

LNG Shipping News

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21 March 2019

Port Kembla project nears execution

Since its launch in March, 2018 the Port Kembla Gas project has made significant progress and is in the last stage of preparation for the final investment decision (FID).

This project is now the most advanced of the proposed LNG import projects in Australia, project leader Australian Industrial Energy group (AIE), claimed.

A site in Port Kembla has been selected, front end engineering and design (FEED) has been completed, an FSRU secured, the environmental impact statement (EIS) has been submitted and reviewed, and a number of key commercial contracts, including LNG supply, port access, short listed EPC contractors, and customer offtake agreements are nearing finalisation.

Based on an extensive EIS, AIE said that it was hopeful of obtaining New South Wales Government Determination (development consent) in the coming weeks.

The project sponsors are establishing an organisational structure to carry it into its construction and operations phase.

With this change of focus and in line with his original appointment agreement, CEO, James Baulderstone will leave the pro-



PK press conference: James Baulderstone pictured with the Hon Niall Blair, MLC – Australian Minister for Primary Industries, Regional Water, Trade and Industry; and Lord Mayor of Wollongong, Gordon Bradbery AM, at the announcement of the Port Kembla gas terminal site in June, 2018

ject. He is taking up a new role in the Australian industrial sector. The leadership for the next phase will be announced in due course.

Baulderstone commented: "The need for both more energy supply and more energy suppliers is critical to solving the current issues faced by energy consumers. I am pleased that the AIE project has been able to position itself as

the leading import gas project so quickly. I am confident that the project will move through to the execution phase and start providing energy solutions to Australian industry in the very near future. I am looking forward to returning to work in this sector myself and play a part in maintaining a sustainable manufacturing base for Australia."

Taipower to start LNG imports in 2023

Taiwanese state-owned utility Taiwan Power Co (Taipower) expects to import LNG by 2023.

According to a Reuters report, Taipower has signed two non-binding deals to buy LNG, a senior company executive said.

Taipower expects to convert the deals into binding sales and purchase agreements (SPAs) by the end of this year.

The Taiwanese utility company, which accounts for about two-thirds of imported LNG, first

obtained government permission to source the fuel from international markets in 2014.

The gas will feed Taipower's planned gas-fired power plant at Taichung, where the first unit is expected to be ready by September, 2023, according to a presentation during the recent LPGA 2019 conference in Singapore.

Based on the company's feasibility studies, Taipower's LNG imports are expected to grow from 150,000 tonnes in 2023 to 3.6 mill

tonnes in 2032, based on a gas-fired generating capacity of 1,300 MW and a 65% utilisation rate.

Taipower also plans to add a plant at Hsieh-Ho by 2025/2026 and expects to issue a request for proposal, or a solicitation of bids, by the end of this month for LNG supply and an FSRU.

Feasibility studies for the Taichung and Hsieh-Ho power plants had already been approved, the company said at the conference.

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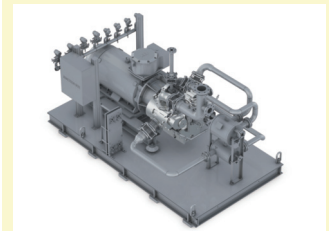
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Brownsville projects near FIDs

Texas LNG's proposed Brownsville LNG export terminal took a step towards receiving US federal approval for construction last week after the energy regulator prepared a final environmental report (EIS).

The US Federal Energy Regulatory Commission (FERC) concluded that construction and operation of the project would result in some adverse environmental impacts, but those impacts 'would not be significant' if the company follows recommendations contained in the report.

FERC has said it would make a decision on the plant around

13th June.

Texas LNG said it plans to make a final investment decision (FID) to build the plant later this year with first LNG expected to be produced in 2023. The project is designed to produce up to 4 million tonnes per annum of LNG.

In addition to Texas LNG, at least two other companies also want to build an LNG export terminal in the Brownsville area -

Exelon Corp's Annova Brownsville and NextDecade Corp's Rio Grande LNG.

Lease agreement

Earlier this month, NextDecade Corp announced that its subsidiary, Rio Grande LNG had signed a lease agreement with the Brownsville Navigation District (BND) to build an LNG export terminal.

This agreement, which covers about 984-acres of land in Cameron County, Texas, is for an initial term of 30 years, with two options to renew and extend the term for periods of 10 years each.

At the port of Brownsville, NextDecade plans to construct, operate, and maintain a large-scale LNG export terminal, including gas treatment, liquefaction, and other supporting facilities and infrastructure.

"We are pleased to have formally executed our lease agreement with the Brownsville Navigation District, and appreci-

ate the ongoing support of Chairman Reed and the BND Commission," said Matt Schatzman, NextDecade's President and CEO. "As we continue to advance our Rio Grande LNG project, we look forward to creating opportunities for local workers and communities across the Rio Grande Valley."

