LNG Shipping News

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Natural gas demand set to slow - IEA

After a decade of unprecedented expansion, growth in global natural gas demand is expected to slow in the coming years.

This is due to declining consumption and declines in mature markets, the International Energy Agency (IEA) said in its latest medium-term forecast.

Global gas demand is on course to grow by an average of 1.6% a year between 2022 and 2026, down from an average of 2.5% a year between 2017 and 2021, according to IEA's 'Gas 2023 Medium-Term Market Report'.

Overall gas demand from mature markets in Asia/Pacific, Europe and North America peaked in 2021, but is forecast to decline by 1% annually through to 2026, the IEA said.

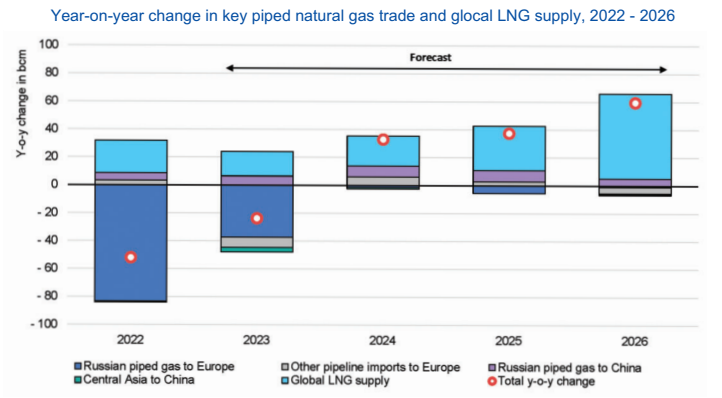
An accelerated rollout of renewables and improved energy efficiency are among the key drivers behind this downward trend for natural gas. For Europe, the loss of piped gas from Russia, following its invasion of Ukraine, pressed governments to seek alternative solutions to maintain energy security.

Decreasing demand in mature markets across the world – a collection of countries that represents almost half of global gas consumption – means that growth will be highly concentrated in fast-growing Asian markets, as well as some gas-rich economies in the Middle East and Africa.

China alone is expected to account for almost half of the total growth in global gas demand between 2022 and 2026, drawing on the fuel to serve its industrial production, power sector and urban areas.

An increase in the amount of new LNG capacity coming online is expected to affect market dynamics in 2025 and 2026 by easing some of the tightness and unlocking price sensitive demand.

The strong increase in LNG supply in 2026 is expected to ease market fundamentals



Source:IEA

Capacity expansion

Overall LNG capacity is expected to expand by 25% between 2022 and 2026, with the US consolidating its position as the world's largest exporter through the construction of new liquefaction plants.

Growth in LNG supply signalled a shift to a more globalised gas marketplace, which will improve resiliency and the ability of suppliers and consumers to respond to supply and demand shocks.

"After their heyday between 2011 and 2021, the world's gas markets have entered a new and more uncertain period that is likely to be characterised by slower growth and higher volatility – and could lead to a peak in global demand by the end of this decade," said Keisuke Sadamori, IEA Director of Energy Markets and Security.

"Different trends are playing out across different regions, with demand declining in mature markets but continuing to grow in emerging and developing economies. We expect a substantial increase in new LNG capacity coming online in the years ahead, which should ease some of the tightness and security of supply concerns that markets have been experiencing since Russia started withholding supplies in 2021," he said.

While gas prices fell in the first three quarters of 2023, uncertainty and risks remain for the coming winter in the Northern Hemisphere. Steep demand reductions in Europe and some Asian markets helped reduce strains, but supplies remain tight.

The LNG supply increase was not enough to offset the sharp decline in deliveries of pipeline gas from Russia to Europe. As such, the risk of price volatility, particularly in the event of a cold winter, is cause for concern. Europe's gas storage sites entered the winter heating season at 96% capacity.

However, this is no guarantee of stable prices throughout the season, particularly in the event of exceptionally cold weather.

In addition, the report provided an outlook for the role of low-emissions gases across key regions. Their supply is expected to more than double through to 2026, with Europe and North America set to drive this expansion and contribute almost 70% of the overall growth, the IEA said. ■

SHIPPING NEWS AGENDA

Pre-winter state of play

LNG shipping rates should strengthen ahead of the peak northern hemisphere winter season, according to the consultancy and research company, Drewry.

This is mainly due to the Asian and European surge in power demand amid higher than normal temperatures.

There are also problems caused by the growing Panama Canal transit restrictions, due to the severe drought, which has hit the region, while supply disruptions, including unplanned outages and longer plant maintenance periods, could further impact the market.

Another factor to be taken into consideration is the possibility of erratic weather conditions caused by the El Nino effect.

Currently, Europe's storage capacity is running at about 94%, primarily due to LNG's increasing role in the region's power generation.

However, Russian gas continues to flow into Europe, especially to Spain, Belgium, France and Portugal.

In general, European buyers tended to rely on the spot market for their LNG, due to limited contracted supplies, Drewry said.

As for Asian demand, Chinese imports are running at around 9% higher year-on-year than seen in 2022. In the major Asian LNG importing countries, stocks are dwindling, while new import terminals are due to come online in the Philippines, Vietnam and Hong Kong.

At present, the outlook for this winter is being driven by a super contango. Both the TTF and Asian spot prices remain below 2022 levels, however, prices are still exposed to market volatility, due to supply disruptions, which are likely to continue until new capacity comes online in 2025/26, Drewry warned.

In the short term, a combination of ample supply and a mild winter should keep European LNG demand stable in the first half of the fourth quarter of this year. Also, the restocking season should start towards the end of this year.

However, competition could intensify given a colder winter and a rise in spot demand. Both supply and demand are likely to increase this winter leading to reduced European storage levels next year.

As for global exports, they should be higher this winter, compared to 2022, partly driven by the restart of Freeport LNG.

New supplies are expected online from Indonesia's Tangguh LNG Train 3, Russia's Arctic LNG Train 2, Altamira and Congo LNG during 4Q23 and 1Q24.

Both Africa and Mexico could bring on more capacity by the end of next year, while Qatar is due to add another 33 mill tonnes per year of LNG through its North Field Expansion (NFE) project Phase 1.

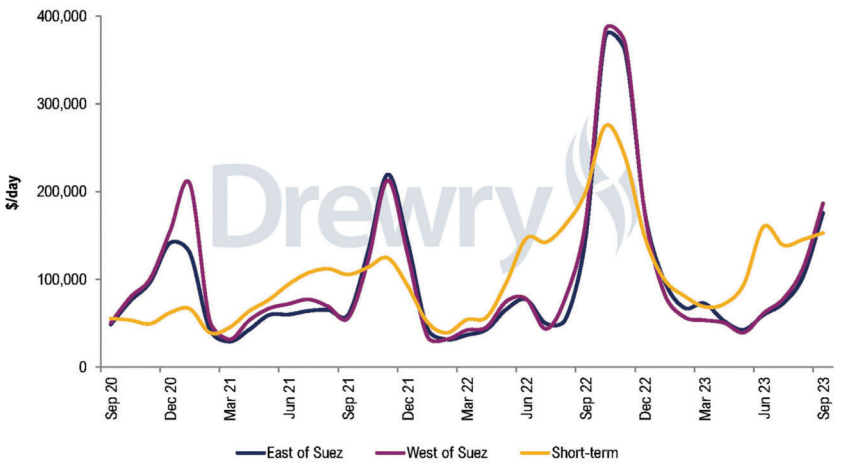
The US is forecast to lead the way in exports this year, however, there are some supply risks.

As for future supplies, the number of FIDs being taken is rising, while developers are offering flexible terms in their supply contracts.

However, financial instability and high inflation should not be discounted but despite these concerns, Rio Grande LNG took FID in 3Q23. Other FIDs, which could come soon include Delfin LNG Phase 1 and Qatar's North Field South Phase 2.

LNG Shipping rates

Rates rallied in 3Q23 amid Panama Canal restrictions and supply disruptions. Expect further strengthening of rates with the approaching winter season.



Source: Drewry

Construction underway

Around 190.5 mill tonnes of liquefaction projects are under construction, mainly in the US, Mexico, Africa, Qatar, Russia, Australia and Indonesia, with about 5.8 mill tonnes coming online by the end of this year. Another 279.1 mill tonnes of planned capacity could take FID in the future.

Included are 16 planned projects in US Gulf and WC Mexico but these could be hindered by the Panama Canal restrictions.

Meanwhile, significant regas capacity additions are being seen in China. Asia is forecast to dominate regas increases going forward.

