

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

12 May 2022

LNG imports hit record levels - GIIGNL

Last year, world LNG imports reached 372.3 mill tonnes, an increase of 16.2 mill tonnes, compared with 2020.

The post lockdowns economic recovery and continued coal-to-gas switch resulted in the LNG imports surge, although the annual growth rate (+4.5%) remained far from pre-pandemic levels, reported the International Group of Liquefied Natural Gas Importers (GIIGNL) in its annual review.

Recovery was diverse across the regions, with Asia recording the highest growth - led by China, which overtook Japan as the world's leading LNG importer - while Europe struggled to attract LNG cargoes throughout most of the year.

Croatia joined the rank of LNG importers, bringing the total to 44 markets importing LNG, supplied by 19 exporting countries.

Imports from the US grew by 49.8% in 2021, thanks to the ramp-up of five large liquefaction projects commissioned in 2020 - Cameron LNG Trains 2 and 3, Corpus Christi LNG Train 3, Freeport LNG Trains 2 and 3, as well as to the commissioning of Sabine Pass Train 6.

New supplies were also added, but to a much lesser extent. Egypt accounted for an extra 5.2 mill tonnes, Algeria with 1.2 mill, Malaysia 1.1 mill and Australia with an extra 0.8 mill tonnes.

The largest drop in LNG exports was recorded by Nigeria at minus 4.1 mill tonnes, due to maintenance issues; Trinidad and Tobago minus 3.9 mill, due to lack of feedgas and Norway at minus 2.9 mill tonnes, due to delays in the Snøhvit restart.

Both the Atlantic Basin and the Middle East experienced growth in 2021, adding plus 17.9 mill and plus 0.6 mill tonnes of exports, respectively. Similar to 2020, the Pa-

cific Basin continued to show a decline in exports last year of minus 2.3 mill tonnes.

However, the Pacific remained the largest source of LNG supplies to the world market with 143.9 mill tonnes or 38.6%, closely followed by the Atlantic Basin with 135.2 mill - a 36.3% market share - and the Middle East with 93.2 mill tonnes - a 25% market share. Middle

East supply increased from 92.6 mill to 93.2 mill tonnes, a rise of 0.6%.

Among the countries supplying LNG, Australia and Qatar led the way, with 78.5 mill and 77 mill tonnes, respectively. In third place was the US, which supplied 67 mill tonnes in 2021 but is set to become the world's leading LNG supplier this year. The Russian Federation came fourth with 29.6 mill, followed by Malaysia with 25 mill tonnes.

Asia led imports

Asia was the leading importing area with a 73.2% share, up from 71.4% in 2020. Imports grew by 7.1% in 2021, reaching 272.5 mill tonnes, the GIIGNL said.

China overtook Japan as largest LNG importer, with the world's highest imported volumes growth rate of 10.4 mill tonnes or plus 15%, totalling 79.3 mill at year-end.

Constrained by dwindling domestic gas production, high de-

mand, due to lower temperatures, along with lower than expected additional pipeline deliveries from Russia, bringing storage levels to record lows, Europe suffered an unusual situation last year, when high JKM/TTF price differentials made flexible LNG volumes prefer Asia throughout most of the year.

This situation worsened until the last quarter of 2021. Overall, Europe's net LNG imports decreased by 8% in 2021 totalling 75.1 mill tonnes, a drop of 6.5 mill tonnes, compared to 2020.

The US consolidated its position as the leading exporter of spot and short-term LNG, accounting for almost one third (32.2%) by volume, followed by Australia with a 18.7% market share.

'True' spot volumes (ie, those delivered within three months from the transaction date) reached 31% of total imports in 2021 or 116 mill tonnes, compared with 35% of total imports in 2020 (125 mill tonnes), the report said. ■

Key figures 2021

372.3 MT

imported vs. 356.1 MT in 2020

+4.5%

growth vs. 2020

19

exporting countries

44

importing markets

7

new LNG regasification terminals

73%

of global LNG demand in Asia

993 MTPA

total regasification capacity*

39%

of global LNG volumes supplied from the Pacific Basin

462 MTPA

total liquefaction capacity*

136.3 MT

imported on a spot or short-term* basis or

36.6%

* At the end of 2021

Source: GIIGNL Annual Report 2022 Edition

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Europe sees huge LNG import rise

In 2021, the European Union (EU) was the world's third largest seaborne importer of LNG, with a 15.8% share.

The EU followed Mainland China (20.2%) and Japan with a 19.7% share, according to a survey by Italian brokerage, Banchero Costa.

In 2019, European LNG imports rose by 65.4% year-on-year to 65.6 mill tonnes, from 39.7 mill tonnes recorded in 2018.

Since then, volumes have fallen, due to more limited energy demand, at a time of Covid lockdowns and a weakened economy.

In 2020, the EU imported 62.8 mill tonnes of LNG, which was a drop of 4.2% compared to 2019. The following year, imports dwindled further, with just 58.5 mill tonnes recorded, down another

6.8% y-o-y from 2020.

However, events took a dramatic turn in the first quarter of this year, with the Russian invasion of Ukraine, which pushed Europe to secure alternative sources of energy.

In the first three months of 2022, the EU imported 22.1 mill tonnes of seaborne LNG, up by 72.8% y-o-y from the 12.8 mill tonnes imported in 1Q21.

This resulted in the EU becoming the world's top importer of LNG during the quarter, with a 20.9% share, ahead of Japan's 19.7% and China's 15.7%.

Moving on to April, the number of LNGCs arriving into Europe rose

more than 20% to 114, compared with 94 in the previous month, vessel-tracking data from S&P Global's cFlow trade-flow analytics software showed.

The Mediterranean region saw the biggest increase, a rise of 24.4%, while Northwest Europe (NWE) saw a month-on-month growth of 18.4%.

Spain leads

Last month, Spain welcomed the largest number of LNGCs in the region totalling 35, an increase of 25% from 25 ships that arrived in March. Italy also saw an increase to 15 LNGCs, from 12 in the previous month.

In NWE, France saw the largest number of LNGCs arriving at 26, compared with 24 in March, while the UK experienced the highest growth over the same period, when 19 vessels arrived, compared with 13 recorded in March - a rise of 46.2%.

Following the February invasion of Ukraine by Russia, European LNG prices increased significantly in March, reaching its highest level on 8th March at \$60.925 per MMBtu for DES NWE. Levels have

fallen since then, but are still up sharply from the same time last year, Platts said.

Higher prices in Europe attracted an increased flow of LNG cargoes, resulting in limited slot availability across the continent. For example, Fos Cavou and Fos Tonkin showed zero receiving capacity until the end of 2022 reported Fosmax LNG, which manages the two French regasification terminals at Fos.

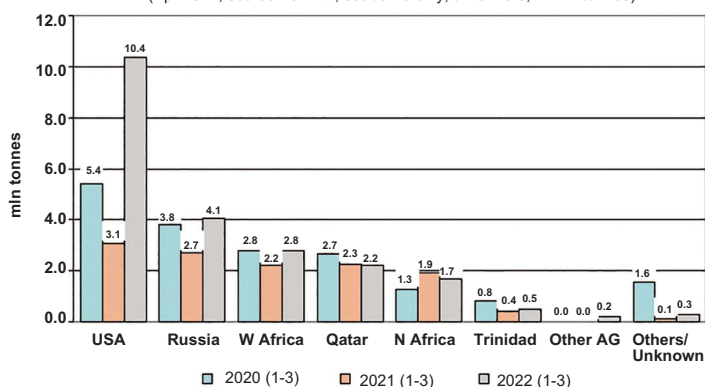
Lower LNG prices in April followed the higher number of LNGC arrivals. According to data from S&P Global Commodity Insights, the monthly average for April DES NWE was \$31.24 per MMBtu, down from \$37.33 per MMBtu in March.

However, the increase in LNG prices for DES NWE was even more significant year-on-year, as the monthly average for LNG prices was \$6.229 per MMBtu in April, 2021.

The higher inflow of LNG into Europe also contributed to the upward trend in European gas inventories, which had reached 34.6% in a recent Gas Infrastructure Europe reading, compared to 26.3% at the end of March, Platts reported. ■

European Union - LNG Imports by Source in Jan-Mar

(Apr 2022; source: refinitiv; seaborne only; all tankers; in mln tonnes)



Source: Banchero Costa

NEWS NUDGE

Alexandroupolis FSRU project underway

Construction startup on Gastrade's FSRU project at Alexandroupolis was marked by a ceremony that took place on 3rd May.

A symbolic plaque was signed

by the Prime Ministers of Greece and Bulgaria to mark the start of the project, which will become a new energy gateway, playing a key role not only in the energy security and independence of Greece, but also for southeastern Europe, the company said.

