LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 27 April 2023

Sinopec invests in Qatar's NFE project

QatarEnergy has signed a partnership agreement with China Petrochemical Corp (Sinopec) for the North Field East (NFE) expansion project.

This agreement was signed by HE Saad Sherida Al-Kaabi, Qatar's Minister of State for Energy Affairs and President and CEO of QatarEnergy, and Dr Ma Yongsheng, Chairman of Sinopec at QatarEnergy's Doha headquarters recently.

Sinopec will become a shareholder in one of the NFE joint venture companies and under the terms of the agreement, QatarEnergy will transfer a 5% stake, the equivalent of one NFE train with a capacity of 8 mill tonnes per annum, to Sinopec.

Speaking at the signing ceremony, HE Al-Kaabi, said: "The People's Republic of China is a major driver of the global energy markets, as well as being one of the most important gas markets in the world and is a key market for Qatari energy products.

"(This) event underscores QatarEnergy's commitment to deepening its relationships with key LNG consumers, while prioritising long-term strategic partnerships and alignment with world class partners from China, represented by Sinopec," he said.

At the November, 2022 agreement to supply Sinopec with 4 mill tonnes per anuum of LNG from NFE, Minister Al-Kaabi, said: "That agreement was not only the first NFE LNG supply agreement to be announced, but also the longest LNG supply agreement in the history of the industry. Sinopec will join Qatar's LNG family becoming the first Asian shareholder in the NFE project."

Dr Ma Yongsheng, added: "The meeting between Chinese President Xi Jinping and Qatar's Amir HE Sheikh Tamim bin Hamad Al Thani during the first China/Arab Summit and China/GCC Summit in 2022, comprehensively outlined the development blueprint of the strategic partnership between the two countries and guided the China/Qatar energy co-operation.

"The signing of this agreement today is a concrete move to carry forward what has been agreed between the two heads of state and deepen the partnership between Sinopec and QatarEnergy. It is another milestone after the signing of the long-term LNG SPA from the NFE project in November, 2022, marking the integrated co-operation achieved by both companies on the NFE project.

"China/Qatar energy co-operation features a natural complementarity. QatarEnergy is a leading LNG producer in the world and one of the most important partners of Sinopec. The co-operation with QatarEnergy will help Sinopec further optimise China's energy consumption structure and enhance the security, stability, and reliability of clean energy supply," he concluded. ■

SHIPPING NEWS AGENDA

Asian LNG demand restraint to continue

Asia's demand for LNG continued to fall in the first quarter of 2023 compared to last year, despite lower global prices and ongoing gas demand destruction in Europe.

Declining LNG imports in the key Asian markets of Japan, China, and South Asia outweighed increasing demand in South Korea, Taiwan, Thailand, and Singapore, according to data from IHS Markit and Bloomberg New Energy Finance (BNEF), analysed by the Institute for Energy Economics and Financial Analysis (IEEFA).

This represent the sixth consecutive quarter of year-on-year decline in Asian LNG imports, a trend which began before the Russian invasion of Ukraine rocked global markets.

Russia's invasion caused Europe to increase LNG imports by 60% last year, pulling cargoes away from Asia and causing spot market prices to spike. As a result, Asia's annual LNG demand fell by 7% in 2022.

A record warm winter, along with healthy storage levels and gas demand destruction in Europe, has brought global LNG prices down since the start of the year. However, European LNG imports increased 6.6% y-o-y in 1Q23 and global prices were well above historical averages.

China's LNG demand fell by 2% y-o-y in 1Q23 and 14% compared to 1Q21. Chinese LNG demand is expected to recover sharply this year after domestic buyers reduced purchases by 20% last year, due to high prices and a COVID-19-related economic slowdown.

However, a surge in China's domestic production and increasing imports of pipeline gas from Russia will likely squeeze the need for LNG. In 2022, pipeline imports and domestic gas production were up 9% and 6%, respectively, as LNG imports plummeted. This year, China has re-exported record volumes of LNG to other countries, indicating weak domestic demand.

In Japan, healthy LNG storage levels and nuclear restarts caused 1Q23 LNG imports to fall 7% y-o-y, following a 3% annual decline in 2022. IEEFA estimated that more nuclear restarts could reduce LNG demand from the power sector by up to 6 mill tonnes per annum, or 8% of the country's LNG imports last year.

In March, it was reported that Japan's imports had declined by 12%.

South Korean LNG demand could be hit by the country's most recent power development plan, which calls for a 20% reduction in the share of LNG-fired power generation through 2036.

South Asia fall

In South Asia, prices did not fall low enough to encourage a return to LNG spot markets. BNEF data showed the region's LNG demand fell y-o-y by nearly 1 mill tonnes combined in February and March this year.

Pakistan, which often paid upwards of $20 per MMBtu for spot cargoes last year, now appears unable to afford volumes at $13.4 per MMBtu, due to an ongoing foreign exchange crisis. As a result, the government no longer plans to build more LNG-fired power plants during the next decade.

