

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

26 April 2018

Low LNG spot market to last until 2022

After two decades as a sellers' market, the tide turned for LNG markets over the past three years precipitating significant ramifications for spot and contract pricing, according to a new report.

In the first of a three-part report, S&P Global Ratings looked at the key developments in the LNG market.

In a nutshell, this market is in the midst of increasing volatility and downside risks for spot LNG prices, which is expected to last until at least 2022, as pipeline gas and LNG deliveries compete for volumes. The trough years will likely be 2019-2020, S&P said.

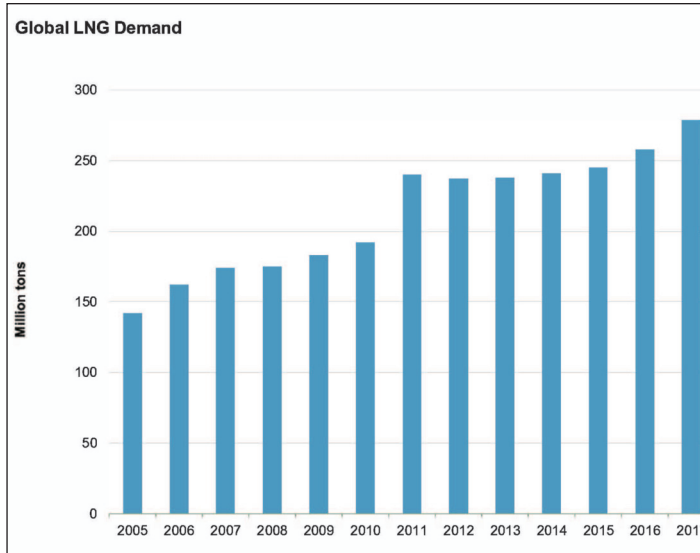
In an overview of the report, S&P said that it expected the low LNG spot market environment to last until at least through 2021. In addition, companies marketing margins will likely come under pressure.

From a positive perspective, increased Chinese demand could aid spot LNG pricing, but conversely Russian pipeline supplies could dampen it.

If global demand grows as anticipated, there is a need for new project FIDs now, however, sellers would be negotiating FIDs in a historically weak sellers market, giving the buyers leverage.

Offtaker risk could rise. S&P said that it expected significantly lower spot prices to result in increased pressure from buyers, especially Asian players, to renegotiate out-of-the-money (above market) long term oil-linked LNG contracts.

Following Qatar's July 2017 announcement that it will add 23 mill tonnes per year of LNG capacity, the report said that many companies are expected



Source: S&P Platt's, IHS Markit, and IGU world LNG report.

Note: The demand in 2011 is distorted because of the Fukushima disaster. Volumes for 2017 are estimates.

to revise, defer or abandon their planned FIDs. Also any future meaningful supply scarcity would recede.

Although S&P assumed that LNG demand will remain strong, growing at 6%-7.5% annually between 2017 and 2020, the report predicted more LNG output coming to the market than is needed globally.

The LNG industry is currently two years into a four-year expansion phase, with about 20 mill tonnes per year of capacity still to come through 2019.

Chinese demand

Strong Chinese demand will continue in the long term, however, roughly half of the global LNG growth that absorbed the 2017

excess supply came from temporary factors in Europe and South Korea.

As a result, gas consumption remained range-bound, despite wide fluctuations in spot LNG prices. Similarly, the strength witnessed in European demand last year was driven by switching away from coal-fired power generation but is unlikely to last into this year.

Well supplied spot market conditions will last at least through the next three to four years, resulting in a highly competitive environment for liquefaction capacities with increasing risk of under-utilisation of high short-run marginal costs facilities.

S&P finally posed the question, where will this surplus go? ■

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Steady LNG market sees flows pick up

Spot LNG rates for May delivery cargoes held steady during the four weeks from mid-March to mid-April.

According to a report compiled by ICIS, markets were comfortably supplied following the end of the east Asian winter and with no major unexpected outages, although there was planned work in Australia, and Papua New Guinea's LNG plant remained out of action.

Australia's 9 mill tonnes per annum APLNG plant held planned shutdowns of its two trains during March and April, but this was partially compensated by higher run-rates at the neighbouring 7.8 mill tonnes per annum GLNG plant, as

the APLNG outage freed up gas supplies.

The 8.6 mill tonnes per annum Papua New Guinea plant, shut after the earthquake on 26th February, saw one of its two trains return to service at the very end of the period, announced by ExxonMobil on 12th April.

On the demand side there were some delays to expected nuclear power plant restarts in east Asia, primarily in Japan.

In South America, Argentina's ENARSA issued four tenders, first

calling for nine cargoes during April/June, then 22 during June/August, another seven for May/June, followed by 18 for July/August. Mexico's CFE has also been active in the tender market, including a call for seven cargoes into its Pacific coast Manzanillo terminal, ICIS reported.

The UK saw its first shipment from the new US Cove Point facility, on board the 138,000 cu m 'Gemmata', at Dragon on 21st March. The same terminal took in the UK's second US Sabine Pass cargo with the 152,000 cu m 'British Ruby' on 5th April and the country's first Egyptian cargo since 2012 with the 162,000 cu m 'Maran Gas Apollonia' on 9th April. Norway, Trinidad and Qatar have also been supplying LNG to the UK.

Floating units

Looking forward, the market is waiting for new floating production units to enter the market. For example, the 141,000 cu m 'Galicia Spirit' is in position to pick up the first cargo from the now-in-

production Kribi LNG project offshore Cameroon.

