

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

26 September 2024

LNGC fleet expansion on the cards

Around 400 more LNGCs will be needed if the current expansion of LNG exporting terminals and infrastructure continues.

In a paper given at last week's Gastech, Emily McClain, Rystad Energy's Vice President Gas Markets said the US will be responsible for 35% of global LNG production by 2035, based on the number of projects already under construction.

Also at Gastech, Indonesian state-owned energy company Pertamina International Shipping (PIS) said it is to double its tanker fleet in the next 10 years.

This included an unspecified number of LNGCs and followed last year's securing of an \$185 mill syndicated loan earmarked for fleet expansion.

“

US will be responsible for 35% of global LNG production by 2035, based on the number of projects already under construction. ”

- Emily McClain, Vice President Gas Markets, Rystad Energy

The expansion is aimed at reducing the average age of the fleet, PIS' CEO, Yoki Fernandi, said.

Indonesia is a major LNG producer and exporter, accounting for around 16 mill tonnes last year, or about 5% of the world's total.

In 2021, PIS signed an agreement with Japanese shipping major NYK to collaborate on LNG logistics business.

Bahri expansion

In addition, Saudi Arabia's shipping giant Bahri is looking to build a fleet of 20 to 30 new LNGCs in a bid to boost the Kingdom's fuel supplies and meet rising global

demand, Bahri CEO, Ahmed Ali Al Subaey told local media.

The company aims to build up the fleet – which is to include LNG, hydrogen, and ammonia carriers – through joint ventures with thus far unnamed partners.

No investment amount was disclosed, but the plan is set to be presented to Bahri's Board for approval next year, he said.

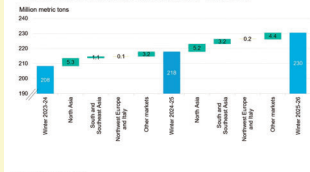
In July, Bahri revealed in its second quarter 2024 earnings presentation that it planned to generate further growth through strategic fleet expansion and upgrades.

Saudi Arabia is also looking to increase gas supplies by developing Aramco's Jafurah field - a gas field estimated to contain some 200 trill standard cu ft - which should help meet the Kingdom's domestic energy needs, while the rest will be exported as hydrogen or LNG, according to local media reports. ■

SHIPPING NEWS AGENDA

MARKETING

Outlook for global winter LNG imports in BNEF's base case



Note: Winter here is the period from October 1 to March 31. 'Other markets' include the Middle East, Americas and 'other Europe'.

Rising demand

2

Algeria switch

3

BUSINESS

Gastrade tie up

3

More SPAs

5

TECHNOLOGY

DNV AIP

6



Windy LNGC

6

Golar FLNG FID

9

Ammonia as fuel

9

Efficiency software

14

LNG ORDERBOOK

LNG carrier orderbook

16

LNG small scale fleet

25



NAKILAT ناقلات

**A JOURNEY OF EXCELLENCE AND RELIABILITY
IN ENERGY TRANSPORTATION AND MARITIME SERVICES**



GLOBAL STAR

20 YEARS ANNIVERSARY

For two decades, we have set the global standard, ensuring safe and efficient delivery of clean energy to over **40 countries** and above **100 terminals**. Our commitment to **safety, excellence, reliability, and customer centricity** positions us as the world's partner in meeting the growing demand for energy transportation and maritime services.

OUR INTEGRATED MARITIME SOLUTIONS

- LNG Transportation
- Ship Repair
- Construction & Fabrication
- Shipping Agency & Logistics
- Towage



Global LNG winter outlook - slightly bullish start

Global LNG demand is expected to climb by 5% in the forthcoming winter period from a year earlier, to hit 218 mill tonnes.

With growth in North Asia and smaller markets squeezing the available LNG volumes for Northwest Europe and Italy, this could raise competition for cargoes and bring a slightly bullish sentiment for prices entering the winter, according to a Bloomberg report.

New supply projects' start up delays, unplanned outages and/or a deterioration in geopolitical tensions could further tighten the global LNG balance and drive up prices.

BloombergNEF (BNEF) thought that Northwest Europe and Italy could import slightly less LNG this winter, as other markets snap up more of the fuel, which could result in larger withdrawals from storage to meet the higher gas demand.

Europe is predicted to end March with its gas inventories 40% full, taking into account the 10-year average weather, which is less than the 56% averaged over

the past two years.

The rise in gas demand will be led by residential and commercial consumers, mainly reflecting increased heating needs, versus the milder winter last year. The power sector will also see higher gas needs, driven by coal plant phase-outs, BNEF said.

North Asia's LNG demand is set to rise by 5% year-on-year to 114 mill tonnes during winter 2024/25. This momentum will be led by South Korea, due to a greater need for gas-fired power and city gas demand.

Slower growth

Mainland China is estimated to follow but will see slower growth than last year. Japan is the only shrinking market in the region, due to nuclear reactor restarts.

Smaller Southeast Asian and Middle East markets will also support LNG demand this winter. For example, demand growth will push up Thai imports, whereas

declining domestic gas production will force Egypt to purchase LNG cargoes to meet its gas needs.

However, elevated Asian spot LNG prices will limit South Asia's buyers' spot purchases.

Weather is a crucial factor driving the change in LNG demand, as are prices.

Asia's benchmark Japan-Korea Marker (JKM) and Europe's Title Transfer Facility (TTF) outlook is slightly bullish for the start of winter in BNEF's base-case scenario, due to a tighter global balance.

This trend is likely to persist into the summer, due to Europe's need for more gas to fill its storage from a lower level at the start of April.

In the event of an extremely cold winter in both North Asia and Northwest Europe, Europe will likely fully deplete its storage and would need to fiercely compete for spot LNG cargoes to restock.

As for supply, Global LNG supplies are expected to inch up by 4% this winter, to 222 mill tonnes, mostly propelled by the US with the start-up of new projects, as well as debottlenecking at Freeport LNG in Texas.

In contrast, the Pacific Basin is poised to see the biggest decline in exports, driven by Malaysia. In addition, Russia's Arctic LNG 2 prospects are still in limbo.

New projects' start ups and their ramp-up will further raise supply post winter, although, a six-month delay could remove over half of the new supply expected next year, BNEF said. ■

Another Arctic LNG 2 cargo loaded

A fifth LNG cargo believed to have recently been loaded at NOVATEK's Arctic LNG 2 export plant was shipped on a vessel managed by a company under US sanctions, according to ship tracking data.

Arctic LNG 2 is also subject to Western sanctions over Russia's war with Ukraine. NOVATEK recently claimed that media allegations that it was involved in establishing and managing a 'shadow fleet' for the export project were untrue.

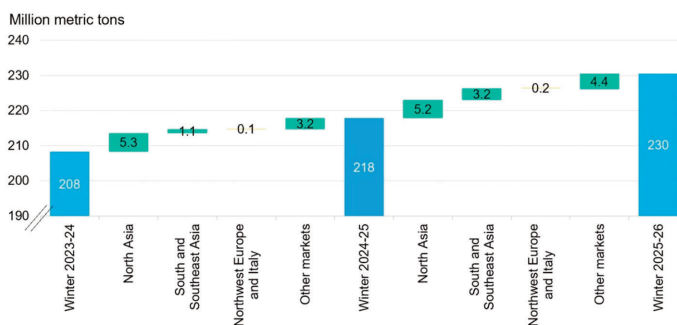
On 14th September, the LNGC 'Asya Energy' berthed at the plant, and sailed fully loaded a day later, according to data from Kpler and LSEG.

She is allegedly managed by India-based Ocean Speedstar Solutions, which came under US State Department sanctions in the last round announced recently.

Other LNGCs to load cargoes at Arctic LNG 2 plant thus far, according to Kpler and LSEG, included:

- * 'Pioneer' on 1st August, which conducted a ship-to-ship transfer (STS) with the LNGC 'New Energy' north of Port Said.
- * 'Asya Energy' on 10th August, which discharged the cargo at an FSU near Murmansk on 4th September.
- * 'Everest Energy' on 25th August, which also discharged the cargo at the FSU on 29th August.
- * 'Everest Energy' on 6th September, which sailed east along the Northern Sea Route (NSR). ■

Outlook for global winter LNG imports in BNEF's base case



Source: BloombergNEF

Note: Winter here is the period from October 1 to March 31. 'Other markets' include the Middle East, Americas and 'other Europe'.

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."

Algeria switches to LNG due to pipeline maintenance

Earlier this month, Algeria's LNG exports saw a sudden increase, as pipeline maintenance in the country resulted in LNG cargoes being offered on a free-on-board (FOB) basis to make up for the reduced gas flows.

According to S&P Global Commodities' data, as of 20th September, Algeria had exported 700,000 tonne (13 cargoes) of LNG in the month, compared to 450,000 tonnes (nine cargoes) in August and 800,000 tonnes (16 cargoes) recorded in September, 2023 over the same period.

Algerian LNG month-to-date exports were the highest since May. Traders expected September's total monthly exports to maintain this trend.

Gas pipeline flows to Spain from Algeria fell sharply, as maintenance work began on the Medgaz subsea pipeline, which averaged only 13 mill cu m per day between 15th and 19th September, compared with an average of 28 mill cu m per day for the first

two weeks of this month, the data showed.

According to market sources, the drop in Algerian flows pushed the Spanish PVB day-ahead instrument to a sustained premium against the TTF.

Platts, part of Commodity Insights, assessed the Spanish PVB day-ahead contract at a 22 cent per MMBtu premium to the Dutch TTF for 16th to 19th September, compared with an 11.2 cent per MMBtu discount the week before.

Since the maintenance period started, Algeria has exported three additional LNG cargoes between 17th and 20th September.

Inspection work on the under-sea part of the pipeline is set to continue until 27th September.

Trading analysts expected

September's exports to overtake recent months, with exports already being earmarked for October.

Healthy offers

Mediterranean spot prices above contractual levels were supporting LNG selling interest.

Given that LNG prices in the West and East Mediterranean are at premiums to their domestic gas hubs and higher than oil-linked contracts, there have been healthy offers from Algeria, traders said.

Algeria utilises a 'cocktail' of pricing mechanisms when offering into the market, industry participants said, including oil-linked components.

Some term contracts - espe-

cially legacy ones, including some Algeria volumes - have tended to have an element priced as a percentage of crude oil, or 'slope', which can vary depending on prevailing market conditions.

Given current market dynamics, traders saw oil-indexed contracts likely pricing around 12%-13.5% against Dated Brent.