A 153,500 cu m GasLog FSRU will be connected to the Greek National Natural Gas Transmis-

sion System (NNGTS) via a 28 km long pipeline, through which the gasified LNG will be sent to Greece, Bulgaria and the wider region, including Romania, Serbia, North Macedonia, etc, and possibly Ukraine.

Alexandroupolis FSRU is expected to come online by the end of 2023. The contracted regasification capacity has already

reached 60% of its technical capacity of 5.5 bill cu m per year, Gastrade said.

Gastrade has also submitted an application for a new Independent Natural Gas System (INGS) License for the 'Thrace LNG' project to the Greek Regulatory Authority for Energy (RAE), which will also be based on an FSRU. ■

LNG Shipping News

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Ukraine conflict gives boost to US export projects

The US is set to dominate the number of North America's planned LNG liquefaction projects by 2026.

It will contribute around 68% of the total project startups between 2022 and 2026, according to data and analytics company, GlobalData.

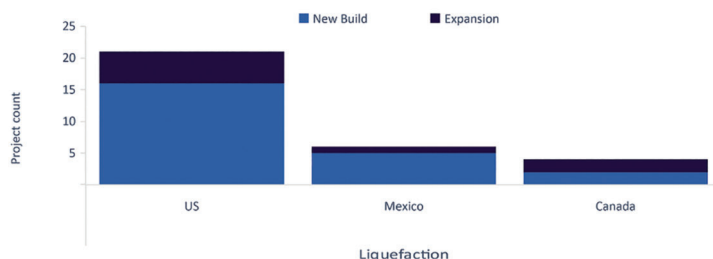
As a result of Russia's invasion of Ukraine, US LNG export projects received a massive boost, as European and Asian buyers increasingly looked towards the US to reduce their reliance on Russian gas.

GlobalData's latest report, 'Global LNG New-Build and Expansion Projects Outlook to 2026', revealed that the US had already dominated the Americas region, while forthcoming LNG liquefaction projects will add 196 mill tonnes per annum of capacity between 2022 and 2026.

The largest US project is Driftwood Phase I with a capacity of 16.6 tonnes per annum. It is cur-



North America LNG liquefaction projects outlook by project type, 2022-2026



Source: GlobalData Oil and Gas Intelligence Center

GlobalData

rently under construction and is expected to start operations by 2026.

Owner Tellurian has definitive agreements in place with TotalEnergies, Vitol and India's Petronet to supply LNG produced from Driftwood.

Rio Grande Phase I is another major US project with a capacity of 16.2 mill tonnes per annum. A final investment decision (FID) has been delayed and is now targeted

for the second half of this year.

A lack of adequate long-term LNG contracts seemed to be the key reason for the FID's delay, GlobalData said.

However, the project's owner, NextDecade, has recently signed a 20-year agreement with Chinese company Guangdong Energy Group, boosting the FID's chances. NextDecade now has three LNG supply agreements in place for this project. ■

Cheniere signs integrated production transaction

Cheniere Energy's subsidiary, Corpus Christi Liquefaction Stage III, has signed a long-term Integrated Production Marketing (IPM) gas supply agreement with ARC Resources US Corp, an ARC Resources company.

Under the agreement, ARC has agreed to sell 140,000 MMBtu per day of natural gas to Corpus Christi Stage III for 15 years, commencing with the commercial operations of Corpus Christi Stage III Project's Train 7.

The LNG associated with this gas supply, around 0.85 mill tonnes per annum, will be marketed by Cheniere.

Cheniere will pay ARC an LNG-linked price for the gas, based on the Platts Japan Korea Marker (JKM), after deductions for fixed LNG shipping costs and a fixed liquefaction fee. ARC Resources will act as the agreement's guarantor.

This agreement is subject to Corpus Christi Stage III making a positive final investment decision (FID) to build the project, which could come this summer.

The Corpus Christi Stage III project is being developed to include up to seven mid-scale liquefaction trains with a total expected nominal production capacity of over 10 mill tonnes per annum.

In addition, Cheniere Energy said that it had suffered a net loss of about \$865 mill for the first quarter of this year.

Consolidated adjusted EBITDA came in at about \$3.2 bill and distributable cash flow was around \$2.5 bill for 1Q22.

Cheniere raised its full year 2022 consolidated adjusted EBITDA guidance to \$8.2 - \$8.7 bill and full year distributable cash flow guidance to \$5.5 - \$6 bill, due to increased volumes from maintenance optimisation, the accelerated ramp-up of Sabine Pass Train 6 and general out performance, as

well as sustained higher margins on LNG throughout this year and increased lifting margin.

"The criticality of energy security and the long-term role of LNG and natural gas as a reliable, flexible and cleaner-burning fuel has never been more evident and we are proud to be able to support our customers and end-users across the globe," said Jack Fusco, Cheniere's President and CEO. "Cheniere's continued focus on execution, seamless operations and maintenance optimisation has enabled record LNG production to help balance the global energy market.

"We are raising our 2022 financial guidance, due to the sustained strength in the global LNG market and an increase in expected LNG production. The cur-

KN announces LNG terminal allocation procedures

Lithuanian operator of oil and liquefied natural gas (LNG) terminals, Klaipėdos Nafta (KN), has announced the procedure for allocating capacity at the Klaipėda LNG terminal.

KN also invited market participants to reserve terminal capacity between 1st October and 31st December, 2022.

During the capacity procedure, 9.66 TWh of available LNG terminal capacity will be allocated.

To ensure that the terminal services are used by the widest possible number of customers, the LNG terminal capacity will be allocated in accordance with the rules of use.

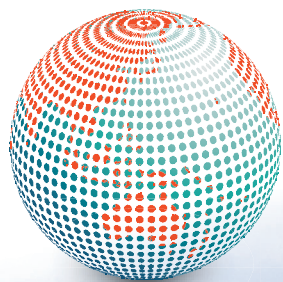
The rules state that one terminal user may not order more than half of the allocated terminal capacity. In the event that the terminal capacity supply exceeds demand, the capacity will be allocated proportionally, giving priority to the companies that have used the LNG terminal services in the last three years and are therefore familiar with the terminal's operational principles.

This year, KN also plans to offer long-term capacity, which can be used from 1st January, 2023 for a period of five or 10 years.

During the gas year, which runs from 1st October, 2021 to 30th September, 2022, customers had reserved 23.9 TWh of Klaipėda LNG's terminal capacity. ■

rent volatility in the global energy markets signals the need for additional investment in new LNG capacity, underscoring the power of the Cheniere platform.

"We expect to complete the remaining steps necessary to reach FID on Corpus Christi Stage 3 in the coming months," he concluded. ■



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Four FSRUs earmarked for Germany

To fast track LNG terminals, the German Government has chartered four FSRUs - two from RWE and two from Uniper.

On behalf of the Government, RWE has chartered and will manage two 170,000 cu m Höegh LNG FSRUs, while Uniper will manage two 174,000 cu m Dynagas FSRUs.

RWE said that with its two FSRUs, between 10 and 14 bill cu m of natural gas can be made available to the German market annually. By comparison, the throughput of a land-based LNG terminal is between eight and 10 bill cu m per year.

The German energy company plans start operating the units by next winter. For now, the operational responsibility for the floating facilities will lie with RWE, which will make all the commercial decisions concerning the use of the ships and optimise these assets in the interest of the German government. Technical operations will remain with Höegh LNG, the company said.

Höegh LNG Holdings confirmed that the RWE charters will run for 10 years.

The detailed FSRU contracts are scheduled to be completed by September/October and FSRU operations are expected to commence at the end of this year.

Höegh LNG President and CEO, Thor Jørgen Guttormsen, commented: "We are very pleased and honoured to be selected by the German government to support Germany's security of energy supply with two of our modern, large-capacity FSRUs."

Dynagas' vessels

Meanwhile, Uniper has chartered Dynagas' 2021-built 'Transgas Force' and 'Transgas Power'. They each have a total natural gas-send-out capacity of up to 7.5 bill cu m per annum and an LNG storage

capacity of 174,000 cu m.

They will enter service in early 2023 with first gas send-out depending on the completion of the onshore installations at the sites selected by the German government.

Uniper claimed that it has broad commercial and technical experience in the LNG market, trading 360 cargoes per year. In addition, the company has access to regasification terminal capacity at Gate (the Netherlands), Isle of Grain (UK) and Spain.

Uniper CEO, Klaus-Dieter Maubach, said: "We are glad and proud to be able to support the German government with our experience in the LNG market in these difficult times. Our site in Wilhelmshaven and the Dynagas' FSRUs will provide an important cornerstone to achieve a greater diversification of natural gas supplies."

Dynagas founder & Chairman, George Procopiou, added: "We are very pleased to conclude this transaction with the German government and Uniper. We have long been advocating for European countries to develop LNG import infrastructure to diversify their sources of supply of natural gas."