However, several LNG projects in smaller Asian countries have stalled, due to resources being sucked up by Europe, which is still keen to expand its import capacity, despite net-zero goals.

In other regions, such as South America, regas capacity development has been slow.

LNG trade is predicted to grow at a CAGR of 8.7% between 2023 and 2028, supported by a global liquefaction capacity reaching 786 mill tonnes per annum - a CAGR growth of 10.5%.

Global regas capacity will expand to 1,397 mill tonnes by 2028, at a CAGR of 3%, Drewry said. ■

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Long term contracts - a buyer's market

LNG buyers are holding out in long-term contract negotiations with suppliers, pushing back on an array of rigid terms and conditions that traditionally favoured sellers.

This signals an ongoing commoditisation and evolution of the LNG market, despite recent upheavals, S&P Global Platts reported.

Two of the world's largest producers - Qatar and the US - are vying for new customers, and are willing to make concessions to close deals, according to sources talking with the newswire. This has turned long term contracting into a buyers market.

Buyers' case firmed this year, as Platts JKM remained below the $15 per MMBtu level. The market could swing even more in their favour towards 2027, when a new wave of supply is expected to come online.

LNG buyers are also seeking shorter contracts, rights to divert cargoes – called destination flexibility - and more flexible seasonal deliveries, traders said. Importers are also looking to reduce the share of oil-linked long-term LNG in their portfolios, while including more FOB volumes.

"The spot market has continued to take market share and that trend will continue. Liquidity will continue to increase, transparency will continue to increase and we'll end up with a spot price that can be hedged in the same way as Brent crude oil, gasoline or diesel," said Richard Holtum, Trafigura's global head of gas and power, in a recent interview with Platts.

"We are big believers in the spot market. We trade around 14 mill tonnes of LNG per year, of which about half is shipped to Asia. Of that total, 80% are spot transactions and 20% term deals. We think that's about the right balance," he said, adding that Asian buyers understood the payoff between price and flexibility.

He added: "If you're signing a 20-year contract, you're taking a 20-year view on your suppliers' reliability, you're taking a 20-year view on your demand profile, you're taking a 20-year view on geopolitical risk and you're taking a 20-year view on price.

"That seems like a pretty bold view to be taking. In the spot market you will get the volume when you need it, where you need it, and all at the prevailing market price," he said.

Destination restriction

Despite signing up for over 40 mill tonnes of US LNG contracts, Chinese buyers have said that destination restriction clauses, favoured by suppliers like Qatar, are a big disadvantage when they need more flexibility to deliver into the Japan/South Korea/Taiwan/China region.

Others are waiting for the post-2026 supply wave to bring down prices.

"We have seen an evolution of Asian buyers in the sense that they now tend to request shorter duration of contracts. Before they used to be interested in the 20 - 25 years," Cristian Signoretto, Eni's Director Global Gas & LNG, said in another recent interview.

"They know they need to de-carbonise the portfolio, but they do not know the speed at which they can de-carbonise. So for them, it sometimes is difficult to lock in or commit for inflexible volumes.

"They need flexibility. This is something that they're requesting a lot," he said, adding that Brent linked prices were still "top of the agenda" but hybrid formulas with spot indexation were coming into the market.

Signoretto also said big utilities in Japan and the rest of Asia may stick to 60% - 70% of their portfolio on a DES basis, but 30%- 40% may be negootiated FOB to manage uncertainties, although DES contracts will remain the backbone of the market even if their share declines. ■

Altamira to come online later this year

New Fortress Energy (NFE) claimed a major milestone when on 26th September, the third and final rig of FLNG 1, 'Pioneer II', sailed away from the Kiewit shipyard in Ingleside, Texas.

The unit will soon join the other two FLNG 1 rigs in Altamira, Mexico for final installation and commissioning, with target operational date of late October or early November.

NFE also announced that it has placed into service its second US Government sponsored power plant in Puerto Rico on 27th September.

"NFE is at an inflection point as our core infrastructure projects enter service. COD of San Juan power marks a key milestone. The combination of the San Juan plant and the Palo Seco plant contribute significantly to downstream volumes and terminal earnings beginning in size in 4Q23.

"Our projects are entering service after years of build-out, and we now look forward to cash generation, deleveraging, and organic growth opportunities," said Wes Edens, NFE Chairman and CEO. ■

NEWS NUDGE

Ships - Newbuildings, deliveries, flag changes

Samsung Heavy Industries (SHI) has won a Won350.8 bill ($260 mill) order to build an LNGC for an Asian interest.

The vessel will be delivered to the undisclosed shipping company by September, 2026, SHI said in a regulatory filing.

Petronas LNG has taken delivery of the W-Max class LNGC 'Lagenda Setia' from Hudong-Zhonghua.

She is a sistership to two vessels delivered to Petronas in May and June, 2022.

The Russian Government has extended maturity date for loans for the construction of five LNGCs ordered for the Arctic LNG 2 project through 2027, according to a Russian Government website notice.

This comes under agreements concluded between the Russian state development corporation VEB.RF and its legal entities involved in the implementation of Arctic LNG 2.

According to the notice, the loan agreements were concluded under shipbuilding contracts placed in 2019 and 2020 for five Arc7s.

The contracts for the construction of 15 Arc7s were signed by the Zvezda Shipbuilding Complex (SC Zvezda) and VEB.RF in December, 2019 and July, 2020. A steel-cutting ceremony for the lead LNGC in the series was held at Zvezda in November, 2020.

They are being built for PAO NOVATEK's Arctic LNG 2 project and will be operated under long-term timecharter agreements.

Elsewhere, Orion Global Transport France (OGTF) has registered its first two LNGCs with the French ship register for commercial vessels (RIF).

They were the 173,000 cu m capacity LNGCs, 'Orion Bohemia', built by Hyundai Heavy Industry in 2022 and the similar sized 'Orion Monet', built by Samsung Heavy Industries and delivered in 2022.

They are powered by WinGD X72-DF engines and are fitted with GTT's Mark III Flex containment systems.

Both vessels are chartered to global energy companies.

OGTF was incorporated in France in 2022, founded by institutional investors, who were advised by JP Morgan Global Alternative's Global Transportation Group. ■

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Asian demand in state of flux

Japan's LNG inventories have been drawn down, due to the warm weather, while Chinese storage looks in "good shape", Poten & Partners said in a recent webinar.

If the forthcoming winter proves to be cold, then Asian buyers will look to the spot market for supplies.

It was noticeable that Asian companies were setting up trading companies in Europe. For example, the Japanese have already set up European desks and the Chinese were also becoming involved.

One of the reasons is that a European presence gives Asian interests closer access to TTF deals, Poten explained.

Asian demand is in a state of flux. For example, Chinese buyers may have become too long on LNG and are re-evaluating their state-owned opportunistic buying strategy and could now focus on reselling.

In addition, Japan and South Korea are concentrating on their net zero policies, while China is more focused on price when considering LNG, Poten said.

Turning to the Americas, in the US, Canada and Mexico, there are about a dozen LNG projects currently under construction, which could add 100 mill tonnes per year of export capacity over the next four years - a rise of 25%.

Poten estimated that 19 projects were permitted but not financed, thus far with around six close to FID.

A problem for developers is that banks want to see a liquefaction fee closer to $2.50 per tonne on top of the Henry Hub selling price before committing finance to a project.

At present, the fees are in the region of $2.10-$2.20 per tonne. One recent deal was agreed at Henry Hub, plus a $2.40 per tonne liquefaction fee.

Some sellers were already marketing LNG at Henry Hub, plus $2.60-$2-80 per tonnes, Poten added.

For 20 year deals, the banks were not asking for a premium. However, for 15 year deals they were.

****Meanwhile, in what could impact on Australian exports, on Monday, union members gave a seven-day notice of strike action at Chevron's Gorgon and Wheatstone plants.

Negotiations were still continuing as *LNG Journal* went to press.

This comes two weeks after Chevron and the Offshore Alliance, which represent the two Australian labour unions involved, had agreed new employment contracts. ■

Delivering LNG can reduce CO2 emissions - support energy security

Enbridge President and CEO, Greg Ebel has urged the Canadian Government to export the country's natural gas.

Addressing the Toronto Region Board of Trade on 6th October, 2023, he said: "This is a major global leadership opportunity for Canada. In fact, it's been staring us in the face for the past decade, with little to no progress, while the US has seized on it.

"If used to displace coal in Asia and Eastern Europe, this would have a tremendous impact on reducing global emissions — far greater than Canada achieving its own 2050 net zero commitment.

