LNG Shipping News

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GasLog's take on LNG trades

Demand for natural gas and LNG remained robust during the first half of this year, underpinned in the second quarter by significant increases in demand from major Asian consumers, GasLog said in its second quarter results roundup (see page 6).

According to Poten & Partners, LNG imports into China, South Korea and India during 1H18 increased 50%, 14% and 10%, respectively, year-on-year, marginally offset by a 3% reduction in Japan's LNG imports.

In particular, Chinese LNG demand growth was attributed to coal-to-gas switching, strong industrial demand and constrained domestic gas production.

Wood Mackenzie said that during 2Q18, global LNG supply increased by 8% year-over-year, but declined 3% from the previous quarter. This increase was driven by the start-up of new liquefaction capacity in the US, Russia and Australia, while the sequential decline is attributed to normal seasonal weakness, supply disruptions from PNG LNG following the earthquake earlier this year, under performance from projects in Algeria and Trinidad and unplanned downtime of UAE facilities.

New liquefaction startups in the second quarter included Cameroon Floating LNG, Cove Point and Wheatstone LNG Train 2.

In 2Q18, a total of 75 cargoes were exported from the US, with around half of these cargoes delivered to Asia.

Cove Point has come on stream recently

Progress made

During 2Q18, progress was made on projects that underpin Wood Mackenzie's 2018 LNG supply growth forecast of 9%. Commissioning cargoes were discharged at the Ichthys and Prelude facilities, while Yamal Train 2 (Russia) and Elba Island (US) were also expected onstream before the year-end.

A further 41 mill tonnes per annum of new supply, or 13% growth, is expected in 2019, principally driven by additions in the US and the ramp-up of Ichthys and Prelude.

In May, Cheniere announced a final investment decision (FID) on Train 3 at the Corpus Christi liquefaction project, the first approval of a new liquefaction project since June, 2017 and the first in the US since 2015.

According to Wood Mackenzie and other reports, in 2Q18, 15 mill tonnes per annum of long-term supply contracts were agreed or signed, bringing the total volume of long-term supply contracts concluded since the beginning of 2017 to 52 mill tonnes per annum.

LNG Canada, which is targeting 24 mill tonnes of capacity in a phased approach and in which Petronas took a 25% stake in May, may take FID later this year, while FID on the US Golden Pass project (16 mill tonnes per year capacity) may be taken in early 2019. Mozambique Area 1 LNG (13 mill tonnes capacity) and the Calcasieu Pass (10 mill tonnes capacity) US project have also made progress in 2Q18 towards potential FIDs in 2019.

In addition, during the second quarter, Panama became the 42nd country to import LNG after commencing operations at its Costa Norte terminal. Plans have also progressed to import LNG into eastern Australia's gas market to alleviate potential future shortages. Pakistan's Ambassador to the US outlined plans in early July to import more gas from that country, claiming that Pakistan was on its way to becoming 'one of the world's largest gas importers'.

In May, Chinese gas distributor ENN was reportedly seeking a commissioning cargo for the country's first privately owned LNG regasification terminal. The Zhoushan terminal has a planned capacity of 3 mill tonnes per annum. ■

SHIPPING NEWS AGENDA

Higher charter rates to be sustained

According to Clarksons, headline daily spot TFDE LNG shipping rates averaged $54,000 in 2Q18, compared to $34,000 in 2Q17, GasLog said.

During the period, rates exhibited counter-seasonal strength, rising to $87,000 per day in late June from $38,000 per day in late April.

This recent, sharp increase was driven by increased vessel demand, as LNG suppliers sought to capitalise on the arbitrage between the Atlantic basin and Asian markets, which was widened by counter-seasonal strength in Asian LNG prices (as measured by the Platts Japan-Korea Marker (JKM) assessment).

As a result, the number of spot fixtures rose to 110 during 2Q18, an all-time high and an increase over the 70 and 78 fixtures reported in 1Q18 and 2Q17, respectively.

GasLog is confident of rates remaining firm

Spot TFDE shipping rates have moderated in recent weeks, with the current Clarksons assessment of $75,000 per day, as softening Asia LNG prices have narrowed near-term arbitrage opportunities.

However, based on current JKM pricing, the arbitrage between the Atlantic and Pacific Basins is expected to remain open for the 2018/19 Northern Hemisphere winter, suggesting that the recent increase in LNG shipping rates could be sustained throughout the remainder of 2018 and into early 2019.

According to Poten and various other reports, 26 firm orders for LNGCs were made thus far in 2018, of which three were for GasLog.

The pace of firm newbuilding orders recently increased, as shipowners sought to lock in attractive yard prices against a positive backdrop for LNGC demand.

However, even after taking into account the current orderbook, we believe that the LNG shipping market could be short of vessels as soon as 2019, based on current supply and demand projections, GasLog said.

The earliest delivery date for a newbuilding is now 2021, which points towards a tighter market in 2019 and 2020, again underpinning the firmer outlook for shipping rates.

Based on our analysis and excluding the current orderbook, 28-56 additional vessels may be needed by 2022 to satisfy projected market growth, with this range increasing to 105-137 additional vessels by 2025, GasLog said. ■

FLNG market to take off

Over $53 bill of investment in FLNGs is forecast as this segment comes back to life, according to a new report from Westwood.

Based on Westwood Global Energy Group's forecast for 2019-2024, using the latest analysis of sanctioned and upcoming projects, global FLNG capital expenditure (Capex) is projected to total $52.8 bill.