"The installation of the two FSRUs will enable Germany, and the wider European region, to significantly increase their LNG import capabilities in a timely and environmentally friendly manner without any permanent footprint on-shore. We look forward to the FSRUs being installed in Germany and supplying the country with natural gas which, ultimately, will also enable the transition to a lower carbon future."

RWE said that the next step is to determine which sites will be suitable - Wilhelmshaven, Bruns-

büttel, Rostock or Stade. A decision has already been made for Wilhelmshaven to become an FSRU location.

At a recent press conference in Wilhelmshaven, German Federal Minister. Robert Habeck and the Lower Saxony Ministers, Olaf Lies and Bernd Althusmann, oversaw the first pile driving activities for the construction of the LNG terminal at the port.

Uniper, as builder and operator of the terminal, will invest around €65 mill, including the chartering of the two Dynagas FSRUs.

In addition, an agreement was signed between the Government and Lower Saxony to expand Wilhelmshaven into a green energy hub for Germany. Uniper is supporting this project with its on-site projects - in the short term an LNG terminal - while in the medium and long term in the Green Wilhelmshaven project.

Phase 1 of the Wilhelmshaven LNG terminal project involves the regasification of LNG via an FSRU that can be connected to the existing 'Umschlagsanlage Voslapper Groden' (UVG) sea bridge.

During this phase, the existing UVG has to be adapted and a connection between the FSRU and the onshore facilities established. The adaptation of the UVG will be carried out by Niedersachsen Ports (NPorts) in close co-operation with Uniper.

In a second phase, a permanent and expanded port solution for the FSRU is to be implemented in parallel to the existing UVG. The plan is to provide additional unloading and handling facilities for green gases, eg ammonia, in order to be able to utilise the full potential of 'Green Wilhelmshaven'. ■

The market according to GasLog

In its first quarter 2022 results release (see page 9), GasLog Partners took a look at the market.

Global LNG supply was around 102.5 mill tonnes in the first quarter of 2022, a rise of 5 mill tonnes (or 5%) year-on-year, according to Wood Mackenzie.

This supply growth was dominated by the US, which increased by 4 mill tonnes, or 24% year-on-year, primarily due to a rise in utilisation of existing liquefaction terminals.

US production growth offset declines from many other supply sources around the world, including Norway, Nigeria, Malaysia and Oman, either due to continued feedstock issues or downtime.

Looking ahead, around 112 mill tonnes of new LNG capacity is currently under construction and scheduled to come online between 2022 and 2026.

Headline spot rates for TFDE LNGCs, as reported by Clarkson Research Services, averaged \$34,850 per day in 1Q22, a 60% decrease over the average of \$84,400 per day recorded in 1Q21, GasLog said. Spot rates for steam turbine vessels averaged \$21,750 per day in 1Q22, some 74% lower than the average of \$60,000 per day in 1Q21.

Headline spot rates in 1Q22 suffered from increased availability of sublet tonnage, limited spot vessel enquiries and declining inter-basin demand. However, demand for charter periods of one year or longer continued to be high in spite of the lack of activity in the spot market.

For example, 12-month timecharter rates for TFDE LNGCs averaged \$89,000 per day in 1Q22, a 70% increase over the \$52,800 per day average in same quarter of 2021. One-year time charter rates for steam vessels averaged \$47,100 per day in 1Q22, a 37% increase over the \$34,250 daily average in 1Q21, GasLog said, quoting Clarkson. ■

NEWS NUDGE

Höegh opts for Nyheim

Höegh LNG Holdings has appointed Erik Nyheim as the new

President & CEO effective from mid-August this year.

Nyheim will arrive from the position as Partner of Boston Consulting Group's Norwegian

office where he has led their maritime practice since 2019.

Prior to this, he worked for more than 15 years with the Wilhelmsen group. ■

More US LNG export authorisations awarded

On 27th April, the US Department of Energy (DOE) issued long-term orders authorising an additional 0.5 bill cu ft per day of LNG exports from two projects.

These were the Texas Golden Pass LNG and Louisiana's Magnolia LNG projects.

Golden Pass LNG will be allowed to export the equivalent of an additional 0.35 bill cu ft per day and Magnolia LNG to export another 0.15 bill cu ft of LNG to any country not prohibited by US law or policy.

The DOE had previously issued long-term non-free trade agreement export orders for the majority of the projects' capacities.

Magnolia LNG's authorisation was for 1.08 bill cu ft issued in 2016, while 2.21 bill cu ft per day was issued to Golden Pass LNG in 2017.

The two new orders align the projects' respective export authorisations to additional capacity that the Federal Energy Regulatory Commission (FERC) had approved for the projects based on optimised project designs, the DOE said.

Golden Pass, jointly owned by ExxonMobil Corp and Qatar

Petroleum International, is under construction at Sabine Pass, Texas, with first exports expected in 2024, while Magnolia LNG, owned by the Glenfarne Group, is to be developed at Lake Charles, Louisiana.

US exports expanding

US LNG exports have recently reached new highs of around 12 bill cu ft per day and are expected to expand to more than 13 bill cu ft by the end of this year, as additional export capacity comes online, the DOE added.

US Senator, Ted Cruz (R-Texas) said in a statement. "At such a critical time for global energy needs, I'm proud to have led the fight to press the DoE to help secure permits for export at two new LNG export facilities.

"This is a tremendous victory for Texans, American jobs, trade, and our European allies who will now have greater access to our clean natural gas exports. America produces the cleanest energy in



Senator Ted Cruz is a champion of ramping up US LNG project authorisations

the world, and I want to thank (US) Secretary Granholm for listening to my concerns about how the delays in permitting was hurting our economy and working productively with me to finally issue these permits."

Sean Ryan, President and CEO, Golden Pass LNG, added:

"We thank Senator Cruz for his long standing support of Golden Pass LNG and we are grateful for his role in securing this opportunity to bring clean energy from Texas to power the world.

"We also appreciate the DOE granting the authorisation to sell our full production capacity of 18.1 mill tonnes per annum to non-FTA countries. This will strengthen US trade and enhance energy security for our allies."

Earlier this year, Sen Cruz introduced the Energy Freedom Act, which would approve all pending LNG export licenses. It would also expedite natural gas pipeline permitting applications, in order to accelerate LNG exporting to Europe and other allies. ■

Second Eemshaven FSRU agreed

On 9th May, Gasunie signed a binding contract to lease a second FSRU to be located at Eemshaven.

The latest contract was with New Fortress Energy (NFE) for a period of five years. The unit will also be suitable for gas storage. The FSRU is expected to arrive in Eemshaven in the third quarter of this year.

With this second FSRU, Gasunie subsidiary EET will expand its new LNG terminal in Eemshaven, to allow a total of 8 bill cu m of LNG to be converted into natural gas.

At the end of April, Gasunie contracted the 'FSRU S188' from Exmar. This unit will also arrive in Eemshaven in 3Q22.

Since Gasunie launched a tender to LNG market participants, more than 15 parties have so far registered their interest in using the terminal to deliver LNG car-

goes. Demand is four times higher than supply.

They have until 10th June to sign a binding LNG supply contract.

Once the floating facilities from Exmar and NFE are moored in Eemshaven, they will be technically ready, connected to the existing gas network in Eemshaven and then transported to the LNG terminal.

Both facilities are expected to be operational this autumn.

As well as Eemshaven, the existing GATE terminal on the Maasvlakte in Rotterdam will also undergo optimisation to enable more LNG to be handled. Together, Eemshaven and Rotterdam will double the Netherlands LNG capacity. ■

Pakistan to get new import terminal

The Fourth Construction Co Ltd (FCC) of China National Chemical Engineering Group Corp (CNCEC) has signed an EPCF contract with Daewoo Gas to develop a new LNG terminal in Pakistan.

With a nameplate capacity of 2.5 mill tonnes per annum of LNG, this project will include berths, storage tanks, a distribution centre and regas trains, China Economic Net reported last month.

The terminal will probably be located on the Arabian Sea coast, south of Pakistan, Shahid Karim, CEO of Daewoo Gas, reportedly said.

"This terminal is for liquid sales with the adoption of a virtual pipeline system technique," said Zhou Hong, CNCEC-FCC General Manager, according to the newswire.

At the virtual signing cere-

mony, Karim reportedly said; "We hope that with the commencement of this project, Daewoo Gas will not only help meet the energy needs of Pakistan, but also contribute towards upgrading of natural gas industry in the country with its innovative technology."

Upon completion, this terminal will handle 10,000 tonnes of LNG per day at its peak, which will improve Pakistan's energy supply, according to Daewoo Gas.

CNCEC has set up an office in Karachi and FCC plans to open a branch in Pakistan in the future, according to Pakistani media. ■

Several US LNG SPAs signed

NextDecade Corp, Energy Transfer LNG (ET) and Venture Global have all recently signed sale and purchase agreements (SPAs) with leading energy providers.