Currently one of the largest proposed private investments in Texas, Rio Grande LNG and its associated Rio Bravo Pipeline could result in more than \$15 billion of investment in Cameron County. The proposed facility and pipelines are expected to create more than 5,000 jobs. In addition, exports from Rio Grande LNG could significantly improve the US balance of trade, NextDecade claimed.

Pending the achievements of commercial milestones and receipt of requisite regulatory approvals, NextDecade said that it anticipated making a positive FID on the project by the end of the third quarter of this year.



The proposed Texas LNG Brownsville site

Gate launches open season

Rotterdam-based LNG terminal operator, Gate is considering increasing capacity by up to 2 billion cu m per annum by installing additional send-out equipment.

This additional capacity could be available from 1st September, 2021.

Gate has invited parties to indicate their interest through an open season during which, subject to allocation and FID, among other considerations, parties can book this additional capacity, as well as the currently available capacity of 1 billion cu m per annum of the exist-

ing terminal, between 1st September, 2021 to 31st August, 2031.

The latter will not be offered on a 'first come/first served' basis until after the open season.

Gate terminal has a send-out capacity of 12 billion cu m per annum.

The terminal operator said that the 1 billion cu m per annum of available capacity is a bundled product

(annual contracted quantity) of berthing slots, storage entitlements and send-out rights, while the 2 billion cu m per annum of additional capacity is an unbundled product, consisting of additional send-out rights but without additional storage entitlements or berthing slots.

Interested parties have the opportunity to enter into binding con-

tracts with Gate until 19th April, 2019, the terminal operator said.

This move follows a record winter of LNG imports into northwest Europe. The extent of market interest in the new capacity could provide an indication of regional buyers' expectations for LNG demand in the years ahead, Gate said.

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LNGC builders to merge

South Korea's shipbuilding group Hyundai Heavy Industries (HHI) has signed a formal agreement to proceed with the acquisition of its rival Daewoo Shipbuilding & Marine Engineering (DSME).

The deal was signed with South Korean state lender Korea Development Bank (KDB) on 8th March and follows a conditional agreement between the two parties signed in January this year.

It was agreed that KDB, which holds a 55.7% stake in DSME, estimated at KRW2.16 trillion (\$1.94 billion), will sell its stake transferring its DSME common stock to HHI and buy KRW1.5 trillion worth of HHI stock, HHI confirmed in a stock exchange filing.

The bank will also consider providing KRW1 trillion to DSME.

HHI will establish a holding company to control the group's shipyards, including DSME. HHI Holdings and KDB will take shares of around 29% and 8%, respectively, in the new company that will control shipbuilding subsidiaries, Hyundai Heavy Industries, Hyundai Samho Heavy Industries, Hyundai Mipo Dockyard and Daewoo.

The new company will hold about 68% of Daewoo's stock.

However, this agreement still faces regulatory hurdles in China, Europe and Japan over anti-trust

concerns.

"Hyundai Heavy will essentially use Daewoo as a sub-contractor to raise its competitiveness," said a source in South Korea's shipbuilding industry to newswires.

The combined entity intends to cut costs and shorten delivery times by building large vessels in Geoje and focusing on the construction of LNGCs at Ulsan.

The two shipbuilders boasted an orderbook including 72 LNGCs at the start of this year, giving them 60% of the global market. ■

GAC handles first Ennore gas carrier call

GAC has handled the first LNGC to berth at the newly opened LNG terminal at Kamarajar Port, Ennore in Chennai, India.

The Marshall Islands-flagged LNGC 'Golar Snow' shipped the terminal's first commissioning cargo of 78,037 cu m of LNG from Ras Laffan.

Agency operations were overseen by Capt Srinivasan Sethumadhavan, General Manager of Shipping Services at GAC's Chennai Office.

"The opening of the first LNG terminal on the east coast of India is likely to change trade dynamics and drive industrial growth in this area.

"Overall, the outlook for the Indian LNG market is promising. Today, India imports some 45% of its total natural gas consumption.



'Golar Snow' was the first LNGC to call at India's new Ennore terminal

The government has invested heavily in the construction of more LNG terminals and pipelines in a bid to transform the country into a gas-based economy.

"This flourishing market is ex-

pected to give rise to an increase in the number of tanker calls. With our 26 offices serving all ports in India, GAC is ready to attend to the needs of LNG tankers," he said. ■

Freeport to export first gas in July

Freeport LNG should be ready to ship its first export cargo in July, nearly two years after flooding following Hurricane 'Harvey' led to the Texas facility's most recent startup delay, CEO Michael Smith said last week.

Smith said in an interview with S&P Global Platts on the sidelines of the CERAWEEK by IHS Markit conference in Houston that Freeport LNG is expected to begin flowing feedgas into the facility in April or May, with first LNG ready to load in July.

Around five to 10 commission-

ing cargoes will be shipped before Freeport LNG begins commercial deliveries this September, Smith said.

This amounts to a nine-month delay from the previous startup target, which was caused in part to flooding at an equipment yard at the Texas site following Hurri-

cane 'Harvey' in August, 2017, and to contractor delays.

