

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

7 December 2023

LNG shipments continue to rise - US largest exporter

This year, LNG shipments started very strongly in the first quarter, but then slowed down somewhat over the spring and summer, according to Refinitiv vessel tracking data, analysed by Italian broking house Banchero Costa.

In the first 10 months of 2023, LNG shipments increased by 1.4% year-on-year to 338.2 mill tonnes, from 333.5 mill tonnes in the same period last year.

The US has now become the largest LNG exporter, accounting for 21.4% of shipments, or 72.4 mill tonnes, a 9.7% increase during the first 10 months of this year, followed by Australia with 19.8% (67 mill tonnes) and Qatar with 19.3%.

In November, US exports rose to the second highest monthly production level on record, at 7.99 mill tonnes, according to LSEG tanker tracking data, analysed by Reuters.

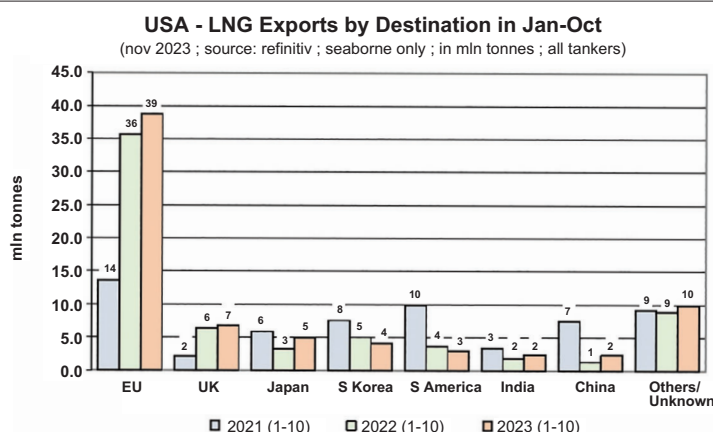
About 68% of all US LNG was exported to Europe last month, an increase from October's 65%, the data showed.

Fewer US cargoes headed to Asia last month. Exports to that region fell to 18.5% of the total from 20% in October, while shipments to Latin America remained almost unchanged at about 5% of total, LSEG data showed.

Australia shipped 67 mill tonnes during the 10-month period, 0.5% down y-o-y, Qatar exported 65.4 mill tonnes, a 1.3% drop, while Russia shipped 25 mill tonnes, down 8% y-o-y from the same period in 2022, but still higher than the years up to 2021.

As for imports, during January to October, 2023, the European Union received 84.5 mill tonnes of LNG, up 3.4% y-o-y, accounting for 25.4% of global LNG imports.

Mainland China imported 56.3 mill tonnes, plus 10.4% y-o-y, from 51 mill tonnes in January/October, 2022, but below the 64.9 mill tonnes



Source: Banchero Costa

recorded in the same period of 2021.

Destinations

In terms of US LNG destinations, the main importers were the EU and UK. During January/October 2022, US LNG exports to the EU increased by 138.2% y-o-y to 41.6 mill tonnes from 17.5 mill in 2021.

Volumes to the UK also surged by 137.8% y-o-y, from 9.4 mill tonnes in 2022 and 4 mill in 2021.

In November, about 68% of US LNG was shipped to Europe, an increase from October's 65%.

Exports to Asia fell to 18.5% of the total in November, from 20% in October, while shipments to Latin America remained almost unchanged at about 5%, LSEG data showed.

During the first 10 months of this year, the third top destination was South Korea, which accounted for 7.3% of US shipments at 4.1 mill tonnes. This was a fall of 18.6% y-o-y.

Exports to Japan rebounded by 51.2% y-o-y this year to 4.9 mill tonnes from 4.2 mill last year.

Shipments to Mainland China plummeted by 79.2% y-o-y in the 2022 period to 1.8 mill tonnes, from an exceptional (and unsustainable) 8.8 mill tonnes in 2021, but increased again to 2.4 mill in January/October, 2023, up 73.1% y-o-y.

Meanwhile, Russian LNG supplies to Europe reached a monthly high of 1.75 mill tonnes, while deliveries to China declined, Kommersant newspaper reported this week, quoting Kpler data.

Russian LNG deliveries to China fell to 0.1 mill tonnes from 0.8 mill in October.

This year, Russia's LNG production is expected to total 30 mill tonnes, or 8% of global output, down from around 33 mill in 2022, mainly due to maintenance at Yamal LNG.

Russia plans to boost its LNG production to around 100 mill tonnes annually by 2030 - a 20% share of the global LNG market.

However, these plans could be hampered by US sanctions against Arctic LNG 2, which is expected to start operations by the end of this year.

SHIPPING NEWS AGENDA

MARKETING



Reloading increase **2**

Overcapacity? **3**

BUSINESS

OMV takes LNG **5**

Delfin seals deal **5**

Nigerian LNG **6**

FINANCE

CoolCo boost **7**

Vopak buys **7**

TECHNOLOGY

FSRU sails **9**



Logbooks **10**

LNG plant **11**

LNG ORDERBOOK

LNG carrier orderbook **13**

LNG small scale fleet **19**

China to increase re-export LNG loadings

Chinese LNG re-export activity will continue to grow this winter, as global volatility and arbitrage opportunities persist.

As Chinese companies become increasingly adept at LNG trading, in the aftermath of last year's geographical arbitrage, the country has boosted its LNG re-exports to 14 cargoes in the first 10 months of 2023 up from eight in the same period of 2022, according to ICIS LNG Edge.

Apart from financial gains, the need to comply with Take-or-Pay (ToP) liability under strict destination clauses also supported re-export growth amid slowing domestic demand.

In the longer term, the recently approved bonded LNG tanks (tax-free storage) at Ningbo and Dalian LNG terminals, and PipeChina's latest third party access (TPA) service will enable more Chinese traders to divert LNG into international markets.

China LNG re-exports will eventually increase terminal utilisation and flexibility in balancing Chinese and the wider Asia region's demand, ICIS said.

In the near term, an ICIS East Asia Index of around \$16 per MMBtu is well above the average term LNG cost to China of \$10-12 per MMBtu.

ICIS' arbitrage calculator showed that re-selling a term



Chinese LNG terminals are being used to re-export LNG

cargo to the Asian markets was profitable from China's Yangpu terminal, with margins varying from \$1.5-\$4 per MMBtu.

Thailand has the potential to achieve the highest profit margin, closely followed by Singapore and Taiwan.

Strict ToP obligations with destination clauses forced the Chinese companies to turn to re-exports. As tax-free bonded LNG tank capacity increases, so will the re-export trade, ICIS said.

However, re-exporting relies on the availability of a bonded tank infrastructure, and due to their tax-free status, these facilities help to reduce the overall cost of re-exporting LNG.

CNOOC's Zhejiang Ningbo LNG terminal undertook its first reloading in September, 2023, three

months after its second bonded tank was approved, while the PipeChina Dalian LNG terminal re-exported its first cargo in November, 2023, delivering it to Thailand.

More companies will have access to re-export cargoes when PipeChina's new bonded LNG reloading service starts in April, 2024. Between November, 2023 and January, 2024, PipeChina will accept requests for medium to long-term terminal usage bookings from third parties.

PipeChina has also announced that the three 160,000 cu m bonded LNG tanks at the Dalian and Hainan Yangpu LNG terminals can provide tax-free reloading services.

The minimum booking for the new services is three years, to a maximum of 20 years, similar to the existing TPA service. ■

Daewoo to build Yemen receiving terminal

South Korea's Daewoo Engineering & Construction (Daewoo E&C) has signed a Memorandum of Understanding (MoU) with the Yemeni Ministry of Electricity and Energy to build an LNG receiving terminal.

The terminal and connecting pipes will be built to supply the Little Aden power plant.

Both signatories also discussed additional energy infrastructure projects, including the building of a 450 MW combined cycle power plant.

Yemen was reportedly pursuing the construction of LNG terminals and gas operated power plants, due to increasing electricity generation costs.

Daewoo E&C has built LNG terminals in Algeria, Papua New Guinea, Sakhalin and Indonesia and is currently working on a \$3.8 billion Nigerian LNG export terminal project.

Following the signing of the MoU, Daewoo plans to continue discussions and undertake onsite surveys.

"We look forward to ongoing collaboration with the Yemeni Ministry of Electricity and Energy, expecting positive results," Daewoo E&C Chairman, Jung Won-ju said.

It was believed that by signing the MoU, the project could be quickly advanced once the geopolitical uncertainties in Yemen are resolved, local media said. ■

NEWS NUDGE

GTT wins more orders - signs technical agreement

GTT has received an order from HD Hyundai Heavy Industries for the tank design of two 174,000 cu m LNGCs on behalf of a Euro-

pean shipowner.

The tanks will be fitted with the Mark III Flex membrane containment system developed by GTT.

Delivery is scheduled for between the fourth quarter of 2027 and the first quarter of 2028.

GTT has also signed a Technical Assistance and License Agreement (TALA) with the Chinese

shipyard, COSCO shipping (Qidong) Offshore, a subsidiary of China COSCO Shipping Corp, one of the world's largest integrated shipping and logistics companies.

This new agreement enables the yard to construct GTT's technologies, for offshore LNG units, such as FLNGs or FSRUs, as well as for LNGCs. ■

LNG Shipping News

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

Publisher

Stuart Fryer

Editor

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

Ad sales enquiries

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

Subscriptions

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

Production

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

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."

Is South Korea over-investing in LNG infrastructure?

South Korea plans to expand storage facilities and related infrastructure by building an LNGC import facility at KOGAS' production plant in Dangjin, South Chungcheong Province by 2027.

This facility will accommodate an additional month's worth of domestic gas.

According to the South Korean Ministry of Trade, Industry and Energy, KOGAS began constructing the port facilities, including an LNGC berth and a navigation channel, late last month.

This is part of a strategy under the 15th long-term natural gas supply plan announced in April.