Next Decade has signed a 15-year SPA with Engie for LNG supply from the Rio Grande LNG (RGLNG) export project at Brownsville, Texas.

Under the SPA, Engie will purchase 1.75 mill tonnes per annum of LNG on a free-on-board (FOB) basis.

The LNG will be supplied from Rio Grande LNG's first two trains. The first train is expected to start commercial operations in 2026.

NextDecade said that it aimed to reduce CO2 emissions from RGLNG by more than 90% via carbon capture and storage, combined with responsibly sourced gas and the use of net-zero electricity.

Assuming the achievement of further LNG contracting and financing, NextDecade anticipated making a positive final investment decision (FID) on a minimum of two trains at the RGLNG export project in the second half of this year, with FIDs on its remaining three trains to follow.

In addition, at the beginning of this month, Energy Transfer LNG (ET) secured two more long term SPAs.

The first SPA calls for the supply of LNG to Gunvor Singapore from its Lake Charles LNG export facility under a 20-year agreement.

Under the SPA, ET will supply 2 mill tonnes of LNG per annum to Gunvor on a free-on-board (FOB) basis from Lake Charles.

The purchase price will be indexed to the Henry Hub benchmark plus a fixed liquefaction charge. First deliveries are expected to commence in 2026.

ET also executed a long-term SPA with SK Gas Trading for the supply of 0.4 mill tonnes per annum of LNG from Lake Charles.

LNG will be supplied on a free-on-board (FOB) basis.

The purchase price will also be indexed to the Henry Hub benchmark, plus a fixed liquefaction charge.

The second SPA is for a term of 18 years and the first deliveries are expected to commence in 2026.

This is ET's fourth SPA announced in the last four weeks, bringing the total amount of LNG

contracted from its Lake Charles LNG export facility to 5.1 mill tonnes per annum.

Both SPAs will become fully effective upon the satisfaction of the conditions precedent, including ET taking a final investment decision (FID) on the project.

ET's Lake Charles LNG export facility will be constructed on an existing brownfield regasification facility and will make use of four existing LNG storage tanks, two deep water berths and other LNG infrastructure.

It will also benefit from its direct connection to ET's existing trunkline pipeline system.

Finally, earlier this week, Venture Global LNG announced the signing of two long-term SPAs with ExxonMobil LNG Asia Pacific (EMLAP).

These SPAs call for the sale of 2 mill tonnes per annum of LNG - 1 mill tonnes from Plaquemines LNG and 1 mill tonnes from the CP2 LNG facility.

This marks the second supply agreement for CP2, which is ex-

pected to commence construction in 2023.

Both facilities will utilise the same innovative modular design undertaken at Calcasieu Pass, where speed of execution resulted in the production of first LNG only 29 months after FID. ■

Exmar ties up small-scale FSRU

Belgian-based LPG and LNG carrier owner Exmar suffered an increased loss in the first quarter of this year.

The loss was \$7.7 mill, compared with a loss of \$2.2 mill in 1Q21 on revenues of \$24.3 mill and \$33.1 mill, respectively.

In the LNG sector, the LNGC 'Excalibur' remained unemployed and the company said that various trading and infrastructure opportunities were being investigated.

On 17th March, 2022, EXMAR reached an agreement for a five-year charter to employ its small-scale 'FSRU S188' with Gasunie LNG Holdings.

She will be employed as a floating LNG import terminal at Eemshaven, near Groningen, the Netherlands.

The barge will be transported from Singapore to the Netherlands this month and is expected to arrive at the site in early August, 2022.

Water heat recovery for the LNG regasification process and shore power are envisaged in order to further minimise the environmental impact within the port, Exmar said.

The unit had been unemployed since June, 2021.

As for 'Tango' FLNG, being a fast-track solution to develop LNG exports, various firm discussions are ongoing for its next Employment, the company claimed. ■

NEWS NUDGE

Bangladesh seeks three LNG cargoes

Bangladesh is planning to import three spot LNG cargoes to be delivered in June.

The cargoes will be needed to meet increased power demand over the peak summer season, a government source told Reuters.

Bangladesh suffers from frequent power cuts, despite government efforts to ration gas supplies. The power cuts could become more frequent heading into summer, due to an increase in the demand for air-conditioning.

The country imports about 300-400 mill cu ft of LNG daily under two long-term deals with Oman and Qatar.

Petrobangla will import two spot cargoes in May when it will also receive six shipments under the long term supply deals, the government source said.

Law firm welcomes back senior gas experts

Law firm, Norton Rose Fulbright, has announced the return of veteran oil and gas lawyer Craig Vogelsang.

He has rejoined as a partner and leader of the oil and gas practice.

In addition, Alex Niebruegge has returned as a senior counsel.

Both join the firm's oil and gas and LNG team based in Houston.

Vogelsang, who rejoins the firm from Baker Botts, advises US and foreign clients on a wide range of oil and gas transactions

and projects, including mergers, acquisitions and dispositions involving oil and gas properties and infrastructure.

He also advises on joint ventures, financings and other commercial arrangements, including LNG exports and joint developments.

Formerly with Winston & Strawn, Niebruegge has experience in US and international energy transactions, advising clients in the acquisition, divestiture, development and operation of energy assets and other corporate matters.

He is also involved with joint ventures and commercial arrangements across the energy sector, including LNG projects. Vogelsang and Niebruegge are both licensed to practice in Texas. ■

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GasLog Partners suffers revenue drop

GasLog Partners first quarter 2022 revenues decreased by \$1.6 mill to \$85.5 mill, compared to the same period in 2021.

The drop was mainly attributable to a net fall in revenues from vessels operating in the spot market for an additional 112 days, due to the lower average headline rates earned by the spot fleet in 2022, compared to 1Q21, as the premium winter spot market ended much earlier this year.

Vessel operating costs increased by \$0.8 mill to \$18.6 mill in 1Q22.

This increase was mainly down to an rise of \$1.4 mill in crew costs, largely related to additional costs this year following the COVID-19 enhanced protocols in relation to crew extension bonuses to support seafarers, travelling and extended quarantine days for seafarers prior to embarkation.

However, this was partially offset by a decrease of \$0.4 mill in vessel management fees in connection with the decrease of the annual fee payable to GasLog's manager (about \$0.1 mill per vessel per year).

As a result, daily operating

costs per vessel (excluding calendar days for the 'Solaris', the operating costs of which are covered by the charterers) increased from \$14,132 per day for 1Q21, to \$14,741 per day in 1Q22.

A drop in adjusted EBITDA of \$3.2 mill to \$60.9 mill was attributable to the fall in revenues of \$1.6 mill and an increase in general and administrative expenses of \$1.6 mill.

Profit fall

GasLog also reported a decrease in profit of \$0.4 mill to \$35 mill for the first quarter of this year.

Adjusted profit also fell by \$3.5 mill to \$28.3 mill in 1Q22, which was mainly due to the decrease in adjusted EBITDA.

As of 31st March, 2022, GasLog Partners had \$135.9 mill of cash and cash equivalents, out of which \$33.5 mill was held in current accounts and \$102.4 mill held in time deposits with an original duration of less than three months.

At the same time, the partnership had an aggregate of \$1,052.4 mill of borrowings outstanding under its credit facilities, of which \$99.4 mill was repayable within a year, and an aggregate of \$53.4 mill of lease liabilities mainly related to the sale and leaseback of the 'GasLog Shanghai', of which \$10.4 mill was also payable within 12 months.

Assets totalled \$153.8 mill and liabilities amounted to \$169.1 mill at the end of the quarter, resulting in a negative working capital position of \$15.3 mill. Current liabilities included \$24.2 mill of unearned revenue in relation to hires received in advance, which represents a non-cash liability that will be recognised as revenues after 31st March, 2022, as the services are rendered.

CEO Paolo Enoizi, commented: "The global LNG market was already tight before the conflict in Ukraine began to unfold. This further need to secure energy supply



GasLog CEO Paolo Enoizi

has led to a significant increase in demand for LNG in recent months. This has resulted in a tight term market, despite volatility in the spot market in the first quarter of 2022.

"We expect that the partnership's contracted revenues in 2022 will more than fulfil its operational and financial obligations, whilst also retaining significant market exposure, particularly in the seasonally stronger second half of the year.

"Given the scarcity of independently-owned vessels available for term charters, based on current market conditions, we expect to recognise material upside well above our contracted revenues," he said. ■

First M-FSRU unveiled

GAS Entec, a subsidiary of Atlantic Gulf & Pacific International Holding (AG&P), has completed the conversion of a 125,000 cu m LNGC for KARMOL, a joint-venture between Turkey's Karpowership and Japan's Mitsui OSK Lines (MOL).