"Natural gas is a lower-carbon source of energy — about half the impact of coal. And it's even more sustainable when it comes from Canada, which is among the cleanest producers in the world.

"Coal still feeds 40% of the world's electricity, so any serious energy and climate policy needs to prioritise the worldwide transition away from coal.

"Not only would it more dramatically reduce emissions, it would strengthen the Canadian economy — creating jobs, supporting families, and making the most of an important natural resource we have in abundance.

"Indeed, we have more than enough natural gas to meet our own domestic needs for 200 years or more. That give us the freedom — I'd even suggest the obligation — to look beyond our borders and consider the benefits of export that go far beyond those economic returns.

"Bringing LNG to global markets also supports energy security (think European markets that have been dependent on Russian energy) and can alleviate energy poverty in parts of Asia and Africa.

"Building and operating an LNG facility requires major construction and power consumption. It therefore takes a degree of political courage to go all-in on LNG — because it can lead to an increase in domestic emissions. But it will also mean a sizeable net benefit as we help reduce the 98.5% of emissions produced beyond our borders.

"Clearly, the time has come to accelerate the building of an LNG economy for Canada. We have the supply, sustainable production and short travel times — the complete package.

"I'm calling on the Canada Government to adopt policies and regulatory measures that will enable the responsible and efficient development and export of this important resource and streamline permitting processes to better respond to the urgent need.

"At the same time, investment in the entire energy sector and many others could be accelerated by the immediate implementation of a federal Indigenous loan-guarantee programme to ensure Canada's Indigenous peoples have a seat at the table and equity that helps secure a more prosperous future for them as well.

"Finally, let's show the world that Canada is ready to make a serious and lasting contribution to reducing global emissions — by providing a cleaner source of energy to countries that need it and want it.

"Our energy resources — especially LNG on the West Coast — are central to this and can help support real outcomes, global emissions reductions, and the energy security of our allies," he said. ■

Enbridge CEO Gregory (Greg) Abel

Eni to add to its LNG capacity portfolio

In what could boost its LNG portfolio, Italian energy major Eni has announced a significant gas discovery.

This is from the Geng North-1 exploration well drilled in North Ganal PSC, about 85 km off the cost of East Kalimantan in Indonesia.

Preliminary estimates indicate a total structure discovered volume of 5 trill cu ft of gas in place with a content of condensate estimated up to 400 mill barrels.

A study will be undertaken on the options to utilise a fast track development project.

The ongoing exploration campaign, along with the recent acquisitions, is in line with Eni's energy transition strategy to progressively shift its portfolio mix towards gas and LNG, targeting 60% in 2030, and to increase its LNG equity portfolio, the Italian energy concern said.

Indonesia, and Southeast Asia in general, play a relevant role in this strategy, the company said.

Thanks to its location and significant size, the discovery has the potential to contribute substantially to the creation of a new production hub, in the northern part of the Kutei Basin, to be connected to the Bontang LNG facilities on the East Kalimantan coast, further exploiting its available ullage capacity.

The Geng North discovery is adjacent to the Indonesia Deepwater Development (IDD) area that includes several stranded discoveries located within the Rapak and Ganal PSC blocks, for which Eni recently announced the acquisition of Chevron interests, increasing its participating interest.

Significant synergies between the two areas are envisaged in terms of gas development options. The acquisition also provides the opportunity to fast track the development of the Gendalo and Gandang gas project (around 2 trill cu ft of gas reserves) through Eni's operated Jangkrik facilities.

The Geng North discovery comes shortly after the announcement of Eni's agreement to acquire Neptune Energy, whose completion will allow the company to further strengthen its position in the North Ganal Block. ■

Gastrade seeks FSRU commissioning managers

Greek utility developer Gastrade has issued an Invitation to Tender (ITT) to provide commissioning management services for the Alexandroupolis Independent Natural Gas System (Alexandroupolis INGS) project.

This project includes an FSRU for the reception, temporary storage and regasification of LNG, a spread mooring system and HP subsea and onshore gas transmission pipelines, through which natural gas will be delivered to the Greek transmission system (NNGTS) for distribution to consumers.

The FSRU will be moored in the Sea of Thrace, 17.6 km southwest of Alexandroupolis in Northeeast Greece around 10 km from the shore.

A 30 inch gas pipeline will consist of an around 24 km subsea section and a 4 km onshore section and will connect the FSRU to the NNGTS near Amphitriti, about 5.5 km northeast of Alexandroupolis.

The project is financed through Gastrade's own resources, plus public funds, which are provided through the Greek Public Investment Programme, partly through national participation and partly through the European Regional Development Fund (ERDF).

Interests wishing to submit their proposals for the tender must do so by 3rd November.

In addition, The European Commission has approved, under EU State aid rules, a €106 mill Greek aid to support the completion of the construction of the LNG terminal at Alexandroupolis.

This measure will complement the Greek public support that was approved by the Commission in June, 2021 (SA.55526).

The aid will take the form of a direct grant.

Meanwhile, DESFA has launched LNG capacity allocation auctions for up to 15 years for the Revithoussa LNG Terminal.

Annual LNG scheduling auctions for 2024/2038 were expected to start on 9th October, 2023, following the approval of the Greek Regulatory Authority for Waste, Energy and Water (RAWEW).

The arrival of the first LNG cargo on board 'Mytilineos' at the end of last year, marked the start of the FSU's operations at Revithoussa. ■

Gastrade is seeking management companies for its FSRU

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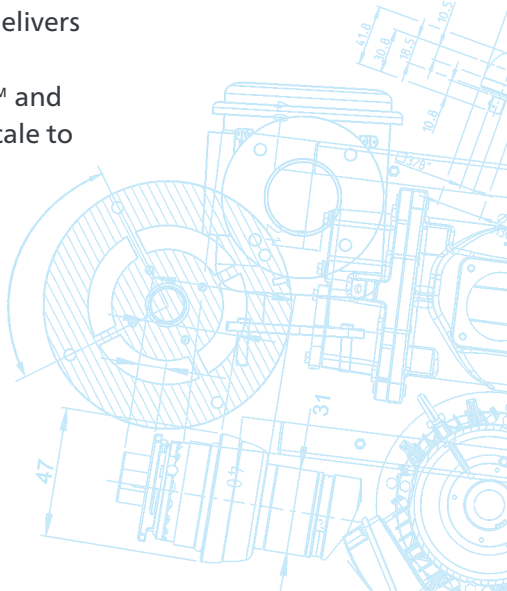

First Gen's LNG terminal online by year end

Philippines-based First Gen Corp expects its Batangas interim offshore terminal (IOT) project to be fully operational by end of this year.

First Gen President and COO, Francis Giles Puno, said the FSRU and the onshore LNG facilities were now at the commissioning stage.

The IOT project is to be connected and start delivering LNG to First Gen's Batangas' power plants, he said.

Puno explained:"We have the floating storage regasification unit, then we have the onshore facilities. Both of them are going through commissioning, so it's not yet connected. So sometime by mid-October, hopefully, it will be connected.

"And then after that, after two or three weeks, or a month of running, the plants will be running," he added.

The FSRU 'BW Batangas' arrived in June, chartered by First Gen's wholly-owned subsidiary FGEN LNG Corp for the project.

She can store 162,524 cu m of LNG and regasify up to 500 mill standard cu ft of gas per day.

Puno also confirmed that First Gen had already received the first LNG cargo. The company awarded a contract to Shell Eastern Trading (Pte) Ltd to deliver the first cargo based on an international tender.

The LNG will be used by the company's gas-fired power plants at its clean energy complex in Batangas City. First Gen owns four gas-fired power plants with a combined capacity of 2,017 MW. ■

Cypriot FSRU close to delivery

The FSRU 'Prometheas' is currently undergoing the last technical inspections and the necessary tests in China, local Cypriot media has reported.

She is expected to be delivered at the end of October or early November.

Cosco with the consortium under CPP, which is executing the Vasilikos LNG terminal project, are now trying to complete the work in order to negate the cost of berthing and the insurance of the vessel, a media report said.

These costs are likely to be passed on to the Cyprus Government if the FSRU is not utilised for many months, possibly beyond 12 months, as at present, Vasilikos will not be ready for LNG receipt and regasification before the end of 2024.

In the interim, it was believed that the Cyprus Ministry of Energy is considering leasing the unit, on a fast-track basis, to another interest for regasification purposes elsewhere, until the terminal is ready.