Under the plan, the government plans to expand natural gas storage facilities by 1.08 mill kl, equivalent to about 31 days' supply by December, 2027 to strengthen the supply infrastructure.

KOGAS plans to add natural gas storage capacity of 810,000 kl in 2029 and 2031 to total 2.7 mill kl, an increase of 22% over 2022.

The Trade Ministry plans to add 2.66 mill kl of private storage tanks in Boryeong, Ulsan, Gwangyang, and Tongyeong during the period to prepare for volatility.

However, South Korea is in danger of LNG terminal over investment and overcapacity, according to a new report published by the

Institute for Energy Economics and Financial Analysis (IEEFA)

IEEFA estimated that the country's LNG industry is pouring ₩11.3 trillion (\$8.7 billion) into infrastructure projects, which are either at the construction or planning stage, to boost receiving capacity.

"Our analysis demonstrates a growing mismatch between LNG import infrastructure and projected LNG demand based on the country's net-zero goal," explained Michelle Chaewon Kim, the report's author and an IEEFA Energy Finance Specialist, based in South Korea.

LNG fuel costs for power generation have nearly doubled since Russia invaded Ukraine. In addition, disruptions in global energy markets, such as the Israeli/Palestinian conflict, could keep South Korean gas prices high.

"This could decrease imports by LNG receiving terminals operated or leased by independent power producers, adding to underutilisation and stranded asset risks.

"We believe that a faster transition to renewable energy will

mitigate the highly volatile fossil fuel cost of power generation caused by unforeseen supply shocks and bolster the energy security of South Korea," she said.

Despite declining natural gas demand amid the country's transition to net zero, five private sector companies and six state owned entities are either currently constructing or proposing new LNG terminal projects, the report said.

Three factors

Kim pointed to three key factors for the investment: a perceived need to boost energy security amid the Russian/Ukrainian war; growing competition in the domestic gas market; and the development of new LNG applications, including blue hydrogen, bunkering services, and hydrogen blending in power generation.

Based on the International Gas Union's (IGU) 2022 data, South Korea's annual average regasification utilisation was one of the lowest at 33%, compared with the global rate of 41% and Asia's 52.4%.

"We believe that the underutil-

isation of LNG receiving terminals will likely worsen if South Korea further revises its 'nationally determined contribution' target to reduce the share of LNG-fired power generation in the energy mix in the coming years," Kim added.

IEEFA forecast that unused LNG regasification capacity could rise from 107.9 mill tonnes this year to 152.8 mill in 2036, lowering the already muted utilisation rate of 29.5% to 19.8%.

If completed, the proposed projects' storage capacity would meet 25.6% of annual LNG demand in 2036. This is nearly double the current 14.1%.

Smaller companies are driving regasification and storage tank investment to secure a larger market share and reduce dependence on KOGAS.

"Fierce competition is causing developers to propose large LNG infrastructure projects in close proximity to one another, which will pose a challenge in securing end-users for the terminals," Kim warned. ■

Commonwealth LNG opts for carbon capture

Commonwealth LNG has signed a Memorandum of Understanding (MoU) with OnStream CO2 for a carbon capture facility.

It will be built at the 9.3 mill tonnes per annum export plant under development at Cameron, Louisiana.

OnStream is a joint venture between Carbonvert and Castex Carbon Solutions.

Under the agreement, OnStream will design, construct and operate CO2 capture equipment near the site. The captured CO2 will be permanently sequestered at the Cameron Parish CO2 hub for 20 years.

OnStream had recently announced an operating agreement with the State of Louisiana to develop a 24,000 acre site offshore Cameron Parish, in which it will

permanently store CO2 in a hub with a capacity for more than 250 mill tonnes.

Commonwealth LNG Founder and Executive Chairman, Paul Varello, said: "Adding carbon capture technology complements our comprehensive goal of achieving best-in-class environmental standards through measures that also include a focus on responsibly sourced gas and the installation of the highest efficiency gas turbines."

Carbonvert Founder and CEO, Alex Tiller, added: "Commonwealth's commitment to our storage site is a great first step and instills confidence in the Lake Charles industrial

corridor to launch CO2 capture initiatives and enhance resilience amidst carbon related global trade requirements and customers' increasing demand for low carbon products."

Castex will be Cameron Parish CO2 hub's operator.

Executive Vice President and CFO, Aaron Killian, commented: "We are pleased to work with Commonwealth LNG to achieve the shared vision of safety, permanently and economically reducing CO2 emissions.

"OnStream's tailored CO2 capture, transportation and storage solution will allow Commonwealth LNG to achieve key environmental

initiatives while focusing on its core LNG business," he said.

The carbon capture arrangement's final terms are subject to definitive agreement negotiations between the parties.

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

The developer added it will be able to achieve an accelerated construction schedule by using a modular approach with the major components being fabricated offsite. ■

In LNG, experience matters

The LNG industry is constantly evolving, and we can help you lead the way. The expertise of Atlas Copco Gas and Process and CPC Pumps International Inc. provides custom-engineered compression and expansion technology that boosts your productivity throughout the LNG value chain.

Across our history, we have engineered advanced process equipment that delivers maximum efficiency in modular, compact packaging. We offer end-to-end centrifugal compressors, screw compressors, turboexpanders, companders™ and centrifugal fluid pumps customized for every LNG application, from small scale to large scale, onshore and off.

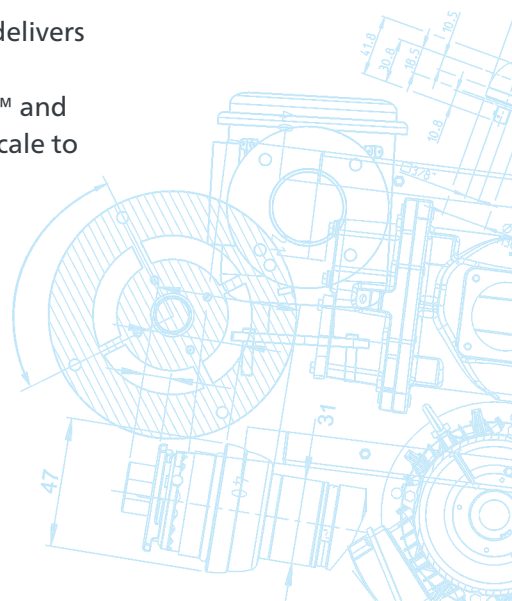
Scan the respective QR Codes to learn more about the solutions.



Atlas Copco
Gas and Process



CPC Pumps
International Inc.



Cheniere to supply OMV - ties up gas requirements

Cheniere Marketing has signed an LNG sale and purchase agreement (SPA) with OMV Gas Marketing and Trading, a subsidiary of the Austrian energy company.

Under the SPA, Cheniere will supply up to 12 LNG cargoes per year, to OMV or around 0.85 mill tonnes per annum, at a TTF-linked price commencing late 2029.

The LNG will be sold to OMV on a delivered ex-ship (DES) basis at Rotterdam's Gate LNG terminal, where OMV holds regasification capacity.

In addition, Cheniere Energy subsidiary, Sabine Pass Liquefaction Stage V, has agreed a long-term integrated production marketing (IPM) gas supply agreement with ARC Resources US Corp, a Canadian natural gas producer.

Under the IPM agreement, ARC Resources will sell 140,000 MMBtu per day of natural gas to SPL Stage V for 15 years, commencing with the commercial operations of the first train (Train 7) starting up at the Sabine Pass liquefaction ex-

pansion project.

SPL Stage V will pay ARC Resources an LNG-linked price for the gas, based on TTF, after deductions for a fixed regasification fee, fixed LNG shipping costs and a fixed liquefaction fee.

Positive FID

This agreement is subject to, among other things, a positive final investment decision (FID) on Train 7.

"This is the second long-term IPM agreement between Cheniere and ARC Resources, and further progresses the commercialisation of the SPL expansion project. This agreement will enable Cheniere to deliver increased quantities of Canadian natural gas to Europe, where energy security has never been more important," explained Jack Fusco, Cheniere's President

and CEO.

"We are pleased to build upon our existing long-term relationship with ARC Resources, and further demonstrate Cheniere's ability to construct innovative solutions that help meet the needs of customers and counterparties along the LNG value chain while delivering value to our stakeholders," he said.

"Canadian natural gas can play a critical role in helping to meet growing global energy demand," added Terry Anderson, President and CEO, ARC Resources. "Through this agreement, we are advancing our LNG strategy and delivering low-cost, low-emission natural gas to consuming regions in Europe - the first long-term arrangement of its kind for a Canadian producer."

This expansion project is being developed to have an LNG production capacity of up to about 20



Cheniere head Jack Fusco

mill tonnes per annum, inclusive of estimated debottlenecking opportunities.

In May, 2023, Cheniere Partners subsidiaries entered the project's pre-filing review process with the US Federal Energy Regulatory Commission (FERC) under the National Environmental Policy Act (NEPA). ■

Gunvor to take Delfin LNG supplies

Delfin Midstream has signed a long-term LNG supply agreement (SPA) with Gunvor Singapore.

This agreement is the latest in a series of long-term LNG SPAs signed by the US Gulf LNG export facility developer.

Under the SPA, Delfin LNG will supply between 0.5 to 1 mill tonnes of LNG per annum to Gunvor on a free-on-board (FOB) basis to be delivered from the Delfin Deepwater Port, located 40

nautical miles off the coast of Louisiana, for a minimum of 15 years.

Kalpesh Patel, Gunvor's Co-Head of LNG Trading, said: "We continue to support US LNG projects and unlock new sources to meet the growing global LNG demand while further expanding our supply portfolio.

"We look forward to a successful, long-term relationship with the Delfin LNG team as their project continues to progress," he said.

Delfin CEO, Dudley Poston, added: "We are very pleased to have entered into a major long-term LNG supply agreement with Gunvor. This latest sale and purchase agreement further demonstrates our attractiveness as a long-term source of scalable, reliable, and clean LNG."