The 134,000 cu m 'Gallina' has sailed from Peru to northwest Australia with a cargo possibly intended to help commission Shell's giant 'Prelude' FLNG. The second 4.5 mill tonnes per annum train at Australia's onshore Wheatstone facility is also due to enter service this summer, while the country's floating Ichthys project could begin this summer or later in the year.

Following the delivery of its first cargo to the UK, Dominion declared the US Cove Point facility in commercial operation in early April. India's GAIL, which recently received its first long-term contract cargo from the US Sabine Pass facility on the 166,000 cu m 'Meridian Spirit' to Dabhol on 29th March, has swapped a string of cargoes from Cove Point with trading company Gunvor.

The market will be watching to see where this additional supply from the US finds a home, ICIS said. ■



A cargo was thought to be heading for the FLNG 'Prelude' as part of its commissioning process

LNGC allegedly falls foul of NSR safety rules

Dynagas' Arc7, 'Boris Vilkitsky' has reportedly violated a number of safety rules by entering the Northern Sea Route (NSR) with deficiencies.

The vessel has been accused of entering the NSR while en route to Sabetta with inoperative stern thrusters and port steering column, the country's Northern Sea Route Administration (NSRA) reportedly said.

Due to the malfunction, the vessel no longer had the minimum thrust requirements as ruled by the Russian Maritime Register (RS) to be classed as an Arc7.

With the reduced engine power, it only met the requirements for an Ice Class Arc4, which is prohibited from navigating alone or under the guidance of an icebreaker in the

Kara Sea in medium or heavy ice conditions.

A report by class society Bureau Veritas showed that the ship suffered the malfunction on or before 30th March. At the time the vessel was sailing to Sabetta from Rotterdam, VesselsValue data indicated.

After arriving at Sabetta, the tanker loaded an LNG shipment and in mid-April continued her

voyage towards Montoir, where it is scheduled to arrive in early May.

The vessel was thought to be anchored off Sabetta.

The LNGC also allegedly violated Rule 19 of the Rules of Navigation, as her Master failed to notify the NSRA of the time, co-ordinates, track, and speed of the vessel when entering the NSR, it was claimed. ■

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Record year for Chinese imports

Chinese imports look set to break another record this year, due to strong government policy support.

LNG imports hit a record 5.18 mill tonnes in January of this year, 51% higher than the total during the corresponding month of 2017, according to official data, analysed by Poten & Partners. Data for February showed imports at 3.99 mill tonnes.

Based on this demand, Chinese LNG demand from November, 2017 through February, 2018 increased by 50% to 18.26 mill tonnes, according to analysis by Poten & Partners.

The strategy of switching from coal to gas introduced last year will continue to be enforced throughout North China during 2018 and more conversions could be undertaken, especially in Hebei province, which saw gas demand rise to 8 Bcm, some 25% higher than initial estimates.

Looking at some of the latest initiatives from Chinese energy companies, PetroChina has signed two long term supply deals amounting to 1.2 mill tonnes per year with Cheniere Marketing (CMI) this year. Under the first contract, CMI will deliver the cargoes primarily in the winter for peak shaving from 2018 through

2043. The second contract is FOB from Corpus Christi Train 3, which will start around 2023.

New terminals

New terminals to be commissioned this year include Sinopec's Tianjin, CNOOC's Shenzhen Diefu, ENN's Zhoushan and Shenzhen Gas' small scale facility, while CNOOC Tianjin could open a 160,000 cu m capacity storage tank this winter.

Sinopec's 3 mill tonnes per year Tianjin terminal received two part cargoes from APLNG in February as part of its commissioning process. It could start accepting full cargoes in 2Q18 when dredging has been completed.

ENN Group hopes to commission the 3 mill tonnes per year Zhoushan terminal in late June. As a result of pipeline plans not coming to fruition thus far, ENN supply contracts will not ramp up until next year. ENN has also signed an agreement with Santos to form a joint venture to trade LNG internationally.

Shenzhen Gas is looking for a partner to supply cargoes and help with the commissioning of the

800,000 tonnes per year terminal, which will be able to handle LNGCs of up to 80,000 cu m.

Shanghai LNG, a joint venture involving CNOOC and provincially owned Shenergy could agree to buy another 500,000 tonnes per year from Petronas, as part of the five year price negotiations for the 3 mill tonnes per year contract tied to MLNG Tiga.

CNOOC might hold a tender this year to secure more supply. It has been talking with Mozambique LNG for its long term supply and has already signed a 'heads of agreement' with ExxonMobil for 700,000 tonnes per year for 17 years starting in 2019.

Provincially-owned Zhejiang Energy has shortlisted up to three suppliers in its 1 mill tonnes per year supply tender for 20 years, possibly starting in 2021, while Hong Kong power utility CLP Group was said to have awarded a supply tender to Shell for 1.2-1.3 mill tonnes per year for 13 years starting in 2020.

Hong Kong's administration wants to phase out coal-fired power generation completely by 2030. ■

Golar advances FLNG project

Golar LNG Limited has entered into a preliminary agreement and exchanged 'Heads of Terms' for a charter agreement with BP Mauritania Investments and BP Senegal Investments in their capacity as block operators.

The HoT represents a commitment between the parties to translate the key commercial terms into a full agreement and proceed with front end engineering design (FEED) to provide an FLNG to support the development of Phase 1A of the Greater Tortue/Ahmeyin field, located offshore Mauritania and Senegal.

This agreement creates obligations on Golar to progress FEED work and be ready for a vessel conversion from 1st July, 2018 onwards; which would be contingent on project FID, expected by the end of this year.

The vessel conversion would take place at Keppel Shipyard building on Keppel's delivery of the FLNG 'Hilli Episeyo', using Black and Veatch Corp's PRICO technology. The preliminary agreement also includes an option for a second FLNG. In the event that FID is not taken, customary termination fees will apply.

Golar CEO, Iain Ross, commented "This agreement with BP underscores the value that Golar's unique FLNG proposition brings to monetising gas reserves to LNG at competitive prices. The FLNG contract shows solid long-term economics on an unleveraged basis. We are looking forward to building on the successful conversion of the 'Hilli Episeyo' for Greater Tortue/Ahmeyin." ■



Golar LNG CEO Iain Ross

GAIL to buy eight cargoes from Gazprom

India's state-owned gas supplier and developer GAIL plans to buy 500,000 tonnes, or eight cargoes of liquefied natural gas (LNG) from Russia's Gazprom in 2018 – 2019.

"The cargoes will start coming from May," CEO Shri Tripathi told Reuters.

GAIL renegotiated the terms of a long-term 2.5 mill tonnes per annum LNG purchase deal with Russia's Gazprom in January.

India has also renegotiated long-term LNG deals with Qatar's RasGas and ExxonMobil, as spot prices declined substantially amid a supply glut that turned trading of the seaborne gas into a buyers' market.

GAIL is also planning to import as much as 5 mill tonnes of LNG from the US, equivalent to about

80 cargoes throughout the fiscal year, Tripathi added.

He said half of the US LNG cargoes could be swapped for shipments from other suppliers, depending on available terms.

"Swapping is a continuous process and we are doing it regularly. We have swapped three so far in this year," he said, although he stressed that GAIL did not expect to swap any of the Gazprom cargoes this year.

The much-delayed Kochi-Managalore natural gas pipeline, which can open up a substantial latent demand in South India, will be

ready by November, he said.

The pipeline will connect Petronet LNG's 5 mill-tonne-per-year regasification terminal at Kochi in southern India to demand centres in and around Mangalore, including a refinery run by Bharat Petroleum Corp and Managalore Refinery and Petrochemicals Ltd and fertiliser plants.

"We are trying to implement a large portion of the gas grid by 2022-2023. The 4,000 km which GAIL is implementing today should be ready by December, 2022," Tripathi said. ■



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Golar's Sergipe project gets finance

Golar Power Limited, a joint venture between Golar LNG Ltd and Stonepeak Infrastructure Partners, has reached financial closing on the 1.5 GW Porto de Sergipe I power project.

Project company CELSE (Centrais Elétricas de Sergipe), which is 50% controlled by Golar Power, will receive \$1.340 bill under a non-recourse project financing structure. The proceeds from the financing will be used to fund remaining capital expenditures, including - the 1.5 GW power plant, a dedicated 34 km 500 KV high-voltage transmission line, and associated gas pipeline and mooring infrastructure required for the integrated LNG import terminal facility.

Total project capex, including taxes and financing costs, is estimated at \$1.740 bill. The total eq-

uity contribution of about \$400 mill has been fully paid-in and includes \$123 mill in cash reserve accounts that were pre-funded by the project sponsors, Golar LNG said.

Golar Power CEO, Eduardo Antonello, commented: "This innovative financing represents a key milestone in the development of Golar Power infrastructure projects globally, establishing a precedent for financing in local currency in support of projects receiving revenues in local currency which are adjusted based on inflation.

"The Project bond issuance has attracted the interest of multiple international investors and opens

a new horizon of opportunities for infrastructure development. With this experience, we believe Golar Power is uniquely positioned to help deliver these opportunities globally to new and underserved customers and geographies.

"With the Sergipe TPP we have developed a fully flexible and highly efficient natural gas fired plant that will enable Brazil to increase its energy security while continuing to expand its development of renewable energy resources, including solar and wind," he said.

Golar Power has also signed final agreements with CELSE to

charter the 'Golar Nanook', a fully customised newbuilding 170,000 cu m FSRU, for 26 years.

Annual EBITDA contribution for Golar Power is currently forecast to be around \$41 mill, with annual escalation indexed to US-CPI, and upside potential for Golar Power through use of the remaining two-thirds of FSRU capacity not used by the project.

The terminal is located in a strategic area to the NNE of Brazil, within 20 km of the main gas distribution network, and has the potential to unlock future LNG distribution opportunities into Brazil, Golar said. ■

Dynagas reduces share distribution

Dynagas LNG Partners has announced that, following a strategic review of its financial profile and distribution policy, the Board has approved the reduction of the quarterly distribution.

This affects the Partnership's common units, whose distribution will be reduced to \$0.25 per common unit from \$0.4225 per common unit, or from \$1.69 per common unit to \$1 per common unit annually.

The reduction will take effect on 3rd May, 2018, upon the payment of the common unit distribution with respect to the first quarter of 2018 to common unitholders of record, as of the close of business on 26th April, 2018.

Tony Lauritzen, Partnership CEO, commented: "This decision by our Board of Directors to reduce the level of the Partnership's

quarterly common unit distribution is necessary to align the Partnership's distribution level with its capacity to generate cash flow in the long term.

"Despite the material increase in the Partnership's estimated revenue contract backlog over the last two years, we have experienced a decrease in operating cash flow and a weakened distribution coverage ratio (which is our distributable cash flow available for distribution in proportion to actual cash distributed), following our shift to longer term charters for the employment of our LNGCs,

which provide us with greater cash flow visibility albeit at lower charter rates that provide attractive returns of capital.

"As the Partnership's shorter duration time charter contracts at peak charter rates have expired or are approaching expiration, we have capitalised on our manager's operational track record and the versatility of the ice class LNGCs in our fleet to secure long term employment contracts. During the last two years, the Partnership has been successful in securing a 10-year contract for the employment of our 2007 built LNGC, 'Ob River', two

15-year contracts for the employment of our 2013 built LNGCs, 'Yenisei River' and 'Lena River', an eight-year contract for the employment of our 2007 built LNGC, 'Clean Energy' and a three-year contract for the employment of our 2013 built LNGC, 'Arctic Aurora'.

"Today our average remaining contract term is 10 years and our estimated contracted revenue backlog is approximately \$1.5 bill, which highlights our ability to secure long-term contracts in periods when the LNG shipping market has been highly competitive," he said. ■

Nakilat records increased profits

Nakilat has announced a net profit of QR217 mill for the first quarter of this year, compared to QR191.4 mill for the same period last year - an increase of 13%.

During 1Q18, Nakilat claimed that it had successfully deployed the company's strategic plans towards maintaining its global leadership in LNG transportation and the integral role it plays in Qatar's LNG supply chain.

The company has managed to achieve positive results across its operations through rationalisation of operational expenses, enhanced operational efficiency, and growth of its international portfolio through the recent expansion with Maran Gas Ventures to include two additional LNGCs.

This most recent move further increased Nakilat's fleet to 69 vessels.



Nakilat now has a fleet of 69 vessels

Nakilat was also the first company in Qatar to be certified for the new ISO 45001:2018 Occupational

Health and Safety Management System (OH&S) standard by Lloyd's Register Quality Assurance. ■

GTT benefits from revenue increases

GTT, the designer of LNG transport and storage membrane containment systems, has announced a 12.4% increase in revenues and a near 15% increase in royalties for the first quarter of 2018.

Revenues totalled €64.2 mill in 1Q18, compared with €57.1 mill in 1Q17, while revenues from royalties went up to €61.5 mill from €53.6 mill in 1Q17.

Much of the royalties are garnered from LNGCs with €54.6 mill coming from ship containment systems, compared to €45.7 mill in 1Q17, a rise of 19.5%, GTT reported.

Orders received in 1Q18 included equipment for 10 LNGCs, one FSRU and a bunker vessel.

Philippe Berterroitière, GTT Chairman and CEO, commented: "The first quarter of 2018 was marked by a sharp increase in orders. We have already booked orders for 10 LNG carriers, 1 FSRU, and the fitting of a bunker vessel. The pace of order bookings is a clear sign of the good performance of the LNG market.

"The liquefaction projects under construction - or lined up for construction - should continue to generate significant demand for additional LNG carriers and FSRUs. We are also highly proactive in LNG fuel, which shows strong potential. From a financial standpoint, the revenues earned during the first three months of the year are in line with our expectations, and we are maintaining our annual objectives," he said.

With 10 LNGC orders and one

FSRU order in 1Q18, GTT's core business recorded a sharp increase compared to 2017. All LNGCs are equipped with GTT's latest technologies (Mark III Flex+, Mark III Flex and NO96 GW).

They are due to be delivered between late 2019 and early 2020.

With the rise in the use of LNG fuel, the shipping industry needs compact cryogenic storage solutions that are easy to install. To meet this requirement, GTT has developed the patented LNG Brick technology, for which it announced the completion of the test phase at the end of March.

LNG Brick is a unit that is ready to be installed into a ship's structure. It is intended for medium-sized commercial vessels with cryogenic tanks whose capacities range between 1,000 and 3,000 cu m. It allows easier management of evaporation for small volumes, thanks to its capacity to maintain higher pressure than conventional membrane containment systems, GTT claimed.

As of 31st March, 2018, the order book comprised 83 units, including 65 LNGCs; 13 FSRUs; two FLNGs; two onshore storage units and one barge.

In the absence of any significant order postponements or cancellations, the company said that its objectives for 2018 were to

consolidated revenues in a range of €235- €250 mill; consolidated EBITDA in a range of €145 - €155 mill; a dividend amount for fiscal year 2018 at least equal to that paid for 2015, 2016 and 2017 and, for fiscal year 2019, a dividend payout ratio of at least 80% of net income available for distribution

***It was later announced that GTT had signed a technical assistance and license agreement (TALA) with Singapore-based Sembcorp Marine for the design and construction of Sembcorp Marine's Gravifloat, FSRU and mid-scale LNGC products, using GTT membrane solutions.

Sembcorp Marine received its approval after successfully completing a qualification process, which started in 2017, including the building of a Mark III mock-up and an audit conducted by GTT.

This new partnership allows both companies to target new markets, especially focusing on solutions for LNG terminals, and to advance the development of LNG in the global fuel supply chain.

"We are pleased to count Sembcorp Marine among our newbuilding partners. We are committed to developing and building together new LNG infrastructures which can be installed worldwide, to provide energy in remote areas," declared Berterroitière.



GTT CEO Philippe Berterroitière

As a GTT-licensed yard operator, Sembcorp Marine is building on the success of two of its shipyards in Singapore already approved for the maintenance of LNGCs equipped with GTT membrane technologies.

"Sembcorp Marine and GTT share the goal of enhancing the worldwide accessibility of clean and affordable LNG fuel," said Wong Weng Sun, President & CEO of Sembcorp Marine. "By combining our respective solutions, we can ensure safer and more reliable LNG delivery, handling and use, and in turn contribute towards more sustainable power generation and consumption. We look forward to an impactful partnership with GTT."

New design LNGC named at Nagasaki

'Diamond Gas Orchid' was officially named recently at the Nagasaki Shipyard of Mitsubishi Heavy Industries.

She is a 165,000 cu m LNGC built to ship US gas for the Cameron LNG project.

The vessel is owned by Diamond LNG Shipping 1 Pte Ltd, a joint venture company between NYK and Mitsubishi Corp that has agreed a long-term timecharter contract with Diamond Gas International Pte Ltd, a wholly owned

subsidiary of Mitsubishi Corp located in Singapore.

The new LNG vessel is a Sa-yarango STaGE type LNGC, which has a continuous steel cover that reduces ship weight and air resistance while increasing LNG-carrying capacity.

Beneath the 'pea pod' cover, are apple-shaped cargo tanks,

whose upper semi-spheres are larger than the lower semi-spheres.

In addition, she is fitted with a hybrid propulsion system named STaGE (steam turbine and gas engines), a reheating steam-type marine turbine, and a dual-fuel diesel engine capable of operating on both gas and fuel oil.

Elsewhere, TMS Cardiff Gas was

believed to have ordered another LNGC at Samsung, while SCF was said to have firmed up an option for 174,000 cu m LNGC at HHI for 2020 delivery.

Recent deliveries include the 174,000 cu m sister LNGCs 'Gaslog Hong Kong' and 'Gaslog Genoa' plus the 177,000 cu m 'LNG Sakura'.

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Ballast-free LNGC project part 2 starts

GTT, Lloyd's Register (LR) and Dalian Shipbuilding Industry Corp (DSIC) have launched the second phase of a 30,000 cu m B-FREE LNGC joint development project (JDP).

A meeting was held recently at LR's Shanghai office to commence Phase II of the project, and to welcome EXMAR as a new partner to the JDP.

The first phase of the project performed by DSIC, GTT and LR developed a new design of ballast-free medium-sized LNGC, fully compliant with the new IMO BWMC, and using membrane containment systems.

It showed the potential for competitive advantages for the shipowners, combining environmentally-friendly features with increased efficiency. It also indicated potentially lower construction and operational costs. The design received an LR Approval in Principle in December, 2017.

Phase II aims to develop the design further, and to validate the initial results achieved during Phase I by applying more detailed analysis and verification, including model testing.

Pierre Dincq, EXMAR's Managing Director of Shipping, said; "The ballast-free concept is a

well-suited solution in the context of a shipping world with growing environmental requirements and concerns. By eliminating the need for ballast water, there is an absolute certainty that no invasive species will be transported on board of the vessel.

"Moreover, the ballast water treatment plant can be omitted, reducing the maintenance requirements and the energy consumption of the vessel, which has a positive impact on the CO2 footprint of the vessel. The combination of the long experience in their respective fields and a strong innovation culture of the several partners in the JDP will ensure this project will become a success," he said.

"After the encouraging results of the first phase, we are looking forward to delving into the details some more in the coming months. It's a pleasure to be working with such experienced and capable partners on an innovative new design," said Chris Hughes, LR China's General

Manager Business Development.

Ma Yingbin, DSIC's Deputy Technical Director, commented: "We have built experience on reduced ballast water oil tanker design such as VLCC, Suezmax and Aframax type vessels in the past and this experience will benefit to this ballast free medium size LNGC development. DSIC will focus on ship arrangement, performance calculation, including hull line optimisation by CFD and ship model test verification, propulsion selection and hull structure basic design. We are confident to end up with a solid design and a competitive offer both in cost and performance."

Lorenz Claes, GTT's naval architect in charge of the project, added: "We are excited to pursue the development of the promising ballast-free design and welcome EXMAR, our long-time partner, in this project. Their involvement clearly demonstrates the interest of the industry in this new type of vessel, both environmentally-friendly and of high economic interest."

NEWS NUDGE

Texas LNG lines up gas buyers

Texas LNG has signed eight non-binding deals with potential LNG buyers in China, southeast Asia and Europe, the company's CEO told newswires.

They include five in China, two in southeast Asia and one in Europe, said Vivek Chandra, CEO of the Houston-based company.

The Texas LNG export facility in Brownsville will have a capacity of up to 4 mill tonnes per year and is being built in two phases of 2 mill tonnes per year each.

The first phase is expected to begin production in 2023.

Ichthys nears start up

Inpex Corp and its partners have purchased an LNG cargo to cool the Ichthys LNG facility ahead of its start-up.

The 182,000 cu m LNGC 'Pacific Breeze' is currently in the Java Sea and expected to reach Darwin on 26th April, according to tracking data.

An Inpex spokesman told Reuters that the vessel was chartered to transport gas with the objective of cooling the onshore Ichthys LNG plant ahead of the project's start-up.

TechnipFMC awarded FEED for Senegal/Mauritania project

BP has awarded TechnipFMC the front-end engineering design (FEED) contract for an FPSO.

The FPSO will be part of the LNG production project planned for offshore Senegal and Mauritania.

Flex LNG charters out new LNGC

Flex LNG has agreed a 12-month timecharter with Enel Trade, part of the Enel Group, for the 2018-built 173,400 cu m MEGI LNGC 'Flex Enterprise'.

Under the terms of the charter-party, the company also has the right to offer up one of its sisterships.

In addition, Enel has the option to extend the contract by an additional 12 months.

CEO Jonathan Cook, commented: "We are pleased to announce a timecharter agreement with Enel for one of our new MEGI vessels and we look forward to working closely with them throughout the charter period. This charter is in line with our strategy of adding incremental revenue as the market for LNG

shipping continues to improve and provides important earnings visibility for the Company."

Broking sources said that the rate agreed was around \$80,000 per day.



Flex LNG has the option to swap the LNGC chartered to Enel

Panama sees ramp up of LNGC transits

The Panama Canal Administration successfully handled three LNGCs through its Neopanamax locks on 17th April, 2018 - a first for the waterway.

The LNGCs 'Clean Ocean', 'Gaslog Gibraltar' and 'Gaslog Hong Kong', arrived at the Canal from the Pacific and transited north, departing into the Atlantic.

This development marks a significant milestone for the Panama Canal and its services to the burgeoning LNG segment - which began transiting the waterway for the first time following the inauguration of the expanded canal. The LNGC segment has seen steady growth in nearly two years.

Currently, the Panama Canal offers one of the seven Neopanamax reservation slots available per day to LNG shippers, which currently average five transits per week. However, during periods of high seasonal demand, the waterway has transited two vessels in one day on 14 separate occasions.

In this fiscal year, as of March, 2018, the canal has handled 134 LNG transits.

Meanwhile, according to a Reuters report, the Panama Canal



LNGC transits of the Panama Canal are likely to grow.
Photo credit- Teekay.

could handle up to five times as much LNG in 2020, compared to last year on the back of increased US production and Asian import rises.

LNG volumes transiting the Canal could hit 30 mill tonnes a year before the end of 2020 up from 6 mill tonnes in 2017, Jorge Quijano, the head Panama Canal Authority, told Reuters.

Shipments are expected to surge over the next few years as

several US LNG projects are under construction. Total US capacity is forecast to reach nearly 70 mill tonnes a year, up from 18 mill tonnes in 2017.

"Right now on average, we're running six (LNG) vessels per week, but in the very near future, you will have several plants exporting and that starts to add up," Quijano said in an interview with Reuters last week.

US LNG exports through the

NEWS NUDGE

S-OIL receives first Malaysian cargo

Petronas subsidiary, Petronas LNG Ltd (PLL), delivered its first LNG cargo to South Korean refining company, S-OIL Corp, on 22nd April, 2018.

This delivery marks the beginning of PLL's supply to S-OIL through a 15-year sale and purchase agreement (SPA). Under the agreement, PLL is committed to deliver up to 0.7 mill tonnes per annum of LNG to the refiner.

The cargo was delivered from PETRONAS LNG Complex in Bintulu, Sarawak, to POSCO Gwangyang Terminal by the LNGC 'Puteri Zamrud Satu'. ■

canal are set to rise to as much as 11 mill tonnes this year and to around 20 mill tonnes in 2019, he reportedly said.

The Canal Authority is already looking ahead and is thinking of adding a fourth set of locks, which would serve even larger ships, Quijano said. ■

New Indian terminals hampered by pipeline woes

India is scheduled to introduce two new import terminals this year. However, throughput will remain low due to the slow progress of adding new pipeline capacity.

According to a report by Poten & Partners, today India has a 16,470 km pipeline network with a total transmission capacity of 387.3 MMcf/d.

As a result of the lack of pipeline capacity, the two new terminals - the million tonnes per year Mundra terminal and the 145,000 cu m capacity FSRU at Jaigarh in Maharashtra - are expected to operate below nameplate capacity.

Mundra is due to start up in June, but construction of the key 20 km section connecting the pipeline to the grid at Anjaar in Gujarat, may not be completed until the end of this year.

Existing joint venture partners Gujarat State Petroleum Corp (GSPC) and Adani Group continued

with state-owned Indian Oil Corp (IOC) to acquire up to 50% stake in Mundra but differences over the cost structure were understood to have delayed the final deal.

GSPC had booked 1 mill tonnes per year capacity at the terminal Mundra is widely expected to compete with the 15 mill tonnes per year capacity Dahej terminal, also located in Gujarat. Dahej is already operating above its nameplate capacity and there are plans to expand it to 17.5 mill tonnes per year.

H-Energy plans to build two pipelines and has already started one 60 km long connecting its FSRU to Dabhol. Completion is expected by the middle of this year but could stretch to September,

Poten & Partners said. It will connect up to GAIL's network.

Commissioning of the FSRU 'Cape Ann' chartered in from ENGIE for five years, is scheduled for late September or October, following India's monsoon season.

Pipeline issues

While pipeline connectivity is unlikely to be an issue, industry players were reported to be closely watching end user offtake from Jaigarh.

I-Energy has a portfolio of 1.5 mill tonnes per year from several suppliers and recently signed a three-year supply deal with Petronas for 600,000-700,000 tonnes per year. Pricing was thought to average in the mid to

high 11% against the crude index. The company was thought to have an option to cancel one cargo per year without a penalty.

Construction of the jetty and topsides work began in March, Poten & Partners said.

The Indian Government has said that it wants to raise the LNG share of the country's energy mix to 15% by 2030 from 6.5% today. However, this share could be eroded by renewables.

In addition, Reliance is looking to invest \$6.2 bill in offshore gas production, which could account for 30-35 MMcf/d due to come on stream in phases between 2020-2022. ONGC is also thought to be reviving production at an old offshore gas field. ■

WORLD LNG CARRIER ORDERBOOK

Name	Containment System	Propulsion	Yard	Ordered	Delivery Date	Capacity	Primary Owner
Oceanic Breeze	Moss	STRH	Mitsubishi H.I.	2013	31/03/2018	155300	K-Line
Myrina	GT NO 96	MEGI	DSME	2014	01/04/2018	173400	Teekay LNG
Seri Cemara	Moss	STRH	Hyundai Heavy	2014	01/04/2018	150000	MISC
British Partner	GT NO 96	MEGI	DSME	2014	01/04/2018	173400	BP
Marvel Falcon	GTT Mark III Flex	XDF	Samsung	2014	15/04/2018	174000	MOL
Castillo De Merida	TZ Mk. III	MEGI	Imabari	2014	01/05/2018	178000	Elcano
CESI Lianyungang	Membrane	TFDE	Hudong-Zhonghua	2012	01/05/2018	174000	China LNG Shipping Holdings
Flex Ranger	TZ Mk. III	MEGI	Samsung	2013	01/05/2018	174000	Flex LNG
Pacific Breeze	Moss	TFDE	Kawasaki	2013	01/06/2018	180000	K-Line
Mitsubishi Nagasaki 2316	Moss	STRH	Mitsubishi H.I.	2014	01/06/2018	153000	NYK
Diamond Gas Orchid	Moss	STaGE	Mitsubishi H.I.	2015	01/06/2018	165000	NYK
Pan Europe	GT NO 96	TFDE	Hudong-Zhonghua	2014	01/06/2018	174000	Teekay LNG
Megara	GT NO 96	MEGI	DSME	2014	01/07/2018	173400	Teekay LNG
Flex Rainbow	TZ Mk. III	MEGI	Samsung	2013	25/07/2018	174000	Flex LNG
Energy Liberty	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/08/2018	165000	MOL
Rudolf Samoylovich	GT NO 96	TFDE - Azipod	DSME	2014	01/08/2018	172410	Teekay LNG
Diamond Gas Rose	Moss	STaGE	Mitsubishi H.I.	2015	01/08/2018	165000	NYK
Enshu Maru	Moss	STRH	Kawasaki	2014	30/08/2018	164000	K-Line
Castillo De Caldelas	TZ Mk. III	MEGI	Imabari	2014	01/09/2018	178000	Elcano
Daewoo 2462 MOL E.On	GT NO 96	TFDE	DSME	2015	01/09/2018	180000	MOL
Vladimir Vize	GT NO 96	TFDE - Azipod	DSME	2014	01/09/2018	172410	MOL
Kinisis	GT NO 96	MEGI	DSME	2015	15/09/2018	173400	Chandris
Daewoo 2442	GT NO 96	MEGI	DSME	2014	01/10/2018	173400	BP
Daewoo 2427	GT NO 96	TFDE - Azipod	DSME	2014	01/10/2018	172410	Dynagas
Marvel Eagle	Moss	TFDE	Kawasaki	2014	15/10/2018	155000	MOL
Daewoo 2443	GT NO 96	MEGI	DSME	2014	01/11/2018	173400	BP
Boris Davydov	GT NO 96	TFDE - Azipod	DSME	2014	01/11/2018	172410	Dynagas
Marvel Hawk	GTT Mark III Flex	XDF	Samsung	2014	01/12/2018	174000	MOL
Mitsubishi Nagasaki 2321	Moss	STaGE	Mitsubishi H.I.	2015	01/12/2018	177000	NYK
Nikolay Zubov	GT NO 96	TFDE - Azipod	DSME	2014	01/12/2018	172410	Dynagas
Jmu Tsu 5071	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/01/2019	165000	NYK
Samsung 2150	GTT Mark III Flex	XDF	Samsung	2014	01/01/2019	174000	MOL
Maran Gas Spetses	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Daewoo 2444	GT NO 96	MEGI	DSME	2014	01/01/2019	173400	BP
Mitsubishi Nagasaki 2323	Moss	STaGE	Mitsubishi H.I.	2015	01/01/2019	177000	MOL
Maran Gas Chios	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Pan Africa	GT NO 96	TFDE	Hudong-Zhonghua	2014	01/01/2019	174000	Teekay LNG
Maran Gas Hydra	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Hyundai Samho S856	TZ Mk. III	MEGI	Hyundai Heavy	2015	01/01/2019	174000	Teekay LNG
Gaslog Gladstone	TZ Mk. III	XDF	Samsung	2014	01/01/2019	174000	GasLog

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 = 29th March 2018

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Hyundai Samho S857	TZ Mk. III	MEGI	Hyundai Heavy	2015	01/01/2019	174000	Teekay LNG
Daewoo 2445	GT NO 96	MEGI	DSME	2014	01/02/2019	173400	BP
Kawasaki Sakaide 1734	Moss	STRH	Kawasaki	2015	01/03/2019	177000	MOL
Kawasaki Sakaide 1735	Moss	STaGE	Kawasaki	2015	01/03/2019	177000	MOL
Daewoo 2446	GT NO 96	MEGI	DSME	2014	01/03/2019	173400	BP
Mitsubishi Nagasaki 2326	Moss	STaGE	Mitsubishi H.I.	2015	01/03/2019	180000	NYK
Mitsubishi Nagasaki 2327	Moss	STRH	Mitsubishi H.I.	2015	01/03/2019	180000	NYK
Hyundai Ulsan 2937	GTT Mark III Flex	XDF	Hyundai Heavy	2016	01/04/2019	180000	SK Shipping
Jmu Tsu 5073	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/05/2019	165000	MOL
Diamond Gas TBN		STaGE	Mitsubishi H.I.	2015	01/05/2019	165000	Mitsubishi
Hyundai Ulsan 2964	GTT Mark III Flex	MEGI	Hyundai Heavy	2017	01/05/2019	180000	Knutsen
Flex Constellation	GT NO 96	MEGI	DSME	2017	01/06/2019	173400	John Fredriksen
Hyundai Ulsan 2963	GTT Mark III Flex	MEGI	Hyundai Heavy	2017	01/06/2019	180000	Knutsen
Hyundai Ulsan 2938	GTT Mark III Flex	XDF	Hyundai Heavy	2016	01/07/2019	180000	SK Shipping
Daewoo 2430	GT NO 96	TFDE - Azipod	DSME	2014	01/07/2019	172000	Teekay LNG
Maran Gas Syros	GT NO 96	MEGI	DSME	2014	01/07/2019	173400	Maran Gas Maritime
Gaslog Windsor	GTT Mark V	XDF	Samsung	2016	01/07/2019	180000	GasLog
MOL HUDONG-ZHONGHUA 1/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/07/2019	174000	MOL
Kawasaki Sakaide 1729	Moss	TFDE	Kawasaki	2014	01/08/2019	155000	MOL
Daewoo 2431	GT NO 96	TFDE - Azipod	DSME	2014	01/08/2019	172000	Teekay LNG
Flex Courageous	GT NO 96	MEGI	DSME	2017	01/08/2019	173400	John Fredriksen
Jmu Tsu 5072	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/09/2019	165000	MOL
Daewoo 2432	GT NO 96	TFDE - Azipod	DSME	2014	01/09/2019	172410	MOL
Mitsubishi Nagasaki 2322	Moss	STaGE	Mitsubishi H.I.	2015	01/09/2019	177000	MOL
Daewoo 2466	GT NO 96	MEGI	DSME	2016	01/10/2019	173400	Maran Gas Maritime
Daewoo 2433	GT NO 96	TFDE - Azipod	DSME	2014	01/10/2019	172000	Teekay LNG
MOL HUDONG-ZHONGHUA 2/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/10/2019	174000	MOL
Daewoo 2467	GT NO 96	MEGI	DSME	2016	01/11/2019	173400	Maran Gas Maritime
Daewoo 2489	GT NO 96	MEGI	DSME	2015	01/11/2019	173400	BWGas
Daewoo 2434	GT NO 96	TFDE - Azipod	DSME	2014	01/11/2019	172000	Teekay LNG
Marvel Swan	GTT Mark III Flex	MEGI	Imabari	2015	01/01/2020	178000	K-Line
MOL HUDONG-ZHONGHUA 3/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/01/2020	174000	MOL
MOL HUDONG-ZHONGHUA 4/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/04/2020	174000	MOL
HHI NYK/EDF	GTT Mark III Flex	XDF	Hyundai Heavy	2018	30/04/2020	174000	NYK
Daewoo 2478	GT NO 96	MEGI	DSME	2017	31/05/2020	173400	Maran Gas Maritime
Samsung 2213	GTT Mark V	XDF	Samsung	2017	01/06/2020	180000	GasLog
HHI Cardiff		XDF	Hyundai Heavy	2018	01/06/2020	174000	Cardiff Marine
HHI Sovcomflot		XDF	Hyundai Heavy	2018	01/06/2020	174000	Sovcomflot
Daewoo 2469	GT NO 96	MEGI	DSME	2016	30/06/2020	173400	Maran Gas Maritime

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 / Lucia Ambition	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	Aman Hakata	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Tripura (ex Surya Satsuma)	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	Norgas Creation	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2010	Norgas Innovation	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Norgas Bahrain Vision	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Norgas Conception	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Invention	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas 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
2014	LNG-Oil combi**	2,000	LNG	Germany	Yes	Veka
2014	Short Sea LNG Tanker **	4,000	LNG	Germany	Yes	Veka
2015	10 small carriers TBN**	5,000	LNG			Bimantara Group
2015	Jahre TBN**	6,200	LNG	Norway	Yes	Donsotank/Jahre Marine
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	LNG bunker barge 1†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 2†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 3†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG Inland bunker**	800	LNG	Germany	Yes	Veka
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2015	TBN	14,000	LNG	China	Yes	Zhejiang Huaxiang
2015	TBN 1	27,500	LNG	China?		Danyang?
2015	TBN 2	27,500	LNG	China?		Danyang?
2015	TBN 3	27,500	LNG	China?		Danyang?
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	Dalian TBN	28,000	LNG	China	Yes	Dalian Inteh Group
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvation	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
2016	Navigator Aurora	35,000	Ethane/Ethylene	Markus Hood - Stenungsund	Ethane, for Borealis	Navigator
2016	Gaschem Beluga	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2016	Gaschem Orca	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services

For more information please visit <http://small-lng.com>

*Includes multi-gas, ethylene and LNG bunker ships with 40,000 cubic metres LNG cargo capacity or less

TBN = To Be Nominated indicates ships are still at construction/planning stage

** = project shelved † = Data to be verified Data last updated = 12th February 2018

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2016	Ocean Yield TBN**	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2017	Cardissa	6,500	LNG	Northwest Europe	Yes	Shell
2017	Yuan He 1	30,000	LNG	China	Yes	CSR
2017	ENGIE Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skargas	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	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	Navigator Eclipse	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Nova	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Prominence	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
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	Shell Bunker Barge TBN 4	3,000	LNG	Northwest Europe	Yes	Shell
2018	Bernhard Schulte TBN	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	CME TBN†	2,200	LNG	US Coast	Yes	CME
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Shell Bunker Barge	4,000	LNG	US Coast	Yes	Q-LNG Transport / Harvey Gulf
2020	Total TBN	18,600	LNG	NWE	Yes	MOL
2021	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas

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*Includes multi-gas, ethylene and LNG bunker ships with 40,000 cubic metres LNG cargo capacity or less

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