The sailing time from Arzew to Barcelona, takes around two days, compared with a Freeport, Texas cargo, which can take around 14 days to arrive at Barcelona.

Thus Algerian volumes would be handy in resolving prompt demand from Mediterranean countries, as well as the lower freight rates involved in such shorter journeys. ■

Venture Global ties up with GASTRADE

Under fire US LNG developer, Venture Global has signed a binding long-term terminal use agreement (TUA) with Greek energy firm GASTRADE.

This will enable the regasification and sale of LNG from Venture Global's terminals in Louisiana to markets in Central and Eastern Europe.

Under the terms of the agreement, Venture Global secured about 1 mill tonnes per annum of LNG regasification capacity at the new Alexandroupolis LNG receiving terminal in Greece for five years, beginning in 2025.

Venture Global's volume will account for around 25% of the total terminal capacity, or about 12 cargoes per annum.

The new Alexandroupolis LNG FSRU receiving terminal and the South/North 'Vertical Corridor' will be essential to enhancing Central and Eastern European energy security by providing a new route to bring alternative supplies of natural gas into the region, Venture Global claimed.

Critical energy infrastructure

projects in Greece have been supported in part by European co-funding, as well as the US Government through its Development Finance Corp (DFC).

"Venture Global is thrilled to expand our European regasification capacity at Greece's new Alexandroupolis LNG terminal,"

said CEO, Mike Sabel. "This move further integrates our business by growing our assets across the LNG supply chain including LNG production, shipping and regasification.

"As a major point of entry for LNG into Central and Eastern Europe, this strategically important

infrastructure will be a game changer for the region's ability to diversify their energy and access a secure and reliable energy supply. Venture Global is proud to support these efforts as a strategic partner with volumes from both Plaquemines LNG and the future CP2 LNG," he said. ■



GASTRADE's FSRU

"THE SHIPPING INDUSTRY IS WHAT KEEPS GLOBAL TRADE MOVING, AND AS THE WORLD MOVES TOWARDS A GREENER CARBON FUTURE, THERE IS NO BETTER TIME TO PURSUE PROFESSIONAL DEVELOPMENT. THE BLUE MBA EQUIPS YOU WITH THE KNOWLEDGE AND UNDERSTANDING OF HOW THE TRADE AND SHIPPING CYCLE WORK TOGETHER, FOR YOU TO BE PART OF THE MOVEMENT TOWARDS A MORE SUSTAINABLE FUTURE."

EXECUTIVE MBA IN SHIPPING AND LOGISTICS (THE BLUE MBA)

A unique industry needs a unique MBA. Take your career to the very top international level by joining the world's premier Executive MBA designed specifically for shipping and logistics professionals.

To learn more about our programme, contact the CBS Blue MBA Director, Irene Rosberg at ir.mba@cbs.dk or request a brochure from our website.

[CBS.DK/BLUEMBA](https://cbs.dk/bluemba)



TotalEnergies signs two LNG supply agreements

TotalEnergies has announced the signing of a 5-year extension of its sales and purchase agreement (SPA) with CNOOC, for the delivery of 1.25 mill tonnes of LNG per year to China until 2034.

This is in line with the French energy giant's strategy to grow its LNG sales portfolio, it said.

As a result of this agreement, TotalEnergies has strengthened its long-term positions in the growing Chinese market.

In China, natural gas serves as a crucial transition energy, mitigating the intermittent renewable energy sources and reducing emissions when used as a substitute for coal in electricity generation, the company said.

"We are pleased to strengthen our ties with CNOOC, a key partner for the company in the world's largest LNG importing country.

"This agreement allows us to continue securing long-term sales in Asia and reduce our exposure to spot market gas prices," explained Gregory Joffroy, TotalEnergies' Senior Vice President, LNG.

In addition, at Gastech, Total-

Energies confirmed the signing of a rumoured Heads of Agreement (HoA) with Turkish state-owned energy company, Botaş.

This HoA calls for the delivery of 1.1 mill tonnes of LNG per year for 10 years starting in 2027.

It also allows TotalEnergies to strengthen its long-term presence in the Turkish LNG market, the company said.

"We are pleased to initiate a new long-term collaboration with Botaş, a key partner for the company in Türkiye. This agreement enables us to secure long-term sales and reduce our exposure to spot market gas price fluctuations," Joffroy said.

TotalEnergies is the world's third largest LNG player having a global portfolio of 44 mill tonnes



TotalEnergies is to supply LNG to Botaş

per year in 2023 thanks to its interests in liquefaction plants worldwide.

The company said that it benefited from an integrated position across the LNG value chain, including production, transportation, access to more than 20 mill tonnes per year of regasification capacity in Europe, trading, and

LNG bunkering.

It also said that its ambition was to increase its share of natural gas in its sales mix to nearly 50% by 2030, to reduce carbon emissions and eliminate methane emissions associated with the gas value chain, and to work with local partners to promote the transition from coal to natural gas. ■

More SPAs signed

Several significant supply deals were reported in the past couple of weeks.

These included - Australian oil and gas developer, Woodside Energy signing a sale and purchase agreement (SPA) with large Japanese importer JERA.

Under the SPA, Woodside will supply around 0.4 mill tonnes (six cargoes) of LNG per year over 10 years on a delivered basis (DES), commencing in April, 2026.

The LNG will be sourced from across Woodside's global portfolio.

This follows the announcement last February that Woodside had reached agreement for the sale a 15.1% non-operating participating interest in the Scarborough Joint Venture to JERA.

Meanwhile, Glenfarne's Texas LNG Brownsville has signed another heads of agreement (HoA) with an undisclosed global LNG player for a long term LNG SPA.

Texas LNG claimed that it had

now secured enough customer off-take commitments to achieve a final investment decision (FID) on the project.

This new agreement added to existing deals with EQT Corp, Gunvor Group, and Macquarie Group.

Glenfarne Energy Transition, a developer, owner, and operator of energy transition infrastructure, is the majority owner and managing member of Texas LNG.

The company's LNG portfolio also includes the 8.8 mill tonnes per annum Magnolia LNG export facility under development in Lake Charles, Louisiana.

Thai purchases

Elsewhere, PTT International Trading, a subsidiary of Thai energy company, PTT, has secured a five-year contract to buy 300,000 tonnes of LNG from Oman LNG.

This long-term procurement strategy helps ease the impact of short-term LNG purchases on the spot market, which exposes Thailand to gas price fluctuations and subsequent surges in the price of electricity bills, PTT explained.

Deliveries will commence in 2025 and continue through 2029.

According to local media reports, PTT is also in talks with Oman LNG to buy another 800,000 tonnes annually in a nine-year contract, commencing in 2026.

In another deal, Uniper and ConocoPhillips extended their long-term gas partnership by agreeing the supply of up to 10 bill cu m of natural gas over the next 10 years.

Under the agreement, ConocoPhillips will supply natural gas to Uniper in Northwest Europe, while leveraging its existing piped

gas and growing LNG positions.

Finally, Kimmeridge Texas Gas (KTG), a subsidiary of investor Kimmeridge, and Commonwealth LNG have signed a heads of terms agreement with commodities trading house Glencore.

Under the terms of the agreement, Glencore will purchase 2 mill tonnes per annum of LNG for 20 years from Commonwealth, as well as the equivalent natural gas from KTG under a netback agreement at international prices.

Definitive agreements are expected to be finalised by the parties in the fourth quarter of this year.

Commonwealth anticipated taking a final investment decision (FID) on its LNG export facility in Cameron, Louisiana in the first half of 2025, with the first LNG production expected in 2028. ■

New LNGC design gets DNV nod

At Gastech, DNV awarded a General Approval for Ship Application (GASA) to HD Hyundai Heavy Industries (HHI) for a new LNGC design.

This new design, consisting of three instead of four cargo tanks, was developed to offer enhanced cargo capacity, improved operational efficiency, and reduced maintenance costs.

The tank configuration is intended to maximise cargo capacity and reduce the number of pump towers and associated cryogenic equipment, such as liquid and gas domes, valves, and piping.

As a result, maintenance costs could be minimised, offering substantial savings over the vessel's operational life.

Jae Jun Jung, HHI's Head of Initial Design Office, Executive

Vice President, said: "The approved design leverages cutting-edge technology solutions aimed at enhancing profitability and operational efficiency.

"By expanding the application of proven technologies, HHI has successfully maximised cargo capacity while maintaining the traditional hull design, ensuring vessels remain highly competitive," he said.

Vidar Dolonen, DNV's Regional Manager for South Korea and Japan, added: "We are very pleased to be working with HHI to approve this design.

"The GASA reflects HHI's dedication to finding solutions that

drive towards improved sustainability and efficiency and their commitment to delivering innovations that are built on the strongest expertise, rigorous class rules and the relevant industry standards," he said.

Thomas Klenum, Executive Vice President of the Liberian International Ship & Corporate Registry, commented: "This multi-stakeholder project demonstrates that international collaboration can pave the way for approval of innovative design solutions and thereby lead to improved efficiency and cost reduction. Congratulations to HHI for this excellent achievement. The

Liberian Registry is proud to have contributed to this successful project."

In addition, HHI's implementation of GTT's Mark III Flex technology will be able to reduce the daily boil-off (BOG) rate from 0.085% to 0.08%, which could result in the reduction of the cargo handling system's electricity consumption, including the reliquefaction plant, thereby contributing to reducing OPEX.

Furthermore, the cargo unloading operations period will be unchanged by maintaining an arrangement of two cargo pumps with increased capacity per pump tower, DNV said. ■

First wind-assisted LNGC under construction

Japanese shipping giant, Mitsui OSK Lines (MOL) and Chevron Shipping, a subsidiary of energy major Chevron USA, are to install a wind-assisted propulsion system on an LNGC.

This system consists of a Wind Challenger, a hard sail wind-assisted ship propulsion system developed by MOL and Oshima Shipbuilding.

The LNGC is being built on the back of a long term charter from

MOL Encean (MOL's 100% indirectly owned subsidiary) to Chevron Asia Pacific Shipping.

She will be the world's first LNGC equipped with a wind-assisted ship propulsion system when delivered and is being built at the

Geoje Shipyard of Hanwha Ocean for delivery in 2026.

Last month, MOL obtained an approval in principle (AiP) from Nippon Kaiji Kyokai (ClassNK), again a first for an LNGC fitted with such a system.

