

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

28 September 2023

QatarEnergy kick starts second ship ordering spree

QatarEnergy has signed a huge new LNG shipbuilding agreement valued at QR14.2 bill (about \$3.9 bill) with HD Hyundai Heavy Industries (HHI).

This agreement calls for the construction of 17 ultra-modern LNGCs.

The deal marks the start of the second phase of QatarEnergy's LNG ship acquisition programme, which will support its expanding LNG production capacity from the North Field LNG expansion and Golden Pass LNG export projects, as well as its long-term fleet replacement requirements.

Together with the 60 ships contracted by QatarEnergy in the programme's first phase, which will be built at South Korean and Chinese shipyards, the latest agreement brings the total number of confirmed new LNGCs to be delivered to QatarEnergy and its affiliates to 77, with still more to follow, the Qatari giant said.

To commemorate the occasion, a special ceremony was held in Seoul, which was attended by HE Saad Sherida Al-Kaabi, Qatar's



Seen signing the agreement in Seoul yesterday were left - KaSam-hyun, Vice Chairman and CEO of HD Korea Shipbuilding & Offshore Engineering (KSOE) - and right - HE Saad Al-Kaabi, Qatar's Minister of State for Foreign Affairs and President and CEO of QatarEnergy

Minister of State for Energy Affairs and President & CEO of QatarEnergy; senior executives from QatarEnergy, QatarEnergy LNG and HD Hyundai.

The agreement was signed by Minister Al-Kaabi and Ka Sam-hyun, Vice Chairman & CEO of HD Korea Shipbuilding & Offshore Engineering (KSOE).

Minister Al-Kaabi said at the ceremony; "This is another milestone in our long-term relationship

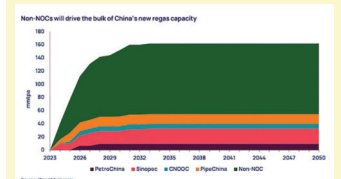
with HD Hyundai Heavy Industries and the Korean shipbuilding industry in general, which is built on the strong and strategic partnership between the State of Qatar and the Republic of Korea."

Qatar's North Field expansion project will boost its position as the world's top LNG exporter. It includes six LNG trains that will ramp up Qatar's liquefaction capacity from 77 mill tonnes per annum to 126 mill tonnes by 2027.

SHIPPING NEWS AGENDA

MARKETING

Imports rising **2**



China regas boom **3**

BUSINESS

Grain offers capacity **4**

More FLNGs **5**

Gate capacity **5**

FINANCE

Dynagas improves **6**



KKR invests **7**

NextDecade's cash call **7**

TECHNOLOGY

SHI wins contract **10**

Cargo containment **11**

RGLNG equipment **11**

LNG ORDERBOOK

LNG carrier orderbook **12**

LNG small scale fleet **18**

DELIVERING CLEAN ENERGY FOR A SUSTAINABLE FUTURE



As the world transitions to cleaner and more sustainable energy sources, liquefied natural gas (LNG) has emerged as a key player in the global energy mix. LNG is a low-emission and versatile fuel that can power homes, businesses, and vehicles, reducing greenhouse gas emissions and improving air quality. These factors make LNG a promising alternative to coal and oil.

With one of the world's largest gas fleets and 2 decades of experience in the industry, Nakilat is at the forefront of innovative LNG transportation solutions, delivering safe, reliable, and cost-effective services to our clients across the globe. Our modern LNG carriers are designed to meet the highest safety standards and environmental regulations, ensuring that your cargo is carried in the most efficient and sustainable way possible.

OUR INTEGRATED MARITIME SOLUTIONS



YOUR TRUSTED PARTNER FOR LNG TRANSPORTATION

Global LNG imports on the rise

In August, 2023, global LNG imports expanded by 4.3% to 1.41 mill tonnes year-on-year, reaching a total of 33.88 mill tonnes.

Asia/Pacific and the MENA regions were the driving forces behind this increase, which offset weaker import figures in Europe, Latin America and the Caribbean (LAC), according to a report from Dubai-based Gas Exporting Countries Forum (GECF).

From January to August, 2023, global LNG imports totalled 272.35 mill tonnes, a growth of 3.3% (8.64 mill tonnes) y-o-y, most of which originated from Asia/Pacific and Europe.

In August, 2023, Europe experienced its second consecutive y-o-y decline in LNG imports of 3.4% (0.30 mill tonnes), to total 8.65 mill tonnes.

This drop was primarily driven by a significant premium of Asian spot LNG price over the TTF gas price in August, coupled with high gas storage levels in Europe.

Between January and August, 2023, cumulative LNG imports in

Europe grew by 5.3% (4.29 mill tonnes) y-o-y, to total 85.02 mill tonnes.

Turning to Asia/Pacific, in August, 2023, this region saw a substantial 8.4% y-o-y increase in imports of 1.78 mill tonnes giving its highest monthly import volume of 22.95 mill tonnes since January, 2023.

This also marked the first time this year that monthly LNG imports exceeded the levels seen in 2021, GECF said.

Between January to August, 2023, cumulative LNG imports in the region grew by 2.5% y-o-y to 172.75 mill tonnes, an increase of 4.14 mill tonnes.

In August, 2023, LAC's LNG imports fell by 20% (0.27 mill tonnes) y-o-y to reach 1.09 mill tonnes. Weaker LNG imports were seen mainly from Argentina, Brazil, Dominican Republic and Jamaica, which offset higher imports in

Chile, Colombia and Puerto Rico.

From January to August, 2023, LAC's cumulative LNG imports increased by 1.7% (0.14 mill tonnes) y-o-y to 8.56 mill tonnes.

August's MENA's imports expanded by 28%, or 0.24 mill tonnes y-o-y to reach 1.12 mill tonnes. Higher LNG imports were driven mainly by Kuwait and the United Arab Emirates (UAE).

Between January and August, 2023, MENA's total LNG imports were down slightly by 0.5% y-o-y, reaching 5.06 mill tonnes.

However, hotter-than-usual weather in August 2023 increased Kuwait's electricity demand, requiring additional LNG imports.

Global exports rise

As for exports, the August figure jumped by 4% (1.29 mill tonnes) y-o-y to reach 33.23 mill tonnes, driven by increased shipments from both GECF and non-GECF countries, offsetting weaker LNG reloads.

Non-GECF countries' share of exports grew from 50.2% in August 2022 to 51.7% in August, 2023, while GECF member countries' share dropped from 48.1% to 47% during the same period, due to stronger growth in non-GECF exports.

In addition, LNG reloads' contribution to the global export total decreased from 1.7% to 1.3%.