However, several markets are showing signs of recovery. For example, Thailand has issued five buy tenders since the start of the year for 29 cargoes.

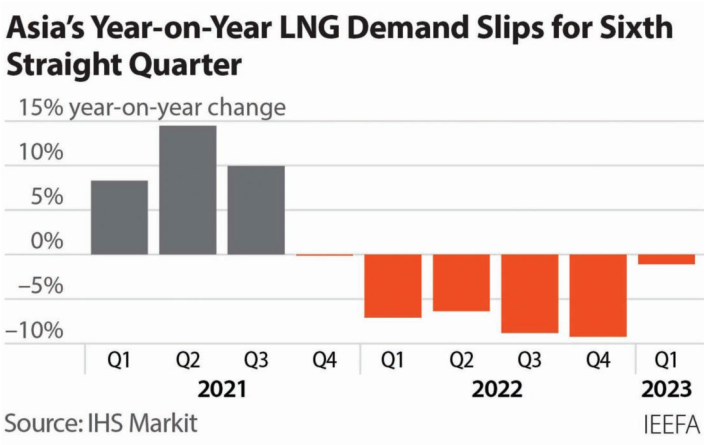
Bangladesh returned to the spot market in February after halting spot market purchases in June, 2022. India's LNG imports have escalated in recent months, according to official customs data, as several state-owned LNG buyers have re-entered spot markets.

A heat wave could keep gas and power demand high in 2Q23.

A recent tender for eight LNG cargoes through May, 2024 to supply India's newly commissioned Dhamra LNG terminal went unawarded, as the lowest offer was reportedly 18% of Brent crude. This is above the oil parity level of 17.2%, meaning LNG would be more expensive than a barrel of oil in energy equivalent terms, IEEFA explained.

The Philippines purchased its first LNG cargo, scheduled for April delivery. Yet, two ongoing power contract disputes demonstrate the difficulty of pricing LNG into the this market and cast doubt on the economic viability of the country's LNG expansion plans.

Despite emerging Asian economies forecast to be the largest growth market for LNG demand globally over several decades, IEEFA said that it expected tight global markets and elevated prices may continue to restrain Asia's LNG demand growth until significant new supply capacity comes online starting in mid-2025. ■



> "...a surge in China's domestic production and increasing imports of pipeline gas from Russia will likely squeeze the need for LNG"

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@btconnect.com

Will US LNG export projects gain the necessary funding?

Funding the US' main LNG export projects is becoming more problematic, according to Poten & Partners.

However, in March, two US projects - Sempra's Port Arthur phase 1 and Plaquemines Phase 2 - combined managed to obtain around $15 bill of funding from around 20 banks each, despite Silicon Valley's current financial woes.

Both projects had managed to secure 15-20 year offtake contracts at a liquefaction fee of between $2 and $2.35 per MMBtu.

But it is difficult to see more being funded, as they still need to sell extra product on a long term basis, Poten's Melanie Lovatt said in a webinar.

Aggregators are buying long term, which is helping to meet Europe's short and medium term requirements, which Lovatt said will last for a couple more years. In Europe, offtakers are bankable however, the region is expected to buy more spot and short term LNG.

Avoiding long term decisions will be expensive in the long run, she said, despite some European offtakers committing to long term contracts. However, these volumes are not enough for financiers to look at financing the planned US projects.

She also thought that European reticence to buy long term was understandable, due mainly to tightening emissions standards. As a result, offtakers were seeking medium term deals, which adversely affects the US developers' taking final investment decisions (FID) on several projects.

In Europe, the focus has been on FSRUs rather than larger onshore regasification terminals.

As for Asia/Pacific, demand growth is expected in South, Southeast Asia and China but the JKT (Japan, Korea, Taiwan) region will be flat. Energy policies are changing in Asia, as for example, Japan is planning to restart its nuclear plants and renewables are being talked of, she said.

To offset the banks reluctance to lend to US projects, equity finance is becoming more popular and could increase this year. However, one of the major problems for developers is increasing costs, including financing and EPC, which indicated that the liquefaction fees should go up by 30-40 cents, Lovatt said.

US project developers should also keep an eye on Brent levels. Qatar is the main Brent seller but some aggregators are switching to selling on this basis.

As for ship finance, she thought that newbuilding finance would stay at elevated levels, while the financiers like to see long term charters before committing to lending money for new ships. Out of the 290 or so LNGCs on the orderbook, only around 30 are thus far uncommitted, she said.

Another method of ship funding was on a sale and leaseback basis, which became dominant last year.

She concluded by saying that there were still various ways of funding a project. For example, in developing countries (non-OECD), export credit agencies are favoured for liquefaction terminal projects, also by taking equity in a project, while bonds were making a comeback.

DoE approval changes

In addition, last week the US Department of Energy (DoE) said it will change how it approves requests by companies to push back start dates for LNG export projects.

This move is to get a better picture of true demand for LNG, the DoE said.

As a result, the DoE will now no longer consider new applications for seven-year commencement extensions, unless companies prove they have physically started construction on an LNG export facility, or face extenuating circumstances.

However, this new policy will not apply to companies that have applications pending.

The US has approved over 49 bill cu ft per day of LNG for non-Free Trade Agreement (FTA) country exports - of which more than half are for LNG projects that are not yet operating or under construction and for which the developers have asked for extensions.

It also said that it will approve a first-time request by Port Arthur LNG and Sempra to extend its start date to 2028, but will reject a second extension request by Energy Transfer's Lake Charles Exports' project.

The DOE also issued a request for information from LNG project developers on strategies and technologies for reducing greenhouse gas emissions (GHG) and other pollutants throughout the LNG process. ■

Delfin's latest SPA could lead to FID this year

Delfin LNG, a wholly-owned subsidiary of Delfin Midstream, has finalised a binding LNG sale and purchase agreement (SPA) with Hartree Partners Power & Gas Co (UK) Limited.

Under the SPA, Delfin LNG will supply 0.6 mill tonnes per annum on a free-on-board (FOB) basis from the Delfin Deepwater Port, located 40 nautical miles off the coast of Louisiana, to Hartree for 20 years. It is indexed to the Henry Hub benchmark.

"We are excited about partnering with Delfin LNG and to strengthen their progress toward reaching final investment decision and look forward to a successful and collaborative long-term relationship," Stephen Hendel, one of Hartree Partners' Founding Managing Directors, said. "This deal will also support our wider strategy of delivering low cost, tailor-made and reliable LNG supply chain solutions that meet the specific requirements of our customers."

This SPA serves as an additional milestone for Delfin and builds on the company's previously announced long-term agreements with strong, strategic counterparties. Delfin has now secured commitments for 3.1 mill tonnes per annum of LNG sales, which is sufficient to make final investment decision (FID) on the first FLNG for the Delfin Deepwater Port LNG export facility, which is expected in mid-2023.

"The signing of this long-term SPA with Hartree represents another significant milestone for our company and signifies the beginning of a strong, mutually beneficial relationship with a world-class trading company, such as Hartree," Dudley Poston, Delfin CEO, said.

Delfin appointed Citi as its exclusive financial structuring advisor and is well advanced in securing project level equity and debt for the first FLNG, the company claimed.

"The Delfin project's ability to make FID one vessel at a time is attracting significant interest from buyers, and Delfin is already in advanced discussions for marketing LNG for its second FLNG vessel," Poston said.

Wouter Pastoor, Delfin COO, added, "With strong commercial and financial progress, Delfin is finalising construction contracts for multiple identical liquefier vessels, which will offer material cost savings and position us to make FID on our second FLNG vessel by the end of this year." ■

World's largest FSRU berths in Hong Kong

The world's largest FSRU, 'MOL FSRU Challenger' (to be renamed 'Bauhinia Spirit') has arrived at Hong Kong's new LNG receiving terminal.

She has an overall length of 345 m and an LNG storage capacity of 263,000 cu m.

Hong Kong LNG Termional, a joint venture between CLP Power Hong Kong Limited (CLP Power) and The Hongkong Electric Co, Ltd (HK Electric), had signed a long term timecharter agreement with Mitsui OSK (MOL) who manages the vessel.

'Bauhinia Spirit' will be used to receive, store, and regasify LNG before it is supplied to CLP Power's Black Point Power Station and HK Electric's Lamma Power Station through two separate subsea gas pipelines.

Final preparations are being made for the terminal to go into operation in mid-2023.

CLP Power's Managing Director, TK Chiang, said, "CLP Power has adopted a fuel diversity strategy since early 1990s for supply reliability, competitive cost and environmental benefits. To complement HKSAR Government's energy policy, we have substantially increased the proportion of natural gas in our fuel mix to around 50% since 2020.

"Natural gas is a transition fuel that supports Hong Kong's journey towards its 2050 carbon neutrality target by lowering the carbon intensity of power generation. Planning and construction of the offshore LNG terminal began a few years ago, which underlines the importance of long term planning to the energy industry. It also demonstrates our commitment to reduce the carbon intensity of our electricity supply and contribute to the sustainable development of Hong Kong.

"This facility, once commenced, will further enhance the diversity of our gas supply sources, giving us additional flexibility and supply security to utilise more natural gas for power generation," he said.

HK Electric's Managing Director, Wan Chi-tin, added, "HK Electric strives to help Hong Kong achieve carbon neutrality before 2050 and has been switching from coal-fired to gas-fired generation as a transitional de-carbonisation measure. The commissioning of the gas-fired unit L11 in 2022 at Lamma Power Station (LPS) enabled us to generate over half of our electricity from natural gas. Another gas-fired unit, L12, is expected to commence operation in early 2024, which will further increase the share of natural gas in our fuel mix.

"The offshore LNG terminal, once in operation, will enhance the security and cost competitiveness of gas supply, enabling more reliable power generation by LPS. This will benefit our customers and contribute to the sustainable development of Hong Kong,"he said. ■

The giant FSRU seen arriving in Hong Kong

Sefe to supply GAIL with LNG cargoes

Indian state-owned energy company GAIL (India) is to receive four LNG cargoes from Germany's Sefe in May.

These cargoes are equivalent to volumes it was getting under a deal with a former unit of Russia's Gazprom, Chairman Sandeep Gupta said earlier this week to local media.

Sefe has already supplied two LNG cargoes each in March and April this year.

"Sefe will decide on volumes on a month to month basis," Gupta told reporters on the sidelines of an event.

Sefe's supply resumption is crucial for GAIL, which reported an almost 93% slump in its December quarter profit, due to lower gas sales triggered by supply disruptions.

In 2012, GAIL agreed to a 20-year LNG purchase deal with Russian energy giant Gazprom. It was signed with Gazprom Marketing and Singapore (GMTS) for annual purchases of an average of 2.5 mill tonnes of LNG per year.

At that time, GMTS was a unit of Gazprom Germania, since renamed Sefe, as the Russians ceded ownership after Western sanctions were imposed on Moscow over its invasion of Ukraine last year.

Sefe had stopped supplying LNG to the Indian company in May last year to meet its own demand. ■

HEH appoints Stade EPC consortium

Hanseatic Energy Hub (HEH) has commissioned a consortium to develop the land-based terminal for liquefied gases at Stade on the River Elbe.

Led by engineering, procurement and construction (EPC) specialist, Técnicas Reunidas, other consortium partners include the FCC Group and Entrade. The contract is subject to a final investment decision (FID) being taken.

The privately developed terminal project is intended to help secure Germany's supply of LNG and green gases from 2027 and at the same time, prepare for the market ramp-up of hydrogen. Its infrastructure and commercial marketing are designed in such a way that a move to ammonia can take place in a future-flexible manner, the developer claimed.

"Our choice of EPC partners is based on many years of experience in the construction of complex infrastructure projects and comprehensive technical expertise in LNG, green gases and hydrogen," Johann Killinger, HEH's Managing Director and co-shareholder said.

Técnicas Reunidas has designed and developed more than 1,000 infrastructure and industrial facilities worldwide, including for LNG and hydrogen.

The Madrid-based company will take over the planning and management of the construction phase and will undertake all the equipment and materials supply for the project. FCC Group, also from Spain, will carry out the site preparation work at the Stade industrial park, as well as the construction of the terminal.

In Spain, FCC has built and commissioned eight LNG storage plants.

Entrade, a subsidiary of the Turkish ENKA Group, will be responsible for the electro-mechanical assembly. The engineering and construction company is already active near Stade.

A FID will be taken this summer, HEH said. The projected investment for the terminal is around €1 bill.

Meanwhile, German energy company EnBW has doubled its LNG import rights at Stade.

The company has agreed another long term 3 mill cu m on top of the 3 mill contracted last December.

Included are options to switch to ammonia as a hydrogen-based energy source. ■

Höegh LNG delivers sustainability plan

Höegh LNG's FSRU fleet scope 1's CO2 emissions declined by 15% from 2021 to 2022, largely driven by changes in the operating mode, the company said in its 2022 Sustainability Report.

Höegh claimed that its FSRUs are the most modern on the market and have the most efficient power production currently available for these operations.

The company said that its overall climate ambition remains committed to reducing total CO2 emissions by 50% and having the first net zero-carbon FSRU in operation by 2030, using 2020 as a baseline.

Höegh's Sustainability Manager, Madeleine Hjemmen Storøy, said; "In 2022, we achieved a 65.38% reduction in CO2 emissions per tonne of gas sent out and made great strides in measuring our scope 2 and 3 emissions and concentrated on enhancing our performance in a systematic manner. We are proud to say that we have delivered on plan and have added further ambitions to our roadmap."

The report also outlined Höegh LNG's sustainability strategy, including targets for reducing greenhouse gas emissions, ramping up its focus on clean energy, and promoting diversity and inclusion throughout the organisation. ■

Höegh LNG is aiming for a net zero carbon FSRU by 2030

Capacity slots open up in Belgium, Finland and Italy

Floating LNG Terminal Finland (FLTF) has announced that the allocation process for the FSRU for the period between 1st October, 2023 and 30th September, 2024, commenced on 17th April, 2022.

Applicants need to submit their terminal capacity requests by 15th May, 2023.

Updated and approved terminal rules will be effective from 1st October, 2023 and the reloading service will be offered between that date and 30th September, 2024.

FLTF will be offering a total of 35 terminal slots of 1,000 GWh each.

The company, a 100% subsidiary of Gasgrid, Finland, is acting as the terminal operator for the FSRU 'Exemplar', which moored at Inkoo in December, 2022.

In Italy, the annual and multi-year auctions for expression of interest in OLT Offshore LNG Toscana amounted to 100% of the allocated capacity for the first product offered.

The auctions were held on 19th and 20th April, 2023.

As a result of the auction, the regasification capacity of 3.75 bill cu m per year (currently authorised) has been fully allocated until gas year 2026/2027.

Regas capacity was offered in slots of 155,000 cu m with seven slots offered for each gas year starting from 2024/2025 until 2033/2034.

Allocations associated with the gas years starting from 2033/2034 are subject to a decision by OLT to extend the terminal's life, which will be decided by the end of gas year 2028/2029.

"FSRU Toscana is contributing the maximum authorised capacity to the country's energy supply," said Giovanni Giorgi, OLT Managing Director. "In order to cope with the European energy emergency, we have requested during 2022 to increase the authorised regasification capacity to 5 bill standard cubic meters per year.

"Final authorisation is expected in the coming weeks. This will allow us to make new slots available for future gas years," he explained.

Elsewhere, Fluxys LNG is offering a slot to unload, store and regasify an LNG cargo at the Zeebrugge LNG Terminal from 12th July 2023.

For this particular cargo, Fluxys LNG has upgraded the standard slot size and commercialised it for an interested party to unload, store and regasify up to 165,000 cu m of LNG over 10 days.

The slot was due to be auctioned on 26th April. ■

Korean Supreme Court rejects GTT's appeal

On 13th April, the Supreme Court of Korea rejected GTT's appeal filed in December, 2022 against the decision of the Seoul High Court.

The original decision confirmed the company's obligation to separate, in whole or in part, the Technology License and the Technical Assistance if requested by South Korean shipyards.

GTT acknowledged what it calls "this very surprising decision", which comes only three months after the decision of the same Supreme Court of Korea to suspend the effects of the decision of the Seoul High Court.

The company said that its provision of technical assistance and engineering services are essential to ensure the safety and performance of its solutions and that its unique expertise is crucial to the safety of LNG maritime transport.

Convinced of the sound basis of its contractual provisions, GTT is still committed to defending its interests and those of the entire LNG industry, and is considering the most appropriate actions to be taken in order to maintain its rights, the company said.

GTT also said that it did not anticipate any significant financial impact in the short or medium term. ■

NEWS NUDGE

TotalEnergies delivers first Dhamra cargo

TotalEnergies has delivered the first commissioning LNG cargo to the Dhamra LNG terminal, located in the state of Odisha on the Indian east coast of India.

The terminal is owned and operated by Adani Total Private Limited (ATPL), a 50-50 joint venture between TotalEnergies and Adani.

This delivery enables the gradual commissioning of the terminal, which is expected to start commercial operations at the end of May, this year.

With regasification capacity of 5 mill tonnes of LNG per year, Dhamra will add more than 10% to India's regasification capacity, strengthening the country's position as the world's fifth largest LNG importer and allowing it to increase the share of natural gas in its energy mix from 8% to 15% by 2030 to reduce its carbon intensity, TotalEnergies said. ■

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Nakilat reports net profit rise

Qatari LNG shipowner and manager, Qatar Gas Transport (Nakilat), has reported a 3.6% year-on-year increase in net profit to QAR396 mill for the first quarter of this year on revenue of QAR1,12 bill.

EBITDA came in at QAR904 mill, while the company declared an 0.07 earnings per share.

Joint venture company profits operating in LNG transportation, including the shipyard, increased by 7.9%.

The net profit rise is attributed to Nakilat's continued focus on operational efficiency, effective cost management, and robust market demand for its LNG shipping services, the company said.

"Nakilat's strong financial performance in the first quarter of 2023 is a reflection of our continued efforts to optimise our operations and capitalise on market opportunities, which in turn focuses on enhancing the value of our shareholders," said CEO, Abdullah al-Sulaiti.

Despite the ongoing challenges facing the global economy and market volatility owing to high interest and inflation rates, the company remained resilient and achieved stable financial results.

"In line with our purpose, vision and strategy, we will continue to pursue sustainable growth, seize business opportunities and maintain our position as one of the world's leading players in the global LNG shipping industry," al-Sulaiti added. ■

Nakilat LNGCs seen loading at Ras Laffan

GTT sees revenues rise over 17%

GTT has reported revenues of €80 mill for the first quarter of this year, which was in line with expectations and 17.2% above 1Q22 levels.

Newbuilding revenues amounted to €73.5 mill, up 19%, compared to 1Q22. Royalties from LNG and ethane carriers amounted to €66.2 mill, up 23%.

GTT said that the number of LNGCs under construction will increase significantly from 2Q23, thus generating additional revenue notably in 2H23.

Royalties from FSUs amounted to €1.2 mill, down 65.6% - the first FSU was delivered during the quarter - while royalties from onshore tanks were €1.1 mill (+44.4%).

Royalties generated by the LNG as fuel business (€4.9 mill) were also starting to benefit from the large number of orders received in 2021 and 2022.

Strong orderbook

As of 31st March, 2023, the orderbook excluding LNG as fuel stood at 289 units. Regarding LNG as fuel, with the delivery of one vessel, there were 69 vessels in the orderbook as at the end of the quarter.

Philippe Berterottière, GTT Chairman and CEO, said: "With 25 orders for LNG carriers and one floating liquefied natural gas unit order booked in the first quarter of 2023, commercial performance in our core business remains strong in the wake of an exceptional 2022.

"Demand for LNG remains particularly strong, as evidenced by the two final investment decisions for new liquefaction plants made in the first quarter, which will generate additional needs for LNG carriers over the coming years.

"GTT is pursuing its constant R&D and innovation efforts with the ambition of being a major technological player in the de-carbonisation of maritime transport. As such, we obtained several new approvals during the first quarter, notably in the field of alternative fuels.

"Regarding our CSR strategy, GTT joined the United Nations Global Compact at the beginning of March, thereby demonstrating our commitment to a sustainable and responsible economy.

"From a financial standpoint, revenues for the first quarter of 2023 show a strong increase of 17.2%, compared to the first quarter of 2022. Activity will pick up notably in the second half of 2023, benefiting from the growing number of ships under construction. In this context, the Group confirms its 2023 targets," he said.

During the quarter, GTT announced a new brand, Ascenz Marorka and in early 1Q23, received an approval in principle (AiP) from Lloyd's Register (LR) for a maintenance optimisation solution for LNG membrane tanks.

The Group also obtained a €4.66 mill subsidy from Bpifrance for the design of an on board CO2 capture system and the development of intelligent operational performance solutions by OSE Engineering as part of the MerVent project.

GTT also received four AiPs from the Japanese classification society ClassNK for its latest alternative fuel development projects.

For the 12 months of 2023, GTT forecast consolidated revenues of between €385 mill and €430 mill, while consolidated EBITDA will be between €190 mill and €235 mill.

Since the financial announcement, GTT has announced orders for the tank designs for another six LNGCs.

These include a first order from Chinese shipyard China Merchants Heavy Industry-Jiangsu for the tank design of four 180,000 cu m LNGCs, on behalf of a European shipowner.

They will be fitted with the Mark III Flex membrane containment system and are scheduled to be delivered between the first quarter of 2026 and the first quarter of 2027.

Another order came from Samsung Heavy Industries for the tank design of two 174,000 cu m LNGCs on behalf of an Asian shipowner.

They will also be fitted with the Mark III Flex membrane containment system and will be delivered between the second and the third quarters of 2026. ■

CoolCo to manage drydockings using BASSnet

Cool Company (CoolCo) is to implement BASSnet Projects' software module for planning, preparing and execution of drydockings across its fleet of LNGCs.

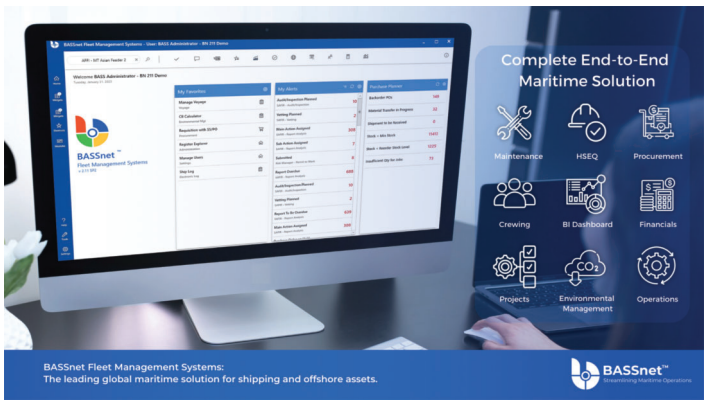
"BASSnet is our preferred choice for smooth and cost-effective drydocking," said Øistein Dahl, CoolCo COO. "Our vessel managers can fully control the entire project optimising planning and execution with better fleet-wide overview to minimise costs.

"They can easily plan jobs and monitor progress across the fleet with daily reports. BASSnet's business intelligence is also invaluable for cost analysis and savings.

"The ability to compare quotes within a single system helps us to stay cost efficient. We can also easily evaluate and identify the best yards for future projects," he said.

For drydocking, BASSnet's solution drives cost and efficiency benefits, and can help users to:

- Efficiently create and distribute company standards for drydocking specifications fleetwide.
- Plan and monitor the entire drydocking and link relevant PMS jobs for the whole fleet.
- Save time by mixing & matching from previous projects including cost estimates.
- Engage ship staff to help prepare the drydocking spec in good time and shift PMS jobs to a convenient upcoming docking.
- Digitally send RFQs to yards, auto-populate quotations back into BASSnet and compare them.
- Efficiently monitor, update the progress of the work and raise all required purchase orders.
- Fully monitor projects costs for yard, materials and sub-contracted services.
- Evaluate yards upon completion of works, for future reference.
- Automatically update the on board maintenance system with history of the work performed for later reference during maintenance planning, class inspections and vetting inspections.
- Analyse past drydockings and use the data for future planning and improvements.



BASSnet's shipmanagement software

BASSnet also offers significant cost efficiency as an integrated solution. For example, the system brings together maintenance, procurement and drydocking, and enables financial control, the company claimed.

"BASSnet is designed for end-to-end efficiency, while fully controlling costs," explained Per Steinar Upsaker, BASS software CEO & Managing Director. "It enables technical asset managers to comply with industry standards and regulations.

"They can tightly manage projects through systematic planning that optimises costs. They can also keep track of drydocking history on board, a highly valuable benefit especially for oil tankers, chemical tankers and gas carriers that are subjected to extreme scrutiny by oil companies and authorities," he said. ■

Regas module for 'LNG Croatia'

LNG Croatia has signed a contract with Wärtsilä Gas Solutions for the delivery of another regasification module for its FSRU.

This regas module will have a maximum capacity of 250,000 cu m/h and the contract is worth €22,970,000.

Its construction will take 22 months, and the installation on the FSRU' 'LNG Croatia' will be carried out during the summer of 2025, which will then enable the total capacity of the terminal to double.

This follows the 18th August, 2022 decision by the Croatian Government to increase the security of gas supply by building the Zlobin/Bosiljevo gas pipeline and expanding the capacity of the LNG terminal to 6.1 bill cu m of gas per year.

Following the installing of the module on board the FSRU and the construction of the Zlobin/Bosiljevo pipeline, additional capacities will be available and offered to the market from 1st October, 2025, for the beginning of the gas year 2025/2026. ■

NEWS NUDGE

Ships - Newbuildings, purchases, deliveries, recycling

The Daewoo (DSME) order mentioned in the last issue was believed to stem from MOL for an equivalent price if $257.5 mill.

Elsewhere, Excelerate Energy has finalised the purchase of the 173,400 cu m FSRU 'Sequoia' for $265 mill.

She was bought from Anemoesa Marine Inc.

In March 2023, Excelerate closed on an amended and restated $600 mill senior secured credit facility, consisting of a $350 mill revolving credit facility and a $250 mill term loan.

The term loan proceeds and cash on hand were used to purchase the FSRU.

'Sequoia' was delivered as a newbuilding to Excelerate Energy's fleet in June, 2020 under a five-year bareboat charter. She can operate as both an FSRU and a traditional LNGC.

She is currently providing regasification services at the Bahia regasification terminal in Bahia, Brazil.

Sold for recycling, the LNGC 'Grace Energy' was beached at Chattogram, Bangladesh on 20th April.

Alpha Gas has taken delivery of its sixth LNGC.

Built by Hyundai Samho Heavy Industries (HSHI), the 174,000 cu m 'Energy Fidelity' is the first LNGC fitted with X-DF engines to join the fleet and is the first of a series of three to be delivered by the shipyard to Alpha in 2023/2024.

She is also equipped with a high capacity reliquefaction plant, an air lubrication system (ALS), two shaft generators (PTO) and an air resistance shield and was delivered into a medium-term charter with an Asian-based charterer. ■

Carbon capture to be trialled on an LNGC

EverLoNG's carbon capture project is about to achieve an important milestone, the company claimed.

A prototype ship-based carbon capture (SBCC) equipment, being built in the Netherlands by Carbotreat, is nearly ready and will be installed in July on an LNG-powered LNGC arranged by partner TotalEnergies. It will operate for three to five months on board.

"This will be the first testing campaign for the carbon capture equipment," said Marco Linders of TNO, the EverLoNG project co-ordinator. "It will run for 2,500 to 3,000 hours. The unit is able to treat 100-150 Nm3/h of exhaust gas, implying it can capture up to 250 kg of CO2 per day."

Captured CO2 will be stored on board as a liquid in a pressurised vessel. Ideally, the CO2 will be off-loaded and transported to an industrial site where it could be used, for example, to produce synthetic fuels or in greenhouses to boost the growth of crops. Alternatively, the CO2 will be stored permanently in the subsurface.

"Later in the project, the SBCC equipment will be removed from this ship and installed on a second vessel – the 'Sleipnir', an LNG-powered crane vessel owned by our partner Heerema Marine Contractors," Dr Linders added. "Installation of the equipment will be accompanied by training for the crew."

The aim is to reduce ships' CO2 emissions by at least 70%, compared with the same ship running on LNG but not equipped with SBCC, as the reference case. The company was also working on the cost effectiveness of SBCC, aiming to achieve CO2 capture and on board storage at costs below €100 per tonne (to be achieved by 2025) and €50 per tonne.

EverLoNG added that it was evaluating the costs of off-loading, transport and storage (or utilisation) of CO2 in several CCUS chains. In parallel, an evaluation is underway on the impact of SBCC on the ships' infrastructure, stability and safety, to guarantee the technical feasibility of the technology.

Finally, off-loading strategies are being developed that clarify the post-treatment required on board, as well as the infrastructure necessary on the port side. To this end, CO2 Shipping Interoperability Industry Group (CSIIG) has been established and a roadmap towards a European off-loading network has been proposed. ■

NEWS NUDGE

S&C advises Sempra

US law firm, Sullivan & Cromwell (S&C) advised Sempra Infrastructure Partners (SI), on project financing to reach a positive final investment decision (FID) to develop, construct and operate the Port Arthur LNG Phase 1 project.

The project will comprise two natural gas liquefaction trains, two LNG storage tanks and associated facilities with a nameplate capacity of around 13 mill tonnes per annum.

In connection with the FID, SI closed its joint venture with ConocoPhillips.

S&C advised SI on a $6.8 bill non-recourse debt financing and the issuance of the final notice to proceed under the project's engineering, procurement and construction (EPC) agreement.

In connection with the project, SI also entered into an agreement to sell an indirect, non-controlling interest in Phase 1 of the project to an infrastructure fund managed by KKR.

MOL joins MAMII

Mitsui OSK Lines (MOL) has joined the Methane Abatement in Maritime Innovation Initiative (MAMII) as a main partner.

MAMII's aim is to reduce methane emissions across the world's maritime industry. It is led by Safetytech Accelerator, a non-profit organisation established by Lloyd's Register (LR) and the Lloyd's Register Foundation.

Formed in September, 2022, it has 14 company members whose goal is to identify, accelerate and advocate technology solutions to measure and manage methane emissions activity to minimise the environmental impact of methane slip in shipping through collaboration.

In addition to participating in MAMII, MOL said that it is working with other partners on a technology development project aimed at significantly reducing methane slip on LNG-fuelled vessels by utilising catalysts and improving engine's combustion process.

Last year, the world's first methane oxidation catalyst system received an Approval in Principle (AiP). A factory test will start in the middle of this year and on board trials will be conducted from the second half of 2024 to the end of 2026, verifying this design concept in the actual vessel. ■

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Svanehøj acquires US-based LNG specialist

Danish marine pump specialist, Svanehøj has purchased California-based Complete Cryogenic Services (CCS), a company involved in the service and overhaul of submerged pumps on LNGCs.

This is Svanehøj's third company acquisition in just over two years.

As a result of the boom in LNGC numbers, an attractive service and after sales market has emerged, in which Svanehøj is determined to gain market share, the company said.

CCS has more than 30 years of experience in the service and overhaul of submerged cargo, spray, and high-pressure pumps for LNGC cargo containment systems.

"CCS is a well-known and recognised company that will strengthen our efforts to become the leading service provider of inspections, service, and calibration of cargo equipment in the LNG segment. At the same time, the acquisition is an investment in knowledge and know-how that will help us develop new products and services for the energy transition of shipping," said Søren Kringelholt Nielsen, Svanehøj CEO.

Significant investment

In recent years, Svanehøj has invested significantly in its service solution business through acquisitions of FORCE Technology Marine Equipment Service (2020) and Wärtsilä Tank Control Systems (2022), as well as the establishment of a 1,600 sq m service and repair shop in Singapore (2021).

With the acquisition of CCS, Svanehøj Service Solutions is now located on three continents with just under 100 employees, almost a tenfold increase in four years.

"We have invested significantly in our service business to be close to customers with local service engineers worldwide. Today, Svanehøj can offer integrated solutions with service on safety valves, gauging and instrumentation systems, and submersible cargo, spray, and high-pressure pumps - all carried out by one service provider to make the entire service scope easier and more financially viable," added Svanehøj Director of Service and Aftersales, Morten Christian Larsen.

With the CCS buyout, Svanehøj will also be able to re-engineer critical spare parts for all pump types. Larsen explained that it is essential to Svanehøj's strategy of supplying high-quality spare parts for other brands' equipment.

CCS becomes an independent part of Svanehøj Service Solutions and will be named Svanehøj CCS - Complete Cryogenic Services. The company's nine employees will continue to work in their current roles with Henry Smith as Director.

"For us, the change of ownership is an opportunity to ensure a future succession and scale our business globally. We have come to know Svanehøj as a company with solid values and a clear vision to help overcome the barriers in the energy transition of shipping. We are very much looking forward to being a part of that," Smith said. ■

Svanehøj continues to expand its operations

NEWS NUDGE

Record LNGC numbers at Grain

The UK's Grain LNG, Europe's largest LNG terminal, has reported a record 102 ships berthed at its terminal on the River Medway for the financial year April 2022 to March 2023.

This number broke the previous record of 71 ships set in the financial year 2019/2020.

Grain's infrastructure, including its two jetties, large storage capacity, and flexible supply chain, has allowed it to accommodate a wide range of vessels and handle significant volumes of LNG shipments from around the world, the UK's National Grid said.

Grain is currently expanding the terminal by around 20% with a new LNG tank and associated delivery infrastructure. ■

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	$268.38 mill
Five years old (174,000 cu m)	$221.84 mill
Total Fleet (565 ships)	$92.22 bill
Orderbook (311 ships)	$82.45 bill

Source: VesselsValue (26/04/23)

**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	$55,000	- $3,000
West of Suez	$38,000	-
12 mos T/C	$123,000	-

Since last report (13/04/23)

Source: Fearnleys (26/04/23)

WORLD LNG CARRIER ORDERBOOK

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

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

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

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

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

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

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

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Data last updated = 28 March 2023

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

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

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WORLD SMALL SCALE LNG FLEET*

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

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