Wind Challenger will help reduce fuel consumption and GHG emissions by using its unique telescopic sails, the company claimed.

In addition to the wind system's robust design, additional safety measures on board the LNGC will include a fully enclosed navigation bridge and a lookout station on the vessel's fore deck to further enhance visibility.

Operationally, the system's position on deck is aimed at minimising the impact on the existing design of membrane type LNGCs.

For example, it will enable the existing mooring arrangements to be unchanged and thereby minimise impacts on ship/shore compatibility, together with limited impact on the vessel's windage

area.

"We're proud to partner with MOL in Wind Challenger's industry-first LNG installation," said Barbara Pickering, Chevron Shipping Co President. "This is another example of using novel approaches in hard-to-abate sectors to reduce carbon intensity in our LNG fleet."

Takeshi Hashimoto, MOL's President and CEO, added, "With the understanding and co-operation of Chevron, we are delighted to be able to extend the Wind Challenger Project to LNG carriers in addition to the two delivered Wind Challenger-equipped bulkers and other ongoing projects.

"Achieving GHG reduction in the maritime transport of LNG, which is increasingly in demand worldwide as a transition fuel, is a very important mission for us.

"This project will undoubtedly be a significant milestone towards achieving 'net zero GHG emissions by 2050', a medium to long-term goal of the Mitsui OSK Lines Group," he said. ■



An LNGC with the ability to utilise the wind



Courtesy of Snam

MIB HPNG System at Terminal FSRU Piombino – ITALIS LNG

www.mibitaliana.com

Chevron Shipping to lower LNGC methane emissions

Technology group Wärtsilä plans to convert one engine on six of Chevron Transport Corp's LNGCs from dual-fuel (DF) to spark gas (SG) operation.

The conversions are intended to reduce greenhouse gas emissions by lowering methane slip in support of Chevron Shipping's broader efforts to reduce the carbon intensity of its operations.

This was made possible after two years of collaboration between the companies, Wärtsilä said.

LNG, when burned as a fuel, results in small amounts of methane that may not fully combust leading to methane escaping into the atmosphere, or 'methane slip'.

Methane exists in the atmosphere for a shorter time than CO₂ but traps around 25-30 times more heat over a 100-year period.

Addressing methane emissions is a key part of lowering carbon intensity, the company added.

Wärtsilä's 50DF conversion project is designed to modify the engines in service to operate as SG, using spark ignition versus diesel pilot fuel to initiate combustion.

This enables a more optimised

combustion process, thereby reducing the methane slip and improving efficiency.

"Chevron Shipping aims to reduce methane emissions intensity of our LNG fleet in support of a lower carbon future," said Barbara Pickering, Chevron Shipping President. "We are pleased to collaborate with Wärtsilä in this industry first. This demonstrates steps we are taking to reduce the carbon intensity of marine transportation."

"This innovative project represents a notable step forward on the road to advancing lower carbon fleets," added Roger Holm, President of Wärtsilä Marine & Executive Vice President at Wärtsilä Corp. "Wärtsilä has an extensive track-record in reducing methane slip from LNG-fuelled engines, not only as newbuild solutions, but also through retrofitting existing installations."

Hydrogen production

In another move, Wärtsilä Marine

and Hycamite have developed cost-effective hydrogen production system from LNG on board vessels.

The system reduces greenhouse gas emissions, both CO₂ and methane, when utilising LNG as fuel. If bioLNG is used, this solution will create a negative carbon footprint.

This de-carbonisation concept can make use of existing LNG infrastructure. In combination with Wärtsilä's patented LNGPac fuel gas handling system, the concept enables on board hydrogen production.

As a result, ultimately, Wärtsilä's flexible, multifuel engines, powered by a mixture of on board hydrogen and LNG, will be able to reduce the ship's CO₂ and methane emissions. Alternatively, hydrogen can also be used in on board fuel cells.

The by-product of the process is solid carbon, which can be more easily stored and handled on board, unlike post-combustion

based CO₂ capture and storage solutions. The carbon produced is of high quality and fit for industrial use, offering the potential for additional revenue.

The system will be scalable and modular, with the following features:

- An automated process for on-demand, on board hydrogen production.
- Solid form carbon produced is stored on board and retrieved via existing port logistics globally.
- Baseline system components are designed based on standard container dimensions.
- Suitable for newbuildings and retrofits into LNG-fuelled vessels.
- Depending on the engine, class requirement, etc, any level of hydrogen conversion can be provided, up to 100%.
- The weight of solid carbon stored on board is nearly 25% of the weight of gaseous CO₂ and takes up much less space. Even in liquefied form, CO₂ requires more than three times the space of solid carbon tonnage.

This system enables companies to meet EU and IMO regulations for 2050 with LNG fuel as baseline.

Mathias Jansson, Wärtsilä's director of fuel gas supply systems, said: "We are investing in the development of marine fuels that can accelerate the transition to carbon-neutral shipping.

"The collaboration with Hycamite is an important step towards this goal. Our gas engines already run on a blend of hydrogen and LNG. The ability to produce hydrogen on board opens up interesting possibilities. It not only solves the lack of supply infrastructure, but also reduces safety risks in the storage and handling of liquid hydrogen and progressively reduces the environmental impact," he said.



A Chevron operated LNGC

Golar firms up MK II FLNG project

Golar LNG Limited has signed an engineering, procurement and construction (EPC) agreement with CIMC Raffles (CIMC) to develop its MK II FLNG design, which has an annual liquefaction capacity of 3.5 mill tonnes of LNG per annum.

Under the agreement, Black & Veatch will provide its licensed PRICO technology, perform detailed engineering and process design, specify and procure topside equipment and provide commissioning support for the FLNG's topsides and liquefaction process, similar to its role in the conversions of Golar's existing FLNGs - 'Hilli' and 'Gimi'.

The MK II design is an evolution of the MK I design illustrated by the two FLNGs currently in service and is also based on the conversion of an existing LNGC.

It allows for a modularisation of the construction process, as well as further efficiency and operability advances based on the previous experience of construct-

ing and operating the existing FLNGs, Golar said.

The project will utilise Golar's LNGC 'Fuji LNG' with a storage capacity of 148,500 cu m, which will be converted into the FLNG.

Golar said that the total EPC price was \$1.6 bill, while the total budget for the MK II FLNG conversion project stood at \$2.2 bill, inclusive of the LNGC, yard supervision, spares, crew, training, contingencies, initial bunker supply and voyage related costs to deliver the FLNG to its operational site, but excluding financing costs.

The latest converted FLNG is expected to be delivered in the fourth quarter of 2027.

Of the total conversion price, Golar had already spent \$0.3 bill

to date, inclusive of the conversion vessel, engineering and long lead items, which are now 63% complete.

As part of the EPC agreement, Golar has also secured an option for a second MK II FLNG conversion slot at CIMC for delivery within 2028.

The first unit's 2027 delivery date makes the MK II FLNG the earliest available floating liquefaction capacity globally, the company claimed.

Based on potential charter terms in line with the most recent long term FLNG charter agreements, the MK II FLNG has an earnings potential of about \$0.5 bill of adjusted annual EBITDA, before commodity exposure. ■

NEWS NUDGE

MAMII gains traction

UK energy giant bp's maritime arm, BP Shipping, container shipping company, CMA CGM, and LNG containment technology supplier, GTT have joined the Methane Abatement in Maritime Innovation Initiative (MAMII).

The three new members bring MAMII's membership to 23, which includes Lloyd's Register, JP Morgan, MSC, NYK Lines, Shell, plus others.

Led by Safetytech Accelerator since 2022, MAMII was established to address methane emissions from ships using LNG as fuel.

Meanwhile, LNGC owner, Seapeak has become the first shipowner to join the Oil and Gas Methane Partnership (OGMP 2.0).

OGMP 2.0 is a voluntary initiative launched by the United Nations Environment Programme (UNEP) to improve the monitoring, reporting, and verification of methane emissions from oil and gas operations.

Hanwha to convert GasLog's LNGC propulsion systems

Hanwha Power Systems, an energy equipment and marine solutions company within the Hanwha Group, has signed a memorandum of understanding (MoU) with GasLog to convert its LNGCs' propulsion to ammonia gas turbine systems.

Through this agreement, announced at Gastech, the two companies will discuss in more detail a plan to replace the existing fossil fuel powered vessels with the eco-friendly ammonia gas turbines.

Last month, Hanwha Power Systems and Hanwha Ocean, in cooperation with GasLog, completed preliminary engineering and economic feasibility reviews for the LNGCs' retrofits.

Following the signing of the MoU, Hanwha Power Systems and GasLog will focus on performance, economic and compliance assessments from a comprehensive perspective to promote the application of ammonia gas turbines in vessel retrofits.

In anticipation of the new carbon emissions regulations, Hanwha

Power Systems said that through its US-based affiliate, Power Systems Mfg. (PSM), it has been actively developing an ammonia (NH3) combustion system to meet the anticipated requirements of the IMO and EU 'Fit for 55'.

These activities have included a successful full-scale, high-pressure test campaign. The PSM ammonia combustion system is planned to be utilised with a gas turbine for the propulsion power application.

Shipowner attention

This initiative has attracted a lot of attention from shipowners who currently lack suitable alternatives for carbon reduction, Hanwha said and ongoing discussions are taking place with major

shipowners.

In particular, it was noted that ammonia gas turbines do not require pilot oil during normal operations, whereas engines typically use pilot oil at all operating points.

For a gas turbine using ammonia as a fuel, it is possible to operate completely carbon-free, or operators can freely mix ammonia and natural gas, so that they can respond flexibly and economically to future regulations.

The gas turbine will generate a negligible amount of methane slip, even if natural gas is used as fuel. Feasibility studies are ongoing for other potential fuels that could be used.

After Hanwha Group acquired Hanwha Ocean, Hanwha Power

Systems launched its Marine Solutions Business Division in May of last year to promote ship modification and upgrades, ship availability and services, plus a fuel propulsion vessel business based on eco-friendly fuels.

Within a year of the launch of the new division, the company had signed contracts with shipping companies for LNG reliquefaction unit retrofit work, among other services.

Justin Lee, Hanwha Power Systems CEO, said, "If the demonstration of ammonia gas turbines for ship propulsion is successful, it will be a major turning point in the global shipbuilding and shipping industry paving the way for eco-friendly fuel propulsion in vessels." ■

ICARIA® SERVICE PROGRAM

YOUR COMPLIANCE SOLUTION FOR MEG4



Mooring rope health management doesn't have to be complicated. Maximize rope lifespan, minimize operational risk, streamline communication, and enhance crew safety with ICARIA. Ensure compliance and optimize efficiency.