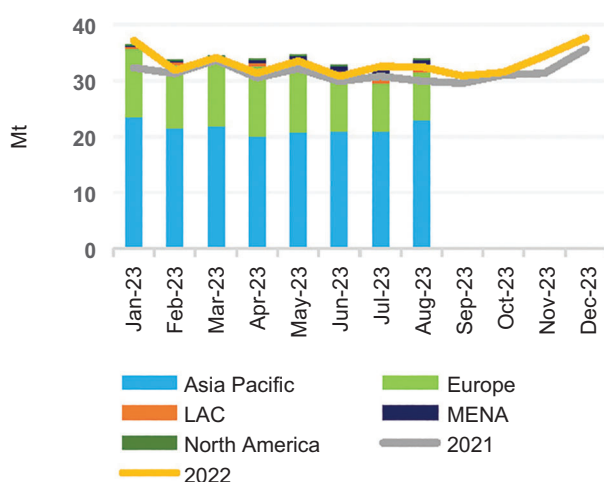
From January to August, 2023, cumulative global LNG exports grew by 3.9%, to total 271.44 mill tonnes. Notably, in August, the top LNG exporting countries were the US, Australia and Qatar.

LNG exports from GECF member countries and observers reached 15.62 mill tonnes in August this year, representing a y-o-y growth of 1.7%, equivalent to 0.26 mill tonnes. This increase was primarily driven by Algeria, as well as Angola, Malaysia, and Mozambique.

In August, 2023, LNG exports from non-GECF countries experienced a significant 7.3% (1.16 mill tonnes) y-o-y increase, to total 17.19 mill tonnes. The primary driver was the US, with Australia, Cameroon and Oman also showing export increases, albeit to a lesser extent.

From January to August, 2023, non-GECF cumulative LNG exports rose by 5.6%, equivalent to 7.26 mill tonnes y-o-y, reaching 136.88 mill tonnes. ■

Trend in global monthly LNG imports



Source: GECF Secretariat based on data from ICIS LNG Edge

NEWS NUDGE

LNT gets LR approval

Lloyd's Register (LR) has awarded Approval in Principle (AiP) to Norwegian technology provider LNT Marine (LNT) for its patented LNT A-BOX cargo containment system.

This system has been developed for medium to large scale LNGCs, and is claimed to make their construction easier and more cost effective, together with the proprietary LNG Fuel-BOX fuel tank system, which offers an ammonia-ready LNG fuel tank system.

LNG Shipping News

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

Publisher

Stuart Fryer

Editor

Ian Cochran
+44 (0)7748 144265
lancochran74@gmail.com

Ad sales enquiries

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

Subscriptions

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

Production

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

No part of this publication may be reproduced or stored in any form by any mechanical, electronic, photocopying, recording or any other means without the prior written consent of the publisher. Whilst the information and articles in LNG Shipping News are published in good faith and every effort is made to check accuracy, readers should verify facts and statements direct with official sources before acting on them as the publisher can accept no responsibility in this respect. Any opinions expressed in this publication should not be construed as those of the publisher."

China's regas capacity rising – but low utilisation persists

This year will see a boom in regasification capacity in China, according to Wood Mackenzie.

Since May, 2023, four regas terminals have been commissioned in the country - Hong Kong Offshore LNG, Caofeidian (Suntien) LNG, Wenzhou LNG and Guangzhou LNG.

These brought the number of operational terminals to 28 with a total nominal capacity of 131 mill tonnes per year, comprising of 45 mill tonnes in North China, 43 mill tonnes in East China and 43 mill tonnes per annum in South China.

Another two could also start operations before the end of this year, namely Zhangzhou LNG and Tianjin LNG (Beijing Gas).

NOCs increasing

One clear trend, WoodMac said, was that non-national oil companies (NOCs) were playing a more significant role in building regas capacity. With the exception of PipeChina's Zhangzhou LNG, five are all majority-owned by city gas companies. And this trend will continue.

Non-NOCs capacity growth is enormous. Based on equity share, non-NOC capacity is expected to grow from 67.5 mill tonnes per year to 176 mill tonnes over the next decade - 67% of total China regas capacity growth. Most of this growth will be seen in east and south China.

This new capacity allows non-

NOCs to directly access the global LNG market, seize arbitrage windows and capture trading opportunities, WoodMac said.

Along with the terminal construction, contracting activity from non-NOCs was also notable. Driven by growing capacities and ongoing market reforms, non-NOCs have become increasingly active in signing long-term contracts.

Since 2021, the annual contracted quantity (ACQ) of the sale purchase agreements (SPAs) signed by non-NOCs averaged 26 mill tonnes per year, 46% of the total signed quantities.

However, utilisation regas capacity rates are declining.

Country level utilisation fell from 77% in 2020 to 57% in 2022. It may drop further in 2023, as new capacity additions are much larger than the expected demand

increase.

Looking forward, the ramp-up flow through Power of Siberia may further reduce utilisation in these regions.

Low utilisation rates affect a terminal's profitability, particularly if the terminal does not have most of its capacity sold under long-term contracts, WoodMac explained.

As a result, some terminals are exploring new business opportunities. Dalian LNG, for example, had a utilisation rate of 22% in 2022 and 16% year-to-date in 2023 because of increased flows from Power of Siberia into the region. This terminal is developing a bonded storage business to mitigate its declining revenues.

In addition, the declining utilisation may also result in a reduction in regas tariffs in some

regions. Although still to be seen, it merits more attention when making investment decisions, WoodMac concluded.

EQT agrees to take Cameron LNG - to supply natural gas

Commonwealth LNG has signed a heads of agreement (HoA) with EQT, the US' largest natural gas producer.

This agreement calls for the supply of 1 mill tonnes per annum of LNG under a 15 year tolling agreement and the associated gas supply to Commonwealth's Cameron LNG facility.

Commonwealth's Founder and Executive Chairman, Paul Varello, said: "We are very pleased to add a US producer of EQT's stature to Commonwealth's customer portfolio.

"This agreement will connect EQT's vast natural gas assets to Commonwealth's LNG facility, thus creating a robust value chain from wellhead to water.

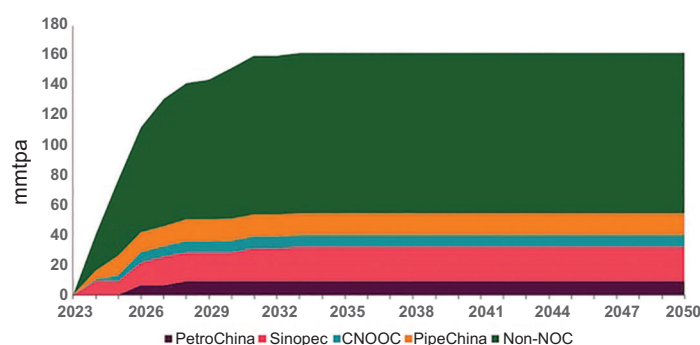
"Accessing EQT's natural gas production, which achieved a 20% year-over-year reduction in Scope 1 and 2 greenhouse gas emissions, supports Commonwealth's goal of achieving best in class environmental standards," he said.