The company has been developing the Delfin LNG Deepwater Port project, to support four FLNGs with a combined export capacity of up to 13.3 mill tonnes per annum.

The company has secured several commercial agreements for LNG sales and liquefaction services and is in the final phase towards FID on its first three FLNGs, Delfin confirmed. ■



Gunvor is to offtake LNG from Delfin Midstream

NEWS NUDGE

QatarEnergy integrates marketing activities

QatarEnergy has integrated all of its marketing and marketing-related activities formerly managed by QatarEnergy LNG.

The company will leverage a combined set of technical, commercial, and financial capabilities to create an enhanced centre of excellence for the marketing and sale of all energy products exported from Qatar, it said.

As a result, QatarEnergy will offer a more diversified and integrated portfolio of products and services, ensuring a seamless and enhanced customer experience.

It will also be the sole point of contact for the State of Qatar's existing and prospective energy customers globally, the company said. ■

German importer to offtake Nigerian LNG

Nigeria's Riverside LNG has signed a Memorandum of Understanding (MoU) with Johannes Schuetze Energy Import for a gas export partnership.

GasInvest CEO, David Ige, who signed the MoU, explained that the Riverside LNG project aimed to export Nigerian energy to Germany.

"The project will supply energy from Nigeria to Germany at 850,000 tonnes per annum, expanding to 1.2 mill tonnes per annum.

"The first gas will leave Nigeria for Germany in 2026, and there will be further expansion. This will extinguish about 50 mill cu ft per day of flared gas in Nigeria and

open alleyways of new and greater exports of gas to Germany," he said.

At the signing ceremony held at a trade meeting between the two countries, German partners expressed confidence in investing in Nigeria's gas sector. Other deals were also agreed at the meeting.

Johannes Schuetze Energy Import COO, Frank Otto described the partnership as a "big deal" for the German market.

Chairman of the Nigerian Union Bank, Farouk Gumel confirmed a commitment of \$500 mill for e-energy projects in Nigeria, emphasising the importance of rural inclusion and bringing more people into the formal economy.

Welcoming the new deals, Nigerian President, Bola Tinubu assured German businesses that with Nigeria's stable political landscape, foreign investments into the country are secure.

"Since 1999, we have witnessed changes in democratic governance, with peaceful transfers of power within and between parties. Democracy in Nigeria has proven to be flexible and resilient. Shake off any remnants of the military era syndrome; we have moved beyond that. Despite challenges faced by other African nations, Nigeria stands firm, and we are your partners," President Tinubu said. ■

Port Hedland to get mid-scale LNG plant

Pilbara Clean Fuels (PCF) is developing a concept for a mid-scale, low carbon footprint LNG plant to be located at Port Hedland in Western Australia, the world's largest iron ore export port.

This project will provide an LNG fuel supply facility by converting pipeline natural gas to LNG, to be used as fuel for large iron ore carriers operating on round voyages between Port Hedland and Asia.

The base-case plant capacity is 0.5 mill tonnes per annum. Market analysis for Port Hedland alone (not counting other major Pilbara ports) indicated a potential demand of 1 mill tonnes by 2030.

A key feature of the project is an electrically operated plant with outsourced power supplied predominantly from renewable sources. It will be designed to significantly reduce Scope 1 and Scope 2 emissions, compared to conventional LNG plants.

The LNG re-fuelling will be undertaken by ship-to-ship (STS) transfers, while vessels are in Port Hedland's anchorage.

At the same time, Oceania Marine Energy is developing an LNG marine fuel bunkering service, based on the charter, shipmanagement and operation of purpose-designed LNG bunker vessels. They will be provided by Norwegian shipowner, Kanfer Shipping.

Italian-based class society RINA is developing a concept for a new 209,000 dwt 'Newcastlemax' bulk carrier design fitted with an LNG

marine fuel system involving pre-combustion carbon removal and hydrogen production, with the objective of meeting and exceeding IMO 2050 emissions reduction marine vessel Carbon Intensity Index (CII) objectives.

RINA's fuel system concept involves the capture, on board storage and offloading of liquefied CO₂ or solid carbon at loading or discharge ports for onshore handling, monetisation or disposal.

By countering the belief that LNG is only a transition fuel, rather than having a long-term future as a zero emissions fuel, this solution is likely to be welcomed by the marine engineering community, due to the extensive maritime operational experience of LNG and its known safe handling characteristics, RINA said.

MoU signed

PCF, Oceania and RINA have signed a Memorandum of Understanding (MoU) to agree to collaborate on developing an end-to-end low-carbon profile LNG production and marine vessel bunkering capability concept for Port Hedland.

PCF Managing Director, Robert Malabar commented: "Along with our existing partners Oceania, we are delighted to have formed the



The world's large ore port could soon get an LNG plant

new collaborative relationship with RINA. The partnership has the ability to demonstrate an attractive commercial development strategy to meet not only the immediate needs of IMO 2030 emissions compliance, but the engineering step-change needed to create a practical path to IMO 2050 net-zero emissions objectives.

"We know the maritime community is happy with LNG as a marine fuel. We believe the outcome of the studies should provide compelling argument in support of the Western Australian Government's May 2020 announcement to 'Create an International LNG Fuelling Hub in the Pilbara'," he said.

Oceania Managing Director, Nick Bentley, added: "Oceania, PCF, and now collaboration with RINA, heralds the beginning of a

new de-carbonisation initiative in Western Australia, enabling a much-needed lower-carbon fuel source for shipping.

"The Oceania and PCF collaboration is aimed at providing a supply capability for low-carbon footprint LNG, for the first time available on-route to the Australia/Asia iron ore shipping fleets. RINA adds to that with new ship and fuel system design enabling LNG to be viewed as a potential future zero-emissions marine fuel.

"Together we are excited to participate in developing Australia's primary green corridor for shipping, supporting significant emission reductions in the short term, and in the future, for a maritime trade route critically important to Western Australia's economy," he said. ■

Fixed rate charters boost CoolCo

In the third quarter of this year, Cool Company (CoolCo) generated total operating revenues of \$92.9 mill, compared to \$90.3 mill for the previous quarter.

Net income was \$39.21 mill, compared to \$44.61 mill for 2Q23.

This decrease was primarily due to lower unrealised mark-to-market gains on interest rate swaps.

During 3Q23, CoolCo achieved an average TCE of \$82,400 per day, compared to \$81,100 per day in 2Q23.

Adjusted EBITDA was \$62.8 mill for 3Q23, compared to \$59.9 mill for the previous quarter.

CoolCo also declared a dividend of \$0.41 per share for the quarter, to be paid to shareholders of record on 7th December, 2023.

CEO Richard Tyrrell commented: "In the third quarter, we benefited from strong operational performance, a seasonal uplift on our variable rate contract and the fleet's fixed-rate, medium- and long-term charter coverage.

"Additionally, we took mea-

sured exposure to the charter market in the form of one vessel that we chose to deploy directly in the spot market while waiting for the right term opportunity. The net result was a sequentially higher TCE level at \$82,400 per day.

"While not currently reaching the levels seen in the months following the Russian invasion of Ukraine, rates in the early fourth quarter have settled in at levels above historic norms for both the industry and for the CoolCo fleet. This provides us upside on legacy contracts as they renew and scope to maintain TCE performance.

"During the second half of 2023, newbuild deliveries have been limited and overall fleet supply has remained well-balanced against demand. The last two newbuilds in the market from independent owners that deliver ahead of CoolCo's 2024 deliveries have now secured long-term employment, positioning our newbuilds as both the next in line and some of the only uncommitted newbuilds currently available before 2026.

"Newbuild pricing has re-

mained elevated relative to historical levels at approximately \$260 mill per vessel, which along with the current interest rate environment is providing significant support to the long-term charter rates available for newbuilds, while also discouraging incremental newbuild orders.

"Moving forward, a continued strength in gas prices and tightening regulations are expected to put increasing pressure on the large number of remaining steam turbine vessels in the market, likely resulting in heavy scrapping in the coming years.

"As the weather begins to turn colder in the Northern Hemisphere, seasonal support for LNG carrier demand typically ratchets up. We have thus far seen only limited term chartering activity ahead of the 2023/24 winter market, but with the continued absence of Europe's traditional supply backstop from Russian pipeline gas and few vessels currently employed as floating storage, the potential for weather events to produce volatility, and thus demand for LNG carriers, is heightened.



CoolCo's Richard Tyrrell

"Ultimately, energy security remains a top priority for many LNG importing nations, and we expect European demand to remain strong and Asian demand to continue its recovery.

"In the meantime, CoolCo is financially well positioned with \$1.5 bill of contracted revenue backlog as of quarter end and built-in near-term earnings growth from its fully financed newbuilds.

"We plan to maintain a patient, long-term perspective in our vessel chartering decisions intended to provide attractive returns and well-supported dividends for our shareholders," he concluded. ■

Awilco refinances LNGCs

A term sheet for refinancing of Awilco LNG's two 2013-built 156,000 cu m TFDEs 'WilForce' and 'WilPride' has been signed with a major Asian leasing company.

Subject to final credit and board approval, documentation, and customary closing conditions, Awilco will utilise its purchase options under the existing financing facility to repurchase the vessels from CCB Financial Leasing.

Awilco's new financing is at par value of the outstanding debt and structured as a sale/leaseback, similar to the current financing of the vessels at improved terms, reducing the company's finance costs.

The transaction is expected to close in the first half of 2024. ■

Vopak completes terminal stake acquisition

Major Dutch terminal operator Vopak has completed the acquisition of a 50% stake in the LNG Eems Energy Terminal in north Holland.

This move, plus the sale of three chemical terminals, is in line with the company's strategy to improve its financial and sustainability performance, to grow its base in industrial and gas terminals and to accelerate towards new energies and feedstocks, the company said.