As LNG exports take a foothold in the US, investment in floating liquefaction facilities in North America will play a pivotal role in global FLNG expenditure over the forecast period, accounting for 45% of expenditure.

A combination of drivers, including perceived technological maturity, an improved macro-economic outlook and cost reduction in the supply chain, will support an increase in project sanctioning over the next 24 months.

Following a 22-month hiatus in project sanctioning, the FLNG industry is moving into a 'second wave' of developments, with the market opening up to a greater number of participants, Westwood said.

The size and technical complexity/risk of early pioneer developments allowed only the largest NOCs and IOCs to move forward with projects on a balance-sheet financing basis.

As more FLNG units become operational, project structures and financing has become more akin to the well-established FPSO sector. This includes a move to syndicated project financing (eg, as arranged for ENI's Coral South Unit) and construction financing/sale and leaseback structures (such as the 'Hilli Episeyo').

Increased gas demand driven by economic growth and fuel switching, combined with ongoing concerns over energy security, underpins the import vessels' market.

The key driver for the use of floating units remains the short lead-time from sanction to operation and consequently tendering activity for FSRUs is expected to remain strong over the 2019-2024 period, Westwood said.

More of these could be seen soon

In conclusion, the report said that 18 countries were expected to have their first floating import units installed over the forecast period. ■

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Adani signs long term terminal contract with GAIL

India's port infrastructure developer and part of the Adani Group, Adani Ports and Special Economic Zone (APSEZ) has signed a long term agreement with GAIL (India), the state run gas company, to provide LNG regasification services.

The services will be offered on a use or pay basis, at the under construction LNG import terminal at Dhamra in Odisha State.

Under the contract, GAIL India has booked 1.5 mill tonnes per annum regasification capacity for 20 years. The Indian energy giant plans to supply the gas to customers located in the eastern region and along the under development Jagdishpur- Haldia gas grid.

"Partnering with GAIL India for facilitating LNG imports is a notable milestone for Adani Ports. This project is now close to being fully subscribed and will play a pioneering role in powering eastern India towards a prosperous and economical gas based future. It will also become a hub for supply to Bangladesh and Myanmar," said Karan Adani, APSEZ CEO.

The project's foundation stone was laid on 17th July and infrastructure firm Larsen & Toubro has started to build gas storage tanks. Also involved is CTCI Corp, a Taiwanese company, that has won the contract to supply the regasification package.

The terminal is expected to be commissioned during the second half of 2021.

Dhamra LNG import terminal has been designed for an initial capacity of five mill tonnes per year, expandable up to 10 mill tonnes.

Initially, it will have two full containment tanks of 180,000 cu m capacity each. The terminal will be first of its kind in India and the second LNG terminal on the east coast after IOC's Ennore terminal in Tamilnadu.

A jetty will be built capable of handling a wide range of LNGCs, up to Q-Max types.

The terminal will also be capable of reloading LNG to serve nearby markets by sea and will also have truck loading gantries. ■

Ichthys goes into production

Japanese energy giant INPEX has announced that gas production has started from the Ichthys LNG project.

This marks the start of around 40 years of operations of this large-scale LNG development, INPEX said.

The gas produced will be housed within the central processing facility ('Ichthys Explorer') where it will be separated into gases and liquids. Thereafter, the liquids will be piped to a nearby FPSO ('Ichthys Venturer'), while the gases will be transported via the 890 km long gas export pipeline (GEP) to the onshore gas liquefaction plant at Darwin in Australia's Northern Territory.

At the FPSO, the condensate contained in the well fluids will be processed to remove water and other impurities, then stored in tanks prior to export by tankers. At the onshore gas liquefaction plant, gases will be processed to remove impurities after which any remaining condensate will be extracted. The gases will then be separated and liquefied to produce LPG and LNG to be stored in tanks and shipped.

Product shipments are expected to begin in order of condensate, LNG and LPG towards the end of the first half of the current fiscal year. The first six months run from April to September, 2018.

Forecast consolidated financial results for the year ending March, 2019, which will factor in the project's expected revenue contributions, are currently being evaluated taking into account the oil price outlook and other factors. Any revision will be announced immediately, INPEX said. ■

NEWS NUDGE

More orders for LNGCs and VLECs

Brokers have reported that TMS Cardiff Gas has exercised options for two more LNGCs.

One 174,000 cu m LNGC will be built at Hyundai, giving a total of seven at the yard, while another 156,000 cu m unit will be built by Samsung, bringing this series up to three.

US investment banking and principal investment firm Delos Shipping was believed to be behind an order for up to 12 very large ethane carriers (VLECs).

According to data provided by Asiasis, the company ordered the units from two South Korean shipbuilders, Samsung Heavy Industries and Hyundai Heavy Industries.

Delos Shipping reportedly placed firm orders for three 93,000 cu m ships at each shipyard, along with three options attached to each contract for about $115-$120 mill each on the back of long term charters to ship ethane from the US to China.

The first VLECs were thought scheduled to be handed over to their owner starting in the second half of 2020. ■

Japan's June LNG imports fall

Japan's LNG imports dropped 10.3% year-on-year in June - the lowest monthly volume in almost two years.

This was due to the supply from major producing countries, such as Australia, Qatar and Malaysia falling, according to data from the Japanese Ministry of Finance.

June's imports totalled 5.55 mill tonnes, the lowest since May, 2016's 5.52 mill tonnes. For example, Australia shipped 1.68 mill tonnes of LNG to Japan, 29.6% less than a year earlier.