Commonwealth also said that it anticipated taking a final investment decision (FID) on Cameron in the first quarter of next year with the first cargo deliveries expected in 2027.

The HoA's terms would commence upon Cameron's commercial startup. Final terms are still to be agreed between the parties.

EQT was advised by law firm Akin.

Non-NOCs will drive the bulk of China's new regas capacity



Source: Wood Mackenzie

NEWS NUDGE

Platts in DES Southeast Asia LNG (SEAM) assessments launch

Platts, part of S&P Global Commodity Insights, is to publish DES Southeast Asia (SEAM) price assessments reflecting the value of spot LNG cargoes delivered into Southeast Asia.

From 16th October, the assessments will be published as a differential to Platts JKM, as

well as on an outright basis.

Southeast Asian LNG imports have grown significantly over the last two years and are expected to grow further as new importing countries enter the market.

Cargoes delivered ex-ship (DES) to Thailand will be considered as the basis of the assessment. Prices of LNG spot cargoes delivered into Singapore, the Philippines or Vietnam may be normalised.

Platts will assess cargoes for delivery in the third, fourth,

fifth and sixth half-month cycles forward from the date of publication. The SEAM monthly assessment will be based on the average of the two DES Southeast Asia LNG half months that match the JKM delivery month period.

DES Southeast Asia assessments will reflect a quantity of 3.4 TBtu. This volume will be subject to plus/minus 5% operational tolerance, at the seller's option.

Platts standards will reflect LNGCs of above 135,000 cu m.

Grain launches capacity auction

Europe's largest LNG terminal, the UK's National Grid Grain LNG, has launched an auction for 375 GWh/d (about 9 mill tonnes per annum) of its existing capacity.

The auction started on 14th September and will run to 23rd November, 2023.

Grain LNG, which is part of National Grid Ventures, said it had used the positive feedback received from a recent market consultation exercise and, following the UK's watchdog Ofgem's approval, is offering three lots of capacity.

Each lot will consist of 42 berthing slots, 200,000 cu m of storage and 125 GWh/d (around 3 mill tonnes per annum) of regasification capacity from January, 2029.

This package was specifically designed for interests who wish to acquire a substantial stake in a major terminal in Northwest

Europe, at a reduced cost and with shorter contract lengths, compared to newbuilding projects, Grain said.

Grain has also worked with Ofgem to arrange a provision, whereby participants can bid jointly in the auction and share capacity.

As the terminal's capacity already exists, interests signing up to the capacity will not be subjected to FID approvals or potential delays that can arise from construction issues, commonly associated with newbuilding terminals.

Simon Culkin, Grain LNG's Importation Terminal Manager, said: "We continue to be encouraged by the high level of interest

shown by potential customers at a time of significant geo-political influence on the world's energy markets.

"It has allowed us to engage

and shape our offering to best meet customer's needs, whilst optimising the best possible access to this strategically important asset," he said. ■

NEWS NUDGE

DET to start regas auctions

German public sector operating company, Deutsche Energy Terminal GmbH (DET), is to hold auctions for regasification capacities, including storage and send-out.

In two digital auction rounds, which are due to start on 16th and 23rd October, 2023, respectively, interests will be able to

acquire utilisation rights for the first short-term capacities in 2024 at the Brunsbüttel and Wilhelmshaven 1 terminals.

Further short-term capacities at the Stade and Wilhelmshaven 2 terminals are due to be offered in another auction round in December, 2023.

Long-term capacity marketing with a term of more than a year is planned for April, 2024. ■

RANCAN
Hi-Tech Laminated Densified Wood



Ranprex®

CYROGENIC APPLICATIONS:

- LPG/LNG Tank supports
- LNG Pipe Supports
- LNG Swivel Joints

PROPERTIES

- Excellent Thermal Insulation
- Consistent Strength
- Long Durability
- Wear Resistant

WE ARE APPROVED BY:

- **ABS** American Bureau of Shipping
- **BV** Bureau Veritas
- **CCS** China Classification Society
- **DNV GL** Det Norske Veritas Germanischer Lloyd
- **LR** Lloyd's Register
- **CLASSNK** Nippon Kaiji Kyokai
- **GTT** Gaztransport & Technigaz
- **JMU** Japan Marine United Corporation



RANCAN SRL - Via della Tecnica 9, (Z.I.) - 36075 Montecchio Maggiore (VI) Italy -

Tel: +39 (0) 444 499234 - Fax: +39 (0) 444 499311 - E-mail: rancan@rancan.com - www.rancan.com

Made in Italy



Indonesian FLNG projects on the horizon

Two Indonesian FLNG projects have moved a step closer.

First, Genting Oil & Gas Limited (GOGL), through its wholly-owned indirect subsidiary PT Layar Nusantara Gas (PTLNG), and Wison (Nantong) Heavy Industry (Wison), an affiliate of Wison Offshore & Marine, have signed a limited notice to proceed on the purchase of \$43.04 mill worth of long lead items for a 1.2 mill tonnes per year FLNG.

PTLNG is a special purpose vehicle established to construct, own and operate the unit, plus an onshore gas processing plant, and pipeline to be located in West Papua, Indonesia.

Under the terms of the agreement, PTLNG will place orders for a cold box, compressor, generator sets, etc, prior to the execution of the engineering, procurement, construction, installation & commissioning (EPCIC) contract signing.

Wison's Chairman, Hua Bangsong, explained: "According to the Gastech exhibition in Singapore that I attended, the LNG market is very tight at the moment, and it is expected that the future demand

will increase significantly, so it is necessary to lock in key resources as soon as possible to ensure that the project will be put into production on time.

"The signing of this agreement marks a key milestone to achieve first drop of LNG in Kasuri Block by 2Q26. Due to Indonesia's archipelago nature and abundant marginal gas resources, FLNG facility offers the most cost-effective option to monetise natural gas in the region, and Wison sees Indonesia as an important strategic market for FLNGs," he said.

FEED underway

Wison is currently conducting a front-end engineering and design (FEED) study for the FLNG, which is due to be completed by the end of November this year.

Dato' Sri Tan Kong Han, President & COO & Executive Director of Genting Berhad, the holding company of GOGL, said that the FLNG unit will be the first in Indonesia and ninth in the world.

Earlier, in February of this year, the Indonesian Government had

approved the revised first phase plan for the Asap, Merah and Kido structures development, which will allow the supply of 230 mill cu ft per day of natural gas to the FLNG for 18 years, as well as another supply of 101 mill cu ft to an Ammonia and Urea plant to be built in West Papua for 17 years.

This will be the third FLNG Wison will construct, following units for Exmar and Eni.

This project is expected to achieve first LNG in 1H26.

The second project involves Bumi Armada, which has signed a non-binding agreement with PT Pertamina International Shipping and PT Davenergy Mulia Perkasa (DMP) to develop and commercialise LNG produced from the Madura gas field utilising an FLNG.

Bumi Armada and Pertamina plan to design, engineer, construct, install, commission, hook up and operate an floating natural gas liquefaction and storage facility, together with an LNGC, which will transport the LNG to distant consumers.

Preliminary discussions have started with several potential off-takers and the first LNG shipment is anticipated about three years after making a final investment decision (FID).

ConocoPhillips secures regas capacity at Gate

ConocoPhillips has signed an agreement to secure additional European regasification capacity at Rotterdam's Gate LNG terminal.

This agreement further complements the company's LNG resources in Qatar and Australia, offtake and equity in Sempra's recently sanctioned US Port Arthur LNG Phase 1 project, a regas agreement at the German LNG Terminal announced last year, and the offtake agreements at Mexico Pacific's Saguaro LNG export facility, announced last month, the US energy giant said.

"Adding capacity at the Gate LNG terminal fits well with our efforts to deliver reliable, lower-carbon energy into Europe from highly competitive LNG supply," said Bill Bullock, ConocoPhillips' Executive Vice President and CFO. "Expanding our LNG footprint with agreements like this further enhances a balanced, diversified, and attractive portfolio, as we progress our global LNG strategy."

ConocoPhillips' 15-year throughput agreement for around 1.5 mill tonnes per annum from Gate is due to begin in September, 2031.

Gate Terminal, a joint venture between Vopak and Gasunie, is an LNG hub at Rotterdam. The terminal began operations in 2011.



Wison's earlier contract was for a 2.4 mill tonnes per annum FLNG on behalf of Eni

Dynagas posts improved income

Dynagas LNG Partners' has reported a net income increase of \$3.3 mill, or 29.7% for the three months ended 30th June, 2023.

The figure was \$14.4 mill, compared to \$11.1 mill for the corresponding period of 2022.

This increase was mainly driven by the fall in drydocking and special survey costs, attributable to the scheduled drydockings of 'Clean Energy' and 'Amur River', which were completed in April, 2022 and July, 2022, respectively.

In addition, an increase was recorded in the deferred revenue amortisation resulting from an escalating timecharter rate, which related to the new charter agreement with Equinor for the employment of the 'Arctic Aurora', which was due to commence this month.

Adjusted net income was \$5.8 mill, compared to \$9.1 mill for 2Q22, which represented a net decrease of \$3.3 mill, or 36.3%.

This was mainly due to interest and finance costs increases, compared to 2Q22, which excluded the effect of the realised gain of \$6.1 mill on the interest rate swap during the quarter.

Voyage revenues for 2Q23 were \$37.7 mill, compared to \$33.4 mill for the corresponding period of 2022 - a net increase of \$4.3 mill or 12.9%.

Dynagas' average daily hire gross of commissions of around \$61,800 per day per vessel in 2Q23, compared to about \$62,860 for 2Q22. The LNGCs operated at 91.7% fleet utilisation, due to unscheduled repairs of the 'Ob River', the cost of which is partly covered under the vessel's hull and machinery and loss of hire insurances.

Higher OPEX

Vessel operating expenses were \$8.1 mill, which corresponds to a daily rate per vessel of \$14,824 in 2Q23, compared to \$7.4 mill, or a daily rate of \$13,588, in 2Q22.

This increase was mainly attributable to higher maintenance and crewing costs on the Partnership's vessels.

Adjusted EBITDA for 2Q23 was



Dynagas' LNGC 'Clean Energy' is to embark upon a new long term timecharter

\$23 mill, compared to \$22.9 mill for 2Q22.

For the first half of this year, Dynagas reported net income of \$24 mill, adjusted net income of \$12.4 mill and adjusted EBITDA of \$46.6 mill.

CEO Tony Lorentzen, explained: "All six LNG carriers in our fleet operate under their respective long-term charters with international gas companies with an average remaining contract term of approximately 7.4 years.

"Pursuant to our strategy of employing our vessels on multi-year time charters with international energy companies, we are pleased to have entered into new long term timecharter party agreements for the 'Clean Energy'

and the 'Arctic Aurora' with Rio Grande LNG, a subsidiary of NextDecade Corp, for a period of about two years and seven years, respectively.

"These timecharters have increased our estimated contracted revenue backlog, which is estimated to be \$1.2 bill as of 14th September, 2023. Notwithstanding any unforeseen events and scheduled vessel drydockings, our fleet is now fully employed through the end of 2027.

"We have remained committed to our strategy of creating equity value through reducing debt and have since September, 2019, repaid \$230.4 mill in debt, which includes two voluntary loan prepayments of \$18.7 mill and \$31.3 mill, effected

on 12th October, 2022 and 27th March, 2023, respectively, in agreement with the lenders of our \$675 mill credit facility.

"Our current debt outstanding is \$444.6 mill. Since 31st December, 2019, we have reduced our net leverage ratio from 6.6 to 4.3, while also increasing our book equity value by 41%, to \$442.2 mill.

"We believe that increasing market sentiment that LNG is a necessary fuel for managing global emissions, as well as, ensuring energy security, will continue to generate demand for LNG shipping in the long-term. In light of these developments, we believe that the outlook for LNG shipping and the Partnership remains positive," he concluded. ■

KKR takes stake in Port Arthur LNG

Sempra Infrastructure has completed the sale of a 42% indirect, non-controlling interest in Port Arthur LNG Phase 1 project to KKR.

Following this transaction, Sempra Infrastructure will retain a controlling 28% indirect interest in Phase 1 at the project level, with ConocoPhillips owning the remaining 30%.

"The closing of this transaction continues the positive momentum of our world class Port Arthur LNG facility and highlights Sempra Infrastructure's ability to access capital to support the growth of its infrastructure business," said Justin Bird, Sempra Infrastructure CEO. "We remain committed to developing energy infrastructure projects with strong partners to continue grow-

ing our portfolio while advancing global de-carbonisation and energy security."

"We are pleased to close our investment in this critical energy infrastructure project led by the Sempra Infrastructure team," said James Cunningham, Partner at KKR. "Port Arthur LNG Phase 1 has continued its strong momentum and is on track to meet its objectives of helping to deliver energy security, economic growth and a near-term supply of reliable and cleaner energy."

Sempra Infrastructure reached a positive final investment decision (FID) for Phase 1 in

March, 2023 and contracted Bechtel Energy to build the facility.

The commercial startup operation dates for Trains 1 and 2 are scheduled for 2027 and 2028, respectively.

Meanwhile, the US Federal Energy Regulatory Commission (FERC) has approved a permit authorising Sempra's Port Arthur LNG Phase 2 expansion project.

Sempra said that this was a major regulatory milestone for the proposed project, which includes the addition of two liquefaction trains (Trains 3 and 4) capable of producing up to 13 mill tonnes per

annum of LNG.

With Phase 1 under construction, the development of Phase 2 could increase the total liquefaction capacity of the facility from around 13 mill tonnes per annum to about 26 mill tonnes.

Phase 2 will include an additional LNG storage tank and marine berth and would also benefit from some of the facilities currently under construction that were previously approved as part of the Port Arthur LNG Phase 1 permitting process.

Phase 2 is under active marketing and development, Sempra added. ■

NextDecade raises cash

NextDecade Corp's subsidiary, Rio Grande LNG (RGLNG), has signed a credit agreement for \$356 mill of senior loans to finance part of Phase 1 (first three LNG trains) at the Rio Grande LNG export facility in Brownsville, Texas.

The senior loans were disbursed in one advance for the full amount on 15th September, 2023, by a group of lenders, which resulted in a reduction in the commitments outstanding under RGLNG's existing term loan facilities for Phase 1 from \$11.1 bill to under \$10.8 bill.

The loans will mature in July, 2033, will accrue interest at a fixed rate of 6.72%, and rank pari passu to RGLNG's existing term loans, the \$500 mill working capital facility, and the \$700 mill of 10-year senior notes issued at Phase 1's FID.

NextDecade said that this financing transaction aligns with its long-term balance sheet strategy for Phase 1, which includes extending and staggering debt maturities, diversifying sources of capital, reducing bank capital over time to provide potential capacity for financing future LNG expansions, and mitigating interest rate exposure.

As of 15th September, RGLNG's outstanding fixed-rate debt and

executed interest rate swaps reduced its exposure to movement

in interest rates for over 80% of the debt currently projected to

be incurred in support of Phase 1 construction. ■



NextDecade has raised cash for Rio Grande LNG Phase 1

LNG Solutions for the Marine Industry



Chart's maritime LNG solutions reduce operating costs while dramatically improving emissions for compliance with today's stringent requirements in the marine industry.

Cryogenic Solutions for:

- LNG ship fueling systems
- FLNG
- FSRUs
- Bunkering vessels
- Bunkering stations
- Port power applications

www.ChartLNG.com
LNG@ChartIndustries.com



Innovation. Experience. Performance.®

New investment vehicle launched

Roundhill Investments, an exchange traded funds (ETF) sponsor focused on financial products, has launched the Roundhill Alerian LNG ETF (LNGG).

LNGC has begun trading on the New York Stock Exchange (NYSE) Arca platform and is the world's first dedicated LNG ETF.

"LNG represents a transformative frontier in the energy sector, and its growth trajectory is evident from its rapidly expanding share within the global gas supply," said Dave Mazza, Chief Strategy Officer at Roundhill Investments. "For climate conscious investors, LNGG offers a practical solution to invest in a transitional fuel source that is significantly cleaner than alternatives like coal."

LNG's share in the global gas supply is projected to rise from

13% today to 23% by 2050. This growth will be driven by meeting escalating demand and a significant surge in anticipated spending on greenfield LNG projects in future years, with approved greenfield investments amounting to \$27 bill in 2022 and a projected \$42 bill in 2024, Roundhill said.

Meanwhile, spending on US LNG projects is expected to total \$100 bill over the next five years.

LNGG's exposures spans across the LNG value chain, including liquefaction, LNGCs, regasification, and more.

The fund's top holdings as at the launch date include:

Holdings*

% Weighting

Cheniere Energy Inc	16.1 %
Santos Ltd	14.1 %
Woodside Energy Group Ltd	13.4 %
Tokyo Electric Power Co Holdings Inc	4.8 %
ENN Energy Holdings Ltd	4.6 %
Qatar Gas Transport Co Ltd	4.2 %
Golar LNG Ltd	4.1 %
New Fortress Energy Inc	3.9 %
FLEX LNG Ltd	2.8 %
Mitsui OSK Lines Ltd	2.5 %
NextDecade Corp	2.4 %
Kunlun Energy Co Ltd	2.1 %
Petronas Gas Bhd	2.1 %
Enbridge Inc	2.1 %
TotalEnergies SE	2.0 %
Shell PLC	2.0 %
Sempra	2.0 %
Exxon Mobil Corp	2.0 %
Chevron Corp	2.0 %
Korea Gas Corp	1.9 %

*Subject to change

Petronas to invest in Canadian LNG

Malaysia's state energy conglomerate Petronas is to invest \$35 bill to develop shale gas assets in Canada and build an LNG export terminal, company officials told Reuters.

This amount is \$15 bill higher than the figure previously announced, since it includes costs associated with drilling wells in British

Columbia and taking over Canadian explorer Progress Energy Resources for \$5 bill, they explained.

Malaysian Prime Minister, Najib

Razak was quoted as saying in the local media that the project, announced last year after Petronas bought Progress Energy, would

make the Southeast Asian country the biggest foreign investor in Canada.

"There is a 30-year timeline for the \$35 bill investment," Najib said after holding bilateral meetings with Canadian Prime Minister, Stephen Harper, recently.

Petronas had previously advised that it would spend \$20 bill to build two LNG trains, on the Canadian West Coast, including a pipeline to be built by TransCanada Corp from the shale-rich Montney region fields.

The trains are expected to be ready by the end of 2028 or 2029.

A final investment decision (FID) on the entire project will be taken by the end of 2024, Petronas said.

Petronas is also in talks to sell stakes in the project to potential LNG buyers and has already finalised one deal with Japan Petroleum Exploration Co (JAPEX).



LNG Canada's Kitimat project could soon be joined by another export facility in British Columbia

Digital management trials on LNGC

Samsung Heavy Industries (SHI) has signed a Memorandum of Understanding (MoU) with local shipowner Pan Ocean to develop a digital shipmanagement platform based on digital twin technology.

SHI said that it plans to install the platform on Pan Ocean's 174,000 cu m LNGC 'New Apex'

by January of next year.

Making use of artificial intelligence (AI) technologies, the plat-

form will provide real time analytics on ship operations to enable an integrated management approach for all of the on board systems and equipment, which is expected to substantially reduce OPEX.

Should the trials prove successful, both companies plan to extend their co-operation to explore the use of digital

solutions for autonomous navigation.

"Digital twin technology is at the core of autonomous navigation for SHI," SHI's CEO, Jung Jin-Taek said. "This partnership is a significant step forward in enhancing our capabilities in autonomous navigation and establishing ourselves as a global leader in the field."

“ Digital twin technology is at the core of autonomous navigation for SHI ”

- Jung Jin-Taek, CEO, SHI

NEWS NUDGE

Ships - Sales, charters, deliveries

MISC Berhad (MISC) is to sell and charter two LNGCs to Japanese shipowner, Nissen Kaiun.

Under the terms of the transaction, MISC will transfer ownership of the LNGCs to Nissen Kaiun, and also sign a charter agreement with Eaglestar and Synergy Marine as the shipmanagers.

The first of the two vessels is expected to be delivered to Nissen Kaiun in the fourth quarter of this year.

COSCO Shipping Energy Transportation (CSET) is to take a stake in three newbuilding LNGCs.

COSCO Shipping LNG Investment will acquire a 49% stake in three single ship companies set

up by Japanese Mitsui OSK Lines, (MOL) in Liberia.

The three 174,000 cu m LNGCs will be built at Hudong-Zhonghua for delivery in 2028 at a price of around \$241 mill per ship.

They are to be chartered to ENN LNG, a Singapore-based subsidiary of China's ENN Natural Gas.

At the same time, CSET's Board gave approval for the financing of the construction of two LNGCs for Shanghai COSCO Shipping Liquefied Natural Gas Investment.

Earlier this month, the 172,000 cu m Ice Class LNGC 'Alexei Kosygin' was named at the Zvezda Shipbuilding complex.

At the naming ceremony, Rus-

sian President, Vladimir Putin, said; "The development of this fleet is of great importance to our country, which is an Arctic power, in order to implement our long-term strategy for developing the Arctic, ensuring reliable transport along the Northern Sea Route, global transport and logistics routes and strengthening our country and the entire world's energy security."

Also reported this month was the delivery of the 174,000 cu m LNGC 'Paris Knutsen'.

She was built by Hyundai Samho Heavy Industries and is the seventh LNGC to be long term chartered to Shell in the series.

'Paris Knuten' is fitted with an MAN ME-GA engine plus an

HI-ALS air lubrication system.

For Qatargas read QatarEnergy LNG

Qatar's giant energy company, Qatargas has been rebranded as QatarEnergy LNG.

At present, the company operates 14 LNG trains with a total annual production capacity of 77 mill tonnes, which makes QatarEnergy LNG the world's largest LNG producer.

Established in 1984, QatarEnergy LNG develops and produces hydrocarbons from the world's largest non-associated natural gas field.

In addition, QatarEnergy LNG is also a leading exporter of natural gas, helium, condensate and associated products, the company claimed.

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$259.65 mill
Five years old (174,000 cu m)	\$221.25 mill
Total Fleet (574 ships)	\$91.20 bill
Orderbook (335 ships)	\$88.77 bill

*Source: VesselsValue (27/09/23)

*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	\$192,500	+\$12,500
West of Suez	\$195,000	+\$25,000
12 mos T/C	\$96,000	-\$5,000

*Since last report (14/09/23)

Source: Fearnleys (27/09/23)

ConocoPhillips' technology for RGLNG

ConocoPhillips proprietary OCP CryoSep heavies removal unit (HRU) systems are to be installed in NextDecade's Rio Grande LNG (RGLNG) Phase 1 project.

RGLNG Phase 1 will include three LNG liquefaction trains giving a total of 17.6 mill tonnes per annum of LNG.

The dedicated HRU units will be installed immediately upstream of each train.

ConocoPhillips licenses OCP CryoSep to provide targeted recovery and/or removal of heavy hydrocarbons that would otherwise freeze in the liquefaction unit or lead to excessive BTU content in the LNG.

Unlike previous applications, in which HRUs incorporating the OCP CryoSep, have been fitted as integrated units in several LNG trains employing the proprietary Optimised Cascade process, this technology can be offered as a

standalone unit to protect any non-Optimised Cascade process LNG liquefaction train, as in the case of RGLNG.

The US energy giant's technology has thus far been licensed to operate on 28 trains in 13 sites. ■

Book Preview Tanker Safety Guide (Liquefied Gas)

The International Chamber of Shipping (ICS) has announced that the '*Tanker Safety Guide (Liquefied Gas)*', fourth edition, is to be published next month.

This is claimed to be the definitive industry guide to support gas carrier operators conduct safe and efficient operations.

The guide, which is a carriage requirement under the national regulations of many flag states, has been fully updated to align with the latest edition of the 'International Safety Guide for Oil Tankers and Terminals (ISGOTT 6)'.

All the content included in this latest edition has been developed and reviewed by senior industry experts with direct experience in the field and has been presented in a user-friendly and modernised format, with a significant upgrade in the visual representation of technical information, including infographics and flow diagrams, the ICS said.

New in this edition:

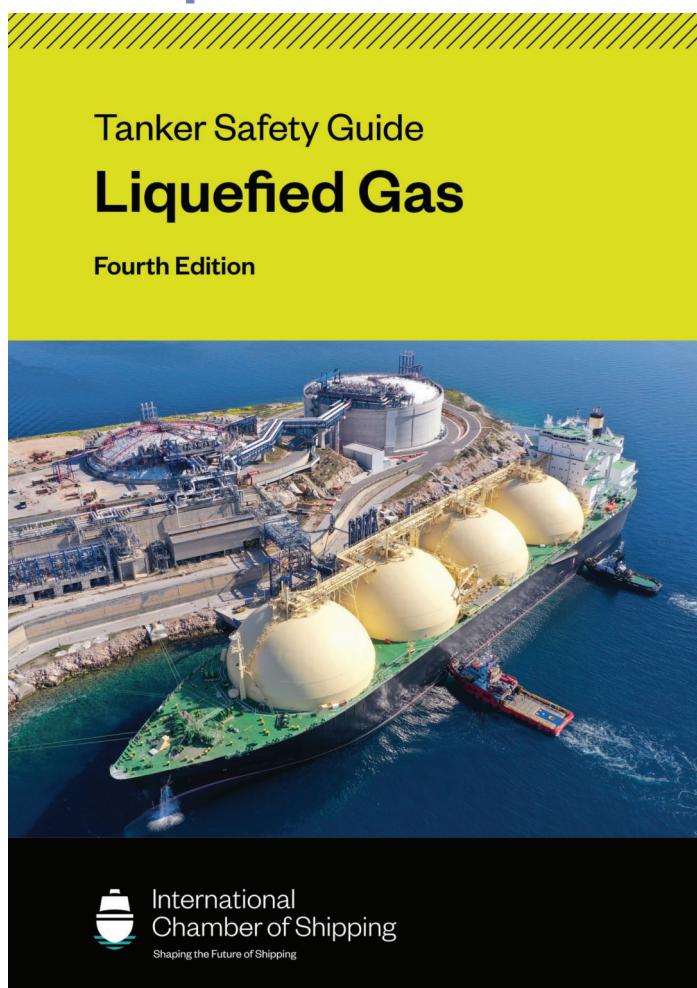
- Alignment of the ship/shore

safety check lists with ISGOTT 6.