Contact us at [SamsonRope.com/services/Icaria](https://www.SamsonRope.com/services/Icaria)



Excelerate turns to Wärtsilä

Excelerate Energy has signed into an agreement with Wärtsilä Gas Solutions, part of technology group Wärtsilä, to retrofit a reliquefaction system on board one of Excelerate's FSRUs.

The equipment will be available to be installed on any of Excelerate's existing vessels based on customer demand or for prospective LNG projects.

This retrofit project will improve the environmental footprint of Excelerate's FSRU operations by reliquefying boil-off gas (BOG) and returning it back to the cargo tanks, thus reducing emissions and saving cargo.

The system is also designed to minimise maintenance and operational costs.

"We are committed to reducing

the environmental footprint in all our operations, and this project is a substantial part of that commitment. We are very pleased to partner up with Wärtsilä Gas Solutions for this project, as their unmatched experience in reliquefaction systems, state-of-the-art technology, and all-round project engineering capabilities make them the ideal partner for us," said David Liner, COO at Excelerate Energy.

"As a market leader in types of cryogenic gas applications, Wärtsilä Gas Solutions has demon-

strated to the market for many years that we have the technology to contribute to greener shipping operations. We are, of course, very proud to be partnering with an industry-leader such as Excelerate Energy, which is a strong testament to our capabilities in delivering quality, commercial value and environmental benefits to our clients," commented Walter Reggente, Vice President Wärtsilä Gas Solutions.

Delivery of the Wärtsilä reliquefaction system is scheduled for early 2026. ■

LR approves Samsung's LNGC design

Lloyd's Register (LR) has granted an Approval in Principle (AiP) to Samsung Heavy Industries (SHI) for an 174,000 cu m LNGC design.

Under the agreement, SHI will carry out the design for the LNGC and LR will provide the review of the shipbuilder's deliverables and technical advice for further design development.

With global demand for LNG expected to increase between 25-50% by 2030 and the current vessel orderbook showing a record list of 270 LNGCs - almost 40% of the existing fleet - facilitating the construction of new generation LNGC, along with the onward transporta-

tion of LNG, is crucial if the industry is to fulfil its supply demands, the class society said.

Sung-Gu Park, LR's North East Asia President, said: "There is a growing demand for vessels which incorporate innovative technologies that are pivotal for the maritime energy transition.

"This AiP signifies Lloyd's Register position at the forefront of meeting the maritime sector's need for innovative design development and approval for LNG car-

riers," he said.

Hae Ki Jang, SHI's CTO & Executive Vice President, added: "SHI is leading the design and development of LNG carrier technology, which offers enhanced efficiency solutions to our global customers to meet ever increasing shipping demand.

"Our continued collaboration with Lloyd's Register will extend the project into further exciting phases of engineering and development," he said. ■

NEWS NUDGE

KN Energies forms German LNG terminal subsidiary

Lithuanian-based international energy terminals operator, KN Energies has formed a German subsidiary, KN Energies Deutschland GmbH.

The new company will be responsible for the performance of its commitment to German state-owned Deutsche Energy Terminal GmbH (DET) to offer technical O&M services for the second floating LNG import terminal at Wilhelmshaven.

Similar to its Brazilian subsidiary, KN Açú Serviços de Terminal de GNL LTDA, all shares in the German operation are held by companies within the KN Energies group.

The new company is registered in Wilhelmshaven, Lower Saxony.

Höegh LNG becomes Höegh Evi

Höegh LNG has changed its name to Höegh Evi.

Standing for 'energy vector infrastructure,' Evi reflects the recent expansion of the company's focus beyond LNG import terminals to encompass clean energy solutions, the company said.

The name change has now been formally registered in the Bermuda Registrar of Companies.

Höegh LNG Holdings has also changed its name to Höegh Evi Ltd. ■

Zero carbon LNGC design introduced

At last week's Gastech exhibition, Hanwha Ocean unveiled a zero carbon LNGC design.

Hanwha hosted an 'LNG Carrier User Forum' aimed at shipowners and classification societies, at which the zero carbon propulsion LNGC, dubbed 'Ocean 1' was introduced.

'Ocean 1' was designed to be powered by an ammonia gas turbine-based electric system, eliminating the reliance on fossil fuels.

It is also capable of operating on LNG and mixed fuels, with the flexibility to integrate future technologies, such as fuel cells and batteries, Hanwha said.

In addition, Hanwha revealed high-manganese steel (MCTIB) LNG fuel tanks. This material, which has been used in VLCCs and containerships, is expected to en-

hance transport efficiency by reducing boil-off gas (BOG) when used in cargo tanks.

Hanwha Engine revealed a remote engine monitoring system that can detect engine faults and predict parts replacement cycles. By integrating with Hanwha Ocean's smart ship solution, this system will enable real-time moni-

toring of engine conditions, the company claimed.

Hanwha Ocean described the zero carbon propulsion LNGC as an innovative, eco-friendly breakthrough leading the industry, emphasising the company's goal of strengthening partnerships with affiliates to become a global leader in marine de-carbonisation solutions. ■

ABS teams up with HD KSOE

US based class society and consultancy, ABS has signed a memorandum of understanding (MoU) with HD Korea Shipbuilding & Offshore Engineering (HD KSOE).

This MoU is aimed at advancing the development and certification of innovative systems for next-generation, zero-carbon ships.

Representatives from both companies met at last week's Gastech in Houston for the signing ceremony.

Entitled 'Co-operation on the Advanced Zero-Carbon Ships,' the MOU focuses on integrating advanced technologies in three main areas:

- A novel LNG cargo handling system that utilises full re-liquefaction system to suppress boil-off gas (BOG) for zero-carbon LNGCs.
- A comprehensive ammonia fuel supply system, including pressure control for large commercial vessels.
- An efficient integrated system that enhances re-liquefaction with cold ammonia fuel supply,

thereby improving system efficiency and reducing power consumption.

"To help safely deliver the rapid technological advances our industry needs, collaboration will be essential. ABS is proud to expand our relationship with HD KSOE, and we look forward to working together on innovative concepts to optimise and enhance next-generation vessels," said Patrick Ryan, ABS Senior Vice President and CTO.

"HD KSOE and ABS are committed to advanced key technological developments for the next-generation vessel market through

collaboration. We look forward to presenting a long-term vision for gas carriers and zero-carbon fuelled ships, focusing on achieving net-

zero emissions," added Sung Young-jae, HD KSOE Vice President and Research Director of De-carbonisation Research Lab. ■



Sung Young-se (left), HD KSOE's Vice President and Research Director with ABS' Senior Vice President and CTO, Patrick Ryan (right) at the signing ceremony

NEWS NUDGE

Ships - Newbuildings, deliveries, sales, recyclings

Recently formed Hercules Tanker Management has signed a contract with Hyundai Mipo Dockyard to construct an 18,000 cu m dedicated LNG and Bio LNG bunkering vessel, which will be deployed by sister company, Peninsula.

The new vessel is expected to be delivered in 2027. An option was also agreed to construct a second vessel.

Physical bunker supplier, Peninsula has been operating the 12,500 cu m LNG bunkering vessel, 'Levante LNG', since October, 2023.

Peninsula is supplying LNG as marine fuel to multiple customers across the Strait of Gibraltar and Western Mediterranean, including Royal Caribbean, Eastern Pacific, K-Line & MSC.

US-based Gulf LNG Tugs has

ordered four high horsepower, highly manoeuvrable, low emission (LEV), Rapport 2800 tugs specifically designed to serve the Port Arthur LNG export facility.

Two will be built by Master Boat Builders in Coden, Alabama, and two by Sterling Shipyard in Port Neches, Texas.

Gulf LNG Tugs is a joint venture between Bay-Houston Towing, Houston, Texas; Moran Towing Corp, New Canaan, Connecticut and Suderman & Young Towing Co of Houston, Texas.

This marks the fifth LNG terminal along the US Gulf Coast involving the Gulf LNG Tugs group, the largest provider of LNG terminal services in North America.

On 10th September, Angelico's Group's Maran Gas Maritime (MGM), took delivery of the ABS classed LNGC 'Maran Gas Kimolos' from Hanwha Ocean.

She is the first in a series of 11 MGM newbuilding LNGCs on

order at the shipyard.

This latest series incorporates MGM's MEGI 'Generation 3' specification, leveraging experience from 13 vessels already in service with 'MAN-MEGI propulsion systems, an evolving and continuously improving design.

MAN-MEGI propulsion engines have the lowest gas consumption and negligible level of methane slip among all dual-fuel LNG engines available, the company claimed.

Combined with design enhancements, as well as tried and tested energy saving devices, such as shaft generators and air lubrication systems, the result is the most efficient and future-proof LNGC design currently being built, with significant advantages over the competition in terms of total GHG emissions, MGM said.

Venture Global has reported on a social media post that the first two new ships in its fleet

recently loaded LNG for the first time and sailed for Germany.

To date, Venture Global has sent almost 50 cargoes to Germany and looks forward to many more through its long-term partnerships with EnBW and for SEFE.

The two LNGCs included the 'Venture Gator', which was the first to be delivered out of nine under construction at Samsung.

Broking sources have reported the sale of the 146,794 cu m 2008-built 'Grace Cosmos' to Chinese interests for a price said to be about \$58 mill.

Leaving the fleet is the steam powered 126,400 cu m LNGC 'Coral Energy'.

Built at the US shipyard of General Dynamics in 1979, she was sold to undisclosed recyclers for \$555 per ldt with around 3,786 tonnes of aluminium on board.

She had been laid up at Labuan for several years. ■



Marine Fuel Gas Supply Systems

LNG, LH2 and Methanol

✉ sales@cryonorm.com
🌐 www.cryonorm.com
☎ +31-172-418080



Gazoccean's LNGC fleet to utilise Ascenz Marorka's software

Smart shipping solutions provider Ascenz Marorka, a GTT Group company, has supplied software to LNGC technical management company, Gazoccean.

The contract includes access to Ascenz Marorka's smart shipping platform for managing vessel performance and monitoring LNG cargoes, along with automatic data collection from on board sensors across the whole fleet.

This data will be used to produce performance and environmental reports for Gazoccean, as well as for its shipowner and charterer clients, with the goal of optimising energy efficiency.