Imports from Qatar fell 13.2% year-on-year to 756,846 tonnes, while Malaysia supplied 677,337 tonnes, down 24.3%.

Globally, supply shrank in the second quarter of this year, due to unplanned losses in Qatar, Malaysia and Brunei, combined with the earthquake in Papua New Guinea, according to S&P Global Platts Analytics.

Imports from PNG are recovering. Volumes to Japan rose 32.5% to 208,788 tonnes from May, but was still down 22.6% from a year earlier.

Japan also imported 180,313 tonnes of LNG from the US.

The Japan Customs Cleared (JCC) crude oil price was $76.344 per barrel in June, a rise of 8.1% from May and a massive 46.2% year-on-year increase.

Japan's long-term LNG contracts are often linked to the JCC crude price, but lag by a few months, so fluctuations in oil prices typically take time to feed through into LNG prices, Platts explained. ■

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Drydocking and short term charters hit Dynagas LNG Partners

Dynagas LNG Partners reported net income of $0.4 mill for the second quarter of 2018.

Included in 2Q18 results were $2.2 mill of scheduled class survey and drydocking costs related to the 'Arctic Aurora', one of the three tri-fuel diesel engine (TFDE) vessels in the fleet.

Adjusted net income was $4.5 mill and adjusted EBITDA was $24.4 mill for 2Q18.

Distributable Cash Flow was $8.7 mill and the Partnership reported free cash of $57.8 mill and available liquidity of $87.8 mill as of 30th June, 2018.

On 5th July, 2018, the Partnership announced a quarterly cash distribution of $0.25 per common unit in respect of 2Q18, which was paid on 19th July, 2018 to all common unitholders of record as of 12th July, 2018.

On 25th July, 2018, the Partnership also announced a cash distribution of $0.5625 per unit of its Series A Preferred Units for the period from 12th May, 2018 to 11th August , 2018, which is expected to be paid on 13th August, 2018 to all unitholders of record as of 5th August, 2018.

Earnings in line

Tony Lauritzen, the Partnership's CEO, commented: "Our reported earnings for the second quarter of 2018 were in line with our expectations and were above those for the second quarter of 2017, but below those for the first quarter of 2018.

Dynagas results were hit by the 'Arctic Aurora' drydocking

"Our earnings were impacted by: (i) the temporary employment of the 'Clean Energy' in the short-term market until 13th July, 2018, at which time the vessel commenced employment on a time charter with Gazprom for a term of approximately eight years, (ii) the completion of the multi-year charter contract with Gazprom for the 'Ob River' in April, 2018 and the subsequent employment of the vessel with the same company at a lower rate of hire reflecting a longer charter term of 10 years, and (iii) the scheduled drydocking of the 'Arctic Aurora' in May, 2018.

"We believe the Yamal LNG project is progressing well. On 1st July, 2018, Yamal narrowed the delivery windows for both the 'Yenisei River' and the 'Lena River' to the earliest possible allowed under their respective 15 year charter contracts.

"On 21st July, 2018, the 'Yenisei River' completed the five year term of its employment contract with Gazprom. Following the redelivery of the vessel to the Partnership, the vessel is undergoing its five year special survey, which is expected to be completed in mid-August 2018. After the completion of the special survey, we expect to employ the 'Yenisei River' in the short-term market until the vessel commences its 15 year contract with Yamal.

"Following redelivery from Gazprom in October, 2018 and the completion of its special survey, the 'Lena River' is contracted to be employed on a multi-month charter contact with a large gas producer until the vessel commences its 15 year contract with Yamal.

"We believe that we have significant cash flow visibility with contracted vessel employment for approximately 85% of 2018, 99% of 2019 and 100% of 2020, and with an estimated fleet-wide average remaining contract duration of 10.1 years. Our intent is to seek additional contract coverage, particularly in 2018, to manage our capital structure and operating expenses, and to continue the safe operation of our fleet," he concluded.

The Partnership reported average daily hire gross of commissions of around $61,500 per day per vessel in 2Q18, compared to about $66,900 per day per vessel in the same period of 2017. ■

Dominion celebrates Cove Point LNG operation

Dominion Energy officially celebrated the start of commercial operations at its Cove Point LNG liquefaction facility in Maryland, US, last week.

Construction of the facility began in October, 2014, following more than three years of federal, state and local permit reviews and approvals.

With a cost of around $4.1 bill, it is the largest construction project ever undertaken in Maryland and on behalf of Dominion Energy.

In March this year, the LNGC 'Gemmata' left the loading facility with the first cargo, thus inaugurating the operation of the second LNG export plant in the lower 48 US states, following Cheniere's Sabine Pass.

Dominion Cove liquefaction facility has an LNG nameplate capacity of 5.25 mill tonnes per year, equivalent to about 8.3 mill gallons of LNG per day.

The plant produces LNG for a joint venture involving Sumitomo Corp and Tokyo Gas and for GAIL, India's state-owned natural gas company. ■

PetroChina to receive PNG gas

Santos has confirmed that the PNG LNG project partners had entered into a mid-term LNG sale and purchase agreement (SPA) with PetroChina International (Hong Kong) Corp, for the supply of gas, which commenced last month.

The mid-term SPA was signed to supply about 450,000 tonnes of LNG per annum over a three-year period.

This SPA takes the total contracted volumes from the project to 7 mill tonnes per year, with 6.6 mill tonnes of PNG LNG's annual output already committed under long-term contracts to JERA, Osaka Gas, Sinopec and CPC, Santos said.