The Energy Ministry has said that during a recent trip to Abu Dhabi, Minister George Papanastasiou received interest from UAE officials to lease the FSRU. ■

FGEN's Batangas terminal

Enagás buys into HEH

Spanish energy company, Enagás has finalised the acquisition of 10% of the shares of Hanseatic Energy Hub (HEH).

The company is involved in a consortium, participating as an industrial partner.

HEH has projects in Stade (Germany), which is to become the location for one of the FSRUs chartered by the German government, operated by Deutsche Energy Terminal (DET), as well as a land-based terminal for liquefied gases that will also be prepared for future green ammonia operations.

With its 10% stake, Enagás said that the deal strengthened the consortium, which was formed by the Buss Group (founding shareholder), Partners Group (on behalf of its clients) and industrial partner Dow.

Enagás also said that it will lend its experience as one of Europe's leading transmission system operators (TSO) in the development and running of energy infrastructures, including CO2-neutral LNG terminals, by assuming a leading role in the plant's operations.

The acquisition has already been approved by the German regulator (BNetzA) and has received EU Competition Clearance.

Arturo Gonzalo, Enagás CEO, said, "The entry of Enagás in Germany as an industrial partner in HEH fits perfectly with the objectives established in the company's strategic plan of contributing to the security of energy supply and the de-carbonisation of Europe.

"Enagás, together with the TSOs of Portugal and France, presented to the call for projects of common European interest (PCI) the first European project for a hydrogen corridor, H2Med, after a historic agreement to which Germany also joined, and is firmly committed to renewable hydrogen for the de-carbonisation of its industry," he said.

HEH commissioned a consortium led by international EPC specialist Técnicas Reunidas to develop the onshore terminal, subject to a final investment decision (FID).

Other members of the consortium are the FCC Group and Entrade.

HEH has contracted 10 bill cu m per year of long-term LNG capacity with EnBW and SEFE.

The aim of the project is to develop a flexible modular system for the transition to green energy in the Stade industrial park, where Dow already is the largest European producer of electrolysis hydrogen.

This location also offers the possibility of creating synergies with the chemical, logistics and energy sectors.

In an initial phase, from end of this year until the commissioning of the onshore terminal, HEH will be the location of one of the five FSRUs chartered by the German Government.

Work on the FSRU's onshore infrastructure -the discharge arms and a gas pipeline- are progressing according to schedule, and is expected to be completed in December, with the aim of getting the infrastructure up and running this winter.

In a second phase, from 2027, LNG and renewable energy sources, such as bio-LNG and synthetic natural gas (SNG), will be able to be imported from the onshore terminal.

The planned regasification capacity is 13.3 bill cu m per year.

HEH's planned investment for the terminal is around €1 bill. ■

> "The entry of Enagás in Germany as an industrial partner in HEH fits perfectly with the objectives established in the company's strategic plan"
>
> *- Arturo Gonzalo, CEO, Enagás*

Trafigura raises cash for US LNG

Commodities trader, Trafigura has signed two revolving credit facilities totalling $400 mill with insurance from the Export-Import Bank of the United States (US EXIM).

The credit will be used to purchase LNG cargoes from US exporters to supply to customers primarily in Europe, the company said.

This follows approval by the US EXIM Board of two financial institution buyer credit (FIBC) policies issued to two financial institutions, including Citibank, for short-term facilities to be extended to Trafigura.

Christophe Salmon, Trafigura's Group CFO, said: "We're delighted to have successfully closed the first LNG-based facilities backed by US EXIM's FIBC insurance policy, which supports American jobs by facilitating US exports."

Citibank acted as sole arranger with Citibank's London Branch as ECA agent and lender for one of the facilities. ■

NEWS NUDGE

Bison Energy to acquire two Pakistani LNG companies

According to reports from Pakistan and the UAE, Bison Energy has been given the all clear to complete the acquisition of two LNG operators and distributors based in Pakistan.

The Pakistani Competition Commission approved the 100% acquisition of Pakistan's Tabeer Energy and Tabeer Energy Marketing by the UAE-based company, local reports said.

Both companies are engaged in establishing and operating an LNG terminal, as well as importing, storing, and distributing LNG and regasifying LNG.

IOC in market for cargoes

Indian Oil Corp (IOC) is seeking three LNG cargoes to be delivered between October and November, industry sources told newswires.

One cargo will be delivered to Ennore, another to Dhamra and the third to Dahej.

The tender closed on 6th October.

MET to expand APAC interest

Swiss based MET Group's subsidiary, MET Asia is to expand its portfolio in Southeast Asia.

The recently formed Singapore-based company is 90% owned by MET Group and 10% by Singapore-based Keppel.

Its strategy is to make MET's LNG interests global by expanding its asset base in the Asia/Pacific region.

Sandor Fasimon has been appointed as MET Asia CEO.

"We expect MET Asia to be a future fuel to our growth story as well as a gateway to participate in the global commodity markets," MET Group CEO, Benjamin Lakatos, said.

This year thus far, MET has secured long-term LNG capacity in Germany and expanded its spot capacity reach to Finland. ■

5th anniversary

Power Play AWARDS

Presented by ExxonMobil

Congratulations to the three winners of the 2023 Power Play Awards!

Once again, there was tremendous support from our Power Play community. Thank you to everyone involved for demonstrating how a mutually supportive environment can help support great business outcomes across all parts of the LNG value chain.

THIS YEAR'S WINNERS BY CATEGORY ARE:

THE RISING STAR

Presented to an outstanding young female professional under 35 years old

Sarah Hanes

Digital Production Operations Engineer, SLB – Digital & Integration

THE AMBASSADOR

Given to a professional who displays outstanding leadership

Rakhi Oli

Global Strategy & Partnerships Development Leader – Low Carbon Business segment, Flowserve Corporation

THE PIONEER

Awarded to an LNG champion demonstrating outstanding business, innovation and/or technology contribution

Jane Mogina

Biodiversity and IFC Advisor, TotalEnergies

Please join us in celebrating our 2023 winners!
We look forward to building off of this momentum in 2024.

ExxonMobil | LNG

Baker Hughes wins equipment orders

US engineering company, Baker Hughes has been awarded two contracts for LNG projects recently.

The first was to provide a modularised LNG system and a power island to Venture Global.

This contract was awarded under a master equipment supply agreement between Venture Global LNG and Baker Hughes for more than 100 mill tonnes per annum of production capacity, which was expanded from 70 mill tonnes, announced during Gastech in Singapore.

It builds on previous contracts between Venture Global and Baker Hughes to provide LNG technology solutions for the Calcasieu Pass and Plaquemines LNG projects in Louisiana.

"We are excited to add another milestone in our successful collaboration with Baker Hughes as a strategic LNG technology supplier, building on the expansion of our agreement," said Mike Sabel, Venture Global CEO.

"To enable a successful transition to more secure and sustainable economies, it is critical that we continue to further our mission of delivering low cost LNG at a larger scale. We are grateful for our continued partnership with Baker Hughes, a world leader in energy technology, and look forward to building on our successful collaboration in our upcoming projects," he said.

"We have been a trusted partner in natural gas operations for more than 30 years and have been able to bring that depth of experience into the recent LNG market upturn.

"This further expansion of our collaboration with Venture Global reaffirms that Baker Hughes technologies are advancing the efficient use of natural gas, and we are honoured to continue to support their projects," added Lorenzo Simonelli, Baker Hughes Chairman and CEO. "The continuing demand for LNG emphasises the pivotal role that natural gas will play in the energy transition, helping to secure supply and to reach net-zero emissions."

Ruwais project

The second was a letter of award received from ADNOC Gas to provide two electric liquefaction systems (e-LNG) for the UAE's Ruwais LNG project.

This contract is expected to be finalised in the fourth quarter of this year and was announced at the ADIPEC expo last week.

The LNG trains will be driven by Baker Hughes' 75 MW BRUSH electric motor technology and will feature the company's compressor technology, making Ruwais LNG one of the first all-electric LNG projects in the Middle East.

Baker Hughes' head Lorenzo Simonelli

The trains' overall production capacity is expected to be 9.6 mill tonnes per annum.

Through the Ruwais LNG growth project, ADNOC plans to more than double its LNG production capacity to meet increased global demand for natural gas, the energy company said.

Ruwais will operate on electric-powered processing facilities, which will make it one of the world's lowest carbon intensity LNG facilities. ■

KBR to modify Pluto Train 1

Last month, KBR was awarded an engineering, procurement and construction management (EPCm) contract by Woodside Energy, on behalf of the Pluto joint venture.

Under the terms of the contract, KBR will undertake modifications to Woodside's Pluto LNG facility's Train 1, located near Karratha, Western Australia.