"We're cautiously optimistic that they're going to meet the current schedule, based on the progress they've made to date," Smith said. "There's still a lot to do. And, I would not ever say there isn't a risk that it be delayed." ■

EU's US LNG imports rising

In an EU/US Joint Statement released earlier this month, it was revealed that EU LNG imports from the US rose by 181%, since their previous Joint Statement dated 25th July, 2018.

With a share of 12.6% of EU LNG imports in 2019 thus far, the US is Europe's third biggest supplier of LNG.

The EU said it is ready import more LNG from the US, if the market conditions are right and prices competitive. This will allow US exporters to further diversify their European markets whilst contributing to the EU's objectives of security of supply and diversification.

Currently, US legislation still requires prior regulatory approval for LNG exports to Europe. These restrictions need to be addressed and US rules made easier for US LNG to be exported in larger quantities to the EU.

To further explore and discuss the strengthening of the transatlantic strategic co-operation with respect to energy, as agreed in the July, 2018 Joint Statement, the EU and the US are to organise the first EU/US Energy Council High-Level Forum in Brussels.

The event will take place on 2nd May under the theme: 'Towards large-scale US LNG exports to the EU's gas market: competitive pricing, infrastructure investments and technological innovation'.

The EU has or committed to co-finance LNG infrastructure projects worth over €656 million. In addition to the existing 150 billion cu m of spare capacity in the EU, the Union is supporting eight LNG projects, which will increase capacity by another 22 billion cu m by 2023. ■

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GasLog drops down 'GasLog Glasgow'

GasLog Partners is to purchase 100% of the shares in the entity that owns and charters the 'GasLog Glasgow' from GasLog Ltd for \$214 mill.

The price includes \$1 mill for positive net working capital balances to be transferred with the vessel.

GasLog Partners estimated that 'GasLog Glasgow' will add about \$23.5 mill to its EBITDA in the first 12 months after the transaction's closing.

'GasLog Glasgow' is a 174,000 cu m tri-fuel diesel-electric LNGC built in 2016 and operated by GasLog Ltd since delivery.

Period charter

She is currently on a multi-year timecharter with a wholly-owned Shell subsidiary through June, 2026. Shell has the option to extend the charter for another five years.

Andy Orekar, GasLog Partners CEO, said, "I am very pleased to announce the accretive acquisition of the 'GasLog Glasgow'. This 2016-built vessel is highly complementary to our strategy and its charter to Shell provides over seven years of stable cash flows at attractive fixed charter terms.

"The acquisition will expand the Partnership's fleet to 15 wholly-owned LNG carriers, significantly grow our contracted EBITDA and increase our con-

tracted days to approximately 92% for 2019 and 74% for 2020," he said.

Paul Wogan, GasLog Ltd CEO, added, "We continue to execute on our strategy of dropping vessels into GasLog Partners in order to recycle capital back to GasLog to fund our capital programme. In turn, this leads to further growth opportunities for the Partnership.

"Since the inception of the Partnership in 2014 - when we had

a dropdown pipeline of 12 vessels with multi-year charters - we have sold 12 vessels to the Partnership. Today, our pipeline of future growth opportunities for GasLog Partners is 11 vessels. With the equity recycled to GasLog, we remain solidly on track to deliver on our target to more than double our consolidated run-rate EBITDA by 2022," he said.

GasLog Partners said it expected to finance the acquisition

from its available sources of liquidity, including proceeds from its 8.5% Series C cumulative redeemable perpetual fixed to floating rate preference units issued in November, 2018, and the assumption of the 'GasLog Glasgow's' \$134 mill of existing debt.

This acquisition is expected to close early in the second quarter of 2019 and is still subject to certain customary closing conditions. ■



GasLog Ltd has dropped down the 'GasLog Glasgow' to the Partnership

Venture Global to expand production capacity

Earlier this week, the US Federal Energy Regulatory Commission (FERC) approved Venture Global LNG's request to proceed with full site preparation at its proposed \$4.5 bill Calcasieu Pass LNG export terminal in Louisiana.

Calcasieu Pass is designed to produce about 10 mill tonnes per annum of LNG.

The company has also said it is to expand its LNG development business by producing 60 mill tonnes per annum (MTPA).

It has increased the size of its 2016 process equipment supply agreement with Baker Hughes (BHGE), a GE company, to 60 mill tonnes per annum, under which BHGE will deliver a comprehensive technology solution for its

export facilities under agreed terms and defined performance guarantees.

This agreement provides for the guaranteed supply of highly efficient and reliable modular liquefaction trains, plus power generation and electrical distribution equipment that will be standardised across the company's Calcasieu Pass, Plaquemines LNG and expansion projects.

Co-CEOs Bob Pender and Mike Sabel, jointly said, "With this

expanded 60 mill tonnes per annum commitment from BHGE, we can grow our business to meet the increasing demand for our low-cost LNG from our international customers.