The unit was converted into an 84 mill cu ft per day modular FSRU (M-FSRU) with capacity to scale from 15 to 300 mill cu ft per day per unit.

She is the world's first modular floating LNG regasification terminal and will deliver gas from LNG to Karpowership's 236 MW floating

power plant, 'Karadeniz Powership Aysegul Sultan' located in Dakar.

This integrated, floating complex will serve shore-based grids in Senegal. The existing floating power plant previously used heavy fuel oil to meet around 15% of the West African nation's power demand.

Gas Entec is responsible for engineering, project management, longevity improvements, drydocking, equipment installation, ship improvements and testing, as well as all commissioning work.

For the KARMOL project, Gas Entec was responsible for the complete design including FEED, basic, detail and production design engineering, class approval and development, supply of regasification technology, project management, test and commissioning of regas equipment and systems and installation work.

In record time, Gas Entec designed the marine-based M-FSRU LNG regasification terminal to include several innovations:

- Scalability: Gas Entec's proprietary, patented RegasTainer technology offers flexibility to scale the capacity of the FSRU up and down from 15 to 300 mill cu ft per day with minimised downtime, allowing the vessel to be re-purposed as power requirements grow in a market.
- Low operation cost: Specialised technology and design regarding significantly reduces the burden on various pumps, reducing operating costs considerably.
- Easy maintenance: Tanks, pumps and the RegasTainer are especially designed for easy maintenance, making high availability requirements feasible and appropriate. ■



The converted M-FSRU

Gazprom shuts off Polish supplies

Polish oil and gas company, PGNiG, has received a notice from Gazprom that on 26th April, all supplies of gas under the Yamal contract would cease from the following day.

PGNiG and Polish domestic gas transporter, Gaz-System, have both confirmed that at present all supplies to customers are being made in accordance with demand. The companies are monitoring the situation and are prepared for different scenarios, they said in a statement.

Thanks to the implementation of the Polish Government's strategy to diversify gas supply sources, PGNiG said it would acquire gas from various sources, eg, through gas interconnections on the western and southern borders and from the Świnoujście LNG terminal, which is gradually increasing the number of LNGCs it receives.

At the end of April, the storage facilities were around 80% full, which was significantly above the level recorded at the same period in previous years.

Klaipeda delivery

Later it was announced that on 6th May, PGNiG had received its first LNG cargo delivered to the FSRU terminal in Klaipėda, Lithuania.

'Aristidis I' brought a cargo of about 65,000 tonnes or 150,000 cu m of LNG to the Klaipėda FSRU 'Independence', which is equivalent

to almost 90 mill cu m of natural gas after regasification. The gas came from Freeport, Texas.

"The first delivery of liquefied natural gas received by PGNiG at the regasification terminal in Klaipėda is an important milestone in the implementation of our strategy to build a strong position for the Group on the international LNG trading market.

"I believe that the co-operation between the PGNiG Group and Klaipėdos Nafta (KN), the terminal operator, will not only further the two companies' business goals but will be a strong impulse for further integration of the gas markets of Poland and the Baltic States, increasing the region's energy security based on diversified gas fuel supplies," said Iwona Waksmundzka-Olejniczak, PGNiG Management Board's President.

"Strengthening of our presence in Lithuania is also part of our plans to build a multi-utility group with PKN ORLEN, which is dynamically developing its business in this region as well," she added.

"This week's developments, including the launch of Polish-Lithuanian gas pipeline interconnector GIPL on 1st May and the



Poland has taken delivery of its first cargo delivered to Klaipeda FSRU

arrival of the first large PGNiG cargo to the Klaipėda FSRU terminal on Friday, are significant milestones in the history of Lithuanian and Polish energy independence and security of gas supply.

"At the same time, it also marks a new stage in the energy integration of the Baltic Sea region countries with a rest of Europe and more opportunities to diversify and secure natural gas supply especially in the context of current difficult geopolitical conditions.

"I'm glad that co-operation with PGNiG, which started more than two years ago, is expanding significantly by creating additional opportunities for both counterparties," said Darius Šilenskis, KN CEO.

PGNiG also said that it had

signed long-term contracts for 12 bill cu m of LNG (after regasification) with suppliers from Qatar and the US. Of the total, 7.4 bill cu m will be delivered on a Free on Board (FOB) basis, where the destination port is selected by PGNiG. Futures contracts are complemented by spot purchases, including under FOB contracts.

To increase its LNG market involvement, PGNiG is developing its own fleet of LNGCs. By the end of this year, the company will have three 160,000 cu m vessels, of which, two will be available by mid-year, and the third in the second half of 2022.

In addition, PGNiG has signed long-term charter contracts for eight LNGCs to be built specifically for the company. The first will enter service in 2023. ■

NEWS NUDGE

Ships - Newbuildings

There is no let up in the number of newbuildings reported with NYK leading the way.

For example, at the end of last month, through a subsidiary, NYK concluded a long-term timecharter contract with CNOOC Gas and Power Singapore Trading & Marketing for six LNGCs.

As a result, orders for six vessels were placed with Hudong-Zhonghua Shipbuilding (Group) Co Ltd.

They are scheduled to be delivered between 2026 and 2027 and will be mainly engaged in

LNG shipments to China.

NYK has also signed a project head of agreement (HoA) with a subsidiary of China Merchants Energy Shipping (CMES) to jointly own and manage the vessels.

The 174,000 cu m LNGCs will be fitted with X-DF2.1 iCER, dual-fuel engines that can operate on fuel oil or boil-off gas stored in the cargo tanks.

In addition, France LNG Shipping, an NYK affiliate, has signed a long-term charter contract for an LNGC with EDF LNG Shipping, resulting in another newbuilding.

This newbuilding, thought to have cost the equivalent of \$223 mill, is scheduled for delivery in 2025 from Hyundai Samho Heavy

Industries. She will be the fourth vessel to be long-term timechartered to the EDF Group.

She will be powered by a WinGD X-DF, dual-fuel slow-speed diesel engine and will also feature an Air Liquide-manufactured Turbo-Brayton refrigeration system that can tap surplus boil-off gas.

Designed by GTT, the 174,000-cu m capacity membrane-type tank will be made of advanced insulating materials to reduce the vaporisation rate.

Meanwhile, CNOOC has awarded Yuan16 bill contracts to build 12 LNGCs, the company said last week on its website.

The 174,000 cu m vessels will be built by Hudong Zhonghua

Shipbuilding and they are due for delivery between 2024 and 2027.

It was not clear whether the NYK orders were included in the total.

Brokers said that MOL had declared options for another two 174,000 cu m LNGCs at Daewoo for the equivalent of \$213 mill each, while Knutsen was said to have ordered another 170,000 cu m LNGC for delivery in 2025 at Hyundai Samho for \$224.5 mill under a long term timecharter with Engie.

GTT has also announced that it has received an order from Hudong Zhonghua for the tank design of the first four MOL LNGCs for the Qatargas project. ■



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GTT receives AiP for ballast-free LNG bunker/feeder concept

GTT has been awarded an approval in principle (AiP) from Bureau Veritas (BV) for its 'Shear-Water' concept, a ballast-free LNG bunker and feeder vessel (LNGB&FV).

A considerable quantity of ballast water is carried by ships every day. Even when ballast water is treated, there is a risk of transferring harmful aquatic organisms and pathogens from one area to another.

The solution developed by GTT is claimed to be able to eliminate

this risk completely. In addition, removing the ballast water treatment system (BWTS) also reduces vessels' energy consumption and CO2 footprint.

GTT's 'Shear-Water' concept is based on a proven vessel design of 18,700 cu m capacity with two membrane tanks. The design also

features a new 'V' form hull shape, which differs from the standard square shaped mid-ship sections traditionally used for LNGCs.

An exhaustive testing regime was carried out at the HSVA Hamburg tank test facility in connection with power/speed, manoeuvrability and seakeeping. Sloshing tests were also undertaken by GTT to ensure the technical feasibility of the project with excellent results obtained, which helped to approve the concept, the company said.

Philippe Berterottière, GTT Chairman and CEO, said: "We are proud to have developed 'Shear-Water', an innovative ballast-free design for LNG bunker and feeder vessels. This new technological solution allows a reduction in invest-

ment and operating costs, simpler operations as well as a reduction in corrosion supporting a longer service life. Obtaining this approval by Bureau Veritas constitutes recognition of the ecological relevance and performance of our technological solution."

Mathieu De Tugny, BV Vice President, said: "Bureau Veritas has given approval in principle to this new design, which has clear performance and environmental benefits: delimitation of the need for ballast water treatment systems and equipment; easier maintenance of the void spaces surrounding the cargo, and reduced propulsion power requirements. Bureau Veritas has monitored and reviewed all the test results performed to support its approval in principle."