By automating the reports, this will significantly reduce the administrative burden on the crew, allowing them to focus on critical operational tasks.

In addition, shore-based teams will benefit from enhanced data quality and less time spent on manual checks and report formatting.

The contract also covers

weather routing services and provides access to Ascenz Marorka's fleet centre, aimed at improving route safety and operational efficiency.

Anouar Kiassi, Ascenz Marorka Managing Director, said: "We are honoured to support Gazoccean in their digitalisation efforts and pursuit of operational excellence. We have always placed great emphasis on the human factor in digital initiatives, which makes this collaboration particularly meaningful. It aims to improve crew working conditions by alleviating their administrative tasks, allowing them to concentrate on essential operations."

Régis Adnet, Chairman of Gazoccean, added: "We are delighted to strengthen our co-operation with the GTT group and to embark on

this important project with Ascenz Marorka.

"Digitalisation and innovation are key levers in supporting our operational excellence and achieving both economic and envi-

ronmental objectives. Through this initiative, we also aim to simplify the daily tasks of our crews and enhance our company's attractiveness in an increasingly competitive sector," he said. ■

NEWS NUDGE

First reload completed at Mukran

Germany's Deutsche Ostsee energy terminal located at the port of Mukran, operated by Deutsche ReGas, has successfully carried out the first reload operation.

The LNGC 'Coral Energy' was loaded with 15,000 cu m of LNG at the terminal.

Reloading allows stored LNG to be delivered using smaller LNGCs to locations in the region

that are not connected to the pipeline system.

With the introduction of reloading at Mukran, Deutsche ReGas can now provide an additional service to enable its northern European neighbours to participate in the terminal's supply.

Customers can also receive smaller LNG deliveries throughout the Baltic Sea region cost-efficiently and competitively, the company claimed. ■



LNG OneWorld.com

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$270.03 mill
Five years old (174,000 cu m)	\$233.17 mill
Total Fleet (604 ships)	\$103.12 bill
Orderbook (375 ships)	\$103.74 bill

*Source: VesselsValue (23/08/24)

*The above is updated each month courtesy of VesselsValue

LNG rate assessments

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

Region	This week	Change*
East of Suez	\$55,000	-\$5,000
West of Suez	\$42,000	+\$2,000
12 mos T/C	\$57,000	-

*Since last report (12/09/24)

Source: Fearnleys (25/09/24)



KONGSBERG



**We do more than
secure your LNG
operations;
we build digital
resilience for a
sustainable future**

Go beyond mere compliance

Our LNG cybersecurity experts turn regulations into a roadmap for proactive risk management, safeguarding your operations and reputation with custom-built security strategies.

kongsberg.com/maritime

/Patrolling /Protecting /Preserving /Empowering

WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Apostolos	Capital Gas	Hyundai Heavy	174,000	ME-GA	01/11/2021	01/07/2024
North Light	MOL	Hanwha Ocean	174,000	ME-GA	01/09/2021	01/07/2024
Ilya Mechnikov	MOL, COSCO	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/07/2024
Venture Bayou	JP Morgan	Samsung	174,000	ME-GA	01/12/2021	01/07/2024
Celsius Greenwich	Celsius Shipping	Samsung	180,000	ME-GA	01/08/2021	01/07/2024
Nikolay Basov	MOL, COSCO	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/07/2024
Daewoo 2524	MOL	Hanwha Ocean	174,000	ME-GA	01/09/2021	01/07/2024
Daewoo 2527	MOL	Hanwha Ocean	174,000	ME-GA	01/10/2021	01/07/2024
Daewoo 2528	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/11/2021	01/08/2024
Pyotr Stolypin	Smart LNG	Zvezda SSK	172,600	TFDE - Azipod	01/09/2019	01/08/2024
Alexey Kosygin	Smart LNG	Zvezda SSK	172,600	TFDE - Azipod	01/09/2019	01/08/2024
Nantes Knutsen	Knutsen	Hyundai Samho	174,000	ME-GA	01/12/2020	01/08/2024
Celsius Grenada	Celsius Shipping	Samsung	180,000	ME-GA	01/08/2021	01/08/2024
Gaslog Italy	GasLog	Hanwha Ocean	174,000	MEGI	01/01/2022	01/08/2024
Athos Lng	TMS Cardiff Gas	Samsung	174,000	ME-GA	01/04/2022	01/08/2024
Sergei Witte	Smart LNG	Zvezda SSK	172,600	TFDE - Azipod	01/09/2019	01/08/2024
Daewoo 2525	MOL	Hanwha Ocean	174,000	ME-GA	01/09/2021	01/08/2024
Kool Tiger	Cool Co	Hyundai Samho	174,000	ME-GA	01/06/2022	31/08/2024
Orion Iris	JP Morgan	Samsung	174,000	ME-GA	01/10/2021	01/09/2024
Samsung 2474	Maran Gas Maritime	Samsung	174,000	XDF	01/05/2021	01/09/2024
Maran Gas Nice	Maran Gas Maritime	Samsung	174,000	XDF	01/05/2021	01/09/2024
Rex Tillerson	MOL, COSCO	Hudong-Zhonghua	175,000	XDF	01/10/2021	01/09/2024
Lev Landau	Hanwha Ocean	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/09/2024
Zhores Alferov	Hanwha Ocean	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/09/2024
Pyotr Kapitsa	Hanwha Ocean	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/09/2024
Marvel Phoenix	GasLog	Hanwha Ocean	174,000	MEGI	01/01/2022	01/09/2024
Marvel Dove	SK Shipping	Hyundai Samho	174,000	ME-GA	01/01/2022	01/09/2024
New Brave	Pan Ocean	Hyundai Heavy	174,000	XDF	01/12/2020	01/09/2024
Daewoo 2536	MOL	Hanwha Ocean	174,000	ME-GA	01/01/2022	01/10/2024
North Valley	MOL	Hanwha Ocean	174,000	ME-GA	01/09/2021	01/10/2024
Id'asah	JP Morgan	Samsung	174,000	ME-GA	01/10/2021	01/10/2024
New Nature	Pan Ocean	Hyundai Heavy	174,000	XDF	01/12/2020	01/10/2024
New Green	Pan Ocean	Hyundai Heavy	174,000	ME-GA	01/07/2021	01/10/2024
Daewoo 2529	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/11/2021	01/11/2024
Samsung 2604	NYK	Samsung	174,000	XDF	01/12/2021	01/11/2024
Orion Sinead	JP Morgan	Hyundai Heavy	174,000	XDF	01/12/2020	01/11/2024
Puteri Mahsuri	Hyundai LNG Shipping	Hyundai Heavy	174,000	XDF	01/07/2021	01/11/2024
Kool Panther	Cool Co	Hyundai Samho	174,000	ME-GA	01/06/2022	01/12/2024
Umm Ghuwailina	MOL, COSCO	Hudong-Zhonghua	175,000	XDF	01/10/2021	01/12/2024
Lng Ping Hu	Zhejiang Huaxiang	Jiangsu Yixiang	78,900	XDF	01/07/2023	01/12/2024
Umm Swayyah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	74,000	ME-GA	01/06/2022	01/12/2024
Samsung 2603	H-Line, Pan Ocean, SK Shipping	Samsung	174,000	ME-GA	01/01/2022	01/12/2024
Samsung 2602	H-Line, Pan Ocean, SK Shipping	Samsung	174,000	ME-GA	01/01/2022	01/12/2024
Nuaijah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/12/2024
New Oasis	Pan Ocean	Hyundai Heavy	174,000	ME-GA	01/07/2021	01/12/2024
Samsung 2597	JP Morgan	Samsung	174,000	ME-GA	01/10/2021	01/12/2024
Jiangnan H2700	ADNOC	Jiangnan	175,000	XDF	01/03/2022	01/01/2025
Josef Pilsudski	Knutsen	Hyundai Samho	174,000	ME-GA	01/03/2022	01/01/2025
Samsung 2595	JP Morgan	Samsung	174,000	ME-GA	01/10/2021	01/01/2025
Samsung 2601	JP Morgan	Samsung	174,000	ME-GA	01/12/2021	01/01/2025
Lebrethah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/01/2025