ExxonMobil, on behalf of the PNG LNG project partners, is negotiating with a number of other parties for potential mid-term LNG supply agreements in lieu of spot sales. These agreements are expected to be concluded in the near-term and increase sales under new mid-term agreements to 1.3 mill tonnes per annum.

Santos has a 13.5% interest in PNG LNG. ■

GasLog Partners in revenue and profit boost

During the second quarter of this year, GasLog Partners reported a profit of $22.9 mill, compared with $19.4 mill in 2Q17.

The adjusted profit was $21.9 mill, compared with $21.2 mill for the periods. EBITDA was $53.3 mill in 2Q18, compared with $45.2 mill in 2Q17, while revenue came in at $74.9 mill, compared with $62.6 mill.

During 2Q18, GasLog Partners completed the acquisition of the 'GasLog Gibraltar' from GasLog Ltd for $207 mill, with an attached multi-year charter to a subsidiary of Royal Dutch Shell.

This acquisition was partially financed through the private issuance of $45 mill of common units to GasLog.

New charters

A new timecharter was also agreed for 'GasLog Sydney' for 18 months with a wholly owned subsidiary of Cheniere Energy. This charter is scheduled to commence between September and December, 2018.

GasLog completed the drydocking of and installation of reliquefaction modules on the 'GasLog Santiago' and 'GasLog Sydney', thereby enhancing the commercial competitiveness of both vessels, the company claimed.

CEO Andrew Orekar commented: "In the second quarter, GasLog Partners continued to execute our strategy, completing the accretive acquisition of the 'GasLog Gibraltar' and agreeing to a firm 18-month time charter plus two six-month options with Cheniere for the 'GasLog Sydney'.

"This charter is the Partnership's second agreement this year with a new, high-quality counterparty and increases our contracted days to 91% in both 2018 and 2019.

"As previously communicated, the drydockings of the 'GasLog Sydney' and the 'GasLog Santiago' in the second quarter temporarily impacted our EBITDA and distributable cash flow. As a result, we have elected to maintain our quarterly distribution at $0.53 per unit, or $2.12 per unit annualised. Adjusted for the impact of these scheduled drydockings, our distribution coverage ratio was 1.18x and in-line with our historical performance.

"The outlook for LNG demand remains robust, underpinning a requirement for additional investment in liquefaction, regasification and shipping capacity. With current liquidity available to fund our next drop-down acquisition and the 'GasLog Shanghai' exposed to the anticipated strength in spot LNG shipping rates, we are reiterating our year-on-year distribution growth guidance of 5% to 7% in 2018," he concluded.

As of 30th June, 2018, GasLog had $134.7 mill of cash and cash equivalents, of which $52.1 mill was held in current accounts and $82.6 mill was held in time deposits with an original duration of less than three months.

As at the same date, the aggregate debt was $1,184.4 mill outstanding under the credit facilities, of which $85 mill is repayable within one year. In addition, there was unused availability under a revolving credit facilities of $55.9 mill.

The current assets totalled $161 mill and current liabilities were $155 mill, resulting in a positive working capital position of $6 mill. ■

NEWS NUDGE

JYT to supply LNG insulation

Jiangsu Yoke Technology is to supply thermal insulation panels to Hudong-Zhonghua Shipbuilding for use in GTT's Mark III containment system fitted LNGCs.

The two companies will also co-operate to construct and develop materials for other LNG carrying vessels.

The firm's wholly-owned unit S&Y International has signed a contract worth CNY104 mill ($15.5 mill) with Shanghai-based Hudong-Zhonghua Shipbuilding to sell reinforced polyurethane insulation panels for the LNGCs, the chemical company based in Jiangsu Province in eastern China, said in a regulatory filing, according to Yicai News. ■

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GTT – solid financial performance

For the first half of this year, GTT reported several orders, success in LNG as a fuel and a solid financial performance.

Some 21 orders were received during 1H18 and the company reported an almost 12% growth in revenues linked to royalties.

For 1H18, GTT reported revenue of €127.2 mill, compared with €113,7 mill for 1H17- an increase of 11.9%. EBITDA was €84.2 mill, compared with €77.3 mill in 1H17.

The basic net earnings per share were €2.04 and €1.7 for the respective periods of 2018 and 2017.

Commenting on the results, Philippe Berterottière, GTT Chairman and CEO, said: "The first half of 2018 was characterised by the growth in the LNG market, with a very satisfying number of orders for LNG carriers, which confirms the trends that began last year.

"In the field of LNG fuel, the success recorded by GTT confirmed the attraction of shipowners for its membrane technologies. After the order for nine giant container carriers from CMA CGM at the end of last year, in January the Group obtained one order for a bunker ship to be operated by TOTAL to supply the LNG to these container carriers.

"In early July, GTT obtained a major success with the order of LNG tanks intended for the future Ponant icebreaker cruiser. In this particular case, GTT will be responsible for the construction of these tanks, thereby offering its partners a true turnkey solution.

"From a financial perspective, the cost reductions implemented in 2017 place us in a favourable position to manage closely the effects of the increase in activity. These elements lead us to confirm our revenues, EBITDA and dividend objectives for FY 2018 as a whole," he concluded.

CEO Philippe Berterottière has overseen a strong first half

More orders

During the first half of 2018, GTT received 18 orders for LNGC tank designs. Following this period, three LNGC orders were booked from 1st to 26th July, 2018 from SHI and HSHI. The company also won two orders for FSRU tank designs.