An impression of GTT's LNGBV/feeder concept

NEWS NUDGE

Sempra advances Cameron LNG 2

Sempra Infrastructure is working to expand its North American network through the development of its LNG portfolio positioned to serve customers in both the Pacific and Atlantic markets.

The company said in its first quarter results roundup that it is also continuing to support

growing integration of North American energy markets through its US/Mexico cross-border infrastructure business.

During the first quarter of this year, Sempra took steps to advance the development of its Cameron LNG Phase 2 expansion project with its partners at the Cameron LNG joint venture.

The steps included a non-binding Heads of Agreement (HoA), which provided the commercial framework for the expansion of the facility by adding a fourth LNG train and also increasing the

production capacity of the existing three trains through debottlenecking activities.

Furthermore, the company and Cameron LNG entered into a project development agreement, which provides for the management and funding of the ongoing development work that is necessary to prepare for a final investment decision (FID).

Cameron LNG is also conducting a competitive front-end engineering design (FEED) process. This development work is targeted to be completed in the

summer of 2023 and the company expects to be in a position to make a FID thereafter.

In addition, Sempra said that it expected to close the sale of a non-controlling 10% interest in Sempra Infrastructure Partners to a subsidiary of Abu Dhabi Investment Authority (ADIA) for \$1.785 bill in cash in 2Q22, subject to customary closing adjustments and conditions.

Upon closing, Sempra will own a 70% controlling interest in Sempra Infrastructure Partners.

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$210.55 mill
Five years old (174,000 cu m)	\$106.13 mill
Total Fleet (543 ships)	\$66.12 bill
Orderbook (203 ships)	\$44.67 bill

*Source: VesselsValue (25/04/22)

*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	+\$7,000
West of Suez	\$55,000	+\$2,500
12 mos T/C	\$108,000	+\$1,000

*Since last report (28/04/22)

Source: Fearnleys (11/05/22)

WORLD LNG CARRIER ORDERBOOK

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Minerva Amorgos	Minerva Marine	Samsung	1/1/2019	174,000	XDF	Q4, 2022
Clean Cajun	Dynagas	Hyundai Heavy	5/22/2019	200,000	XDF	Q2, 2022
Clean Copano	Dynagas	Hyundai Heavy	5/22/2019	200,000	XDF	Q3, 2022
Orion Star	JP Morgan	Samsung	6/1/2019	174,000	XDF	Q2, 2022
Orion Sun	JP Morgan	Samsung	6/1/2019	174,000	XDF	Q2, 2022
Prism Diversity	SK Shipping	Hyundai Heavy	6/29/2019	180,000	XDF	Q3, 2022
Asterix I	Capital Gas	Hyundai Heavy	8/1/2019	174,000	XDF	Q1, 2023
Hudong-zhonghua H1829a	CSSC	Hudong-Zhonghua	8/1/2019	174,000	XDF	Q1, 2024
Hudong-zhonghua H1830a	CSSC	Hudong-Zhonghua	8/1/2019	174,000	XDF	Q2, 2024
Alexey Kosygin	Smart LNG	Zvezda SSK	9/1/2019	172,600	TFDE - Azipod	Q1, 2023
Pyotr Stolypin	Smart LNG	Zvezda SSK	9/1/2019	172,600	TFDE - Azipod	Q3, 2023
Sergei Witte	Smart LNG	Zvezda SSK	9/1/2019	172,600	TFDE - Azipod	Q4, 2023
Zvezda 044	Smart LNG	Zvezda SSK	9/1/2019	172,600	TFDE - Azipod	Q4, 2023
Zvezda 045	Smart LNG	Zvezda SSK	9/1/2019	172,600	TFDE - Azipod	Q4, 2023
Bw Cassia	BWGas	DSME	10/1/2019	174,000	MEGI	Q3, 2022
Bw Iris	BWGas	DSME	10/1/2019	174,000	MEGI	Q3, 2022
Samsung 2364	MISC	Samsung	10/10/2019	174,000	XDF	Q1, 2023
Samsung 2365	MISC	Samsung	10/10/2019	174,000	XDF	Q1, 2023
Vivit Arabia Lng	H-Line	Hyundai Samho	12/1/2019	174,000	XDF	Q2, 2022
Alicante Knutsen	Knutsen	Hyundai Samho	12/18/2019	174,000	XDF	Q4, 2022
Huelva Knutsen	Knutsen	Hyundai Samho	12/18/2019	174,000	XDF	Q4, 2022
Malaga Knutsen	Knutsen	Hyundai Samho	12/18/2019	174,000	XDF	Q3, 2022
Santander Knutsen	Knutsen	Hyundai Samho	12/18/2019	174,000	XDF	Q2, 2022
Sm Albatross	Korea Line	Hyundai Heavy	12/18/2019	174,000	XDF	Q3, 2022
Sm Bluebird	Korea Line	Hyundai Heavy	12/18/2019	174,000	XDF	Q4, 2022
Lng Prosperity	JP Morgan	Hyundai Heavy	12/19/2019	174,000	XDF	Q4, 2022
Orion Song	JP Morgan	Hyundai Heavy	12/19/2019	174,000	XDF	Q4, 2022
Grace Freesia	NYK	Hyundai Samho	12/27/2019	173,000	XDF	Q2, 2022
Lagenda Serenity	K-Line	Hudong-Zhonghua	1/1/2020	79,960	XDF	Q2, 2022
Lagenda Suria	K-Line	Hudong-Zhonghua	1/1/2020	79,960	XDF	Q2, 2022
Hudong-zhonghua H1831a	ULT	Hudong-Zhonghua	6/30/2020	174,000	XDF	Q3, 2022
Hudong-zhonghua H1832a	ULT	Hudong-Zhonghua	6/30/2020	174,000	XDF	Q1, 2023
Hudong-zhonghua H1833a	ULT	Hudong-Zhonghua	6/30/2020	174,000	XDF	Q2, 2023
Lng Harmony	JP Morgan	Hyundai Heavy	7/20/2020	174,000	XDF	Q3, 2023
Orion Sage	JP Morgan	Hyundai Heavy	7/20/2020	174,000	XDF	Q3, 2023
El Ferrol Knutsen	Knutsen	Hyundai Samho	7/30/2020	174,000	XDF	Q4, 2022
Extremadura Knutsen	Knutsen	Hyundai Samho	7/30/2020	174,000	XDF	Q1, 2023
Daewoo 2514	Sovcomflot	DSME	8/1/2020	172,500	TFDE - Azipod	Q1, 2023
Daewoo 2515	Sovcomflot	DSME	8/1/2020	172,500	TFDE - Azipod	Q2, 2023
Daewoo 2516	Sovcomflot	DSME	8/1/2020	172,500	TFDE - Azipod	Q3, 2023
Daewoo 2517	MOL, COSCO	DSME	8/1/2020	172,500	TFDE - Azipod	Q3, 2023
Daewoo 2518	MOL, COSCO	DSME	8/1/2020	172,500	TFDE - Azipod	Q4, 2023
Daewoo 2519	MOL, COSCO	DSME	8/1/2020	172,500	TFDE - Azipod	Q4, 2023
Zvezda 046	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q3, 2024
Zvezda 047	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q3, 2024
Zvezda 048	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2024
Zvezda 049	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2024
Zvezda 050	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2024