"Having fully contracted Calcasieu Pass and anticipating completion of Plaquemines LNG, we are pleased to announce this expansion to meet additional customer demand. We believe our model of mid-scale modular liquefaction is the future of

low-cost LNG production," they said.

Under 20-year agreements with Shell, BP, Edison, Galp, Repsol and PGNiG, Calcasieu Pass will begin delivering US natural gas to the global market in 2022.

The 20 mill tonnes per annum Plaquemines LNG project is expected to receive its final FERC authorisation in August with construction commencing later in the year with a completion date of 2023. ■

Nakilat - a Leader in LNG Shipping

Last year, Nakilat opened a new horizon and business avenue by the addition of two LNGCs and a major stake in an FSRU, the company claimed.

At its Annual General Meeting (AGM) and Extraordinary General Meeting (EGM) held earlier this week, His Excellency Dr Mohammed Bin Saleh Al Sada, Nakilat's Board Chairman said that these moves allowed it to maximise returns for shareholders while reinforcing its integral role in supporting Qatar's status as the world's largest exporter of clean energy.

He also commented on the company's commitment to operational excellence, as evident from the delivery of all cargoes without any interruptions worldwide, despite the challenges brought about by the ongoing "unjust" blockade imposed on Qatar by neighbouring countries.

Nakilat CEO, Eng Abdullah Fadhalah Al Sulaiti, said: "Nakilat's strong financial performance bears testament to the company's prudent long-term growth plans that has enabled it to remain resilient despite challenging the business



Two LNGCs and an FSRU were added to Nakilat's fleet last year

environment.

"The company has successfully capitalised on profitable growth opportunities and pursued sustainable cost optimisation initiatives to achieve greater cost efficiency and synergy across the organisation, which has enabled us to maintain a steady cash flow.

"The company achieved strong results which reflected positively on the performance of the share price during the previous period with an increase of 23.7% during the period from January, 2018 until March, 2019, compared to an increase of 13.5% in the Qatar Exchange Index. We will continue to

steer ahead with our business plans and effective risk management to continue delivering positive value to our shareholders, and towards achieving our vision to be a global leader and provider of choice for energy transportation and maritime services," he concluded. ■

BP and ExxonMobil to aid Alaska LNG project

Alaska Gasline Development Corp (AGDC) has signed an agreement with BP and ExxonMobil to help advance the state-owned company's proposed \$43.4 bill Alaska LNG project.

"Our respective organisations share an interest in the successful commercialisation of Alaska's stranded North Slope natural gas," AGDC Interim President, Joe Dubler said in a statement.

The Alaska LNG project is designed to liquefy 3.5 bill cu ft per day of gas for sale to customers in

the Asia/Pacific region from a facility to be built in Nikiski on the Kenai Peninsula south of Anchorage. It includes a 1,300 km pipeline from the North Slope.

According to Reuters, US energy regulators recently delayed the LNG project's decision date to June, 2020 from February, 2020.

At the same time, AGDC said it was continuing negotiations with several parties interested in the project, including a joint development agreement with Sinopec, China's sovereign wealth fund China Investment Corp's CIC Capital Corp and the state-owned Bank of China. ■

Philippine government gives terminal green light

Philippine power producer First Gen Corp said last week that the Department of Energy has approved its application for a Notice to Proceed (NTP) for the construction of its FGEN Batangas LNG terminal project.

First Gen, which operates four power plants with a com-

bined capacity of 2,000 MW running on Philippines' Malampaya natural gas, said it has yet to receive a formal notice from the DOE on the issuance of NTP, according to a Reuters report.

With Tokyo Gas as its LNG partner, First Gen is seeking to ensure availability of imported

gas for its power plants ahead of Malampaya's depletion possibly by 2024.

In a regulatory filing, the company said its LNG terminal will serve the natural gas requirements of existing and future gas-fired power plants of third parties and its affiliates. ■

NEWS NUDGE

Teekay LNG declares distributions

Teekay GP LLC, the general partner of Teekay LNG Partners, has declared cash distributions of \$0.5625 per unit on the Partnership's Series A preferred units and \$0.5313 per unit on the Partnership's Series B preferred units for the period from 1st January, 2019 to 31st March, 2019.

They are payable on 15th April, 2019 to all unitholders of record as at 29th March, 2019. ■



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NEWS NUDGE

Rotterdam extends discounts to Green Award LNGCs

The first Green Award incentive provider, the Port of Rotterdam, has extended its remit to reward LPG and LNG carriers of any size certified by the organisation.

From 1st January, 2019, every liquid bulk carrier in the Green Award scheme now benefits from a discount on the vessels' port dues of 15%, relating to its gt, when calling at Rotterdam.

The Port Authority has also introduced a new pay-out scheme, which makes claiming incentives unnecessary, as this is automatically awarded upon notification by the agent that a vessel with a Green Award certificate is calling at the port.

This year Green Award is celebrating its 25th anniversary.

GTT wins tank designs for Celsius

GTT has received an order from Samsung Heavy Industries (SHI) to design the tanks for two 180,000 cu m LNGCs, ordered by Celsius Tankers.