GTT received an order for a bunker ship with a capacity of 18,600 cu m. She will be equipped with the Mark III Flex technology and built by Hudong Zhonghua.

To be operated in northern Europe, she will mainly supply LNG for the newbuilding CMA CGM container carriers. She will be operated by Mitsui OSK Lines Ltd and chartered by the dedicated bunker subsidiary Total Marine Fuels Global Solutions (TMFGS).

In April, 2018, GTT signed a Technical Assistance and License Agreement (TALA) with Sembcorp Marine to design and build FSRUs, average-size LNGCs and Sembcorp Marine's Gravifloat platforms, which will be fitted with GTT's membrane containment systems.

As at 30th June, 2018, GTT's orderbook stood at 84 units - 66 LNGCs, 13 FSRUs, two FLNGs, two onshore storage tanks and one barge. ■

DEFSA to be privatised

Snam, Enagás and Fluxys have signed contracts to jointly acquire a 66% interest in Greek gas infrastructure operator DESFA, which follows an agreement signed in April.

The latest deals were signed in Athens on 20th July between a consortium consisting of the three companies, the Hellenic Republic Asset Development Fund (HRADF) and Hellenic Petroleum.

The consortium members are Snam with 60%, Enagás 20% and Fluxys with the remaining 20%.

In April, the consortium was awarded a tender to privatise DESFA on the basis of an offer of €535 mill. The latest deals were signed following authorisation given by the European Commission and the Hellenic Court of Audit.

The completion of the transaction is expected by the end of this year, subject to conditions.

DESFA owns and operates a high-pressure transport gas network of about 1,500 km, as well as an LNG regasification terminal at Revithoussa.

The consortium has secured a > 10-year non-recourse acquisition financing corresponding to around 65% of the enterprise value. The financing is subject to documentation and closing is expected to occur in the next few weeks.

Meanwhile, the Revithoussa gas receiving terminal, located off Greece's Attica coast, was due to receive its first Qatari LNG cargo last weekend.

The 140,000 cu m cargo, which Mytilineos had secured through an agreement with Qatargas, opens the way for the entry into the Greek market of LNG from another source besides Algeria, the English language Greek-based newspaper Ekathimerini said.

The LNGC will take five to six days to discharge, which will be achieved in two tranches, as the existing capacity of the island's installations is insufficient to accommodate large Qatari cargoes.

The facility is currently being upgraded by installing a third tank. The company persuaded Qatar to deliver the first load and conduct the unloading in a two-part process, as part of an agreement for future deliveries after the completion of the upgrading work, which has been scheduled for September, Ekathimerini reported. ■

NEWS NUDGE

First Yamal train hits milestone

OAO Yamal LNG recently shipped the three millionth tonne of LNG from its first LNG train.

Yamal LNG reached this milestone with the 41st cargo loaded at its first LNG train, since it started operations in December, 2017.

In July, the summer navigational period commenced on the Northern Sea Route (NSR), allowing the Yamal LNG project to ship LNG cargoes using Arc7 Ice Class LNGCs in an easterly direction to Asia/Pacific countries without icebreaking support, as well as using LNGCs with lower Ice Class notation. ■

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LNG infrastructure agreement signed

Engro Corp of Pakistan and Dutch-based Royal Vopak have signed a Share Purchase Agreement (SPA) in which Vopak will acquire a 29% share in Elengy Terminal Pakistan Ltd (ETPL).

ETPL's wholly owned subsidiary, Engro Elengy Terminal (Pvt) Ltd (EETPL) owns an LNG facility located at Port Qasim, Pakistan, adjacent to the Engro Vopak chemical terminal on the mainland side of the channel into the port.

The facility has been in operation since 2015 and was the first LNG import facility in Pakistan. It consists of an LNG jetty including a 7.5 km high pressure gas pipeline, which is connected to the grid of EETPL's sole customer, Sui Southern Gas Company Ltd, a Pakistan government owned entity. EETPL has an FSRU on a 15-year timecharter.

Following the completion of this transaction, the shareholders in ETPL will be Engro Corp, Vopak and the International Finance Corp.

This acquisition is still subject to certain conditions, including customary regulatory and shareholder approvals, and closing is anticipated to take place in the fourth quarter of 2018.

Eelco Hoekstra, Chairman of the Executive Board and CEO, Royal Vopak, said "We very much look forward to further build, inside and outside of Pakistan, on our excellent partnership with Engro.This new step in our cooperation gives Vopak an excellent entry in the growing Pakistan LNG market. This fits very well our ambitions to grow and diversify our service offering in LNG." ■

First of Evergas' VLECs launched

The first of Evergas' 85.000 cu m VLECs was floated out of the building dock at DSIC in China. She will be delivered in the first quarter of 2019.

Following the float out, the steel cutting of the second vessel was celebrated at DSIC.

The two VLECs will be delivered to INEOS Trading & Shipping to add to the company's existing fleet of eight 'Dragon' class vessels.

The VLECs will be managed commercially and operationally in-house by Evergas, a subsidiary of JACCAR.

Last year, INEOS signed a long-term supply agreement with SP Chemicals to deliver ethane from US shale gas to China. The VLECs will ship the gas to SP Chemicals new gas cracker facility, currently under construction in Taixing China.

Ethane is used to make ethylene - one of the world's most important chemical building blocks. Ethylene is a raw material used to make products for a wide variety of industrial and consumer markets such as transportation, electronics, textile and construction. ■

RMI establishes gas team

The RMI Registry, which claims to be the largest registry for gas carriers, has established a Worldwide Gas Team.

The team comprises experts in the design, technical management, inspection, and commercial operation of gas carriers. This new group is a response to the recent growth, both in number and vessel types, in the transportation and processing of liquefied gases.

Due to the technological developments taking place in gas shipping, new international regulations have been put in place regarding the design and construction of gas ships and equipment in order to ensure the safety of the vessel, crew, and the marine environment.

In any marine sector, new regulatory requirements can be complex and expensive for owners to adhere to. This can be especially true in a space like gas shipping, where new technological developments create an environment that is constantly evolving, and owners must be prepared to respond to these changes with costly updates to their vessels, RMI said.

The team is made up of experts chosen for their ability to provide guidance from inspection and registration to technical issues and regulatory challenges, and is located worldwide.

It is headed by Eric Linsner, IRI's LNG/LPG specialist who has extensive experience in LNG design and operations. Other key members of the team include:

- Jason Clifton-Samuel, Safety & Technical Manager, London.
- Jasbir Jaspal, Senior Maritime Advisor, Reston.
- Kevin Cook, Maritime Consultant, Reston.
- Warren Kedenburg, LNG Advisor, Kobe.
- Steven Garcia, Flag State Specialist, Houston.
- J. Person, Flag State Inspector, London.
- Joseph McKeown, Vice President, Technical & Marine Safety. ■

NEWS NUDGE

GTT receives order from HSHI

GTT has received an order from Hyundai Samho Heavy Industries (HSHI) to design the tank for a new 174,000 cu m LNGC to be built on behalf of an Asian shipowner.

The vessel's delivery is expected in 4Q20.

Her LNG tanks will be equipped with GTT's Mark III Flex containment system.

Philippe Berterottière, GTT Chairman and CEO, said: "We are proud of the success achieved by the Mark III Flex technology, now selected to equip almost 90 ships since its launch."

LNGC is Panama's 4,000th Neopanamx transit

The LNGC 'Maria Energy' has become the Panama Canal's 4,000th Neopanamax vessel when she transited the expanded canal on 29th July. She was sailing southbound from the Atlantic to the Pacific Ocean.

'Maria Energy' was followed into the canal by the LNGC 'Maran Gas Alexandria', which also transited southbound.

Both vessels loaded at Cheniere Energy's Sabine Pass LNG export facility in Louisiana, US.

Of the 4,000 vessels LNGCs were responsible for around 10% of the Neopanamax traffic. ■

Bureau Veritas issues FSU conversion notations and guidelines

Class society Bureau Veritas (BV) has issued new and updated notations and guidance to support the construction and operation of both FSRUs and FSUs.

Interest in FSRUs and FSUs is growing, BV said. Floating gas terminals offer operational flexibility, reduced timescales - from concept to operation - and cost effectiveness in comparison with onshore terminals.

In addition, converting existing LNGCs offers a fast route to operational availability. There are more than 20 LNGCs presently laid up. Many of these are candidates for conversion to floating terminal applications, such as FSRUs/ FSUs.

The new conversion guidelines provide clear advice to the LNG industry in properly addressing issues that either will or may arise during the conversion of LNGCs into FSRUs or FSUs, helping shipowners to either avoid or to overcome potential problems, BV claimed.

Matthieu de Tugny, BV COO, Marine & Offshore, said, "With growing interest in floating gas terminals, working with industry stakeholders, we are providing the rule framework and guidance necessary to develop both FSRU and FSU terminals - both for newbuildings and conversions.

"Last November, Bureau Veritas published NR645, the first rules document fully dedicated to Floating Storage and Regasification Units. These new notations and guidelines are further evidence of BV's classification leadership in both FSRUs and FSUs," he said.

BV has been one of the leading class societies in floating gas terminals for specific notations development, regulations and tools. The first FSRU newbuilding, delivered in 2005, was to BV class, while the largest FSRU built to date is MOL's BV classed 263,000 cu m unit delivered in 2017. Nearly 40% of the fleet in service is BV classed.

In addition, BV provides a range of services, including - risk assessment and support - tools for sloshing analysis, mooring, CFD, hydro-structural assessments and ice/structure interaction. ■

> **"With growing interest in floating gas terminals... we are providing the rule framework and guidance necessary to develop both FSRU and FSU terminals"**
>
> *- Matthieu de Tugny, BV COO, Marine & Offshore*

Wison wins FLNG project FEED

Wison Offshore & Marine and Western LNG have signed a technical service agreement (TSA) in relation to a new FLNG project.

This is being developed by Western in British Columbia, Canada. Under the TSA, Wison will develop the basis of design (BOD) and carry out front end engineering design (FEED) for the proposed FLNG.

Western has also appointed Wison as the EPC service provider for the floating liquefaction plant upon project FID.

Wison will provide a FEED package using its in-house design team and execution methodology that has been optimised based on the Caribbean FLNG. The FEED is expected to be completed in less than 40 weeks after the BOD is finalised.

Last year, Wison delivered the Caribbean FLNG on an EPC basis after liquefaction performance testing was carried out at its yard in China. ■

Wison has won another FLNG project contract

WORLD LNG CARRIER ORDERBOOK

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Pan Europe	Hudong-Zhonghua	GT NO 96	174000	TFDE	01/06/2018	2014	Teekay LNG
Megara	DSME	GT NO 96	173400	MEGI	01/07/2018	2014	Teekay LNG
Flex Rainbow	Samsung	TZ Mk. III	174000	MEGI	25/07/2018	2013	Flex LNG
LNG Schneeweisschen	DSME	GT NO 96	180000	TFDE	31/07/2018	2015	MOL
Rudolf Samoylovich	DSME	GT NO 96	172410	TFDE - Azipod	01/08/2018	2014	Teekay LNG
Energy Liberty	Japan Marine United Corp	SPB	165000	TFDE	01/08/2018	2014	MOL
Diamond Gas Rose	Mitsubishi H.I.	Moss	165000	STaGE	01/08/2018	2015	NYK
Enshu Maru	Kawasaki	Moss	164000	STRH	30/08/2018	2014	K-Line
Castillo De Caldelas	Imabari	TZ Mk. III	178000	MEGI	01/09/2018	2014	Elcano
Vladimir Vize	DSME	GT NO 96	172410	TFDE - Azipod	01/09/2018	2014	MOL
Kinisis	DSME	GT NO 96	173400	MEGI	15/09/2018	2015	Chandris
British Achiever	DSME	GT NO 96	173400	MEGI	01/10/2018	2014	BP
Georgiy Brusilov	DSME	GT NO 96	172410	TFDE - Azipod	01/10/2018	2014	Dynagas
Marvel Eagle	Kawasaki	Moss	155000	TFDE	19/10/2018	2014	MOL
Jmu Tsu 5071	Japan Marine United Corp	SPB	165000	TFDE	01/11/2018	2014	NYK
British Contributor	DSME	GT NO 96	173400	MEGI	01/11/2018	2014	BP
Boris Davydov	DSME	GT NO 96	172410	TFDE - Azipod	01/11/2018	2014	Dynagas
Marvel Hawk	Samsung	GTT Mark III Flex	174000	XDF	01/12/2018	2014	MOL
Marvel Crane	Mitsubishi H.I.	Moss	177000	STaGE	01/12/2018	2015	NYK
Nikolay Zubov	DSME	GT NO 96	172410	TFDE - Azipod	01/12/2018	2014	Dynagas
Samsung 2150	Samsung	GTT Mark III Flex	174000	XDF	01/01/2019	2014	MOL
Maran Gas Spetses	DSME	GT NO 96	173400	MEGI	01/01/2019	2015	Maran Gas Maritime
Daewoo 2444	DSME	GT NO 96	173400	MEGI	01/01/2019	2014	BP
Mitsubishi Nagasaki 2323	Mitsubishi H.I.	Moss	177000	STaGE	01/01/2019	2015	MOL
Maran Gas Chios	DSME	GT NO 96	173400	MEGI	01/01/2019	2015	Maran Gas Maritime
Maran Gas Hydra	DSME	GT NO 96	173400	MEGI	01/01/2019	2015	Maran Gas Maritime
Hyundai Samho S856	Hyundai Heavy	TZ Mk. III	174000	MEGI	01/01/2019	2015	Teekay LNG
Gaslog Gladstone	Samsung	TZ Mk. III	174000	XDF	01/01/2019	2014	GasLog
Yamal Spirit	Hyundai Heavy	TZ Mk. III	174000	MEGI	01/01/2019	2015	Teekay LNG
Pan Africa	Hudong-Zhonghua	GT NO 96	174000	TFDE	01/01/2019	2014	Teekay LNG
Shinshu Maru	Kawasaki	Moss	177000	STRH	01/02/2019	2015	MOL
British Mentor	DSME	GT NO 96	173400	MEGI	01/02/2019	2014	BP
Nohshu Maru	Mitsubishi H.I.	Moss	180000	STaGE	01/02/2019	2015	NYK
Jmu Tsu 5072	Japan Marine United Corp	SPB	165000	TFDE	01/03/2019	2014	MOL
British Sponsor	DSME	GT NO 96	173400	MEGI	01/03/2019	2014	BP
Hyundai Ulsan 2937	Hyundai Heavy	GTT Mark III Flex	180000	XDF	01/04/2019	2016	SK Shipping
Diamond Gas TBN	Mitsubishi H.I.	Moss	165000	STaGE	01/05/2019	2015	Mitsubishi
Hyundai Ulsan 2964	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	01/05/2019	2017	Knutsen
Bushu Maru	Mitsubishi H.I.	Moss	180000	STaGE	01/06/2019	2015	NYK
Flex Constellation	DSME	GT NO 96	173400	MEGI	01/06/2019	2017	Flex LNG
Hyundai Ulsan 2963	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	01/06/2019	2017	Knutsen

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 = 6th June 2018

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Sohshu Maru	Kawasaki	Moss	177000	STRH	01/07/2019	2015	MOL
Hyundai Ulsan 2938	Hyundai Heavy	GTT Mark III Flex	180000	XDF	01/07/2019	2016	SK Shipping
Jmu Tsu 5073	Japan Marine United Corp	SPB	165000	TFDE	01/07/2019	2014	MOL
Daewoo 2430	DSME	GT NO 96	172000	TFDE - Azipod	01/07/2019	2014	Teekay LNG
Maran Gas Syros	DSME	GT NO 96	173400	MEGI	01/07/2019	2014	Maran Gas Maritime
Gaslog Windsor	Samsung	GTT Mark III Flex	180000	XDF	01/07/2019	2017	GasLog
Kawasaki Sakaide 1729	Kawasaki	Moss	155000	TFDE	01/08/2019	2014	MOL
Daewoo 2431	DSME	GT NO 96	172000	TFDE - Azipod	01/08/2019	2014	Teekay LNG
Flex Courageous	DSME	GT NO 96	173400	MEGI	01/08/2019	2017	Flex LNG
Daewoo 2432	DSME	GT NO 96	172410	TFDE - Azipod	01/09/2019	2014	MOL
Mitsubishi Nagasaki 2322	Mitsubishi H.I.	Moss	177000	STaGE	01/09/2019	2015	MOL
Daewoo 2466	DSME	GT NO 96	173400	MEGI	01/10/2019	2016	Maran Gas Maritime
Daewoo 2433	DSME	GT NO 96	172000	TFDE - Azipod	01/10/2019	2014	Teekay LNG
Daewoo 2467	DSME	GT NO 96	173400	MEGI	01/11/2019	2016	Maran Gas Maritime
Daewoo 2489	DSME	GT NO 96	173400	MEGI	01/11/2019	2015	BWGas
Daewoo 2434	DSME	GT NO 96	172000	TFDE - Azipod	01/11/2019	2014	Teekay LNG
MOL HUDONG-ZHONGHUA 1/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	01/12/2019	2017	MOL
DSME 2490	DSME	GT NO 96	173400	MEGI	01/02/2020	2018	BWGas
MOL HUDONG-ZHONGHUA 2/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	01/03/2020	2017	MOL
HHI NYK/EDF	Hyundai Heavy	GTT Mark III Flex	174000	XDF	30/04/2020	2018	NYK
DSME 2491	DSME	GT NO 96	173400	MEGI	01/05/2020	2018	BWGas
Daewoo 2478	DSME	GT NO 96	173400	MEGI	31/05/2020	2017	Maran Gas Maritime
Samsung 2213	Samsung	GTT Mark III Flex	180000	XDF	01/06/2020	2016	GasLog
HHI / Total	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/06/2020	2018	Cardiff Marine
HHI / Total / Sovc	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/06/2020	2018	Sovcomflot
HHI / Cardiff #1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/06/2020	2018	Cardiff Marine
HHI / Cardiff #2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/06/2020	2018	Cardiff Marine
Flex Aurora	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/06/2020	2018	Flex LNG
SHI Gaslog #1	Samsung	GTT Mark III Flex	180000	XDF	01/06/2020	2018	GasLog
Hyundai Ulsan 3086	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	01/06/2020	2018	Knutsen
Daewoo 2469	DSME	GT NO 96	173400	MEGI	30/06/2020	2016	Maran Gas Maritime
MOL HUDONG-ZHONGHUA 3/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	01/07/2020	2017	MOL
DSME 2479	DSME	GT NO 96	173400	MEGI	01/08/2020	2018	John Fredriksen
Flex America	Hyundai Heavy	GTT Mark III Flex	174000	XDF	01/08/2020	2018	Flex LNG
DSME 2480	DSME	GT NO 96	173400	MEGI	01/09/2020	2018	John Fredriksen
SHI Gaslog #2	Samsung	GTT Mark III Flex	180000	XDF	01/09/2020	2018	GasLog
MOL HUDONG-ZHONGHUA 4/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	01/10/2020	2017	MOL
DSME 2483	DSME	GT NO 96	173400	MEGI	01/10/2020	2018	Alpha Gas
DSME 2484	DSME	GT NO 96	173400	MEGI	01/12/2020	2018	Alpha Gas
DSME Minerva #1	DSME	GT NO 96	173400	MEGI	01/03/2021	2018	Minerva Marine
DSME Minerva #2	DSME	GT NO 96	173400	MEGI	01/07/2021	2018	Minerva Marine

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 = 6th June 2018

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	Triputra (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 Conception	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Invention	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
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	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2014	LNG-Oil combi**	2,000	LNG	Germany	Yes	Veka
2014	Short Sea LNG Tanker **	4,000	LNG	Germany	Yes	Veka
2015	LNG Inland bunker**	800	LNG	Germany	Yes	Veka
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 Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	10 small carriers TBN**	5,000	LNG			Bimantara Group
2015	Jahre TBN**	6,200	LNG	Norway	Yes	Donsotank/Jahre Marine
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
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	TBN 1	27,500	LNG	China?		Danyang?
2015	TBN 2	27,500	LNG	China?		Danyang?
2015	TBN 3	27,500	LNG	China?		Danyang?
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2016	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang

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 = 18th July 2018

Small-LNG.com

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
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	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
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
2016	Ocean Yield TBN**	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2017	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	ENGIE Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	Cardissa	6,500	LNG	Northwest Europe	Yes	Shell
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	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	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	Yuan He 1	30,000	LNG	China	Yes	CSR
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
2018	CME TBN†	2,200	LNG	US Coast	Yes	CME
2018	Shell Bunker Barge TBN 4	3,000	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2018	Kairos	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	Qi Yuan	28,000	LNG	China	Yes	Dalian Inteh Group
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
2018	Bunker Breeze	0	LNG	Barcelona	Yes	Suardiaz Energy Shipping
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	Shell Bunker Barge	4,000	LNG	US Coast	Yes	Q-LNG Transport/Harvey Gulf
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Total TBN	18,600	LNG	NWE	Yes	MOL
2020	FuelLNG TBN	7,500	LNG	Singapore	Yes	FuelLNG
2020	CLS TBN	3,500	LNG	Japan	Yes	CLS
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
TBN = To Be Nominated indicates ships are still at construction/planning stage
** = project shelved † =Data to be verified Data last updated = 18th July 2018

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