The modifications will enable the processing of up to three mill tonnes per annum of Scarborough gas through Train 1.

"KBR is pleased to support Woodside in the modification of the Pluto Train 1 LNG facility to enable processing of Scarborough gas, and in turn provide opportunity to extend the life of the plant," said Jay Ibrahim, KBR's President – Sustainable Technology Solutions.

"KBR is committed to helping its clients navigate the energy transition, which includes gas as a key part of the energy mix. We are also excited to focus on engaging local and Indigenous businesses to support the project and proud to be creating jobs and opportunities within Western Australia," he said. ■

Second AiP for large LNGC design

Class society DNV has presented Hanwha Ocean with an Approval in Principle (AiP) for a 270,000 cu m LNGC.

Its design maximises cargo capacity while optimising vessel performance, DNV said.

The new 345 m long and 55 m beam LNGC was described as a "ground-breaking achievement" by Vidar Dolonen, DNV's Regional Manager, Korea & Japan, when he presented the AiP to Jong Seo Kim, Hanwha Ocean COO, at the shipbuilder's office in Okpo.

The LNGC has five cargo tanks to minimise sloshing pressure, and will be equipped with an X-DF engine and reliquification system to significantly improve CII.

"DNV is honoured to be chosen to review Hanwha Ocean's pioneering 270K LNG carrier development," said Dolonen. "This innovative design signifies a ground breaking achievement, pushing the boundaries in size and technological advancement."

Under its class guidelines, DNV conducted a comprehensive structural verification and feasibility study. Critical structural details were validated throughout the advanced analysis. The sloshing calculation for cargo tanks was also reviewed, further contributing to the carrier's enhanced structural reliability.

"We believe this AiP marks the dawn of a new era in 270K LNG carrier designs and significantly enhances the competitiveness of ships built by Hanwha Ocean," said Jong Seo Kim.

"Through our collaboration with DNV, we are proudly pioneering cutting-edge technologies within the Korean shipbuilding industry. Our commitment is to align with our clients' needs and adhere to industry regulations, primarily focusing on creating a safer 270K LNG carrier," he said.

This follows Bureau Veritas' AiP award to Hudong-Zhonhua for a 271,000 cu m design. ■

MAMII selects trial technology companies

Two methane measurement technology companies are to undertake pilot studies with Methane Abatement in Maritime innovation initiative's (MAMII) anchor partners CoolCo, MOL, and Shell.

MAMII parent, Safetytech Accelerator, in collaboration with CoolCo, MOL and Shell International Trading and Shipping Co, has chosen Green Instruments and Everimpact as the first two technology providers to tackle the challenge of measuring methane emissions from combustion on board ships.

Safetytech Accelerator evaluated more than 80 methane measurement technology companies and initially selected 12 to join the technology ecosystem.

In its first year of operation, MAMII has focused on identifying and evaluating new technologies to monitor and reduce methane emissions from LNG-fuelled vessels, with a particular emphasis on measuring unburned methane in the exhaust stack - methane slip.

Industry adoption

Once these solutions are validated, the initiative will seek to encourage its adoption by shipping companies.

Green Instruments is headquartered in Denmark, specialising in measurement and analysis technologies for both marine and land-based industries.

The company's G7000 CEMS is known for its SOx and CO2 monitoring capabilities for scrubber applications.

"We are thrilled to be selected amongst the industry providers and look forward to participating in this work that fall so much in line with the vision of our company. The de-carbonisation transition relies on facts and not assumptions, hence it is imperative that we start to actually measure ship emissions and collect accurate and concrete data.

"Why not leverage the technology that is readily available so that everyone can have a more accurate picture when discussing ship emissions - a practice which has been in place on land for many years," said Green Instruments' Sales Manager, Casper Nørgaard Jensen.

Everimpact started off as a real-time GHG monitoring platform for cities using satellites, sensors and AI. It has partnered with Mitsubishi and Wilhelmsen to launch a sensor-based continuous emissions measurement system (CEMS) for ships, which is already implemented on a Mitsubishi vessel.

Everimpact offers a gas analyser and platform measuring GHG emissions - CH4, CO2, CO, NO, NO2 and SO2 - from exhaust stacks in real time. The solution uses a cabinet that is safely deployed away from the stack yet connected via a heated sample line.

"We're excited that our continuous emissions measurement system, already used to measure fuel emissions from the exhaust stacks of ships, is being evaluated to track methane slip. Joining forces with MAMII will get us one step further on our mission to accelerate the de-carbonisation of shipping with better data," said Mathieu Carlier, CEO and Founder, Everimpact.

MOL's Tatsuya Gamoh added: "We emphasise a collaboration in MAMII regarding with GHG monitoring and emission saving. We are pleased to join these technology firms because the pursuit of GHG measuring technology is the one of key point for us. Safetytech Accelerator is giving a quite significant opportunity for collaboration. We would like to appreciate all of groups and cooperate them even more." ■

> **"Why not leverage the technology that is readily available so that everyone can have a more accurate picture when discussing ship emissions"**
>
> *- Casper Nørgaard Jensen, Sales Manager, Green Instruments'*

NEWS NUDGE

LNG appointments

Tania Ortiz Mena has been promoted President of Sempra Infrastructure.

In her role, she will lead the company's three business areas - clean power, energy networks, plus LNG and net-zero solutions.

She most recently served as the company's group President of clean power and energy networks.

With a professional career spanning more than 23 years in the Sempra family of companies, she has held various roles including serving as IEnova's CEO, Chief Development Officer and Vice President of development and external affairs.

She currently serves as independent board member of the Mexican Stock Exchange and chairs its Corporate Practices Committee.

Capital Product Partners affiliate Capital GP has appointed LNG expert, Atsunori Kozuki as a member of the partnership's Board. ■

Monthly Large LNGC Values*

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

Source: VesselsValue (27/09/23)

The above is updated each month courtesy of VesselsValue

LNG rate assessments

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

Region	This week	Change*
East of Suez	$140,000	-$52,500
West of Suez	$140,000	-$55,000
12 mos T/C	$92,000	-$4,000

Since last report (28/09/23)

Source: Fearnleys (11/10/23)