They will be fitted with the Mark III Flex membrane containment system. The ships' deliveries are planned during the second quarter of 2021.

OLT publishes tender procedure

OLT Offshore LNG Toscana's tender procedure for the auctioning of LNG equalling 60,000 MW/h is now available.

The documents to participate to the tender were presented on 18th March, 2019, according to the conditions set forth in the procedure.

Foreign flag LNGCs allowed at Sabetta

Russian has decreed that foreign flag vessels are allowed to transport gas and condensed gas from Sabetta.

Nippon Paint sees success in LNGC sector

Nippon Paint Marine (Europe) has reported a 35% increase in consolidated sales as it looks to strengthen its position with new marine coating products and expansion into new geographical areas and market sectors.

Since it was established in 2016, Nippon Paint Marine (Europe) and its 100% subsidiary Nippon Paint Marine (Turkey) has seen "considerable growth in sales" due in part to the market success of its fuel-saving A-LF Sea antifouling product, particularly in the LNG/LPG segments.

Michel Wilckens, Managing Director, Nippon Paint Marine (Europe) GmbH, said: "Since the market introduction of our unique low friction, hydrogel-based coatings in 2007, more than 3,000 vessels have been applied with this unique marine technology. We anticipate further growth as more ship operators apply the technol-

ogy as a way of reducing fuel consumption to meet new emissions regulations."

Increased interest has also been registered for NPM's specialty products such as the solvent free, fibre-reinforced epoxy mastic EPOBARR; Neoguard Toughness, an abrasion resistant, easy-to-clean epoxy for cargo tanks; and the recently introduced Aquaterras, the world's first and only biocide-free SPC antifouling.

"Nippon Paint Marine has long been at the forefront of marine coatings technology," said Wilckens. "With the introduction of Aquaterras, we can provide

shipowners and managers with an antifouling product that is not only free of biocides and heavy metals but can also further reduce fuel consumption through its ultra-smooth surface."

John Drew, Director, Nippon Paint Marine (Europe) GmbH, added: "The Middle East Area has become an important focal point for our customers, especially following the rapid increase in dry-dock capacity. In order to strengthen our regional presence and improve product availability and technical services, Nippon Paint Marine (Europe) will open a new sales and distribution office in the UAE, later this year." ■

Up to six small-scale LNGCs for Avenir

Chinese shipbuilder Nantong CIMC Sinopacific Offshore & Engineering (CIMC SOE) is to build up to six LNGCs for Avenir LNG, according to brokers reports.

The contract includes the construction of two firm 20,000 cu m LNGCs, plus up to four optional LNG bunkering vessels. The delivery of the firm vessels is set for 2021.

This small-scale LNG company

was formed by Stolt-Nielsen, which holds a majority stake, in co-operation with Golar LNG and Høegh LNG.

Stolt-Nielsen had earlier ordered four small-scale LNGCs from Keppel Offshore & Marine (Keppel O&M) for its subsidiary Stolt-Nielsen Gas.

These 7,500 cu m vessels will be fitted with dual fuel engines that can run on both

diesel and LNG.

To be completed in the fourth quarter of 2020 and the first quarter of 2021, respectively, the vessels will have a class notation for bunkering, which enables the provision of LNG bunkering services as required.

****The four 180,000 cu m LNGCs recently reported ordered at Samsung were believed to be for Sinokor, broking sources said. ■

For example, vessels timechartered for at least 15 years are allowed to trade until 31st December, 2043. A list of vessels is included in an Appendix to the Governmental Order.

Foreign-flagged vessels that are timechartered for no longer than six months are allowed to carry gas and condensed gas from Sabetta until 31st December, 2021.

GasLog names SHI-built LNGCs

At a ceremony on 12th March, GasLog named two new LNGCs building at Samsung Heavy Industries.

They were named 'GasLog

Gladstone' and 'GasLog Warsaw'. 'GasLog Gladstone' was also delivered to GasLog at the same ceremony.

GasLog said the 174,000 cu m 'GasLog Gladstone' would start a long term charter to Shell following her delivery.

The company did not provide additional info on the 180,000 cu m 'GasLog Warsaw'.

TEN LNGCs chartered out

The 'Neo Energy' and 'Maria Energy' have been fixed to "significant international energy concerns" for an aggregate period of 36 months.

The total gross revenues from these two charters, over the duration of the respective contracts, is expected to be about \$60 mill.

"LNG is on top of the agenda for TEN's diversified energy fleet. With two vessels fixed on accretive medium-term charters, the company is examining further expansion in the sector," George Saroglou, TEN COO, commented. "TEN's model provides its clients with a broad range of vessel types, ranging from crude and product tankers to gas carriers. At the same time this diversity allows TEN to choose the best investment opportunities for growth," he said. ■

Atlas Copco wins LNGC compressor orders

Turbo-machinery manufacturer Atlas Copco Gas and Process Division has won compressor orders for LNGCs.