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 = 29 July 2024

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Samsung 2598	Celsius Shipping	Samsung	180,000	ME-GA	01/12/2021	01/01/2025
Al-kheesah	Pan Ocean, SK Shipping, H-Line	Samsung	174,000	ME-GA	01/09/2022	01/01/2025
Puteri Mayang	Hyundai LNG Shipping	Hyundai Heavy	174,000	XDF	01/07/2021	01/01/2025
Samsung 2612	Pan Ocean, SK Shipping, H-Line	Samsung	174,000	ME-GA	01/09/2022	01/02/2025
Puteri Sabah	SK Shipping	Hyundai Heavy	174,000	ME-GA	01/05/2022	01/02/2025
Al-kharrarah	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/02/2025
Daewoo 2559	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/02/2025
Venture Acadia	Venture Global LNG	Hanwha Ocean	174,000	MEGI	01/11/2021	01/03/2025
Ignacy Jan Paderewski	Knutsen	Hyundai Samho	174,000	ME-GA	01/03/2022	01/03/2025
Hudong-zhonghua H1792a	MOL, COSCO	Hudong-Zhonghua	175,000	XDF	01/10/2021	01/03/2025
Al-slaimi	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/03/2025
Puteri Sarawak	SK Shipping	Hyundai Heavy	174,000	ME-GA	01/05/2022	01/03/2025
Hudong-zhonghua H1836a	ULT	Hudong-Zhonghua	174,000	XDF	01/12/2021	01/03/2025
Clean Mistral	Dynagas	Hyundai Heavy	200,000	ME-GA	01/03/2022	01/03/2025
HI Alyssa Warner	H-Line	Samsung	174,000	ME-GA	01/02/2022	01/03/2025
Hyundai Samho 8049	NYK	Hyundai Samho	174,000	XDF	01/08/2022	01/03/2025
Samsung 2634	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/04/2025
HL Fortuna	H-Line	Hyundai Samho	174,000	XDF	01/01/2022	01/04/2025
Clean Levant	Dynagas	Hyundai Heavy	200,000	ME-GA	01/03/2022	01/04/2025
Venture Creole	Venture Global LNG	Hanwha Ocean	174,000	MEGI	01/11/2021	01/05/2025
Mareekh	Knutsen	Hyundai Heavy	174,000	XDF	01/06/2022	01/05/2025
Hudong-zhonghua H1793a	MOL, COSCO	Hudong-Zhonghua	175,000	XDF	01/10/2021	01/05/2025
Samsung 2599	Celsius Shipping	Samsung	180,000	ME-GA	01/12/2021	01/05/2025
HI Edward Austin	H-Line	Samsung	174,000	ME-GA	01/02/2022	01/05/2025
Daewoo 2561	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/05/2025
Jiangnan H2701	ADNOC	Jiangnan	175,000	XDF	01/03/2022	01/05/2025
Wadi Al Syl	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/06/2025
Mesaieed	Knutsen	Hyundai Heavy	174,000	XDF	01/06/2022	01/06/2025
HI Sea Eagle	H-Line	Samsung	174,000	ME-GA	01/02/2022	01/06/2025
Daewoo 2562	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/06/2025
Zoe Knutsen	Knutsen	Hyundai Samho	174,000	ME-GA	01/07/2021	01/07/2025
Hyundai Samho 8188	SK Shipping	Hyundai Samho	174,000	ME-GA	01/05/2022	01/07/2025
Daewoo 2541	Venture Global LNG	Hanwha Ocean	200,000	ME-GA	01/03/2022	01/07/2025
Samsung 2637	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/07/2025
Orion Hugo	JP Morgan	Hyundai Heavy	174,000	ME-GA	01/07/2021	01/07/2025
Samsung 2631	H-Line	Samsung	174,000	ME-GA	01/05/2022	01/07/2025
Daewoo 2534	GasLog	Hanwha Ocean	174,000	MEGI	01/01/2022	01/08/2025
Hyundai Ulsan 3395	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/08/2025
Nikolay Semenov	MOL, COSCO	Hanwha Ocean	172,500	TFDE - Azipod	01/08/2020	01/08/2025
Samsung 2638	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/08/2025
Hyundai Samho 8189	SK Shipping	Hyundai Samho	174,000	ME-GA	01/05/2022	01/08/2025
Hudong-zhonghua H1881a	MOL	Hudong-Zhonghua	174,000	XDF	01/01/2022	01/08/2025
Daewoo 2566	Meiji Shipping	Hanwha Ocean	174,000	XDF	01/09/2022	01/08/2025
Sea Spirit	China Merchant	Dalian Shipbuilding	175,000	XDF	01/04/2022	01/09/2025
Daewoo 2537	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/01/2022	01/09/2025
Al Zour	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/09/2025
Orion Gauguin	JP Morgan	Hyundai Heavy	174,000	ME-GA	01/07/2021	01/09/2025
Hudong-zhonghua H1797a	K-Line, MISC, NYK, China LNG Shipping	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/09/2025
Samsung 2640	JP Morgan	Samsung	174,000	ME-GA	01/09/2022	01/09/2025
Daewoo 2550	MOL	Hanwha Ocean	174,000	ME-GA	01/04/2022	01/09/2025
HI Puffin	H-Line	Samsung	174,000	ME-GA	01/02/2022	01/09/2025

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Samsung 2639	JP Morgan	Samsung	174,000	ME-GA	01/09/2022	01/09/2025
Daewoo 2567	Meiji Shipping	Hanwha Ocean	174,000	XDF	01/09/2022	01/09/2025
Jiangnan H2702	ADNOC	Jiangnan	175,000	XDF	01/05/2022	01/09/2025
Daewoo 2542	Venture Global LNG	Hanwha Ocean	200,000	ME-GA	01/03/2022	01/10/2025
Hyundai Samho 8181	Knutzen	Hyundai Samho	174,000	ME-GA	01/04/2022	01/10/2025
Samsung 2619	Celsius Shipping	Samsung	180,000	ME-GA	01/03/2022	01/10/2025
Hyundai Samho 8174	NYK	Hyundai Samho	174,000	XDF	01/08/2022	01/10/2025
Hudong-zhonghua H1882a	MOL	Hudong-Zhonghua	174,000	XDF	01/01/2022	01/10/2025
Hudong-zhonghua H1892A	COSCO	Hudong-Zhonghua	174,000	XDF	01/07/2022	01/10/2025
Daewoo 2539	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/02/2022	01/11/2025
Daewoo 2538	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/01/2022	01/11/2025
Bw Nivalis	BWGas	Hanwha Ocean	174,000	MEGI	01/04/2022	01/11/2025
Hudong-zhonghua H1798a	K-Line, MISC, NYK, China LNG Shipping	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/11/2025
Samsung 2651	Celsius Shipping	Samsung	180,000	ME-GA	01/10/2022	01/11/2025
Samsung 2641	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/11/2025
Jiangsu Yangzi Xinfu YZJ2022-1475	Hammonia Reederei	Yangzijiang	175,000	ME-GA	01/10/2022	01/11/2025
Hudong-zhonghua H1908a	ULT	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/11/2025
Dalian No 1 G175k-3	China Merchant	Dalian Shipbuilding	175,000	XDF	01/09/2022	01/11/2025
Daewoo 2564	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/11/2025
Daewoo 2563	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/11/2025
Daewoo 2540	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/02/2022	01/12/2025
Bw Borealis	BWGas	Hanwha Ocean	174,000	MEGI	01/04/2022	01/12/2025
Daewoo 2535	GasLog	Hanwha Ocean	174,000	MEGI	01/01/2022	01/12/2025
Hyundai Ulsan 3396	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/12/2025
Hudong-zhonghua H1909a	ULT	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/12/2025
Dalian No 1 G175k-2	China Merchant	Dalian Shipbuilding	175,000	XDF	01/04/2022	01/12/2025
Clean Srocco	Dynagas	Hyundai Heavy	200,000	ME-GA	01/03/2022	01/12/2025
Daewoo 2543	Venture Global LNG	Hanwha Ocean	200,000	ME-GA	01/03/2022	01/12/2025
Samsung 2632	H-Line	Samsung	174,000	ME-GA	01/05/2022	01/12/2025
DAEWOO 2570	MISC	Hanwha Ocean	174,000	XDF	01/09/2022	01/01/2026
Archimidis	Capital Gas	Hyundai Samho	174,000	ME-GA	01/06/2022	01/01/2026
Agamemnon	Capital Gas	Hyundai Samho	174,000	ME-GA	01/06/2022	01/01/2026
Al Udeid	Knutzen	Hyundai Heavy	174,000	XDF	01/07/2022	01/01/2026
Hyundai Ulsan 3397	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/01/2026
Samsung 2642	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/01/2026
Hyundai Samho 8182	TMS Cardiff Gas	Hyundai Samho	174,000	XDF	01/10/2022	01/01/2026
Dalian No 1 G175k-4	China Merchant	Dalian Shipbuilding	175,000	XDF	01/09/2022	01/01/2026
Jiangnan H2703	ADNOC	Jiangnan	175,000	XDF	01/05/2022	01/01/2026
Samsung 2633	H-Line	Samsung	174,000	ME-GA	01/05/2022	01/01/2026
Barzan	Knutzen	Hyundai Heavy	174,000	XDF	01/07/2022	01/02/2026
Hudong-zhonghua H1799a	K-Line, MISC, NYK, China LNG Shipping	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/02/2026
Samsung 2652	Minerva Marine	Samsung	174,000	ME-GA	01/11/2022	01/02/2026
Samsung 2643	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/02/2026
Daewoo 2565	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	174,000	ME-GA	01/06/2022	01/02/2026
Samsung 2653	Minerva Marine	Samsung	174,000	ME-GA	01/11/2022	01/03/2026
Hyundai Samho 8200	TMS Cardiff Gas	Hyundai Samho	174,000	XDF	01/07/2022	01/03/2026
China Merchants Jiangsu Cmhi-282-01	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2023	01/03/2026
Samsung 2636	TMS Cardiff Gas	Samsung	174,000	ME-GA	01/04/2022	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 = 29 July 2024

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

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Hudong-zhonghua H1883a	MOL	Hudong-Zhonghua	174,000	XDF	01/01/2022	01/03/2026
Hudong-zhonghua H1893A	COSCO	Hudong-Zhonghua	174,000	XDF	01/07/2022	01/03/2026
Clean Texas	Dynagas	Hyundai Heavy	200,000	XDF	01/01/2023	01/04/2026
Hyundai Ulsan 3386	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/04/2026
Samsung 2644	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/04/2026
Daewoo 2572	TMS Cardiff Gas	Hanwha Ocean	174,000	ME-GA	01/09/2022	01/04/2026
DAEWOO 2571	MISC	Hanwha Ocean	174,000	XDF	01/09/2022	01/05/2026
Daewoo 2552	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/06/2022	01/05/2026
Hyundai Ulsan 3387	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/05/2026
Hudong-zhonghua H1800a	K-Line, MISC, NYK, China LNG Shipping	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/05/2026
Hyundai Samho 8204	Oman Shipping Co.	Hyundai Samho	174,000	XDF	01/01/2023	01/05/2026
Samsung 2664	K-Line	Samsung	174,000	ME-GA	31/03/2023	01/05/2026
Jiangsu Yangzi Xinfu YZJ2022-1476	Hammonia Reederei	Yangzijiang	175,000	ME-GA	01/10/2022	01/05/2026
Daewoo 2553	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/06/2022	01/06/2026
Hyundai Ulsan 3393	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/06/2026
Hyundai Samho 8205	Oman Shipping Co.	Hyundai Samho	174,000	XDF	01/01/2023	01/06/2026
Samsung 2645	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/06/2026
Hudong-zhonghua H1884a	MOL	Hudong-Zhonghua	174,000	XDF	01/01/2022	01/06/2026
Daewoo 2568	Meiji Shipping	Hanwha Ocean	174,000	XDF	01/09/2022	01/06/2026
Jiangnan H2704	ADNOC	Jiangnan	175,000	XDF	01/05/2022	01/06/2026
Hyundai Ulsan 3394	Knutsen	Hyundai Heavy	174,000	XDF	01/07/2022	01/07/2026
Hudong-zhonghua H1801a	K-Line, MISC, NYK, China LNG Shipping	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/07/2026
Hyundai Ulsan 3398	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/07/2026
Clean Rio Grande	Dynagas	Hyundai Heavy	200,000	XDF	01/01/2023	01/07/2026
Clean Brownsville	Dynagas	Hyundai Heavy	200,000	XDF	01/01/2023	01/07/2026
Daewoo 2573	TMS Cardiff Gas	Hanwha Ocean	174,000	ME-GA	01/09/2022	01/07/2026
China Merchants Jiangsu Cmhi-282-02	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2023	01/07/2026
Samsung 2646	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/07/2026
Jiangnan H2716	Shandong Marine	Jiangnan	175,000		01/03/2023	01/08/2026
Hyundai Samho 8201	TMS Cardiff Gas	Hyundai Samho	174,000	XDF	01/07/2022	01/08/2026
Hudong-zhonghua H1886a	NYK	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/08/2026
Dalian No 1 G175K-5	China Merchant	Dalian Shipbuilding	175,000	XDF	01/03/2023	01/08/2026
Samsung 2647	JP Morgan	Samsung	174,000	ME-GA	01/06/2022	01/08/2026
Daewoo 2574	Venture Global LNG	Hanwha Ocean	174,000	MEGI	01/03/2023	01/09/2026
Alcaios I	Capital Gas	Hyundai Samho	174,000	ME-GA	01/01/2023	01/09/2026
Hyundai Ulsan 3399	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/09/2026
Samsung 2687	MOL	Samsung	174,000	ME-GA	01/11/2023	01/09/2026
Daewoo 2558	MOL	Hanwha Ocean	174,000	ME-GA	01/09/2022	01/09/2026
Daewoo 2551	MOL	Hanwha Ocean	174,000	ME-GA	01/04/2022	01/09/2026
Samsung 2316	SinoKor	Samsung	173,400	ME-GA	01/12/2019	01/09/2026
Samsung 2662	MOL	Samsung	174,000	ME-GA	20/01/2023	01/09/2026
Hudong-zhonghua H1885a	MOL	Hudong-Zhonghua	174,000	XDF	01/01/2022	01/09/2026
Daewoo 2569	Meiji Shipping	Hanwha Ocean	174,000	XDF	01/09/2022	01/09/2026
Jiangnan H2705	ADNOC	Jiangnan	175,000	XDF	01/05/2022	01/09/2026
Samsung 2693	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/10/2026
Hudong-zhonghua H1887a	NYK	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/10/2026
Dalian No 1 G175K-6	China Merchant	Dalian Shipbuilding	175,000	XDF	01/03/2023	01/10/2026
Hudong-zhonghua H1894a	K-Line	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/10/2026