- Emphasis on simplifying the human element processes on board to reduce the chance of root cause accidents attributed to human element.
- New elements on bunkering and simultaneous operations.
- Expanded guidance on rollover, enclosed spaces and mooring.
- Updated section on reliquefaction to incorporate new technologies.
- Useful and relevant annexes pulled into the main body of the guide for easy reference.

The guide is relevant for on board deck and technical officers, those training or providing training in liquefied gas transportation, plus anyone engaged in the transportation of liquefied gas by sea.

It can now be pre-ordered at £470 and the print copy will be available on 16th October. ■



Jiangsu and DSIC to fit cargo containment systems

Two Chinese engineering companies, Dalian Shipbuilding Industry Company (DSIC) and Jiangsu Yak, have signed a contract to fit LNGC cargo containment systems on ten 175,000 cu m LNGCs.

According to a DSIC post, the two parties will work together in the construction, production

management, safety management, quality management, logistics management and other aspects to complete the project.

This contract is an extension of their previously signed 'Framework agreement for the joint construction of large LNG carrier cargo containment systems.'

DSIC also said it had orders for a total of 13 LNGCs, thus far.

In addition, this month, DSIC placed an order with GTT for the tank design of two new LNGCs.

The two 175,000 cu m vessels will be fitted with GTT's Mark III Flex membrane containment system.

Also this month, it was announced that Cosco Shipping Energy and Sinopec Kantons Holdings, a subsidiary of China Petroleum & Chemical Corporation (Sinopec), had placed an order for the construction of three LNGCs with DSIC on the back of a long term charter. ■

WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hudong-zhonghua H1830a	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/04/2024
Wen Cheng	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/01/2024
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
Lng Harmony	JP Morgan	Hyundai Heavy	20/07/2020	174,000	XDF	01/07/2023
Daewoo 2517	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/11/2023
Daewoo 2518	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/02/2024
Daewoo 2519	MOL, COSCO	Hanwha Ocean	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
Maran Gas Marseille	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
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
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	Hanwha Ocean	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	01/10/2023
Clean Vitality	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/02/2024
MOL Coral	MOL	Hanwha Ocean	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	01/08/2024
Hyundai Samho 8106	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/03/2024
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	01/11/2023
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
Daewoo 2522	Hyundai LNG Shipping	Hanwha Ocean	15/07/2021	174,000	MEGI	01/05/2024
Ignacy Lukasiewicz	Knutsen	Hyundai Samho	22/07/2021	174,000	ME-GA	01/11/2023
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	01/10/2023
Samsung 2579	Celsius Shipping	Samsung	26/07/2021	180,000	ME-GA	01/04/2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Samsung 2584	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/06/2024
Samsung 2585	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/07/2024
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	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/02/2024
Daewoo 2524	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/04/2024
Daewoo 2525	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/08/2024
Daewoo 2526	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/10/2024
Daewoo 2527	MOL	Hanwha Ocean	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	01/10/2023
Samsung 2581	NYK	Samsung	01/10/2021	174,000	XDF	01/11/2023
Samsung 2582	NYK	Samsung	01/10/2021	174,000	XDF	01/01/2024
Samsung 2583	NYK	Samsung	01/10/2021	174,000	XDF	01/02/2024
Samsung 2592	JP Morgan	Samsung	01/10/2021	174,000		01/03/2024
Samsung 2593	JP Morgan	Samsung	01/10/2021	174,000		01/06/2024
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
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	Hanwha Ocean	10/11/2021	174,000	MEGI	01/08/2024
Daewoo 2529	Maran Gas Maritime	Hanwha Ocean	10/11/2021	174,000	MEGI	01/11/2024
Daewoo 2530	BWGas	Hanwha Ocean	25/11/2021	174,000	MEGI	01/03/2025
Daewoo 2531	BWGas	Hanwha Ocean	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	Hanwha Ocean	01/01/2022	174,000	MEGI	01/05/2024
Daewoo 2533	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/08/2024
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	01/08/2025
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
Hyundai Samho 8173	SK Shipping	Hyundai Samho	04/01/2022	174,000	ME-GA	01/09/2024
Daewoo 2537	Maran Gas Maritime	Hanwha Ocean	06/01/2022	174,000	MEGI	01/09/2025
Daewoo 2538	Maran Gas Maritime	Hanwha Ocean	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	Hanwha Ocean	17/01/2022	174,000	ME-GA	01/09/2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hyundai Samho 8175	H-Line	Hyundai Samho	26/01/2022	174,000	XDF	01/04/2025
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	Hanwha Ocean	07/02/2022	174,000	MEGI	01/11/2025
Daewoo 2540	Maran Gas Maritime	Hanwha Ocean	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	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
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	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
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	Hanwha Ocean	15/04/2022	174,000	ME-GA	01/09/2025
Daewoo 2551	MOL	Hanwha Ocean	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	XDF	01/08/2026
NYK CNOOC 2	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/10/2026
NYK CNOOC 3	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/01/2027
NYK CNOOC 4	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/04/2027
NYK CNOOC 5	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/07/2027
NYK CNOOC 6	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/10/2027
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
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
Daewoo 2559	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/05/2024
Daewoo 2560	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/04/2025
Daewoo 2561	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/05/2025

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 = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2562	SK Shipping, Pan Ocean, Hanwha Ocean H-Line		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, Hanwha Ocean H-Line		01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2565	Pan Ocean, SK Shipping, Hanwha Ocean H-Line		01/06/2022	174,000	ME-GA	01/02/2026
Kool Panther	Cool Co	Hyundai Samho	02/06/2022	174,000	ME-GA	01/09/2024
Kool Tiger	Cool Co	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 ME-GA	H-Line, Pan Ocean, SK Shipping 01/12/2024	Hanwha Ocean			07/06/2022	174,000
Daewoo 2547 ME-GA	H-Line, Pan Ocean, SK Shipping 01/12/2024	Hanwha Ocean			07/06/2022	174,000
Daewoo 2548 ME-GA	H-Line, Pan Ocean, SK Shipping 01/01/2025	Hanwha Ocean			07/06/2022	174,000
Daewoo 2549 ME-GA	H-Line, Pan Ocean, SK Shipping 01/02/2025	Hanwha Ocean			07/06/2022	174,000
Daewoo 2552	Maran Gas Maritime	Hanwha Ocean	08/06/2022	174,000	MEGI	01/05/2026
Daewoo 2553	Maran Gas Maritime	Hanwha Ocean	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
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

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
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	Hanwha Ocean	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
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
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	XDF	01/06/2027
MOL ENN 2	MOL	Hudong-Zhonghua	08/09/2022	174,000	XDF	01/10/2027
MOL ENN 3	MOL	Hudong-Zhonghua	08/09/2022	174,000	XDF	01/03/2028
Daewoo 2566	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/08/2025
Daewoo 2567	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/09/2025
Daewoo 2568	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/06/2026
Daewoo 2569	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/09/2026
DAEWOO 2570	MISC	Hanwha Ocean	30/09/2022	174,000	XDF	01/01/2026
DAEWOO 2571	MISC	Hanwha Ocean	30/09/2022	174,000	XDF	01/05/2026
Daewoo 2572	TMS Cardiff Gas	Hanwha Ocean	30/09/2022	174,000	ME-GA	01/03/2026
Daewoo 2573	TMS Cardiff Gas	Hanwha Ocean	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	01/11/2025
Hyundai Samho 8182	TMS Cardiff Gas	Hyundai Samho	17/10/2022	174,000	XDF	01/01/2026
VG 1	Venture Global LNG	Hanwha Ocean	21/10/2022	174,000	MEGI	01/09/2026
VG 2	Venture Global LNG	Hanwha Ocean	21/10/2022	174,000	MEGI	01/12/2026
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
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

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 = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
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
Celsius 1	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/03/2026
Celsius 2	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/07/2026
Celsius 3	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/11/2026
Celsius 4	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/03/2027
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 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
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
MOL 1	MOL	Samsung	01/02/2023	174,000	ME-GA	01/09/2026
MOL 2	MOL	Samsung	01/02/2023	174,000	ME-GA	01/01/2027
Samho Mar 1	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2026
Samho Mar 2	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/07/2027
Samho Mar 3	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2027
DAEWOO 2580	MOL	Hanwha Ocean	13/02/2023	174,000	ME-GA	01/03/2027
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
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
Hyundai Samho 8206	Capital Gas	Hyundai Samho	28/03/2023	174,000	ME-GA	01/02/2027
Hyundai Samho 8207	Capital Gas	Hyundai Samho	28/03/2023	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	01/06/2026
K-Line SHI I	K-Line	Samsung	04/04/2023	174,000	ME-GA	01/08/2026
K-Line SHI II	K-Line	Samsung	04/04/2023	174,000	ME-GA	01/11/2026
Daewoo 2583	MOL	Hanwha Ocean	07/04/2023	174,000	ME-GA	01/08/2027
Hd Hyundai Ulsan 3452	Dynagas	Hyundai Heavy	28/04/2023	200,000	XDF	01/05/2027
Hd Hyundai Ulsan 3453	Dynagas	Hyundai Heavy	28/04/2023	200,000	XDF	01/11/2027
Hudong-zhonghua H1901a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/03/2028
Hudong-zhonghua H1902a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/06/2028
Hudong-zhonghua H1903a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/09/2028
NYK EnBW	NYK	Hyundai Heavy	02/05/2023	174,000		01/03/2027
NYK EnBW 2	NYK	Hyundai Heavy	02/05/2023	174,000		01/06/2027
NYK EnBW 3	NYK	Hyundai Heavy	02/05/2023	174,000		01/09/2027
NYK EnBW 4	NYK	Hyundai Heavy	02/05/2023	174,000		01/12/2027
Chevron SHI 1	Chevron	Samsung	13/06/2023	174,000		01/12/2027
Chevron SHI 2	Chevron	Samsung	13/06/2023	174,000		01/02/2028
PCI 7	ULT	Hudong-Zhonghua	03/07/2023	174,000	XDF	01/11/2025
PCI 8	ULT	Hudong-Zhonghua	03/07/2023	174,000	XDF	01/12/2025

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
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2019	Blue Whale	7,500	LNG	Korea	Yes	Korea Line

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Avenir Advantage	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Accolade	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Aspiration	7,500	LNG		Yes	Avenir LNG
2020	Kaguya	3,500	LNG	Japan	Yes	CLS
2020	CNTIC VPOWER Global	28,000	LNG	Myanmar	Yes	Dalian Inteh Group
2020	Ecobunker Tokyo Bay	2,500	LMG	Japan	Yes	Ecobunkers
2020	Optimus	6,000	LNG	NWE	Yes	Elenger
2020	FueLNG Bellina	7,500	LNG	Singapore	Yes	FueLNG
2020	SM Jeju LNG2	7,500	LNG	Korea	Yes	Korea Line
2020	Q-LNG 4000	4,000	LNG	US Coast	Yes	Q-LNG Transport/Harvey Gulf
2020	Flexfueller 002	1,480	LNG	Antwerp	Yes	Titan LNG
2021	Avenir Ascension	7,500	LNG		Yes	Avenir LNG
2021	Hai Gang Wei Lai	20,000	LNG	China	Yes	SSES
2021	Bergen LNG	850	LNG	Norway	Yes	Bergen Tankers
2021	Dmitry Mendelev	5,800	LNG	Russia	Yes	Gazprom Neft
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2021	Ravenna Knutsen	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	Brassavola	12,000	LNG	Singapore	Yes	MOL
2021	Gas Vitality	18,600	LNG	Mediterranean	Yes	MOL
2021	TG TBN	500	LNG	Korea	Yes	Trans Gas
2021	Titan Hyperion	8,000	LNG	Benelux	Yes	Titan LNG
2022	Xin Ao Pu Tuo Hao	8,500	LNG	China	Yes	ENN
2022	Coral Nordic	30,000	LNG	Worldwide	Yes	Anthony Veder
2022	Avenir Achievement	20,000	LNG	Worldwide	Yes	Avenir LNG
2022	Haugesund Knutsen	5,000	LNG	Spain	Yes	Knutsen OAS
2022	Clean Cañaveral	5,400	LNG	USG	Yes	PNE
2022	K.Lotus	18,000	LNG	Korea	Yes	K Line
2023	Cryopeak TBA	4,000	LNG	West Canada	Yes	Cryopeak
2023	Kuntsen TBN	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	PNE TBN	5,500	LNG	USG	Yes	PNE
2023	FueLNG Venosa	18,000	LNG	Singapore	Yes	FueLNG
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	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	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
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