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**

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WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hudong-zhonghua H1830a	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/04/2024
Wen Cheng	CSSC	Hudong-Zhonghua	01/08/2019	174,000	XDF	01/01/2024
Alexey Kosygin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/03/2024
Pyotr Stolypin	Smart LNG	Zvezda SSK	01/09/2019	172,600	TFDE - Azipod	01/09/2024
Samsung 2315	SinoKor	Samsung	01/12/2019	173,400	XDF	01/12/2023
Samsung 2316	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/12/2026
Samsung 2317	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/03/2027
Samsung 2318	SinoKor	Samsung	01/12/2019	173,400	ME-GA	01/06/2027
Lng Harmony	JP Morgan	Hyundai Heavy	20/07/2020	174,000	XDF	01/07/2023
Daewoo 2517	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/11/2023
Daewoo 2518	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/02/2024
Daewoo 2519	MOL, COSCO	Hanwha Ocean	01/08/2020	172,500	TFDE - Azipod	01/05/2026
Sm Golden Eagle	Korea Line	Hyundai Heavy	12/08/2020	174,000	XDF	01/09/2025
Sm Kestrel	Korea Line	Hyundai Heavy	12/08/2020	174,000	XDF	01/10/2023
Maran Gas Marseille	Maran Gas Maritime	Samsung	01/11/2020	174,000	XDF	01/08/2023
Hyundai Samho 8100	Knutsen	Hyundai Samho	14/12/2020	174,000	ME-GA	01/11/2024
Orion Sky	JP Morgan	Hyundai Heavy	14/12/2020	174,000	XDF	01/11/2024
New Brave	Pan Ocean	Hyundai Heavy	15/12/2020	174,000	XDF	01/09/2024
New Nature	Pan Ocean	Hyundai Heavy	15/12/2020	174,000	XDF	01/10/2024
Puteri Saadong	Hyundai LNG Shipping	Hyundai Heavy	15/04/2021	174,000	XDF	01/02/2024
Puteri Santubong	Hyundai LNG Shipping	Hyundai Heavy	29/04/2021	174,000	XDF	01/06/2024
Puteri Sejinjang	Hyundai LNG Shipping	Hyundai Heavy	29/04/2021	174,000	XDF	01/07/2024
Mulan Spirit	Jovo Energy	Jiangnan	01/05/2021	79,800	XDF	01/12/2023
Samsung 2473	Maran Gas Maritime	Samsung	01/05/2021	174,000	XDF	01/09/2024
Samsung 2474	Maran Gas Maritime	Samsung	01/05/2021	174,000	XDF	01/09/2024
Daewoo 2521	Hyundai LNG Shipping	Hanwha Ocean	28/05/2021	174,000	MEGI	01/09/2023
Clean Destiny	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/11/2023
Clean Future	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/03/2024
Clean Resolution	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/10/2023
Clean Vitality	Dynagas	Hyundai Heavy	31/05/2021	200,000	ME-GA	01/02/2024
MOL Coral	MOL	Hanwha Ocean	01/06/2021	174,000	ME-GA	01/10/2023
Amore Mio I	Capital Gas	Hyundai Heavy	18/06/2021	174,000	ME-GA	01/10/2023
Axios II	Capital Gas	Hyundai Heavy	18/06/2021	174,000	ME-GA	01/12/2023
Celsius Geneva	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/07/2023
Energy Fortitude	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/08/2024
Hyundai Samho 8106	Alpha Gas	Hyundai Samho	01/07/2021	174,000	XDF	01/03/2024
Hyundai Samho 8147	H-Line	Hyundai Samho	01/07/2021	174,000	XDF	01/11/2023
Samsung 2460	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/10/2023
Samsung 2461	Celsius Shipping	Samsung	01/07/2021	180,000	ME-GA	01/11/2023
Hyundai Samho 8101	Knutsen	Hyundai Samho	13/07/2021	174,000	ME-GA	01/12/2023
Hyundai Samho 8102	Knutsen	Hyundai Samho	13/07/2021	174,000	ME-GA	01/09/2025
Orion Gaugin	JP Morgan	Hyundai Heavy	13/07/2021	174,000	ME-GA	01/09/2025
Orion Hugo	JP Morgan	Hyundai Heavy	13/07/2021	174,000	ME-GA	01/07/2025
New Green	Pan Ocean	Hyundai Heavy	14/07/2021	174,000	ME-GA	01/10/2024
New Oasis	Pan Ocean	Hyundai Heavy	14/07/2021	174,000	ME-GA	01/12/2024
Daewoo 2522	Hyundai LNG Shipping	Hanwha Ocean	15/07/2021	174,000	MEGI	01/05/2024
Ignacy Lukasiewicz	Knutsen	Hyundai Samho	22/07/2021	174,000	ME-GA	01/11/2023
Puteri Ledang	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/05/2024
Puteri Mahsuri	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/11/2024
Puteri Mayang	Hyundai LNG Shipping	Hyundai Heavy	22/07/2021	174,000	XDF	01/01/2025
Saint Barbara	Knutsen	Hyundai Samho	22/07/2021	174,000	ME-GA	01/10/2023
Samsung 2579	Celsius Shipping	Samsung	26/07/2021	180,000	ME-GA	01/04/2024

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Samsung 2584	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/06/2024
Samsung 2585	Celsius Shipping	Samsung	01/08/2021	180,000	ME-GA	01/07/2024
Aktoras	Capital Gas	Hyundai Samho	01/09/2021	174,000	ME-GA	01/07/2024
Hudong-zhonghua H1838a	K-Line	Hudong-Zhonghua	01/09/2021	79,960	XDF	01/09/2023
Daewoo 2523	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/02/2024
Daewoo 2524	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/04/2024
Daewoo 2525	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/08/2024
Daewoo 2526	MOL	Hanwha Ocean	14/09/2021	174,000	ME-GA	01/10/2024
Daewoo 2527	MOL	Hanwha Ocean	01/10/2021	174,000	ME-GA	01/07/2024
Hudong-zhonghua H1790a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/09/2024
Hudong-zhonghua H1791a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/12/2024
Hudong-zhonghua H1792a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/03/2025
Hudong-zhonghua H1793a	MOL	Hudong-Zhonghua	01/10/2021	175,000	XDF	01/05/2025
Samsung 2580	NYK	Samsung	01/10/2021	174,000	XDF	01/10/2023
Samsung 2581	NYK	Samsung	01/10/2021	174,000	XDF	01/11/2023
Samsung 2582	NYK	Samsung	01/10/2021	174,000	XDF	01/01/2024
Samsung 2583	NYK	Samsung	01/10/2021	174,000	XDF	01/02/2024
Samsung 2592	JP Morgan	Samsung	01/10/2021	174,000		01/03/2024
Samsung 2593	JP Morgan	Samsung	01/10/2021	174,000		01/06/2024
Samsung 2594	JP Morgan	Samsung	01/10/2021	174,000		01/09/2024
Samsung 2595	JP Morgan	Samsung	01/10/2021	174,000		01/01/2025
Samsung 2596	JP Morgan	Samsung	01/10/2021	174,000	ME-GA	01/11/2024
Samsung 2597	JP Morgan	Samsung	01/10/2021	174,000	ME-GA	01/12/2024
Apostolos	Capital Gas	Hyundai Heavy	04/11/2021	174,000	ME-GA	01/06/2024
Assos	Capital Gas	Hyundai Heavy	04/11/2021	174,000	ME-GA	01/05/2024
Daewoo 2528	Maran Gas Maritime	Hanwha Ocean	10/11/2021	174,000	MEGI	01/08/2024
Daewoo 2529	Maran Gas Maritime	Hanwha Ocean	10/11/2021	174,000	MEGI	01/11/2024
Daewoo 2530	BWGas	Hanwha Ocean	25/11/2021	174,000	MEGI	01/03/2025
Daewoo 2531	BWGas	Hanwha Ocean	25/11/2021	174,000	MEGI	01/05/2025
Samsung 2600	JP Morgan	Samsung	01/12/2021	174,000		01/07/2024
Samsung 2601	JP Morgan	Samsung	01/12/2021	174,000		01/01/2025
Samsung 2598	Celsius Shipping	Samsung	07/12/2021	180,000	ME-GA	01/01/2025
Samsung 2599	Celsius Shipping	Samsung	07/12/2021	180,000	ME-GA	01/05/2025
Hudong-zhonghua H1834a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/09/2024
Hudong-zhonghua H1835a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/12/2024
Hudong-zhonghua H1836a	ULT	Hudong-Zhonghua	08/12/2021	174,000	XDF	01/03/2025
Samsung 2604	NYK	Samsung	27/12/2021	174,000	XDF	01/12/2024
Daewoo 2532	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/05/2024
Daewoo 2533	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/08/2024
Daewoo 2534	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/06/2025
Daewoo 2535	GasLog	Hanwha Ocean	01/01/2022	174,000	MEGI	01/08/2025
Samsung 2602	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024
Samsung 2603	H-Line, Pan Ocean, SK Shipping	Samsung	01/01/2022	174,000	ME-GA	01/12/2024
Hyundai Samho 8173	SK Shipping	Hyundai Samho	04/01/2022	174,000	ME-GA	01/09/2024
Daewoo 2537	Maran Gas Maritime	Hanwha Ocean	06/01/2022	174,000	MEGI	01/09/2025
Daewoo 2538	Maran Gas Maritime	Hanwha Ocean	06/01/2022	174,000	MEGI	01/11/2025
Hudong-zhonghua H1880a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/10/2024
Hudong-zhonghua H1881a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/08/2025
Hudong-zhonghua H1882a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/10/2025
Hudong-zhonghua H1883a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/03/2026
Hudong-zhonghua H1884a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/06/2026
Hudong-zhonghua H1885a	MOL	Hudong-Zhonghua	07/01/2022	174,000	XDF	01/09/2026
Daewoo 2536	MOL	Hanwha Ocean	17/01/2022	174,000	ME-GA	01/09/2024