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 = 29 July 2024

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Antaios I	Capital Gas	Hyundai Samho	174,000	ME-GA	01/01/2023	01/11/2026
Samsung 2694	China Merchant	Samsung	174,000	XDF	06/02/2024	01/11/2026
Hanwha Ocean 2585	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/11/2026
Samsung 2665	K-Line	Samsung	174,000	ME-GA	31/03/2023	01/11/2026
China Merchants Jiangsu Cmhi-282-03	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2023	01/11/2026
Daewoo 2576	MOL	Hanwha Ocean	174,000	ME-GA	01/12/2022	01/12/2026
Daewoo 2575	Venture Global LNG	Hanwha Ocean	174,000	MEGI	01/03/2023	01/12/2026
Hanwha Ocean 2586	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/12/2026
Jiangnan H2717	Shandong Marine	Jiangnan	175,000		01/03/2023	01/12/2026
Hyundai Ulsan 3400	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/12/2026
Hyundai Ulsan 3401	K-Line, MISC, NYK, China LNG Shipping	Hyundai Heavy	174,000	XDF	01/08/2022	01/12/2026
Samsung 2695	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/12/2026
Hyundai Samho 8262	Nakilat	Hyundai Samho	174,000	XDF	09/01/2024	01/12/2026
Daewoo 2579	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/10/2022	01/12/2026
Hyundai Samho 8208	NYK	Hyundai Samho	174,000	XDF	01/02/2023	01/12/2026
Hudong-zhonghua H1888a	NYK	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/12/2026
Dalian No 1 G175K-7	China Merchant	Dalian Shipbuilding	175,000	XDF	01/03/2023	01/12/2026
Hudong-zhonghua H1895a	K-Line	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/12/2026
Dalian No 1 G175k-12	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding	175,000	XDF	21/08/2023	01/01/2027
Hd Hyundai Ulsan 3476	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/01/2027
Samsung 2663	MOL	Samsung	174,000	ME-GA	20/01/2023	01/01/2027
Hanwha Ocean 2584	MOL	Hanwha Ocean	174,000	ME-GA	01/08/2023	31/01/2027
Athlos	Capital Gas	Hyundai Samho	174,000	ME-GA	01/03/2023	01/02/2027
Samsung 2696	China Merchant	Samsung	174,000	XDF	06/02/2024	01/02/2027
Hanwha Ocean 2594	K-Line, Hyundai Glovis	Hanwha Ocean	174,000	XDF	01/06/2024	01/02/2027
Hanwha Ocean 2593	K-Line, Hyundai Glovis	Hanwha Ocean	174,000	XDF	01/06/2024	01/02/2027
Hudong-zhonghua H1794A	MOL, COSCO	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/02/2027
Hd Hyundai Ulsan 3477	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/02/2027
DALIAN NO 1 G175K-8	China Merchant	Dalian Shipbuilding	175,000	XDF	01/03/2023	01/02/2027
Hd Hyundai Ulsan 3441	NYK	Hyundai Heavy	174,000	ME-GA	28/04/2023	01/03/2027
Hanwha Ocean 2580	MOL	Hanwha Ocean	174,000	ME-GA	01/02/2023	01/03/2027
Archon	Capital Gas	Hyundai Samho	174,000	ME-GA	01/03/2023	01/03/2027
Dalian No 1 G175K-9	China Gas, Wah Kwong, Fortune Clean Energy	Dalian Shipbuilding	174,000	XDF	12/03/2024	01/03/2027
Hudong-zhonghua H1889a	NYK	Hudong-Zhonghua	174,000	XDF	01/04/2022	01/03/2027
Samsung 2656	Seapeak	Samsung	174,000	ME-GA	01/11/2022	01/03/2027
Samsung 2317	SinoKor	Samsung	173,400	ME-GA	01/12/2019	01/03/2027
China Merchants Jiangsu Cmhi-282-04	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2023	01/03/2027
Cosco 1	COSCO	Dalian Shipbuilding	175,000		31/08/2023	01/03/2027
Hudong-zhonghua H1896a	K-Line	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/03/2027
Hanwha Ocean 2581	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/04/2023	01/04/2027
Samsung 2697	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/04/2027
Hd Hyundai Ulsan 3454	Evalend Shipping	Hyundai Heavy	174,000	XDF	02/08/2023	01/04/2027
Hd Hyundai Ulsan 3478	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/04/2027
Hanwha Ocean 2595	K-Line, Hyundai Glovis	Hanwha Ocean	174,000	XDF	01/06/2024	01/05/2027
Hyundai Samho 8263	Nakilat	Hyundai Samho	174,000	XDF	09/01/2024	01/05/2027
Hd Hyundai Ulsan 3479	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/05/2027
Clean Astraeus	Dynagas	Hyundai Heavy	200,000	XDF	01/04/2023	01/05/2027
Samsung 2657	Seapeak	Samsung	174,000	ME-GA	01/11/2022	01/05/2027
Hudong-zhonghua H1890a	NYK	Hudong-Zhonghua	174,000	XDF	01/04/2022	01/05/2027

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 29 July 2024

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Hyundai Samho 8238	NYK	Hyundai Samho	174,000	XDF	01/02/2023	01/05/2027
Hd Hyundai Ulsan 3442	NYK	Hyundai Heavy	174,000	ME-GA	28/04/2023	01/06/2027
Dalian No 1 G175K-10	China Gas, Wah Kwong, Fortune Clean Energy	Dalian Shipbuilding	174,000	XDF	12/03/2024	01/06/2027
Hanwha Ocean 2582	Maran Gas Maritime	Hanwha Ocean	174,000	MEGI	01/04/2023	01/06/2027
Samsung 2698	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/06/2027
Samsung 2318	SinoKor	Samsung	173,400	ME-GA	01/12/2019	01/06/2027
Cosco 2	COSCO	Dalian Shipbuilding	175,000		31/08/2023	01/06/2027
Hudong-zhonghua H1897a	K-Line	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/06/2027
Hanwha Ocean 2588	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/07/2027
Hanwha Ocean 2587	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/07/2027
Hudong-zhonghua H1795A	MOL, COSCO	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/07/2027
Dalian No 1 G175k-13	Wah Kwong, China Gas, CSSC	Dalian Shipbuilding	175,000	XDF	21/08/2023	01/07/2027
Hd Hyundai Ulsan 3480	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/07/2027
Hyundai Samho 8209	NYK	Hyundai Samho	174,000	XDF	01/02/2023	01/07/2027
Hd Hyundai Ulsan 3443	NYK	Hyundai Heavy	174,000	ME-GA	28/04/2023	01/08/2027
Hanwha Ocean 2583	MOL	Hanwha Ocean	174,000	ME-GA	01/04/2023	01/08/2027
Samsung 2699	China Merchant	Samsung	174,000	XDF	06/02/2024	01/08/2027
Hanwha Ocean 2596	K-Line, Hyundai Glovis	Hanwha Ocean	174,000	XDF	01/06/2024	01/08/2027
Hd Hyundai Ulsan 3481	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/08/2027
Samsung 2658	Seapeak	Samsung	174,000	ME-GA	01/11/2022	01/08/2027
Hd Hyundai Ulsan 3444	NYK	Hyundai Heavy	174,000	ME-GA	01/05/2023	31/08/2027
Hanwha Ocean 2589	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/09/2027
China Merchants Jiangsu Cmhi-282-05	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/02/2024	01/09/2027
Hd Hyundai Ulsan 3482	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/09/2027
Samsung 2659	Seapeak	Samsung	174,000	ME-GA	01/11/2022	01/09/2027
Hanwha Ocean 2590	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/10/2027
Samsung 2700	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/10/2027
Hd Hyundai Ulsan 3483	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/10/2027
Hudong-zhonghua H1891a	NYK	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/10/2027
Hudong-zhonghua H1898a	COSCO, MOL, ENN	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/10/2027
Hyundai Samho 8239	NYK	Hyundai Samho	174,000	XDF	01/02/2023	01/10/2027
Hanwha Ocean 2951	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/11/2027
Samsung 2701	Shandong Marine	Samsung	174,000	XDF	06/02/2024	01/11/2027
Hd Hyundai Ulsan 3484	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/11/2027
Clean Azeus	Dynagas	Hyundai Heavy	200,000	XDF	01/04/2023	01/11/2027
Samsung 2702	MISC	Samsung	174,000	XDF	06/02/2024	01/12/2027
Hudong-zhonghua H1796A	MOL, COSCO	Hudong-Zhonghua	174,000	XDF	01/09/2022	01/12/2027
Samsung 2668	Chevron	Samsung	174,000	XDF	01/06/2023	01/12/2027
Hd Hyundai Ulsan 3455	Evalend Shipping	Hyundai Heavy	174,000	XDF	02/08/2023	01/12/2027
Hd Hyundai Ulsan 3485	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/12/2027
Samsung 2660	Seapeak	Samsung	174,000	ME-GA	01/11/2022	01/12/2027
Hyundai Samho 8210	NYK	Hyundai Samho	174,000	XDF	01/02/2023	01/12/2027
Hudong-zhonghua H1899a	COSCO, MOL, ENN	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/12/2027
Hanwha Ocean 2592	Nakilat	Hanwha Ocean	174,000	XDF	01/06/2024	01/01/2028
China Merchants Jiangsu Cmhi-282-06	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2024	01/01/2028
HD Hyundai Ulsan 3456	Evalend Shipping	Hyundai Heavy	74,000	XDF	14/11/2023	01/01/2028
Samsung ADNOC 4	ADNOC	Samsung	174,000		01/07/2024	01/02/2028
Samsung 2669	Chevron	Samsung	174,000	XDF	01/06/2023	01/02/2028
Capital Samho 1	Capital Gas	Hyundai Samho	174,000		26/02/2024	01/02/2028
Hudong Qatar 1	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/03/2028