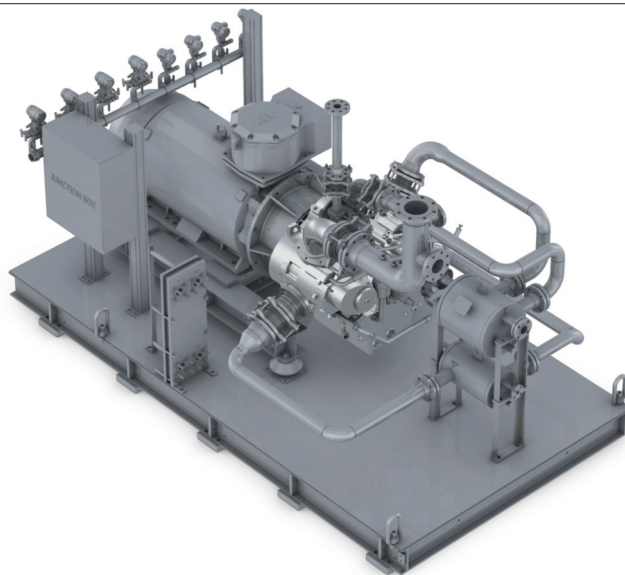
Placed by Samsung Heavy Industries, the order calls for the supply of eight HD centrifugal gas compressors, eight oil-free gas screw compressors along with the necessary heaters and vaporizers.

This equipment will be fitted on four 180,000 cu m LNGCs ordered by Celsius Tankers.

The first units will be shipped from Atlas Copco at the beginning of October, 2019, with the remainder of the machinery being delivered in the second quarter of 2020.

Each of the new vessels will be fitted with Atlas Copco's new oil-free gas screw compressors to feed their XDF engines - a first in the LNGC sector. This new compressor technology was specifically designed to meet modern LNG carrier needs, including the XDF pressure requirements and reduced flow of boil-off gas from improved insulation measures.

An oil-free design also allows



Atlas Copco is to supply compressors for Celsius newbuildings

for significantly longer maintenance intervals compared to oil-flooded compressors and can be used with a reliquefaction system without any risk of oil contamination in heat exchangers or LNG cargo, Atlas Copco said.

"This order is a milestone in

our marine LNG product development. To be able to provide the first ever oil-free gas screw compression technology for carrier vessels is a significant step in the evolution of our products," said Robert Radimeczky, President of the Gas and Process Division. ■

Anthony Veder to manage larger LNGC

Anthony Veder is expanding its fleet by taking delivery of a 30,000 cu m LNGC currently under construction at Zhejiang Xinle Shipbuilding in Ningbo.

She will be completed under the supervision of Anthony Veder and will become operational this summer.

After delivery, she will be renamed taking the company's 'Coral' prefix. Anthony Veder will handle both the commercial

operation and technical ship-management.

"We are proud to add a new LNG carrier to our fleet in this relatively short time frame and look forward to our close co-operation with Xinle Shipbuilding to finalise the vessel," said Jan Valkier, An-

thony Veder CEO. "Our company has a long history in building and delivering ships in China such as the LNG-fuelled LEG vessels 'Coral Star' and 'Coral Sticho'. We are excited to return to China for this latest addition to our fleet after five years of absence." ■

NEWS NUDGE

PETRONAS moves FLNG

PETRONAS has relocated the FLNG, 'PFLNG Satu', from the Kumang field, offshore Sarawak, to the Kebabangan (KBB) field, offshore Sabah. 'PFLNG Satu' is to be moored at a water depth of 120 m in the KBB cluster field, located 90 km northwest of Kota Kinabalu, Sabah.

PETRONAS Executive Vice President and CEO Upstream, Datuk Mohd Anuar Taib said "PFLNG Satu's' technology, featuring the capability to move from one location to another, will strengthen the reliability of PETRONAS' LNG supply system to meet growing LNG demand.

"PETRONAS has delivered 19 successful cargoes since the commissioning of 'PFLNG Satu' and we are confident that this success continues in Sabah waters as well," he added.

Designed to last for up to 20 years without drydocking, the 365 m long FLNG is expected to produce 1.2 mill tonnes of LNG per year.

Saga LNG's LNGC nears completion

Saga LNG Shipping held a naming ceremony for its first LNGC at the Jiangsu shipyard on 13th March, 2019.

Named 'Saga Dawn', the 45,000 cu m vessel will be delivered in May of this year and enter into service shortly after.

Saga LNG claimed that the vessel is the world's first LNGC to feature an IMO type A LNG containment system, based on LNT Marine's patented LNT A-BOX design.

The ABS-classed vessel is fitted with Wärtsilä dual-fuel main and auxiliary engines. ■



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Zhang Jia-Hua, Operations Team Leader
Baotou Lu Ding Natural Gas Co. Ltd.
Inner Mongolia, China

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WORLD LNG CARRIER ORDERBOOK

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Jmu Tsu 5072	JMU	SPB	165000	TFDE	Mar-19	Feb-14	MOL
Jmu Tsu 5073	JMU	SPB	165000	TFDE	Jul-19	Feb-14	MOL
Jmu Tsu 5071	JMU	SPB	165000	TFDE	Mar-19	Feb-14	NYK
Gaslog Gladstone	Samsung	TZ Mk. III	174000	XDF	Jan-19	May-14	GasLog
Maran Gas Syros	DSME	GT NO 96	173400	MEGI	Apr-19	Jun-14	Maran Gas Maritime
Daewoo 2430	DSME	GT NO 96	172000	TFDE - Azipod	Jul-19	Jul-14	Teekay LNG
Daewoo 2431	DSME	GT NO 96	172000	TFDE - Azipod	Aug-19	Jul-14	Teekay LNG
Daewoo 2433	DSME	GT NO 96	172000	TFDE - Azipod	Oct-19	Jul-14	Teekay LNG
Daewoo 2434	DSME	GT NO 96	172000	TFDE - Azipod	Nov-19	Jul-14	Teekay LNG
Daewoo 2432	DSME	GT NO 96	172410	TFDE - Azipod	Sep-19	Jul-14	MOL
Kawasaki Sakaide 1729	Kawasaki	Moss	155000	TFDE	Dec-19	Sep-14	MOL
Samsung 2150	Samsung	GTT Mark III Flex	174000	XDF	Jan-19	Oct-14	MOL
British Mentor	DSME	GT NO 96	173400	MEGI	Feb-19	Nov-14	BP
British Sponsor	DSME	GT NO 96	173400	MEGI	Mar-19	Nov-14	BP
Daewoo 2444	DSME	GT NO 96	173400	MEGI	Jan-19	Nov-14	BP
Nikolay Zubov	DSME	GT NO 96	172410	TFDE - Azipod	Mar-19	Dec-14	Dynagas
Mitsubishi Nagasaki 2322	Mitsubishi H.I.	Moss	177000	STaGE	Sep-19	Jan-15	MOL
Marvel Crane	Mitsubishi H.I.	Moss	177000	STaGE	Dec-18	Jan-15	NYK
Mitsubishi Nagasaki 2323	Mitsubishi H.I.	Moss	177000	STaGE	Jan-19	Mar-15	MOL
Maran Gas Chios	DSME	GT NO 96	173400	MEGI	Jan-19	Jun-15	Maran Gas Maritime
Maran Gas Hydra	DSME	GT NO 96	173400	MEGI	Jan-19	Jun-15	Maran Gas Maritime
Hyundai Samho S856	Hyundai Heavy	TZ Mk. III	174000	MEGI	Jan-19	Jun-15	Teekay LNG
Yamal Spirit	Hyundai Heavy	TZ Mk. III	174000	MEGI	Jan-19	Jun-15	Teekay LNG
Daewoo 2489	DSME	GT NO 96	173400	MEGI	Nov-19	Sep-15	BWGas
Shinshu Maru	Kawasaki	Moss	177000	STRH	Feb-19	Sep-15	MOL
Sohshu Maru	Kawasaki	Moss	177000	STRH	Jul-19	Sep-15	MOL
Diamond Gas TBN	Mitsubishi H.I.	Moss	165000	STaGE	May-19	Nov-15	Mitsubishi
Bushu Maru	Mitsubishi H.I.	Moss	180000	STaGE	Jun-19	Nov-15	NYK
Nohshu Maru	Mitsubishi H.I.	Moss	180000	STaGE	Feb-19	Nov-15	NYK
Hyundai Ulsan 2937	Hyundai Heavy	GTT Mark III Flex	180000	XDF	Apr-19	May-16	SK Shipping
Hyundai Ulsan 2938	Hyundai Heavy	GTT Mark III Flex	180000	XDF	Jul-19	May-16	SK Shipping
Daewoo 2466	DSME	GT NO 96	173400	MEGI	Oct-19	Jun-16	Maran Gas Maritime
Daewoo 2467	DSME	GT NO 96	173400	MEGI	Nov-19	Jun-16	Maran Gas Maritime
Samsung 2213	Samsung	GTT Mark III Flex	180000	XDF	Jun-20	Sep-16	GasLog
Daewoo 2469	DSME	GT NO 96	173400	MEGI	Apr-20	Dec-16	Maran Gas Maritime
Hyundai Ulsan 2964	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	May-19	Mar-17	Knutzen
Flex Constellation	DSME	GT NO 96	173400	MEGI	Jun-19	Mar-17	Flex LNG
Flex Courageous	DSME	GT NO 96	173400	MEGI	Aug-19	Mar-17	Flex LNG
Hyundai Ulsan 2963	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	Jun-19	May-17	Knutzen
MOL HUDONG-ZHONGHUA 1/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	Dec-19	Jul-17	MOL
MOL HUDONG-ZHONGHUA 2/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	Mar-20	Jul-17	MOL
MOL HUDONG-ZHONGHUA 3/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	Jul-20	Jul-17	MOL