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hyundai Samho 8175	H-Line	Hyundai Samho	26/01/2022	174,000	XDF	01/04/2025
Samsung 2607	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/03/2025
Samsung 2608	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/05/2025
Samsung 2609	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/06/2025
Samsung 2610	H-Line	Samsung	01/02/2022	174,000	ME-GA	01/09/2025
Daewoo 2539	Maran Gas Maritime	Hanwha Ocean	07/02/2022	174,000	MEGI	01/11/2025
Daewoo 2540	Maran Gas Maritime	Hanwha Ocean	07/02/2022	174,000	MEGI	01/12/2025
Hyundai Samho 8170	Hyundai Glovis	Hyundai Samho	21/02/2022	174,000	ME-GA	01/08/2024
Daewoo 2541	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/07/2025
Daewoo 2542	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/10/2025
Daewoo 2543	Venture Global LNG	Hanwha Ocean	01/03/2022	200,000	ME-GA	01/12/2025
Jiangnan H2700	ADNOC	Jiangnan	01/03/2022	175,000	XDF	01/01/2025
Jiangnan H2701	ADNOC	Jiangnan	01/03/2022	175,000	XDF	01/05/2025
Samsung 2619	Celsius Shipping	Samsung	01/03/2022	180,000	ME-GA	01/10/2025
Clean Levant	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/04/2025
Clean Mistral	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/03/2025
Clean Srocco	Dynagas	Hyundai Heavy	02/03/2022	200,000	ME-GA	01/12/2025
Hyundai Samho 8179	Knutsen	Hyundai Samho	31/03/2022	174,000	ME-GA	01/03/2025
Hyundai Samho 8180	Knutsen	Hyundai Samho	31/03/2022	174,000	ME-GA	01/06/2025
Daewoo 2544	BWGas	Hanwha Ocean	01/04/2022	174,000	MEGI	01/11/2025
Daewoo 2545	BWGas	Hanwha Ocean	01/04/2022	174,000	MEGI	01/12/2025
Samsung 2635	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/09/2024
Samsung 2636	TMS Cardiff Gas	Samsung	01/04/2022	174,000	ME-GA	01/03/2026
Daewoo 2550	MOL	Hanwha Ocean	15/04/2022	174,000	ME-GA	01/09/2025
Daewoo 2551	MOL	Hanwha Ocean	15/04/2022	174,000	ME-GA	01/09/2026
Dalian No 1 G175k-1	China Merchant	Dalian Shipbuilding	19/04/2022	175,000	XDF	01/09/2025
Dalian No 1 G175k-2	China Merchant	Dalian Shipbuilding	19/04/2022	175,000	XDF	01/12/2025
Hyundai Samho 8181	Knutsen	Hyundai Samho	20/04/2022	174,000	ME-GA	01/12/2025
SHANGHAI JIANGNAN CHANGXING SB H1889A		Hudong-Zhonghua	28/04/2022	174,000	XDF	01/03/2027
SHANGHAI JIANGNAN CHANGXING SB H1890A		Hudong-Zhonghua	28/04/2022	174,000	XDF	01/05/2027
NYK CNOOC 1	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/08/2026
NYK CNOOC 2	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/10/2026
NYK CNOOC 3	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/01/2027
NYK CNOOC 4	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/04/2027
NYK CNOOC 5	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/07/2027
NYK CNOOC 6	NYK	Hudong-Zhonghua	29/04/2022	174,000	XDF	01/10/2027
Jiangnan H2702	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/09/2025
Jiangnan H2703	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/01/2026
Jiangnan H2704	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/06/2026
Jiangnan H2705	ADNOC	Jiangnan	01/05/2022	175,000	XDF	01/09/2026
Samsung 2631	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/07/2025
Samsung 2632	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/12/2025
Samsung 2633	H-Line	Samsung	01/05/2022	174,000	ME-GA	01/01/2026
Hyundai Samho 8188	SK Shipping	Hyundai Samho	16/05/2022	174,000	ME-GA	01/07/2025
Hyundai Samho 8189	SK Shipping	Hyundai Samho	16/05/2022	174,000	ME-GA	01/08/2025
Hyundai Ulsan 3370	SK Shipping	Hyundai Heavy	16/05/2022	174,000	ME-GA	01/02/2025
Hyundai Ulsan 3371	SK Shipping	Hyundai Heavy	16/05/2022	174,000	ME-GA	01/03/2025
Daewoo 2559	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/05/2024
Daewoo 2560	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/04/2025
Daewoo 2561	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/05/2025

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2562	SK Shipping, Pan Ocean, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/06/2025
Daewoo 2563	H-Line, Pan Ocean, SK Shipping	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2564	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/11/2025
Daewoo 2565	Pan Ocean, SK Shipping, H-Line	Hanwha Ocean	01/06/2022	174,000	ME-GA	01/02/2026
Kool Panther	Cool Co	Hyundai Samho	02/06/2022	174,000	ME-GA	01/09/2024
Kool Tiger	Cool Co	Hyundai Samho	02/06/2022	174,000	ME-GA	01/12/2024
Hyundai Ulsan 3380	Knutsen	Hyundai Heavy	03/06/2022	174,000	XDF	01/05/2025
Hyundai Ulsan 3381	Knutsen	Hyundai Heavy	03/06/2022	174,000	XDF	01/06/2025
Daewoo 2546 ME-GA	H-Line, Pan Ocean, SK Shipping 01/12/2024		Hanwha Ocean		07/06/2022	174,000
Daewoo 2547 ME-GA	H-Line, Pan Ocean, SK Shipping 01/12/2024		Hanwha Ocean		07/06/2022	174,000
Daewoo 2548 ME-GA	H-Line, Pan Ocean, SK Shipping 01/01/2025		Hanwha Ocean		07/06/2022	174,000
Daewoo 2549 ME-GA	H-Line, Pan Ocean, SK Shipping 01/02/2025		Hanwha Ocean		07/06/2022	174,000
Daewoo 2552	Maran Gas Maritime	Hanwha Ocean	08/06/2022	174,000	MEGI	01/05/2026
Daewoo 2553	Maran Gas Maritime	Hanwha Ocean	08/06/2022	174,000	MEGI	01/06/2026
Agamemnon	Capital Gas	Hyundai Samho	14/06/2022	174,000	ME-GA	01/03/2026
Archimidis	Capital Gas	Hyundai Samho	14/06/2022	174,000	ME-GA	01/01/2026
Samsung 2634	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/05/2025
Samsung 2637	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/07/2025
Samsung 2638	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/08/2025
Samsung 2641	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/11/2025
Samsung 2642	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/01/2026
Samsung 2643	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/02/2026
Samsung 2644	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/05/2026
Samsung 2645	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/06/2026
Samsung 2646	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/07/2026
Samsung 2647	JP Morgan	Samsung	15/06/2022	174,000	ME-GA	01/08/2026
HUDONG-ZHONGHUA H1892A	COSCO	Hudong-Zhonghua	01/07/2022	174,000	XDF	01/10/2025
HUDONG-ZHONGHUA H1893A	COSCO	Hudong-Zhonghua	01/07/2022	174,000	XDF	01/03/2026
Hyundai Samho 8200	TMS Cardiff Gas	Hyundai Samho	06/07/2022	174,000	XDF	01/03/2026
Hyundai Samho 8201	TMS Cardiff Gas	Hyundai Samho	06/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3382	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/07/2025
Hyundai Ulsan 3383	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/11/2025
Hyundai Ulsan 3384	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/02/2026
Hyundai Ulsan 3385	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/04/2026
Hyundai Ulsan 3386	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/05/2026
Hyundai Ulsan 3387	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/08/2026
Hyundai Ulsan 3393	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/10/2026
Hyundai Ulsan 3394	Knutsen	Hyundai Heavy	06/07/2022	174,000	XDF	01/11/2026
Hyundai Samho 8049	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/03/2025
Hyundai Samho 8174	NYK	Hyundai Samho	01/08/2022	174,000	XDF	01/10/2025
Hyundai Ulsan 3395	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/08/2025
Hyundai Ulsan 3396	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2025
Hyundai Ulsan 3397	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/01/2026
Hyundai Ulsan 3398	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/07/2026