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 = 29 July 2024

Name	Owners	Yard	Capacity	Propulsion	Ordered Date	Delivery Date
Samsung 2702	China Merchant	Samsung	174,000	XDF	06/02/2024	01/03/2028
Hd Hyundai Ulsan 3457	Evalend Shipping	Hyundai Heavy	174,000	XDF	14/11/2023	01/03/2028
Hudong-zhonghua H1900a	COSCO, MOL, ENN	Hudong-Zhonghua	174,000	XDF	01/06/2023	01/03/2028
Hd Hyundai Ulsan 3501	Evalend Shipping	Hyundai Heavy	174,000	XDF	03/05/2024	31/03/2028
Samsung ADNOC 3	ADNOC	Samsung	174,000		01/07/2024	01/04/2028
Dalian No 1 G175K-11	China Gas, Wah Kwong, Fortune Clean Energy	Dalian Shipbuilding	174,000	XDF	12/03/2024	01/04/2028
Cosco 3	COSCO	Dalian Shipbuilding	175,000		31/08/2023	01/04/2028
Hanwha ADNOC 4	ADNOC	Hanwha Ocean	174,000		01/07/2024	15/04/2028
Samsung 2704	MISC	Samsung	174,000	XDF	06/02/2024	01/05/2028
Hd Hyundai Ulsan 3502	Evalend Shipping	Hyundai Heavy	174,000	XDF	03/05/2024	01/05/2028
China Merchants Jiangsu Cmhi-282-07	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2024	01/05/2028
Hd Hyundai Ulsan 3486	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/05/2028
Hudong-zhonghua H1901a	CSSC	Hudong-Zhonghua	174,000	XDF	01/05/2023	31/05/2028
Hudong Qatar 2	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/06/2028
Samsung ADNOC 2	ADNOC	Samsung	174,000		01/07/2024	01/06/2028
Samsung 2705	China Merchant	Samsung	174,000	XDF	06/02/2024	01/06/2028
Capital Samho 2	Capital Gas	Hyundai Samho	174,000		26/02/2024	01/06/2028
Hanwha ADNOC 3	ADNOC	Hanwha Ocean	174,000		01/07/2024	15/06/2028
Samsung 2706	MISC	Samsung	174,000	XDF	06/02/2024	01/07/2028
Hd Hyundai Ulsan 3487	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/07/2028
Samsung ADNOC 1	ADNOC	Samsung	174,000		01/07/2024	01/08/2028
Hanwha ADNOC 2	ADNOC	Hanwha Ocean	174,000		01/07/2024	15/08/2028
Hudong Qatar 3	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/09/2028
China Merchants Jiangsu Cmhi-282-08	Celsius Shipping	China Merchants HI Jiangsu	180,000	ME-GA	01/05/2024	01/09/2028
Hd Hyundai Ulsan 3488	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/09/2028
Capital Samho 3	Capital Gas	Hyundai Samho	174,000		26/02/2024	01/09/2028
Hudong-zhonghua H1902a	CSSC	Hudong-Zhonghua	174,000	XDF	01/05/2023	01/09/2028
Samsung 2707	China Merchant	Samsung	174,000	XDF	06/02/2024	01/10/2028
Hanwha ADNOC 1	ADNOC	Hanwha Ocean	174,000		01/07/2024	15/10/2028
Hd Hyundai Ulsan 3489	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/11/2028
Hudong Qatar 4	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/12/2028
Capital Samho 4	Capital Gas	Hyundai Samho	174,000		26/02/2024	01/12/2028
Hudong-zhonghua H1903a	CSSC	Hudong-Zhonghua	174,000	XDF	01/05/2023	01/12/2028
Hudong Qatar 5	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/03/2029
Hd Hyundai Ulsan 3490	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/03/2029
Hudong Qatar 6	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/06/2029
Hd Hyundai Ulsan 3491	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/06/2029
Hudong Qatar 7	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/09/2029
Hd Hyundai Ulsan 3492	Nakilat	Hyundai Heavy	174,000	XDF	01/09/2023	01/09/2029
Hudong Qatar 8	Nakilat	Hudong-Zhonghua	271,000	XDF	12/01/2024	01/12/2029
Hudong Qatar 9	Nakilat	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/01/2030
Hudong Qatar 10	China Merchant	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/03/2030
Hudong Qatar 11	China Merchant	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/05/2030
Hudong Qatar 12	China Merchant	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/07/2030
Hudong Qatar 13	China Merchant	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/09/2030
Hudong Qatar 14	Shandong Marine	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/11/2030
Hudong Qatar 15	Shandong Marine	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/01/2031
Hudong Qatar 16	Shandong Marine	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/03/2031
Hudong Qatar 17	China LNG Shipping	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/05/2031
Hudong Qatar 18	China LNG Shipping	Hudong-Zhonghua	271,000	XDF	29/04/2024	01/07/2031

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. ®

WORLD SMALL SCALE LNG FLEET*

Built	Name	CBM	Cargo Type	Trading Area	Trading in LNG?	Ship Owner / Operator
1974	Seagas	187	LNG	Sweden	Yes	AGA
1988	Kayoh Maru	1,517	LNG	Japan	Yes	Daiichi
1993	Aman Bintulu	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1996	Surya Aki	19,475	LNG	Indonesia - Japan	Yes	MCGC
1997	Aman Sendai	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1998	Pelita Energy	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Coral Favia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2010	Coral Fraseri	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Titan Vision	12,000	LNG/LPG/Ethylene	Europe	No	Titan LNG
2011	Titan Unikum	12,000	LNG/LPG/Ethylene	Europe	No	Titan LNG
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innovation	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 EnergiICE	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
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG

Built	Name	CBM	Cargo Type	Trading Area	Trading in LNG?	Ship Owner / Operator
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 Mendeleev	5,800	LNG	Russia	Yes	Gazprom Neft
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2021	Ravenna Knutsen	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	Brassavola	12,000	LNG	Singapore	Yes	MOL
2021	Gas Vitality	18,600	LNG	Mediterranean	Yes	MOL
2021	TG TBN	500	LNG	Korea	Yes	Trans Gas
2021	Titan Hyperion	8,000	LNG	Benelux	Yes	Titan LNG
2022	Xin Ao Pu Tuo Hao	8,500	LNG	China	Yes	ENN
2022	Coral Nordic	30,000	LNG	Worldwide	Yes	Anthony Veder
2022	Avenir Achievement	20,000	LNG	Worldwide	Yes	Avenir LNG
2022	Haugesund Knutsen	5,000	LNG	Spain	Yes	Knutsen OAS
2022	Clean Cañaveral	5,400	LNG	USG	Yes	PNE
2022	K.Lotus	18,000	LNG	Korea	Yes	K Line
2023	Cryopeak TBA	4,000	LNG	West Canada	Yes	Cryopeak
2023	Levante LNG	12,500	LNG	Spain	Yes	Knutsen OAS
2023	SM Jeju LNG3	7,500	LNG	Korea	Yes	Korea Line
2023	New Frontier 2	18,000	LNG	USG	Yes	Shell
2023	Krios	4,200	LNG	Benelux	Yes	Titan LNG
2023	Alice Cosulich	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	Clean Everglades	5,500	LNG	USG	Yes	PNE
2023	FueLNG Venosa	18,000	LNG	Singapore	Yes	FueLNG
2023	LNG Erasmus	8,000	LNG	NWE	Yes	Shell
2023	Energy Stockholm	8,000	LNG	NWE	Yes	Shell
2024	Coral Evolution	30,000	LNG	Australia	Yes	Anthony Veder ?
2024	Crowley TBN	12,000	LNG	US Coast	Yes	Crowley Maritime
2024	CNOOC TBN	12,000	LNG	China	Yes	CNOOC
2024	TBN	12,500	LNG	Worldwide	Yes	???
2024	Keys TBN	3,500	LNG	Japan	Yes	Keys Bunkering West Japan Co
2024	Seaspan Garbaldi	7,600	LNG	Panama	Yes	Seaspan ULC
2024	Paolina Cosulich	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2024	Huaihe Nengyuan Qihang	14,000	LNG	China	Yes	Anhui Changjiang LNG
2024	Keys Azalea	3,500	LNG	Japan	Yes	Keys Bunkering West Japan
2024	Seaspan Lions	7,600	LNG	Canada	Yes	Seaspan ULC
2024	Hai Yang Shi You 302	12,000	LNG	China	Yes	CETS (CNOOC)
2025	Axpo TBN	7,500	LNG	Italy	Yes	Axpo
2025	Seaspan TBN 3	7,600	LNG	Canada	Yes	Seaspan ULC
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	ScaleGas TBN	12,500	LNG	Spain	Yes	ScaleGas
2026	Vitol TBN 1	12,500	LNG	Worldwide	Yes	Vitol
2026	Total TBN	18,600	LNG	Worldwide	Yes	Total Energies
2027	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2027	Vitol TBN 2	20,000	LNG	Worldwide	Yes	Vitol