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Zvezda 051	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q3, 2025
Zvezda 052	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q3, 2025
Zvezda 053	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2025
Zvezda 054	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2025
Zvezda 055	Smart LNG	Zvezda SSK	8/1/2020	172,600	TFDE - Azipod	Q4, 2025
Sm Golden Eagle	Korea Line	Hyundai Heavy	8/12/2020	174,000	XDF	Q3, 2023
Sm Kestrel	Korea Line	Hyundai Heavy	8/12/2020	174,000	XDF	Q4, 2023
Grazyna Gesicka	Knutsen	Hyundai Heavy	10/30/2020	174,000	XDF	Q2, 2023
Lech Kaczynski	Knutsen	Hyundai Heavy	10/30/2020	174,000	XDF	Q1, 2023
Samsung 2425	Maran Gas Maritime	Samsung	11/1/2020	174,000	XDF	Q3, 2023
Hyundai Samho 8100	Knutsen	Hyundai Samho	12/14/2020	174,000	XDF	Q3, 2024
Orion Sky	JP Morgan	Hyundai Heavy	12/14/2020	174,000	XDF	Q4, 2024
Hyundai Ulsan 3221	Pan Ocean	Hyundai Heavy	12/15/2020	174,000	XDF	Q3, 2024
Hyundai Ulsan 3222	Pan Ocean	Hyundai Heavy	12/15/2020	174,000	XDF	Q4, 2024
Samsung 2426	Pan Ocean	Samsung	1/1/2021	174,000	XDF	Q2, 2023
Jules Verne	Sovcomflot	Hyundai Samho	1/8/2021	174,000	XDF	Q2, 2023
Hudong-zhonghua H1837a	Shenzhen Gas	Hudong-Zhonghua	3/21/2021	79,960	XDF	Q1, 2023
Hyundai Ulsan 3294	Hyundai LNG Shipping	Hyundai Heavy	4/15/2021	174,000	XDF	Q1, 2024
Hyundai Ulsan 3295	Hyundai LNG Shipping	Hyundai Heavy	4/29/2021	174,000	XDF	Q2, 2024
Hyundai Ulsan 3296	Hyundai LNG Shipping	Hyundai Heavy	4/29/2021	174,000	XDF	Q3, 2024
Hyundai Samho 8139	Knutsen	Hyundai Samho	4/30/2021	174,000	XDF	Q4, 2023
Jiangnan H2637	Jovo Energy	Jiangnan	5/1/2021	79,800	XDF	Q4, 2023
Samsung 2473	Maran Gas Maritime	Samsung	5/1/2021	174,000	XDF	Q3, 2024
Samsung 2474	Maran Gas Maritime	Samsung	5/1/2021	174,000	XDF	Q3, 2024
Daewoo 2521	Hyundai LNG Shipping	DSME	5/28/2021	174,000	MEGI	Q3, 2023
Hyundai Ulsan 3290	Dynagas	Hyundai Heavy	5/31/2021	200,000	ME-GA	Q4, 2023
Hyundai Ulsan 3291	Dynagas	Hyundai Heavy	5/31/2021	200,000	ME-GA	Q4, 2023
Hyundai Ulsan 3292	Dynagas	Hyundai Heavy	5/31/2021	200,000	ME-GA	Q1, 2024
Hyundai Ulsan 3293	Dynagas	Hyundai Heavy	5/31/2021	200,000	ME-GA	Q3, 2023
Daewoo 2520	MOL	DSME	6/1/2021	174,000	MEGI	Q4, 2023
Amore Mio I	Capital Gas	Hyundai Heavy	6/18/2021	174,000	ME-GA	Q4, 2023
Axios II	Capital Gas	Hyundai Heavy	6/18/2021	174,000	ME-GA	Q4, 2023
Alexandre Dumas	Sovcomflot	Hyundai Samho	7/1/2021	170,520	XDF	Q1, 2024
Hyundai Samho 8147	H-Line	Hyundai Samho	7/1/2021	174,000	XDF	Q3, 2023
Samsung 2459	Celsius Shipping	Samsung	7/1/2021	180,000	ME-GA	Q2, 2023
Samsung 2460	Celsius Shipping	Samsung	7/1/2021	180,000	ME-GA	Q3, 2023
Samsung 2461	Celsius Shipping	Samsung	7/1/2021	180,000	ME-GA	Q4, 2023
Victor Hugo	Sovcomflot	Hyundai Samho	7/1/2021	170,520	XDF	Q3, 2024
Hyundai Samho 8101	Knutsen	Hyundai Samho	7/13/2021	174,000	XDF	Q4, 2023
Hyundai Samho 8102	Knutsen	Hyundai Samho	7/13/2021	174,000	ME-GA	Q3, 2025
Hyundai Ulsan 3320	JP Morgan	Hyundai Heavy	7/13/2021	174,000	ME-GA	Q3, 2025
Hyundai Ulsan 3321	JP Morgan	Hyundai Heavy	7/13/2021	174,000	ME-GA	Q3, 2025
Hyundai Ulsan 3224	Pan Ocean	Hyundai Heavy	7/14/2021	174,000	ME-GA	Q4, 2024
Hyundai Ulsan 3225	Pan Ocean	Hyundai Heavy	7/14/2021	174,000	ME-GA	Q4, 2024
Daewoo 2522	Hyundai LNG Shipping	DSME	7/15/2021	174,000	MEGI	Q2, 2024
Hyundai Samho 8148	Knutsen	Hyundai Samho	7/22/2021	174,000	XDF	Q1, 2024
Hyundai Samho 8149	Knutsen	Hyundai Samho	7/22/2021	174,000	ME-GA	Q1, 2024
Hyundai Ulsan 3297	Hyundai LNG Shipping	Hyundai Heavy	7/22/2021	174,000	XDF	Q2, 2024
Hyundai Ulsan 3298	Hyundai LNG Shipping	Hyundai Heavy	7/22/2021	174,000	XDF	Q4, 2024
Hyundai Ulsan 3299	Hyundai LNG Shipping	Hyundai Heavy	7/22/2021	174,000	XDF	Q1, 2025

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Samsung 2579	Celsius Shipping	Samsung	7/26/2021	180,000	ME-GA	Q1, 2024
Samsung 2584	Celsius Shipping	Samsung	8/1/2021	180,000	ME-GA	Q3, 2024
Samsung 2585	Celsius Shipping	Samsung	8/1/2021	180,000	ME-GA	Q3, 2024
Hudong-zhonghua H1838a	K-Line	Hudong-Zhonghua	9/1/2021	79,960	XDF	Q3, 2023
Hyundai Samho 8140	Capital Gas	Hyundai Samho	9/1/2021	174,000	ME-GA	Q3, 2024
Daewoo 2523	MOL	DSME	9/14/2021	174,000	ME-GA	Q1, 2024
Daewoo 2524	MOL	DSME	9/14/2021	174,000	ME-GA	Q2, 2024
Daewoo 2525	MOL	DSME	9/14/2021	174,000	ME-GA	Q3, 2024
Daewoo 2526	MOL	DSME	9/14/2021	174,000	ME-GA	Q4, 2024
Daewoo 2527	MOL	DSME	10/1/2021	174,000	ME-GA	Q3, 2024
Hudong-Zhonghua QP #1	Qatar Petroleum	Hudong-Zhonghua	10/1/2021	175,000	XDF	Q3, 2024
Hudong-Zhonghua QP #2	Qatar Petroleum	Hudong-Zhonghua	10/1/2021	175,000	XDF	Q1, 2024
Hudong-Zhonghua QP #3	Qatar Petroleum	Hudong-Zhonghua	10/1/2021	175,000	XDF	Q4, 2024
Hudong-Zhonghua QP #4	Qatar Petroleum	Hudong-Zhonghua	10/1/2021	175,000	XDF	Q1, 2025
MOL 23	MOL	DSME	10/1/2021	174,000	ME-GA	Q3, 2023
MOL 25	MOL	DSME	10/1/2021	174,000	ME-GA	Q3, 2025
MOL 26	MOL	DSME	10/1/2021	174,000	ME-GA	Q3, 2026
Samsung 2580	NYK	Samsung	10/1/2021	174,000	XDF	Q3, 2023
Samsung 2581	NYK	Samsung	10/1/2021	174,000	XDF	Q4, 2023
Samsung 2582	NYK	Samsung	10/1/2021	174,000	XDF	Q4, 2023
Samsung 2583	NYK	Samsung	10/1/2021	174,000	XDF	Q1, 2024
Samsung 2592	JP Morgan	Samsung	10/1/2021	174,000		Q2, 2024
Samsung 2593	JP Morgan	Samsung	10/1/2021	174,000		Q3, 2024
Samsung 2594	JP Morgan	Samsung	10/1/2021	174,000		Q4, 2024
Samsung 2595	JP Morgan	Samsung	10/1/2021	174,000		Q1, 2025
Hyundai Ulsan 3341	Capital Gas	Hyundai Heavy	11/4/2021	174,000	ME-GA	Q2, 2024
Hyundai Ulsan 3342	Capital Gas	Hyundai Heavy	11/4/2021	174,000	ME-GA	Q2, 2024
Qatar DSME 1/4	Qatar Petroleum	DSME	11/7/2021	174,000	MEGI	Q1, 2025
Qatar DSME 2/4	Qatar Petroleum	DSME	11/7/2021	174,000	MEGI	Q3, 2025
Qatar DSME 3/4	Qatar Petroleum	DSME	11/7/2021	174,000	MEGI	Q2, 2025
Qatar DSME 4/4	Qatar Petroleum	DSME	11/7/2021	174,000	MEGI	Q4, 2025
Qatar SHI 1/2	Qatar Petroleum	Samsung	11/7/2021	174,000	ME-GA	Q1, 2025
Qatar SHI 2/2	Qatar Petroleum	Samsung	11/7/2021	174,000	ME-GA	Q1, 2025
Daewoo 2528	Maran Gas Maritime	DSME	11/10/2021	174,000	MEGI	Q3, 2024
Daewoo 2529	Maran Gas Maritime	DSME	11/10/2021	174,000	MEGI	Q4, 2024
Daewoo 2530	BWGas	DSME	11/25/2021	174,000	MEGI	Q1, 2025
Daewoo 2531	BWGas	DSME	11/25/2021	174,000	MEGI	Q2, 2025
Qatar HHI 1	Qatar Petroleum	Hyundai Heavy	11/29/2021	174,000		Q1, 2025
Qatar HHI 2	Qatar Petroleum	Hyundai Heavy	11/29/2021	174,000		Q1, 2025
Qatar HHI 3	Qatar Petroleum	Hyundai Heavy	11/29/2021	174,000		Q2, 2025
Qatar HHI 4	Qatar Petroleum	Hyundai Heavy	11/29/2021	174,000		Q3, 2025
Samsung 2600	JP Morgan	Samsung	12/1/2021	174,000		Q3, 2024
Samsung 2601	JP Morgan	Samsung	12/1/2021	174,000		Q1, 2025
Samsung 2598	Celsius Shipping	Samsung	12/7/2021	180,000	ME-GA	Q1, 2025
Samsung 2599	Celsius Shipping	Samsung	12/7/2021	180,000	ME-GA	Q2, 2025
Hudong-zhonghua H1834a	ULT	Hudong-Zhonghua	12/8/2021	174,000	XDF	Q3, 2024
Hudong-zhonghua H1835a	ULT	Hudong-Zhonghua	12/8/2021	174,000	XDF	Q4, 2024
Hudong-zhonghua H1836a	ULT	Hudong-Zhonghua	12/8/2021	174,000	XDF	Q1, 2025
Samsung 2604	NYK	Samsung	12/27/2021	174,000	XDF	Q4, 2024
Daewoo 2532	GasLog	DSME	1/1/2022	174,000	MEGI	Q2, 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 = Data last updated = 12th April 2022