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Data last updated = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Hyundai Ulsan 3399	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/09/2026
Hyundai Ulsan 3400	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2026
Hyundai Ulsan 3401	NYK, MISC, K-Line, China LNG Shipping Holdings	Hyundai Heavy	09/08/2022	174,000	XDF	01/12/2026
DAEWOO 2558	MOL	Hanwha Ocean	01/09/2022	174,000	ME-GA	01/09/2026
Dalian No 1 G175k-3	China Merchant	Dalian Shipbuilding	01/09/2022	175,000	XDF	01/11/2025
Dalian No 1 G175k-4	China Merchant	Dalian Shipbuilding	01/09/2022	175,000	XDF	01/01/2026
HUDONG-ZHONGHUA H1794A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/02/2027
HUDONG-ZHONGHUA H1795A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/07/2027
HUDONG-ZHONGHUA H1796A	MOL	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/12/2027
Hudong-zhonghua H1797a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/09/2025
Hudong-zhonghua H1798a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/11/2025
Hudong-zhonghua H1799a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/02/2026
Hudong-zhonghua H1800a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/05/2026
Hudong-zhonghua H1801a	NYK, MISC, K-Line, China LNG Shipping Holdings	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/07/2026
Hudong-zhonghua H1894a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/10/2026
Hudong-zhonghua H1895a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/12/2026
Hudong-zhonghua H1896a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/03/2027
Hudong-zhonghua H1897a	K-Line	Hudong-Zhonghua	01/09/2022	174,000	XDF	01/06/2027
Samsung 2611	H-Line, Pan Ocean, SK Shipping	Samsung	01/09/2022	174,000	ME-GA	01/01/2025
Samsung 2612	H-Line, Pan Ocean, SK Shipping	Samsung	01/09/2022	174,000	ME-GA	01/03/2025
Samsung 2639	JP Morgan	Samsung	01/09/2022	174,000	ME-GA	01/09/2025
Samsung 2640	JP Morgan	Samsung	01/09/2022	174,000	ME-GA	01/09/2025
MOL ENN 1	MOL	Hudong-Zhonghua	08/09/2022	174,000	XDF	01/06/2027
MOL ENN 2	MOL	Hudong-Zhonghua	08/09/2022	174,000	XDF	01/10/2027
MOL ENN 3	MOL	Hudong-Zhonghua	08/09/2022	174,000	XDF	01/03/2028
Daewoo 2566	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/08/2025
Daewoo 2567	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/09/2025
Daewoo 2568	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/06/2026
Daewoo 2569	Meiji Shipping	Hanwha Ocean	30/09/2022	174,000	XDF	01/09/2026
DAEWOO 2570	MISC	Hanwha Ocean	30/09/2022	174,000	XDF	01/01/2026
DAEWOO 2571	MISC	Hanwha Ocean	30/09/2022	174,000	XDF	01/05/2026
Daewoo 2572	TMS Cardiff Gas	Hanwha Ocean	30/09/2022	174,000	ME-GA	01/03/2026
Daewoo 2573	TMS Cardiff Gas	Hanwha Ocean	30/09/2022	174,000	ME-GA	01/06/2026
MISC EM 1	MISC	Samsung	30/09/2022	174,000	XDF	01/06/2026
MISC EM 2	MISC	Samsung	30/09/2022	174,000	XDF	01/08/2026
Samsung 2651	Celsius Shipping	Samsung	01/10/2022	180,000	ME-GA	01/11/2025
Hyundai Samho 8182	TMS Cardiff Gas	Hyundai Samho	17/10/2022	174,000	XDF	01/01/2026
VG 1	Venture Global LNG	Hanwha Ocean	21/10/2022	174,000	MEGI	01/09/2026
VG 2	Venture Global LNG	Hanwha Ocean	21/10/2022	174,000	MEGI	01/12/2026
Yangzijiang 1	Hammonia Reederei	Yangzijiang	26/10/2022	175,000	ME-GA	01/10/2025
Yangzijiang 2	Hammonia Reederei	Yangzijiang	26/10/2022	175,000	ME-GA	01/03/2026
Samsung 2652	Minerva Marine	Samsung	01/11/2022	174,000	ME-GA	01/02/2026
Samsung 2653	Minerva Marine	Samsung	01/11/2022	174,000	ME-GA	01/03/2026

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 2 August 2023

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Samsung 2656	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/03/2027
Samsung 2657	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/05/2027
Samsung 2658	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/08/2027
Samsung 2659	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/09/2027
Samsung 2660	Seapeak	Samsung	15/11/2022	174,000	ME-GA	01/12/2027
Celsius 1	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/03/2026
Celsius 2	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/07/2026
Celsius 3	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/11/2026
Celsius 4	Celsius Shipping	China Merchants HI Jiangsu	31/12/2022	180,000	ME-GA	01/03/2027
Hyundai Samho 8204	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/05/2026
Hyundai Samho 8205	Oman Shipping Co.	Hyundai Samho	01/01/2023	174,000		01/06/2026
Hyundai Ulsan 3433	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/04/2026
Hyundai Ulsan 3434	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/07/2026
Hyundai Ulsan 3435	Dynagas	Hyundai Heavy	16/01/2023	200,000	XDF	01/11/2026
Hyundai Samho 8202	Capital Gas	Hyundai Samho	18/01/2023	174,000	ME-GA	01/09/2026
Hyundai Samho 8203	Capital Gas	Hyundai Samho	18/01/2023	174,000	ME-GA	01/11/2026
HYUNDAI SAMHO 8238	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/05/2027
HYUNDAI SAMHO 8239	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/10/2027
MOL 1	MOL	Samsung	01/02/2023	174,000	ME-GA	01/09/2026
MOL 2	MOL	Samsung	01/02/2023	174,000	ME-GA	01/01/2027
Samho Mar 1	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2026
Samho Mar 2	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/07/2027
Samho Mar 3	NYK	Hyundai Samho	01/02/2023	174,000	XDF	01/12/2027
DAEWOO 2580	MOL	Hanwha Ocean	13/02/2023	174,000	ME-GA	01/03/2027
DALIAN NO 1 G175K-5	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/08/2026
DALIAN NO 1 G175K-6	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/10/2026
DALIAN NO 1 G175K-7	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/12/2026
DALIAN NO 1 G175K-8	China Merchant	Dalian Shipbuilding	01/03/2023	175,000	XDF	01/02/2027
Shandong 1	Shandong Marine	Jiangnan	01/03/2023	175,000		01/03/2027
Shandong 2	Shandong Marine	Jiangnan	01/03/2023	175,000		01/07/2027
Hyundai Samho 8206	Capital Gas	Hyundai Samho	28/03/2023	174,000	ME-GA	01/02/2027
Hyundai Samho 8207	Capital Gas	Hyundai Samho	28/03/2023	174,000	ME-GA	01/03/2027
HANWHA OCEAN 2581	Maran Gas Maritime	Hanwha Ocean	01/04/2023	174,000	MEGI	01/04/2027
HANWHA OCEAN 2582	Maran Gas Maritime	Hanwha Ocean	01/04/2023	174,000	MEGI	01/06/2026
K-Line SHI I	K-Line	Samsung	04/04/2023	174,000	ME-GA	01/08/2026
K-Line SHI II	K-Line	Samsung	04/04/2023	174,000	ME-GA	01/11/2026
Daewoo 2583	MOL	Hanwha Ocean	07/04/2023	174,000	ME-GA	01/08/2027
Hd Hyundai Ulsan 3452	Dynagas	Hyundai Heavy	28/04/2023	200,000	XDF	01/05/2027
Hd Hyundai Ulsan 3453	Dynagas	Hyundai Heavy	28/04/2023	200,000	XDF	01/11/2027
Hudong-zhonghua H1901a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/03/2028
Hudong-zhonghua H1902a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/06/2028
Hudong-zhonghua H1903a	CSSC	Hudong-Zhonghua	01/05/2023	174,000	XDF	01/09/2028
NYK EnBW	NYK	Hyundai Heavy	02/05/2023	174,000		01/03/2027
NYK EnBW 2	NYK	Hyundai Heavy	02/05/2023	174,000		01/06/2027
NYK EnBW 3	NYK	Hyundai Heavy	02/05/2023	174,000		01/09/2027
NYK EnBW 4	NYK	Hyundai Heavy	02/05/2023	174,000		01/12/2027
Chevron SHI 1	Chevron	Samsung	13/06/2023	174,000		01/12/2027
Chevron SHI 2	Chevron	Samsung	13/06/2023	174,000		01/02/2028
PCI 7	ULT	Hudong-Zhonghua	03/07/2023	174,000	XDF	01/11/2025
PCI 8	ULT	Hudong-Zhonghua	03/07/2023	174,000	XDF	01/12/2025

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WORLD SMALL SCALE LNG FLEET*

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
1974	Seagas	187	LNG	Sweden	Yes	AGA
1988	Kayoh Maru	1,517	LNG	Japan	Yes	Daiichi
1993	Aman Bintulu	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1996	Surya Aki	19,475	LNG	Indonesia - Japan	Yes	MCGC
1997	Aman Sendai	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1998	Pelita Energy	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Coral Favia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2010	Coral Fraseri	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Vision Spirit	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Seapeak Unikum	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvovation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coral Encanto	30,000	LNG	China	Yes	Anthony Veder
2017	JS Ineos Invention	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	JS Ineos Intuition	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	Oizmendi	600	LNG	Spain	Yes	Itsas Gas
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Green Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	New Frontier 1	6,500	LNG	Northwest Europe	Yes	Shell
2018	Kairos	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	LNG London	3,000	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2018	Bunker Breeze	1,200	LNG	Barcelona	Yes	Suardiaz Energy Shipping
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2019	Blue Whale	7,500	LNG	Korea	Yes	Korea Line

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