Eems Energy Terminal is an 8 bill cu m per year LNG import terminal, located at Eemshaven, near Delfzijl. It has been operating since September, 2022.

With partner Gasunie, Vopak is working to increase the terminal's

capacity towards 10 bill cu m and are also planning to facilitate the import of green hydrogen at Eemshaven.

Vopak's investment in the terminal comes to just over €80 mill, which will positively contribute to the company's operating cash return for the remainder of this year but will have limited impact on full year 2023 EBITDA outlook.

CEO, Dick Richelle, said: "The successful completion of this acquisition and divestment supports our strategic goals and positions

the portfolio towards higher and long term cash returns.

"It grows our footprint in gas and gives the opportunity to accelerate towards new energies in the future. Vopak's unique global portfolio and partnerships strategically position us to leverage the strong market fundamentals and energy transition opportunities.

"We are proud to be leading the way in providing infrastructure solutions that are and will be essential to the economy and the daily lives of people around the world," he said. ■

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.®

Seatrium hands over FSRU 'Alexandroupolis'

Singapore-based engineering company, Seatrium has delivered the refurbished FSRU 'Alexandroupolis', following the completion of near shore testing.

She sailed for Greece to undertake final gas commissioning of the regasification system.

The project was developed by GAS-fifteen, a wholly-owned subsidiary of GasLog LNG Services. The work included 2.9 mill man-hours without any recordable injury and loss-time incident.

Chris Ong, Seatrium CEO, said, "We are pleased to support Gaslog and contribute towards Greece's energy future with the delivery of the first FSRU for the country through the Alexandroupolis Independent Natural Gas System (INGS) project.

"This project marks a significant milestone for Seatrium, affirming our position as a global player with industry-leading engineering expertise in the gas value chain. We look forward to delivering more of such innovative solutions to meet our clients' evolving needs," he said.

As Greece's first FSRU, the INGS project will become a critical energy gateway, supporting its energy security while advancing the energy transition trajectory of Southeastern Europe, the company claimed.

Seatrium's scope of work included refurbishment and life extension work, engineering and

procurement, fabrication, and installation of a new regasification skid, as well as supporting systems, such as boilers, offloading, electrical and automation systems.

When completed, 'Alexandroupolis' will be deployed some 17 km southwest of the Port of Alexandroupolis, Northern Greece, and will have an overall delivery capacity of about 5.5 bill cu m per year, with a peak send out of 22 mill cu m per day.

The 155,000 cu m LNGC, recently re-flagged to the Hellenic Register, is the first FSRU conversion under the Greek Flag for op-

eration in the Thracian Sea.

She will eventually be owned and managed by Greek-based GASTRADE, a consortium of players in the wider region's energy market, and will supply Southeastern European with natural gas.

Compared to a newbuilding FSRU, a converted unit has a smaller carbon footprint, is more cost-effective, and is faster to market, Seatrium claimed.

In addition to converting the world's first FSRU in 2008, Seatrium converted the world's first FPSO in 1981, and the world's first FLNG in 2017. ■

WFW advises Snam on FSRU acquisition

Watson Farley & Williams (WFW) has advised Snam Group on the finalisation of its circa \$400 mill acquisition of BW LNG's FSRU I Limited, owner of the FSRU 'BW Singapore'.

Built in 2015, the 'BW Singapore' can operate both as an LNGC and as an FSRU.

To be located off the coast of Ravenna in the northern Adriatic, the vessel has a storage capacity of 170,000 cu m of LNG and a regasification capacity of 5 bill cu m per year.

Advising Snam was a cross border and multi-disciplinary WFW team led by Rome Assets & Structured Finance Partner, Michele Autuori, supported

by Milan Senior Associate, Davide Canepa, and Associates, Beatrice D'Amato and Teresa Roussou.

London Corporate Partner, Mark Tooke, advised on the deal's UK law matters.

The team worked closely throughout with Snam's in-house legal team comprising, Umberto Baldi, Salvatore Branca and Alessandro Rizzi.

Appleby acted as Bermudan legal counsel. ■



The FSRU 'BW Singapore'

Woodside to import Mexican LNG

Australian LNG producer Woodside has signed a sales and purchase agreement (SPA) with Mexico Pacific to purchase 1.3 mill tonnes per annum of LNG for 20 years.

This is equivalent to around 18 cargoes per year, Woodside said.

LNG is expected to play a critical role in the energy transition and long-term demand is anticipated to remain strong. This agreement is consistent with Woodside's strategic objective of building global scale and flexibility in its LNG portfolio, the company added.

Woodside CEO, Meg O'Neill, said, "As we deliver on our strategy, we aim to complement Woodside's produced LNG supply with third parties' volumes, giving us greater scale and portfolio flexibility to serve our customers, while optimising our LNG trading activities.

"This agreement with Mexico Pacific delivers a new source of LNG into our trading portfolio, expands our geographic diversification in the Pacific Basin and builds on our presence in Mexico.

"Mexico Pacific's Saguaro Energia LNG project is located on the Pacific coast of Mexico, providing

proximity to key markets in Asia."

Under the SPA, Woodside will purchase the LNG from the Saguaro Energia LNG project, located in Puerto Libertad, Sonora, Mexico on a free-on-board (FOB) basis with pricing linked to US gas indices.

The agreement is subject to Mexico Pacific taking a final investment decision (FID) on the planned third train at Saguaro Energia, which is expected in the first half of 2024. Commercial operations are targeted to commence in 2029.

"We are delighted to welcome Woodside, one of the most established global LNG market participants, as a foundation customer of Train 3, further validating the value of west coast Mexican LNG," said Sarah Bairstow, Mexico Pacific President. "We look forward to continuing our collaborative relationship with Woodside to bring additional supply online to address critical energy security and energy transition needs." ■

Anthony Veder looks to NAPA Logbook

Rotterdam-based Anthony Veder's fleet of small-scale gas carriers fleet, including LNGCs, are to benefit from the installation of NAPA's Logbook.

NAPA a supplier of maritime software and data services, has installed the electronic reporting and data integration system across the entire fleet.

By enhancing digitalisation on board, the software streamlines reporting for seafarers, while opening new opportunities to optimise operations for greater safety and sustainability, the Finnish company claimed.

This shift from manual to electronic logbooks facilitates on board record-keeping, significantly reducing crew workloads, while also streamlining voyage reporting and regulatory compliance.

Moreover, voyage reports, such as noon and bunkering reports, as well as notices of readiness, departure, and arrivals, are now fully automated, eliminating duplication and facilitating communication between all stakeholders, including shipowners, charterers, cargo owners, and port and terminal operators, NAPA claimed.

In the longer term, the aim is to utilise data from voyage reports and electronic logbooks to enhance the efficiency, safety and

sustainability of operations across the fleet.

NAPA Logbook will streamline data collection and integration, and facilitate the sharing of data between crews and shoreside teams. This will enable real-time analysis to help onshore and on board teams to make better-informed decisions for each voyage.

Trend identification

Furthermore, the data will help managers to identify trends and use the insights to unlock new efficiencies for gas carrier operations and improve safety practices on board.

Anthony Veder is one of the first companies to deploy the NAPA Logbook, which is already in use by more than 40 companies in the passenger ship sector.

This reflects growing industry demand across shipping segments for efficient data collection and analysis solutions that can provide new insights on fleets and streamline reporting.

Mark Luchs, Anthony Veder's Digital Development Manager, said: "Digitalisation is critical to



Anthony Veder opts for NAPA Logbook

reduce the administrative work of my seafaring colleagues, and creates insights that allow us to further optimise our operations.

"Intelligence gained from on board data and information, for example, plays a pivotal role in the industry's sustainability journey. At Anthony Veder, we are passionate to facilitate digital change in a way that benefits everyone, both on board and shoreside.

"The power of digitisation to reduce the administrative workload lies in revealing areas where

duplication and errors can be reduced, and greater operational efficiency can be attained.

"NAPA Logbook enables us to obtain new insights while reducing workloads and ensuring a smooth transition for our people.

"We believe that through comprehensive data analysis, we can make informed decisions on how to create new efficiencies, enhance safety and make our operations more sustainable.

"This is critical not only to optimise our daily operations and ensure compliance with changing regulations, but also to thrive commercially and achieve our ambition to be a leader in gas shipping services solutions," he said.

In addition, Anthony Veder has extended its turbocharger service agreement with Accelleron, securing Turbo LifecycleCare support across 13 vessels.

The contract, covering 20 turbochargers on single-fuel and LNG dual-fuel 4-stroke engines, builds on a service relationship that began in 2017 with four vessels.

Under the extended agreement, all turbocharger maintenance will be planned and executed by Accelleron under a fixed fee based on actual running hours and includes spare parts purchasing and unexpected service costs.

NEWS NUDGE

Movers and shakers

Excelerate Energy's Daniel Bustos stepped down from his role as CCO on 16th November, 2023.

To help with the transition, Bustos will serve as a senior advisor to the company until 31st May, 2024, when his employment will be terminated.

In addition, effective the same day, Excelerate appointed Oliver Simpson as Executive Vice President and CCO, reporting to CEO Steven Kobos.

Simpson has served as Vice President, Commercial since 2017 and has been with the company since January, 2014.

As a result, Excelerate effec-

tively separated the CCO's role and responsibilities into two executive positions: Chief Development Officer and Chief Commercial Officer, both of whom will report to the CEO.

An interim Chief Development Officer will be appointed, once a permanent successor is identified.

Sempre has announced plans to strengthening its existing management capabilities and sustained financial and operational performance.

Effective 1st January, Justin Bird, Sempra Infrastructure CEO, will continue in his current role. In addition, he has been appointed Executive Vice President of Sempra where he will lead several corporate functions, including Corporate Development

and Financial Planning.

Diana Day, who currently serves as deputy general counsel, has been appointed Sempra's Chief Legal Counsel with responsibility for the company's Legal Affairs and Governance.

Trevor Mihalik, currently the company's Executive Vice President and CFO, has been appointed Executive Vice President and Sempra Group President.