Name	Owners	Yard	Ordered	Capacity	Propulsion	Delivery
Daewoo 2533	GasLog	DSME	1/1/2022	174,000	MEGI	Q3, 2024
Daewoo 2534	GasLog	DSME	1/1/2022	174,000	MEGI	Q2, 2025
Daewoo 2535	GasLog	DSME	1/1/2022	174,000	MEGI	Q3, 2025
NYK 2	NYK	Hyundai Samho	1/1/2022	174,000	XDF	Q1, 2025
Qatar SHI 3	Qatar Petroleum	Samsung	1/1/2022	174,000	ME-GA	Q1, 2025
Qatar SHI 4	Qatar Petroleum	Samsung	1/1/2022	174,000	ME-GA	Q2, 2025
Hyundai Samho 8173	SK Shipping	Hyundai Samho	1/4/2022	174,000	ME-GA	Q3, 2024
Daewoo 2537	Maran Gas Maritime	DSME	1/6/2022	174,000	MEGI	Q3, 2025
Daewoo 2538	Maran Gas Maritime	DSME	1/6/2022	174,000	MEGI	Q4, 2025
Hudong-zhonghua H1880a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q4, 2024
Hudong-zhonghua H1881a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q3, 2025
Hudong-zhonghua H1882a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q4, 2025
Hudong-zhonghua H1883a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q1, 2026
Hudong-zhonghua H1884a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q2, 2026
Hudong-zhonghua H1885a	MOL	Hudong-Zhonghua	1/7/2022	174,000	XDF	Q3, 2026
Samho Jan		Hyundai Samho	1/10/2022	174,000	ME-GA	Q1, 2025
Daewoo	MOL	DSME	1/17/2022	174,000	ME-GA	Q4, 2024
Daewoo 2539	Maran Gas Maritime	DSME	2/7/2022	174,000	MEGI	Q4, 2025
Daewoo 2540	Maran Gas Maritime	DSME	2/7/2022	174,000	MEGI	Q4, 2025
Bono Samho 1	Bono Energy	Hyundai Samho	2/10/2022	174,000	ME-GA	Q1, 2025
Bono Samho 2	Bono Energy	Hyundai Samho	2/10/2022	174,000	ME-GA	Q1, 2025
Qatar DSME 5	Qatar Petroleum	DSME	2/15/2022	174,000	MEGI	Q2, 2025
Qatar HHI 5	Qatar Petroleum	Hyundai Heavy	2/15/2022	174,000		Q3, 2025
Qatar HHI 6	Qatar Petroleum	Hyundai Heavy	2/15/2022	174,000		Q4, 2025
Qatar SHI 5	Qatar Petroleum	Samsung	2/15/2022	174,000	ME-GA	Q2, 2025
HL 1	H-Line	Samsung	2/16/2022	174,000		Q1, 2025
HL 2	H-Line	Samsung	2/16/2022	174,000		Q2, 2025
HL 3	H-Line	Samsung	2/16/2022	174,000		Q3, 2025
HL 4	H-Line	Samsung	2/16/2022	174,000		Q3, 2025
Glovis Samho	Hyundai Glovis	Hyundai Samho	2/21/2022	174,000		Q4, 2024
Samsung 1		Samsung	2/24/2022	174,000		Q2, 2025
Samsung 2		Samsung	2/24/2022	174,000		Q2, 2025
Samsung 3		Samsung	2/24/2022	174,000		Q3, 2025
Samsung 4		Samsung	2/24/2022	174,000		Q3, 2025
Jiangnan ADNOC 1	ADNOC	Jiangnan	3/1/2022	175,000	XDF	Q1, 2025
Jiangnan ADNOC 2	ADNOC	Jiangnan	3/1/2022	175,000	XDF	Q2, 2025
HHI 1	Dynagas	Hyundai Heavy	3/3/2022	200,000	ME-GA	Q1, 2025
HHI 2	Dynagas	Hyundai Heavy	3/3/2022	200,000	ME-GA	Q2, 2025
HHI 3	Dynagas	Hyundai Heavy	3/3/2022	200,000	ME-GA	Q4, 2025
BW DSME 3	BWGas	DSME	3/18/2022	174,000	MEGI	Q4, 2025
BW DSME 4	BWGas	DSME	3/18/2022	174,000	MEGI	Q4, 2025
VG DSME 1	Venture Global LNG	DSME	3/24/2022	200,000		Q3, 2025
VG DSME 2	Venture Global LNG	DSME	3/24/2022	200,000		Q4, 2025
VG DSME 3	Venture Global LNG	DSME	3/24/2022	200,000		Q4, 2025
Dalian Merchant 1	China Merchant	Dalian Shipbuilding	3/31/2022	175,000	XDF	Q3, 2025
Dalian Merchant 2	China Merchant	Dalian Shipbuilding	3/31/2022	175,000	XDF	Q2, 2026
Samho 1	Knutzen	Hyundai Samho	3/31/2022	174,000	ME-GA	Q1, 2026
Samho 2	Knutzen	Hyundai Samho	3/31/2022	174,000	ME-GA	Q2, 2025
Samsung Apr	Celsius Shipping	Samsung	3/31/2022	180,000	ME-GA	Q4, 2025

WORLD SMALL SCALE LNG FLEET*

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
1974	Seagas	187	LNG	Sweden	Yes	AGA
1988	Kayoh Maru	1,517	LNG	Japan	Yes	Daiichi
1993	Aman Bintulu	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1996	Surya Aki	19,475	LNG	Indonesia - Japan	Yes	MCGC
1997	Aman Sendai	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1998	Pelita Energy	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Coral Favia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2010	Coral Fraseri	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Vision Spirit	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Unikum Spirit	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

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
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	SM Jeju LNG1	7,500	LNG	Korea	Yes	Korea Line
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Avenir Advantage	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Accolade	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Aspiration	7,500	LNG		Yes	Avenir LNG
2020	Kaguya	3,500	LNG	Japan	Yes	CLS
2020	CNTIC VPOWER Global	28,000	LNG	Myanmar	Yes	Dalian Inteh Group
2020	Ecobunker Tokyo Bay	2,500	LMG	Japan	Yes	Ecobunkers
2020	Optimus	6,000	LNG	NWE	Yes	Elenger
2020	FueLNG Bellina	7,500	LNG	Singapore	Yes	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	Xin Ao Pu Tuo Hao	8,500	LNG	China	Yes	ENN
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	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	Knutsen TBN	12,500	LNG	Spain	Yes	Knutsen OAS
2023	SM Jeju LNG3	7,500	LNG	Korea	Yes	Korea Line
2023	Pan Ocean TBN	18,000	LNG	USG	Yes	Pan Ocean Co
2023	Krios	4,200	LNG	Benelux	Yes	Titan LNG
2023	Fratelli Cosulich TBN	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	PNE TBN	5,500	LNG	USG	Yes	PNE
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	TBN	30,000	LNG	Australia	Yes	Anthony Veder ?
2024	Crowley TBN	12,000	LNG	US Coast	Yes	Crowley Maritime
2024	CNOOC TBN	12,000	LNG	China	Yes	CNOOC
2024	TBN	12,500	LNG	Worldwide	Yes	???
2024	Keys TBN	3,500	LNG	Japan	Yes	Keys Bunkering West Japan Co
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG