their stakes if they so wished.

Moscow invited firms interested in obtaining Shell's stake - as well as ExxonMobil's abandoned share in the sister Sakahlin-1 project - to submit applications to the government. ■

GAZ-SYSTEM strengthens grip on Polish LNG

On 14th March, 2024, polish gas transmission system operator, GAZ-SYSTEM acquired 100% of the share capital of Gas Storage Poland.

However, the acquisition was still thought to be conditional on the approval by the Polish Office of Competition and Consumer Protection (UOKiK).

GAZ-SYSTEM said that this acquisition gives the company more responsibility in strategic energy infrastructure management in the Polish gas market, as in addition to its role as the gas transmission system operator, it becomes the operator of the Polish section of the Yamal transit pipeline and of the LNG terminal.

"The takeover by GAZ-SYSTEM of the company that operates the underground gas storage facilities will enhance the oversight of the strategic gas infrastructure in Poland. It will also improve co-operation between the transmission system operator and the storage system operator, which will also translate into greater security of gas supply to consumers and better utilisation of the existing storage capacity and its expansion," said Sławomir Hinc, GAZ-SYSTEM President.

The sale of Orlen's shares in Gas Storage Poland follows the decision of UOKiK concerning the merger between the company and Polskie Górnictwo Naftowe i Gazownictwo (PGNiG).

The consolidation of the operations of the transmission system, the LNG Terminal and natural gas storage into one group guarantees that decisions will be taken with respect to the expansion and modernisation of storage facilities, taking into account the needs of both systems and gas market participants, as well as ensuring optimal financing and comprehensive implementation of investment projects, the company claimed.

In another move, GAZ-SYSTEM was believed to have concluded a 15-year charter deal for a recently ordered FSRU, which will be moored off Gdansk.

The 174,000 cu m unit was reported to have been ordered by MOL at Hyundai Heavy Industries for delivery in 2027 at a cost said to be the equivalent of $384 mill. ■

WaveCrest to develop Teesside regas terminal

WaveCrest Energy has started a market consultation process for its proposed UK Teesside Flexible Regas port.

This process is in advance of a planned capacity auction to be launched in the third quarter of this year.

The new plant will provide flexibility and energy security to the UK, with the potential to deliver up to 248.5 GWh per day (848,000 MMBtu per day) of natural gas, equivalent to around 17% of the country's demand.

Located at Teesport, the project will include onshore buffer storage and LNG regasification equipment, which will be connected to a dedicated jetty to handle the unloading of LNGCs.

Regasified LNG will be transported from the project through a short segment of a high-pressure natural gas pipeline for delivery into the UK National Transmission System.

A streamlined and cost-effective design will allow for the rapid construction time of less than a year, with a planned commercial operation startup in 2026.

WaveCrest Energy selected Teesport given the port's long history in energy infrastructure, which continues today with ongoing energy transition related initiatives in the hydrogen generation, carbon capture and storage, and biogas sectors.

In addition, deepwater access within the port and extensive marine services will provide the necessary support to ensure the project's safe and reliable operation, the company claimed.

WaveCrest Energy CEO, Rob Bryngelson, said: "The WaveCrest Energy team has a long and successful history in working in Teesport dating back nearly 20 years when the port became home to the world's first dockside LNG regasification project.

"In support of the project's efforts, we will continue working with statutory consultees, local stakeholders, and communities as part of the planning process. Our goal is to work closely with local partners through the approval, construction, and operation of the project to make this a true win-win for the country and the region," he said.

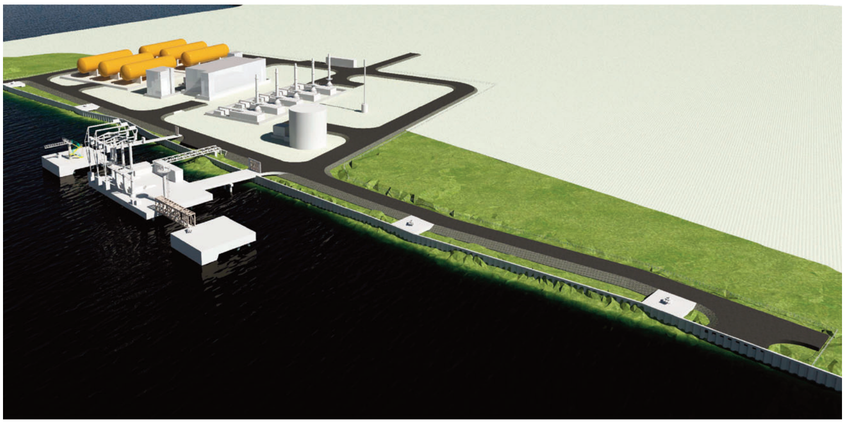
The benefits of the project include a plant design to blend imported LNG with incoming North Sea natural gas flows, with the complementary ability to inject nitrogen into the gas stream.

This allows the receipt of gas from most suppliers worldwide providing broad market access, while still meeting the UK's National Transmission System specifications.

The project is classed as a UK Nationally Significant Infrastructure Project and will be seeking a Development Consent Order from the UK Secretary of State for Energy Security and Net Zero.

The market consultation process was due to start on 18th March and close on 26th April.

Bryngelson was the former Founder and CEO of Excelerate Energy. ■



Wavecrest's proposed Teesside import facility

First SPB tank lifting operation

On 2nd March, 2024, the first self-supporting prismatic IMO type B (SPB) tank for the Marine XII Offshore FLNG project (the Eni developed Congo FLNG) was hoisted into the unit's cargo space at Wison New Energies (WNE) Nantong shipyard.

This tank, designed and constructed by WNE, is the world's largest SPB tank. Construction started in February, 2023, with the upper and lower bodies of the tank joined in July, and the overall installation was completed on 2nd March, 2024.

The tank is 45 m long, 44.9 m wide, with a main body height of 24 m and a total height of over 31 m. It has a volume of 45,000 cu m, with a total weight exceeding 1,400 tonnes, making it the highest and largest independent lifting component in the whole project.

According to the schedule, the Nantong yard will complete the installation of the remaining three SPB tanks for the Congo FLNG project by the end of this month. ■

NEWS NUDGE

K&S advises NextDecade

US law firm, King & Spalding (K&S) has advised NextDecade subsidiary, Rio Grande LNG (RGLNG), on the first phase of the Brownsville, Texas project.

RGLNG is the largest privately funded infrastructure project in Texas. On 12th July, 2023, NextDecade achieved around $18.4 bill in project financing for the project.

NextDecade also confirmed a Final Investment Decision (FID) and full notice to proceed.

First, K&S advised NextDecade on the circa $12 bill contract with Bechtel Energy for the project's engineering, procurement, and construction (EPC), including the building of three liquefaction units, for an aggregate nominal LNG production capacity of around 17.6 mill tonnes per annum.

In addition, the law firm advised on natural gas transportation arrangements with Enbridge subsidiary Rio Bravo Pipeline and supported NextDecade's LNG marketing, including providing advice in respect of each of the LNG sale and purchase agreements (SPA), which underpinned the project financing.

Finally, K&S advised NextDecade on real estate matters, including the negotiation of the around 984 acre lease with the Brownsville Navigation District of Cameron County, Texas, as well as numerous other real estate agreements.

In addition to advising on the initial site control documents, King & Spalding served as real estate counsel in the project financing, and further supported the project financing as opinion counsel, providing Texas, New York, and English law opinions in respect of the real estate and commercial agreements. ■

BV concludes large LNGC design work

Bureau Veritas (BV) has concluded a joint development project (JDP) with South Korean shipbuilder, Hanwha Ocean, for its 270,000 cu m LNGC design.

Hanwha Ocean's proprietary hull design for the large LNGC was developed to anticipate and fulfil the future demands of the LNG market, BV said.

By optimising the hull's performance and maximising cargo capacity, it exceeds the capabilities of the existing Q-Max 263,000 cu m LNGC and FSRU designs.

Throughout this project, Hanwha Ocean prepared the development of the LNGC design's key hull drawings in compliance with BV's requirements and relevant regulations.

As a result, Hanwha Ocean and BV agreed to jointly develop this new size of vessel to secure structural reliability and obtain an Approval in Principle (AiP).

To verify the drawings, BV performed 2D local scantling and 3D cargo hold finite element analysis, assessing the longitudinal strength of the hull, as well as the yielding and buckling of longitudinal and transverse members.

Fatigue analysis was also conducted using a local fine mesh to evaluate the details of hull structures sensitive to fatigue.

Upon the completion of the comprehensive verification on the hull design, the AiP certification was delivered to Hanwha Ocean on 28th February, 2024.

Sang-Don Kang, Hanwha Ocean's Vice President of Basic Design Department, said: "The newly developed 270K LNGC is dedicated to minimising unit freight costs, and ensuring structural robustness for the vessel's safety performance.

"I am pleased that the structural reliability of this new vessel will be verified once again through this JDP with BV," he said.

Capt Drago Pinteric, BV's Country Chief Executive, Korea, added: "The development of a new standard 270K LNG carrier holds immense importance for BV, as it aligns with our core responsibilities of ensuring safety, compliance, and quality in maritime operations.

"This involvement reinforces BV's commitment to industry leadership, innovation, and the promotion of sustainable and safe shipping practices.

"We commend the strong collaboration between Bureau Veritas and Hanwha Ocean, showcasing a robust partnership in the maritime and related industries. Such alliances contribute to enhanced safety, quality assurance, and sustainable practices in the ever-evolving maritime landscape," he said.

Last October, Hanwha announced that the 345 m long, 55 m wide design had received an AiP from DNV.

The design is fitted with five cargo tanks and X-DF propulsion technology, plus a reliquefaction system. ■

NEWS NUDGE

Ships - Charters, newbuildings, sales

Not surprisingly, QatarEnergy has signed timecharter party agreements with Qatar Gas Transport Co (Nakilat) for the operation of 25 conventional-size LNGCs.

They are part of the second shipowner tender under QatarEnergy's massive LNG fleet expansion programme.

Seventeen of the 25 LNGCs are being built at the Hyundai Heavy Industries (HHI) shipyards in South Korea, while the remaining eight are being constructed at Hanwha Ocean.

Each of the 25 vessels will have a capacity of 174,000 cu m and will be chartered out by Nakilat to affiliates of QatarEnergy pursuant to the 15-year timecharters.

Earlier this week, Hanwha Ocean confirmed that it had received an order worth Won2.4 trill ($1.8 bill) to build eight LNGCs for delivery by January, 2028.

Elsewhere, apart from Venture Global's increasing involvement in the LNGC space (see page 1), China's Sea Jade Investment Co, a joint venture involving Wah Kwong, China Gas and China Ship Leasing, declared options for another two 175,000 cu m LNGCs at Dalian for a reported $238 mill each.

Due for delivered in 2027 and 2028, they will be chartered to China City Gas for 20 years.

Turning to ship sales, Stena Bulk has announced that it has completed the sale of two of its LNGCs – 'Stena Crystal Sky' and' Stena Clear Sky' – to BW LNG. They have since been delivered.

As part of the deal, BW LNG will take on the existing charters for both 174,000 cu m vessels.

They were delivered in 2011 from Daewoo Shipbuilding & Marine Engineering.

Erik Hånell, Strena Bulk's President & CEO, explained: "As part of our strategy to continuously look for new opportunities, Stena Bulk took the decision some time ago to sell 'Stena Crystal Sky' and 'Stena Clear Sky'.

"Following the sale of these two vessels, we have one LNG tanker – 'Stena Blue Sky' – still in our control. We will continue to be pragmatic about 'Stena Blue Sky', and the opportunities that slightly rationalising our fleet will bring," he said. ■

LNG rate assessments

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

Region	This week	Change*
East of Suez	$35,000	-$3,000
West of Suez	$42,500	+$5,000
12 mos T/C	$54,000	-

**Since last report (14/03/24)*

Source: Fearnleys (20/03/24)

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*

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

Fearnley LNG

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

Fearnley LNG

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
Hl Alyssa Warner	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/03/2025
Hl 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
Hl Puffin	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/09/2025
Hl 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

Fearnley LNG

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

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

Fearnley LNG

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

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

Fearnley LNG

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

Fearnley LNG

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

Data last updated = 7 February 2024 | For more information please visit http://small-lng.com.

Small-LNG.com

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

Data last updated = 7 February 2024 | For more information please visit http://small-lng.com.

Small-LNG.com