Karen Sedgwick, who currently serves as the company's Chief Administrative Officer and Chief HR Officer, has been appointed Executive Vice President and CFO of Sempra.

Finally, Kevin Sagara, Executive Vice President and Sempra's Group President, will be retiring on 1st December, 2023. ■

ABB wins LNG plant equipment order

Engineering conglomerate ABB has won an order from Bechtel Energy to supply integrated automation, electrical and digital solutions for Phase 1 of NextDecade's Rio Grande LNG facility (RGLNG Phase 1) in Brownsville, Texas.

Bechtel is undertaking the construction under an engineering, procurement, and construction (EPC) contract, which includes three liquefaction trains and supporting infrastructure.

ABB's order marks its first fully-integrated scope on a major LNG facility. When fully operational, Phase 1 is expected to produce 17.6 mill tonnes per annum of LNG.

"Innovation and collaboration are helping address the energy trilemma of providing affordable,

accessible and sustainable energy for all," said Brandon Spencer, ABB Energy Industries' President. "ABB technology will automate, electrify and digitalise the Rio Grande project, which will further boost global LNG exports and play a vital role in achieving global energy security."

Fitting automation control systems, digital electrification components and industrial drives will enable RGLNG Phase 1 to optimise production assets, increase



Rio Grande LNG

energy efficiency and operate

more sustainably, ABB claimed. ■

NEWS NUDGE

Egypt looks to export

Egypt could be exporting 1 bill cu ft of LNG per day by January, 2024, Al Arabiya Business reported, quoting an official from the country's Ministry of Petroleum and Mineral Resources.

Its current LNG production ranges between 5.9 and 6.1 bill cu ft per day, with consumption reaching 7 bill cu ft daily during the summer, the official said.

The remaining LNG is imported from Israel, which amounted to 850 to 900 mill cu ft per day, to fill in the production gap, the official explained.

Egypt's imports of Israeli natural gas are thought to have resumed to pre-war levels at 850 mill cu ft per day.

The sources added that Egypt's consumption of natural

gas had started to gradually decline, due to lower temperatures. It is expected to fall to 6 bill cu ft in January, its lowest level.

JERA shores up LNG supply

Through its subsidiary JERA Global Markets, the Japanese energy major importer has secured three LNG cargoes.

This purchase was made to enable a stable supply during the coming winter.

This year's Japanese supply and demand had eased, due to a warm winter weather forecast and high stocks in Europe.

However, JERA said that the situation still remained unpredictable and could change drastically, due to an increase in demand, coupled with poor LNG production.

On 24th November, JERA received the approval from the Japanese Ministry of Economy,

Trade and Industry (METI) to become an authorised supplier under the 'strategic buffer LNG (SBL)' scheme, between December 2023 and February 2024.

As a result, JERA will secure one SBL cargo per month as requested by METI.

SBL is surplus LNG that exceeds the quantity that an authorised supplier expects to secure for its own regular operations and that is sold to domestic entities designated by METI when deemed necessary.

Ropax accommodation for Woodfibre

Vancouver (BC)-based floating accommodation provider Bridgemans Services Group is to charter the ropax 'Isabelle'.

She will be used to house workers at Woodfibre LNG's export terminal near Squamish, BC, beginning next spring.

Woodfibre LNG said that it

had chosen Bridgemans for its commitment to sustainability and ability to deliver turnkey, safe and secure live-work offshore accommodation for more than 600 workers at the site.

'Isabelle' has undergone an extensive refit in Europe of its environmental systems and living, dining, recreational, and meeting areas and is in the final stages of preparation before being deployed to the site next spring.

The floatel will offer 652 newly renovated single cabins with private facilities, a dining room, lounges, meeting rooms, fast Wi-Fi, offices, medical care, a 8,000 sq ft fitness facility, billiards and games room, plus separate accommodation for crew members.

Bridgemans is also providing support and workforce transfers through its Marine Services division. ■

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$256.06 mill
Five years old (174,000 cu m)	\$218.53 mill
Total Fleet (578 ships)	\$91.08 bill
Orderbook (355 ships)	\$92.33 bill

*Source: VesselsValue (30/11/23)

*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	\$115,000	-\$35,000
West of Suez	\$155,000	-\$10,000
12 mos T/C	\$75,000	-\$5,000

*Since last report (23/11/23)

Source: Fearnleys (06/12/23)

Fast solutions for your LNG Storage & Transportation needs.



We can build your small-scale LNG terminal or peak-shaving plant within 18 months.



On-site/Factory-Built Storage Tanks, Intermodal ISO Tank-Containers, Tanker Trailers, Ship/Barge Cargo Tanks for LNG or any Cryogenic/Liquefied Gases

Corban Energy Group (CEG), based in New Jersey, USA, creates highly engineered products for the natural gas supply chain in the Americas, Europe, and Africa. With its global network of engineers and manufacturing facilities, CEG has provided unmatched quality and value in LNG equipment.

Call or e-mail us to find out how your company can benefit from our comprehensive natural gas products and services today.

www.CorbanEnergyGroup.com

CORBAN ENERGY GROUP
Your Solution for LNG/CNG



T. 201.509.8555 info@corbanenergygroup.com
418 Falmouth Avenue, Elmwood Park, NJ 07407, USA

WORLD LNG CARRIER ORDERBOOK

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Daewoo 2531	MEGI	174000	2021-11-01	2025-05-01	BWGas	Hanwha Ocean
Daewoo 2530	MEGI	174000	2021-11-01	2025-03-01	BWGas	Hanwha Ocean
Hudong-zhonghua H1900a	XDF	174000	2023-06-01	2028-03-01	COSCO, MOL, ENN	Hudong-Zhonghua
Hudong-zhonghua H1899a	XDF	174000	2023-06-01	2027-12-01	COSCO, MOL, ENN	Hudong-Zhonghua
Hudong-zhonghua H1898a	XDF	174000	2023-06-01	2027-10-01	COSCO, MOL, ENN	Hudong-Zhonghua
Hudong-zhonghua H1891a	XDF	174000	2023-06-01	2027-10-01	NYK	Hudong-Zhonghua
Hd Hyundai Ulsan 3443		174000	2023-04-28	2027-08-01	NYK	Hyundai Heavy
Dalian No 1 G175k-13		175000	2023-08-21	2027-07-01	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding
Hd Hyundai Ulsan 3442		174000	2023-04-28	2027-06-01	NYK	Hyundai Heavy
Hd Hyundai Ulsan 3441		174000	2023-04-28	2027-03-01	NYK	Hyundai Heavy
Hanwha Ocean 2584	ME-GA	174000	2023-08-01	2027-01-31	MOL	Hanwha Ocean
Dalian No 1 G175k-12		175000	2023-08-21	2027-01-01	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding
Samsung 2663	ME-GA	174000	2023-01-20	2027-01-01	MOL	Samsung
Daewoo 2575	MEGI	200000	2023-03-01	2026-12-01	Venture Global LNG	Hanwha Ocean
Hudong-zhonghua H1888a	XDF	174000	2023-06-01	2026-12-01	NYK	Hudong-Zhonghua
Samsung 2665	ME-GA	174000	2023-03-31	2026-11-01	K-Line	Samsung
Hudong-zhonghua H1887a	XDF	174000	2023-06-01	2026-10-01	NYK	Hudong-Zhonghua
Samsung 2662	ME-GA	174000	2023-01-20	2026-09-01	MOL	Samsung
Daewoo 2574	MEGI	200000	2023-03-01	2026-09-01	Venture Global LNG	Hanwha Ocean
Samsung 2664	ME-GA	174000	2023-03-31	2026-08-01	K-Line	Samsung
Hudong-zhonghua H1886a	XDF	174000	2023-06-01	2026-08-01	NYK	Hudong-Zhonghua
Hudong-zhonghua H1909a	XDF	174000	2023-06-01	2025-12-01	ULT	Hudong-Zhonghua
Hudong-zhonghua H1908a	XDF	174000	2023-06-01	2025-11-01	ULT	Hudong-Zhonghua
China Merchants Jiangsu Cmhi-282-01	ME-GA	180000	2023-05-01	2026-03-01	Celsius Shipping	China Merchants HI Jiangsu
China Merchants Jiangsu Cmhi-282-02	ME-GA	180000	2023-05-01	2026-07-01	Celsius Shipping	China Merchants HI Jiangsu
China Merchants Jiangsu Cmhi-282-03	ME-GA	180000	2023-05-01	2026-11-01	Celsius Shipping	China Merchants HI Jiangsu
China Merchants Jiangsu Cmhi-282-04	ME-GA	180000	2023-05-01	2027-03-01	Celsius Shipping	China Merchants HI Jiangsu
Samsung 2687		174000	2023-11-01	2026-09-01	MOL	Samsung
Hd Hyundai Ulsan 3453	XDF	200000	2023-04-01	2027-07-01	Dynagas	Hyundai Heavy
Hyundai Ulsan 3435	XDF	200000	2023-01-01	2026-07-01	Dynagas	Hyundai Heavy
Hyundai Ulsan 3434	XDF	200000	2023-01-01	2026-04-01	Dynagas	Hyundai Heavy
Hyundai Ulsan 3433	XDF	200000	2023-01-01	2025-12-01	Dynagas	Hyundai Heavy
Daewoo 2559	ME-GA	174000	2022-06-01	2025-02-01	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean
Hyundai Ulsan 3394	XDF	174000	2022-07-01	2025-12-01	Knutzen	Hyundai Heavy
Hyundai Ulsan 3393	XDF	174000	2022-07-01	2025-12-01	Knutzen	Hyundai Heavy
Hyundai Ulsan 3386	XDF	174000	2022-07-01	2025-08-01	Knutzen	Hyundai Heavy
Daewoo 2533	MEGI	174000	2022-01-01	2024-09-01	GasLog	Hanwha Ocean
North Mountain	XDF	174000	2021-10-01	2023-12-01	NYK	Samsung
Samsung 2579	ME-GA	180000	2021-07-01	2024-03-01	Celsius Shipping	Samsung
Ignacy Lukasiewicz	ME-GA	174000	2021-07-01	2024-03-01	Knutzen	Hyundai Samho
Energy Fortitude	XDF	174000	2021-07-01	2024-04-01	Alpha Gas	Hyundai Samho
Samsung 2461	ME-GA	180000	2021-07-01	2023-12-01	Celsius Shipping	Samsung
Nikolay Basov	TFDE - Azipod	172500	2020-08-01	2024-03-01	MOL, COSCO	Hanwha Ocean
Lev Landau	TFDE - Azipod	172500	2020-08-01	2024-01-01	Hanwha Ocean	Hanwha Ocean
Zhores Alferov	TFDE - Azipod	172500	2020-08-01	2024-03-01	Hanwha Ocean	Hanwha Ocean
Ilya Mechnikov	TFDE - Azipod	172500	2020-08-01	2024-03-01	MOL, COSCO	Hanwha Ocean

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 = 30 November 2023

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Pyotr Kapitsa	TFDE - Azipod	172500	2020-08-01	2024-01-01	Hanwha Ocean	Hanwha Ocean
Marvel Dove	ME-GA	174000	2022-01-01	2024-09-01	SK Shipping	Hyundai Samho
Marseille Knutsen	ME-GA	174000	2021-07-01	2025-09-01	Knutsen	Hyundai Samho
Emei	XDF	174000	2021-12-01	2024-09-01	ULT	Hudong-Zhonghua
Orion Sinead	XDF	174000	2020-12-01	2024-11-01	JP Morgan	Hyundai Heavy
HHI Nov 1		174000	2023-11-14	2027-11-30	Evalend Shipping	Hyundai Heavy
HHI Nov 2		174000	2023-11-14	2028-01-31	Evalend Shipping	Hyundai Heavy
DALIAN NO 1 G175K-6	XDF	175000	2023-03-01	2026-10-01	China Merchant	Dalian Shipbuilding
DALIAN NO 1 G175K-5	XDF	175000	2023-03-01	2026-08-01	China Merchant	Dalian Shipbuilding
JIANGSU YANGZI XINFU	ME-GA	175000	2022-10-01	2025-11-01	Hammonia Reederei	Yangzijiang YZJ2022-1475
JIANGSU YANGZI XINFU	ME-GA	175000	2022-10-01	2026-05-01	Hammonia Reederei	Yangzijiang YZJ2022-1476
Lng Ping Hu	XDF	78900	2023-07-01	2024-12-31	Zhejiang Huaxiang	Jiangsu Yixiang
Shandong 1		175000	2023-03-01	2027-03-01	ADS, AES Panama LNG	Jiangnan
Samsung 2609	ME-GA	174000	2022-02-01	2025-06-01	H-Line	Samsung
Samsung 2608	ME-GA	174000	2022-02-01	2025-05-01	H-Line	Samsung
Samsung 2610	ME-GA	174000	2022-02-01	2025-09-01	H-Line	Samsung
Hudong-zhonghua H1882a	XDF	174000	2022-01-01	2025-10-01	MOL	Hudong-Zhonghua
Samsung 2592		174000	2021-10-01	2024-03-01	JP Morgan	Samsung
Celsius 6	ME-GA	180000	2023-10-24	2027-09-01	Celsius Shipping	China Merchants HI Jiangsu
Celsius 5	ME-GA	180000	2023-10-24	2027-06-01	Celsius Shipping	China Merchants HI Jiangsu
Coral Evolution	XDF	29400	2021-06-01	2023-12-01	Anthony Veder	Hyundai Mipo
Hd Hyundai Ulsan 3454	XDF	174000	2023-08-02	2026-12-01	Evalend Shipping	Hyundai Heavy
Hd Hyundai Ulsan 3455	XDF	174000	2023-08-02	2027-06-30	Evalend Shipping	Hyundai Heavy
MOL Coral	ME-GA	174000	2021-06-01	2024-01-01	MOL	Hanwha Ocean
Daewoo 2521	MEGI	174000	2021-05-01	2024-01-01	Hyundai LNG Shipping	Hanwha Ocean
Hudong-zhonghua H1889a	XDF	174000	2022-04-01	2027-03-01	NYK	Hudong-Zhonghua
Hudong-zhonghua H1890a	XDF	174000	2022-04-01	2027-05-01	NYK	Hudong-Zhonghua
Hudong-zhonghua H1903a	XDF	174000	2023-05-01	2028-12-01	CSSC	Hudong-Zhonghua
Hudong-zhonghua H1902a	XDF	174000	2023-05-01	2028-09-01	CSSC	Hudong-Zhonghua
Hudong-zhonghua H1901a	XDF	174000	2023-05-01	2028-05-31	CSSC	Hudong-Zhonghua
Hd Hyundai Ulsan 3444		174000	2023-05-01	2027-08-31	NYK	Hyundai Heavy
Cosco 3		175000	2023-08-31	2028-04-01	COSCO	Dalian Shipbuilding
Cosco 2		175000	2023-08-31	2027-06-01	COSCO	Dalian Shipbuilding
HANWHA OCEAN 2582	MEGI	174000	2023-04-01	2027-06-01	Maran Gas Maritime	Hanwha Ocean
Cosco 1		175000	2023-08-31	2027-03-01	COSCO	Dalian Shipbuilding
Samsung 2584	ME-GA	180000	2021-08-01	2027-02-01	Celsius Shipping	Samsung
Daewoo 2573	ME-GA	174000	2022-09-01	2026-07-01	TMS Cardiff Gas	Hanwha Ocean
Daewoo 2572	ME-GA	174000	2022-09-01	2026-04-01	TMS Cardiff Gas	Hanwha Ocean
Samsung 2640	ME-GA	174000	2022-09-01	2025-10-01	JP Morgan	Samsung
Daewoo 2535	MEGI	174000	2022-01-01	2025-09-01	GasLog	Hanwha Ocean
Kool Panther	ME-GA	174000	2022-06-01	2024-12-01	Cool Co	Hyundai Samho
Kool Tiger	ME-GA	174000	2022-06-01	2024-08-31	Cool Co	Hyundai Samho
Daewoo 2532	MEGI	174000	2022-01-01	2024-07-01	GasLog	Hanwha Ocean
Pyotr Stolypin	TFDE - Azipod	172600	2019-09-01	2024-06-01	Smart LNG	Zvezda SSK
Pacific Success	XDF	173400	2019-12-01	2024-03-01	SinoKor	Samsung
Samsung 2669		174000	2023-06-01	2028-02-01	Chevron	Samsung
Samsung 2668		174000	2023-06-01	2027-12-01	Chevron	Samsung
Hyundai Samho 8210	XDF	174000	2023-02-01	2027-12-01	NYK	Hyundai Samho
Hanwha Ocean 2583	ME-GA	174000	2023-04-01	2027-08-01	MOL	Hanwha Ocean
Hyundai Samho 8209	XDF	174000	2023-02-01	2027-07-01	NYK	Hyundai Samho
Archon	ME-GA	174000	2023-03-01	2027-03-01	Capital Gas	Hyundai Samho

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 = 30 November 2023

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Hanwha Ocean 2580	ME-GA	174000	2023-02-01	2027-03-01	MOL	Hanwha Ocean
Athlos	ME-GA	174000	2023-03-01	2027-02-01	Capital Gas	Hyundai Samho
Hyundai Samho 8208	XDF	174000	2023-02-01	2026-12-01	NYK	Hyundai Samho
Antaios I	ME-GA	174000	2023-01-01	2026-11-01	Capital Gas	Hyundai Samho
Alcaios I	ME-GA	174000	2023-01-01	2026-09-01	Capital Gas	Hyundai Samho
Nikolay Semenov	TFDE - Azipod	172500	2020-08-01	2026-05-01	MOL, COSCO	Hanwha Ocean
Energy Endurance	XDF	174000	2021-07-01	2024-03-01	Alpha Gas	Hyundai Samho
Hyundai Samho 8189	ME-GA	174000	2022-05-01	2025-08-01	SK Shipping	Hyundai Samho
HYUNDAI SAMHO 8239	XDF	174000	2023-02-01	2027-10-01	NYK	Hyundai Samho
HYUNDAI SAMHO 8238	XDF	174000	2023-02-01	2027-05-01	NYK	Hyundai Samho
DAEWOO 2558	ME-GA	174000	2022-09-01	2026-09-01	MOL	Hanwha Ocean
Daewoo 2527	ME-GA	174000	2021-10-01	2024-07-01	MOL	Hanwha Ocean
HANWHA OCEAN 2581	MEGI	174000	2023-04-01	2027-04-01	Maran Gas Maritime	Hanwha Ocean
Samsung 2318	ME-GA	173400	2019-12-01	2027-06-01	SinoKor	Samsung
Samsung 2316	ME-GA	173400	2019-12-01	2026-12-01	SinoKor	Samsung
Samsung 2317	ME-GA	173400	2019-12-01	2027-03-01	SinoKor	Samsung
Agamemnon	ME-GA	174000	2022-06-01	2026-03-01	Capital Gas	Hyundai Samho
Shandong 2		175000	2023-03-01	2027-07-01	Shandong Marine	Jiangnan
Archimidis	ME-GA	174000	2022-06-01	2026-01-01	Capital Gas	Hyundai Samho
Aktoras	ME-GA	174000	2021-09-01	2024-07-01	Capital Gas	Hyundai Samho
Hyundai Samho 8179	ME-GA	174000	2022-03-01	2025-03-01	Knutsen	Hyundai Samho
Daewoo 2542	ME-GA	200000	2022-03-01	2025-10-01	Venture Global LNG	Hanwha Ocean
Daewoo 2541	ME-GA	200000	2022-03-01	2025-07-01	Venture Global LNG	Hanwha Ocean
Samsung 2659	ME-GA	174000	2022-11-01	2027-09-01	Seapeak	Samsung
HUDONG-ZHONGHUA H1796A	XDF	174000	2022-09-01	2027-12-01	MOL	Hudong-Zhonghua
Samsung 2660	ME-GA	174000	2022-11-01	2027-12-01	Seapeak	Samsung
HUDONG-ZHONGHUA H1795A	XDF	174000	2022-09-01	2027-07-01	MOL	Hudong-Zhonghua
Samsung 2658	ME-GA	174000	2022-11-01	2027-08-01	Seapeak	Samsung
HUDONG-ZHONGHUA H1794A	XDF	174000	2022-09-01	2027-02-01	MOL	Hudong-Zhonghua
Samsung 2656	ME-GA	174000	2022-11-01	2027-03-01	Seapeak	Samsung
Samsung 2657	ME-GA	174000	2022-11-01	2027-05-01	Seapeak	Samsung
Hd Hyundai Ulsan 3452	XDF	200000	2023-04-01	2027-05-01	Dynagas	Hyundai Heavy
Hudong-zhonghua H1897a	XDF	174000	2022-09-01	2027-06-01	K-Line	Hudong-Zhonghua
Samsung 2647	ME-GA	174000	2022-06-01	2026-08-01	JP Morgan	Samsung
Daewoo 2543	ME-GA	200000	2022-03-01	2025-12-01	Venture Global LNG	Hanwha Ocean
Hyundai Ulsan 3399	XDF	174000	2022-08-01	2026-09-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Hudong-zhonghua H1894a	XDF	174000	2022-09-01	2026-10-01	K-Line	Hudong-Zhonghua
Hudong-zhonghua H1895a	XDF	174000	2022-09-01	2026-12-01	K-Line	Hudong-Zhonghua
Hyundai Ulsan 3400	XDF	174000	2022-08-01	2026-12-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Hyundai Ulsan 3401	XDF	174000	2022-08-01	2026-12-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Samsung 2636	ME-GA	174000	2022-04-01	2026-03-01	TMS Cardiff Gas	Samsung
HUDONG-ZHONGHUA H1893A	XDF	174000	2022-07-01	2026-03-01	COSCO	Hudong-Zhonghua
Samsung 2644	ME-GA	174000	2022-06-01	2026-05-01	JP Morgan	Samsung
Hudong-zhonghua H1800a	XDF	174000	2022-09-01	2026-05-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua
Hyundai Samho 8204		174000	2023-01-01	2026-05-01	Oman Shipping Co.	Hyundai Samho
Hudong-zhonghua H1884a	XDF	174000	2022-01-01	2026-06-01	MOL	Hudong-Zhonghua
Samsung 2645	ME-GA	174000	2022-06-01	2026-06-01	JP Morgan	Samsung
Hyundai Samho 8205		174000	2023-01-01	2026-06-01	Oman Shipping Co.	Hyundai Samho

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 = 30 November 2023

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Samsung 2646	ME-GA	174000	2022-06-01	2026-07-01	JP Morgan	Samsung
Hyundai Ulsan 3398	XDF	174000	2022-08-01	2026-07-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Hudong-zhonghua H1801a	XDF	174000	2022-09-01	2026-07-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua
Samsung 2641	ME-GA	174000	2022-06-01	2025-11-01	JP Morgan	Samsung
Dalian No 1 G175k-3	XDF	175000	2022-09-01	2025-11-01	China Merchant	Dalian Shipbuilding
Hudong-zhonghua H1798a	XDF	174000	2022-09-01	2025-11-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua
Clean Srocco	ME-GA	200000	2022-03-01	2025-12-01	Dynagas	Hyundai Heavy
Hyundai Ulsan 3396	XDF	174000	2022-08-01	2025-12-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Samsung 2642	ME-GA	174000	2022-06-01	2026-01-01	JP Morgan	Samsung
Clean Destiny	ME-GA	200000	2021-05-01	2023-11-01	Dynagas	Hyundai Heavy
Puteri Sejinjang	XDF	174000	2021-04-01	2024-07-01	Hyundai LNG Shipping	Hyundai Heavy
Dalian No 1 G175k-4	XDF	175000	2022-09-01	2026-01-01	China Merchant	Dalian Shipbuilding
Hyundai Ulsan 3397	XDF	174000	2022-08-01	2026-01-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Samsung 2643	ME-GA	174000	2022-06-01	2026-02-01	JP Morgan	Samsung
Hudong-zhonghua H1799a	XDF	174000	2022-09-01	2026-02-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua
Samsung 2652	ME-GA	174000	2022-11-01	2026-02-01	Minerva Marine	Samsung
Hudong-zhonghua H1883a	XDF	174000	2022-01-01	2026-03-01	MOL	Hudong-Zhonghua
HUDONG-ZHONGHUA H1892A	XDF	174000	2022-07-01	2025-10-01	COSCO	Hudong-Zhonghua
Hyundai Ulsan 3395	XDF	174000	2022-08-01	2025-08-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy
Samsung 2638	ME-GA	174000	2022-06-01	2025-08-01	JP Morgan	Samsung
Hudong-zhonghua H1790a	XDF	175000	2021-10-01	2024-09-01	MOL	Hudong-Zhonghua
Hudong-zhonghua H1896a	XDF	174000	2022-09-01	2027-03-01	K-Line	Hudong-Zhonghua
Orion Gaugin	ME-GA	174000	2021-07-01	2025-09-01	JP Morgan	Hyundai Heavy
Samsung 2639	ME-GA	174000	2022-09-01	2025-09-01	JP Morgan	Samsung
Hudong-zhonghua H1797a	XDF	174000	2022-09-01	2025-09-01	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua
Samsung 2611	ME-GA	174000	2022-09-01	2025-01-01	Pan Ocean, SK Shipping, H-Line	Samsung
Samsung 2619	ME-GA	180000	2022-03-01	2025-10-01	Celsius Shipping	Samsung
Hyundai Samho 8174	XDF	174000	2022-08-01	2025-10-01	NYK	Hyundai Samho
Hyundai Ulsan 3370	ME-GA	174000	2022-05-01	2025-02-01	SK Shipping	Hyundai Heavy
Hyundai Samho 8188	ME-GA	174000	2022-05-01	2025-07-01	SK Shipping	Hyundai Samho
Orion Hugo	ME-GA	174000	2021-07-01	2025-07-01	JP Morgan	Hyundai Heavy
Hyundai Samho 8180	ME-GA	174000	2022-03-01	2025-06-01	Knutzen	Hyundai Samho
Hyundai Ulsan 3381	XDF	174000	2022-06-01	2025-06-01	Knutzen	Hyundai Heavy
Samsung 2634	ME-GA	174000	2022-06-01	2025-05-01	JP Morgan	Samsung
Samsung 2599	ME-GA	180000	2021-12-01	2025-05-01	Celsius Shipping	Samsung
Hyundai Ulsan 3380	XDF	174000	2022-06-01	2025-05-01	Knutzen	Hyundai Heavy
Hudong-zhonghua H1793a	XDF	175000	2021-10-01	2025-05-01	MOL	Hudong-Zhonghua
Hyundai Samho 8175	XDF	174000	2022-01-01	2025-04-01	H-Line	Hyundai Samho
Clean Levant	ME-GA	200000	2022-03-01	2025-04-01	Dynagas	Hyundai Heavy
Hyundai Samho 8049	XDF	174000	2022-08-01	2025-03-01	NYK	Hyundai Samho
Samsung 2612	ME-GA	174000	2022-09-01	2025-03-01	Pan Ocean, SK Shipping, H-Line	Samsung
Clean Mistral	ME-GA	200000	2022-03-01	2025-03-01	Dynagas	Hyundai Heavy
Samsung 2607	ME-GA	174000	2022-02-01	2025-03-01	H-Line	Samsung
Hudong-zhonghua H1792a	XDF	175000	2021-10-01	2025-03-01	MOL	Hudong-Zhonghua
Hudong-zhonghua H1881a	XDF	174000	2022-01-01	2025-08-01	MOL	Hudong-Zhonghua

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 = 30 November 2023

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Samsung 2601		174000	2021-12-01	2025-01-01	JP Morgan	Samsung
Samsung 2598	ME-GA	180000	2021-12-01	2025-01-01	Celsius Shipping	Samsung
Samsung 2595		174000	2021-10-01	2025-01-01	JP Morgan	Samsung
Puteri Mayang	XDF	174000	2021-07-01	2025-01-01	Hyundai LNG Shipping	Hyundai Heavy
Samsung 2597	ME-GA	174000	2021-10-01	2024-12-01	JP Morgan	Samsung
Samsung 2602	ME-GA	174000	2022-01-01	2024-12-01	H-Line, Pan Ocean, SK Shipping	Samsung
Samsung 2603	ME-GA	174000	2022-01-01	2024-12-01	H-Line, Pan Ocean, SK Shipping	Samsung
Samsung 2604	XDF	174000	2021-12-01	2024-12-01	NYK	Samsung
Hudong-zhonghua H1791a	XDF	175000	2021-10-01	2024-12-01	MOL	Hudong-Zhonghua
New Oasis	ME-GA	174000	2021-07-01	2024-12-01	Pan Ocean	Hyundai Heavy
Samsung 2596	ME-GA	174000	2021-10-01	2024-11-01	JP Morgan	Samsung
Puteri Mahsuri	XDF	174000	2021-07-01	2024-11-01	Hyundai LNG Shipping	Hyundai Heavy
Hyundai Samho 8100	ME-GA	174000	2020-12-01	2024-11-01	Knutzen	Hyundai Samho
Hudong-zhonghua H1880a	XDF	174000	2022-01-01	2024-10-01	MOL	Hudong-Zhonghua
New Green	ME-GA	174000	2021-07-01	2024-10-01	Pan Ocean	Hyundai Heavy
Samsung 2635	ME-GA	174000	2022-04-01	2024-09-01	TMS Cardiff Gas	Samsung
Samsung 2594		174000	2021-10-01	2024-09-01	JP Morgan	Samsung
Samsung 2473	XDF	174000	2021-05-01	2024-09-01	Maran Gas Maritime	Samsung
New Brave	XDF	174000	2020-12-01	2024-09-01	Pan Ocean	Hyundai Heavy
Hyundai Samho 8170	ME-GA	174000	2022-02-01	2024-08-01	Hyundai Glovis	Hyundai Samho
New Nature	XDF	174000	2020-12-01	2024-10-01	Pan Ocean	Hyundai Heavy
Samsung 2600		174000	2021-12-01	2024-07-01	JP Morgan	Samsung
Apostolos	ME-GA	174000	2021-11-01	2024-06-01	Capital Gas	Hyundai Heavy
Samsung 2593		174000	2021-10-01	2024-06-01	JP Morgan	Samsung
Puteri Santubong	XDF	174000	2021-04-01	2024-06-01	Hyundai LNG Shipping	Hyundai Heavy
Assos	ME-GA	174000	2021-11-01	2024-05-01	Capital Gas	Hyundai Heavy
Puteri Ledang	XDF	174000	2021-07-01	2024-05-01	Hyundai LNG Shipping	Hyundai Heavy
Clean Future	ME-GA	200000	2021-05-01	2024-03-01	Dynagas	Hyundai Heavy
Clean Vitality	ME-GA	200000	2021-05-01	2024-02-01	Dynagas	Hyundai Heavy
Puteri Saadong	XDF	174000	2021-04-01	2024-02-01	Hyundai LNG Shipping	Hyundai Heavy
Hyundai Ulsan 3371	ME-GA	174000	2022-05-01	2025-03-01	SK Shipping	Hyundai Heavy
Hudong-zhonghua H1885a	XDF	174000	2022-01-01	2026-09-01	MOL	Hudong-Zhonghua
Samsung 2653	ME-GA	174000	2022-11-01	2026-03-01	Minerva Marine	Samsung
Samsung 2651	ME-GA	180000	2022-10-01	2025-11-01	Celsius Shipping	Samsung
Samsung 2637	ME-GA	174000	2022-06-01	2025-07-01	JP Morgan	Samsung
Samsung 2582	XDF	174000	2021-10-01	2024-01-01	NYK	Samsung
Samsung 2585	ME-GA	180000	2021-08-01	2024-07-01	Celsius Shipping	Samsung
DALIAN NO 1 G175K-8	XDF	175000	2023-03-01	2027-02-01	China Merchant	Dalian Shipbuilding
DALIAN NO 1 G175K-7	XDF	175000	2023-03-01	2026-12-01	China Merchant	Dalian Shipbuilding
DAEWOO 2571	XDF	174000	2022-09-01	2026-05-01	MISC	Hanwha Ocean
DAEWOO 2570	XDF	174000	2022-09-01	2026-01-01	MISC	Hanwha Ocean
Hyundai Samho 8182	XDF	174000	2022-10-01	2026-01-01	TMS Cardiff Gas	Hyundai Samho
Mulan Spirit	XDF	79800	2021-05-01	2023-12-01	Jovo Energy	Jiangnan
Daewoo 2568	XDF	174000	2022-09-01	2026-06-01	Meiji Shipping	Hanwha Ocean
Daewoo 2567	XDF	174000	2022-09-01	2025-09-01	Meiji Shipping	Hanwha Ocean
Daewoo 2569	XDF	174000	2022-09-01	2026-09-01	Meiji Shipping	Hanwha Ocean
Daewoo 2566	XDF	174000	2022-09-01	2025-08-01	Meiji Shipping	Hanwha Ocean
Hyundai Ulsan 3384	XDF	174000	2022-07-01	2026-02-01	Knutzen	Hyundai Heavy
Hyundai Ulsan 3382	XDF	174000	2022-07-01	2025-07-01	Knutzen	Hyundai Heavy
Hyundai Ulsan 3383	XDF	174000	2022-07-01	2025-11-01	Knutzen	Hyundai Heavy
Hyundai Ulsan 3387	XDF	174000	2022-07-01	2026-08-01	Knutzen	Hyundai Heavy

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 = 30 November 2023

Name	Propulsion	Capacity	Ordered	Delivery	Owners	Yard
Hyundai Ulsan 3385	XDF	174000	2022-07-01	2026-04-01	Knutsen	Hyundai Heavy
Hyundai Samho 8201	XDF	174000	2022-07-01	2026-08-01	TMS Cardiff Gas	Hyundai Samho
Hyundai Samho 8200	XDF	174000	2022-07-01	2026-03-01	TMS Cardiff Gas	Hyundai Samho
Alexey Kosygin	TFDE - Azipod	172600	2019-09-01	2024-03-01	Smart LNG	Zvezda SSK
Axios II	ME-GA	174000	2021-06-01	2023-12-01	Capital Gas	Hyundai Heavy
Daewoo 2562	ME-GA	174000	2022-06-01	2025-06-01	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean
Daewoo 2564	ME-GA	174000	2022-06-01	2025-11-01	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean
Daewoo 2561	ME-GA	174000	2022-06-01	2025-05-01	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean
Daewoo 2565	ME-GA	174000	2022-06-01	2026-02-01	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean
Daewoo 2560	ME-GA	174000	2022-06-01	2025-04-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2563	ME-GA	174000	2022-06-01	2025-11-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2545	MEGI	174000	2022-04-01	2025-12-01	BWGas	Hanwha Ocean
Daewoo 2544	MEGI	174000	2022-04-01	2025-11-01	BWGas	Hanwha Ocean
Daewoo 2551	ME-GA	174000	2022-04-01	2026-09-01	MOL	Hanwha Ocean
Daewoo 2550	ME-GA	174000	2022-04-01	2025-09-01	MOL	Hanwha Ocean
Samsung 2474	XDF	174000	2021-05-01	2024-09-01	Maran Gas Maritime	Samsung
Daewoo 2540	MEGI	174000	2022-02-01	2025-12-01	Maran Gas Maritime	Hanwha Ocean
Daewoo 2528	MEGI	174000	2021-11-01	2024-08-01	Maran Gas Maritime	Hanwha Ocean
Daewoo 2546	ME-GA	174000	2022-06-01	2024-12-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2547	ME-GA	174000	2022-06-01	2024-12-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2549	ME-GA	174000	2022-06-01	2025-02-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2548	ME-GA	174000	2022-06-01	2025-01-01	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean
Daewoo 2552	MEGI	174000	2022-06-01	2026-05-01	Maran Gas Maritime	Hanwha Ocean
Dalian No 1 G175k-1	XDF	175000	2022-04-01	2025-09-01	China Merchant	Dalian Shipbuilding
Dalian No 1 G175k-2	XDF	175000	2022-04-01	2025-12-01	China Merchant	Dalian Shipbuilding
Daewoo 2536	ME-GA	174000	2022-01-01	2024-09-01	MOL	Hanwha Ocean
Jiangnan H2701	XDF	175000	2022-03-01	2025-05-01	ADNOC	Jiangnan
Jiangnan H2704	XDF	175000	2022-05-01	2026-06-01	ADNOC	Jiangnan
Jiangnan H2702	XDF	175000	2022-05-01	2025-09-01	ADNOC	Jiangnan
Jiangnan H2703	XDF	175000	2022-05-01	2026-01-01	ADNOC	Jiangnan
Jiangnan H2700	XDF	175000	2022-03-01	2025-01-01	ADNOC	Jiangnan
Jiangnan H2705	XDF	175000	2022-05-01	2026-09-01	ADNOC	Jiangnan
Samsung 2632	ME-GA	174000	2022-05-01	2025-12-01	H-Line	Samsung
Samsung 2631	ME-GA	174000	2022-05-01	2025-07-01	H-Line	Samsung
Daewoo 2553	MEGI	174000	2022-06-01	2026-06-01	Maran Gas Maritime	Hanwha Ocean
Samsung 2633	ME-GA	174000	2022-05-01	2026-01-01	H-Line	Samsung
Daewoo 2539	MEGI	174000	2022-02-01	2025-11-01	Maran Gas Maritime	Hanwha Ocean
Daewoo 2537	MEGI	174000	2022-01-01	2025-09-01	Maran Gas Maritime	Hanwha Ocean
Hyundai Samho 8181	ME-GA	174000	2022-04-01	2025-12-01	Knutsen	Hyundai Samho
Daewoo 2529	MEGI	174000	2021-11-01	2024-11-01	Maran Gas Maritime	Hanwha Ocean
Daewoo 2538	MEGI	174000	2022-01-01	2025-11-01	Maran Gas Maritime	Hanwha Ocean
Hudong-zhonghua H1835a	XDF	174000	2021-12-01	2024-12-01	ULT	Hudong-Zhonghua
Hudong-zhonghua H1836a	XDF	174000	2021-12-01	2025-03-01	ULT	Hudong-Zhonghua
Daewoo 2534	MEGI	174000	2022-01-01	2025-06-01	GasLog	Hanwha Ocean
Samsung 2583	XDF	174000	2021-10-01	2024-02-01	NYK	Samsung
Daewoo 2524	ME-GA	174000	2021-09-01	2024-04-01	MOL	Hanwha Ocean
Daewoo 2526	ME-GA	174000	2021-09-01	2024-10-01	MOL	Hanwha Ocean
Daewoo 2523	ME-GA	174000	2021-09-01	2024-02-01	MOL	Hanwha Ocean
Daewoo 2525	ME-GA	174000	2021-09-01	2024-08-01	MOL	Hanwha Ocean
Daewoo 2522	MEGI	174000	2021-07-01	2024-05-01	Hyundai LNG Shipping	Hanwha Ocean

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