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 = 23rd January 2019

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
MOL HUDONG-ZHONGHUA 4/4	Hudong-Zhonghua	GT NO 96	174000	MEGI	Oct-20	Jul-17	MOL
Gaslog Windsor	Samsung	GTT Mark III Flex	180000	XDF	Jul-19	Dec-17	GasLog
Daewoo 2478	DSME	GT NO 96	173400	MEGI	May-20	Dec-17	Maran Gas Maritime
HHI NYK/EDF	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Apr-20	Jan-18	NYK
HHI / Total	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-20	Jan-18	Cardiff Marine
HHI / Total / Sovc	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-20	Jan-18	Sovcomflot
DSME 2490	DSME	GT NO 96	173400	MEGI	Feb-20	Feb-18	BWGas
DSME 2491	DSME	GT NO 96	173400	MEGI	May-20	Feb-18	BWGas
HHI / Cardiff #1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-20	Feb-18	Cardiff Marine
HHI / Cardiff #2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-20	Feb-18	Cardiff Marine
DSME 2479	DSME	GT NO 96	173400	MEGI	Aug-20	Feb-18	John Fredriksen
DSME 2480	DSME	GT NO 96	173400	MEGI	Sep-20	Feb-18	John Fredriksen
Flex America	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Aug-20	Mar-18	Flex LNG
Flex Aurora	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-20	Mar-18	Flex LNG
SHI Gaslog #1	Samsung	GTT Mark III Flex	180000	XDF	Jun-20	Mar-18	GasLog
Samsung 2271	Samsung	GTT Mark III Flex	174000	XDF	Apr-20	Mar-18	Cardiff Marine
DSME Minerva #1	DSME	GT NO 96	173400	MEGI	Mar-21	Mar-18	Minerva Marine
DSME Minerva #2	DSME	GT NO 96	173400	MEGI	Jul-21	Mar-18	Minerva Marine
Hyundai Ulsan 3086	Hyundai Heavy	GTT Mark III Flex	180000	MEGI	Jun-20	Mar-18	Knutsen
DSME 2483	DSME	GT NO 96	173400	MEGI	Oct-20	Mar-18	Alpha Gas
DSME 2484	DSME	GT NO 96	173400	MEGI	Dec-20	Mar-18	Alpha Gas
SHI Gaslog #2	Samsung	GTT Mark III Flex	180000	XDF	Sep-20	May-18	GasLog
Maran Gas DSME	DSME	GT NO 96	173400	MEGI	Oct-20	Jun-18	Maran Gas Maritime
DSME 2487	DSME	GT NO 96	173400	TFDE	Apr-21	Jun-18	Maran Gas Maritime
DSME 2485	DSME	GT NO 96	173400	MEGI	Mar-21	Jun-18	Alpha Gas
HHI Thenamaris #1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Nov-20	Jun-18	Thenamaris
HH 8012	Hyundai Heavy	GTT Mark III Flex	174000		Feb-21	Jun-18	Flex LNG
HH 8013	Hyundai Heavy	GTT Mark III Flex	174000		May-21	Jun-18	Flex LNG
HHI Capital Gas #1	Hyundai Heavy	GTT Mark III Flex	174000		Sep-20	Jul-18	Capital Gas
HHI Capital Gas #2	Hyundai Heavy	GTT Mark III Flex	174000		Dec-20	Jul-18	Capital Gas
HHI Capital Gas #3	Hyundai Heavy	GTT Mark III Flex	174000		Mar-21	Jul-18	Capital Gas
HHI Capital Gas #4	Hyundai Heavy	GTT Mark III Flex	174000		Jun-21	Jul-18	Capital Gas
DSME 2492	DSME	GT NO 96	173400	MEGI	Nov-20	Jul-18	John Fredriksen
SHI Celcius #1	Samsung	GTT Mark III Flex	180000	XDF	Oct-20	Aug-18	Celcius Shipping
SHI Celcius #2	Samsung	GTT Mark III Flex	180000	XDF	Jan-21	Aug-18	Celcius Shipping
HHI 3037	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jul-20	Aug-18	Cardiff Marine
SHI 2300	Samsung	GTT Mark III Flex	174000	XDF	Nov-20	Aug-18	GasLog
SHI 2301	Samsung	GTT Mark III Flex	174000	XDF	Dec-20	Aug-18	GasLog
HHI / Cardiff	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Feb-21	Sep-18	Cardiff Marine
HHI/ Thenamaris	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Feb-21	Sep-18	Thenamaris
Samsung/NYK	Samsung	GTT Mark III Flex	174000	XDF	Mar-21	Sep-18	NYK
Samsung/Minerva 1	Samsung	GTT Mark III Flex	174000	XDF	Feb-21	Oct-18	Minerva Marine
Samsung/Minerva 2	Samsung	GTT Mark III Flex	174000	XDF	Aug-21	Oct-18	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 = 23rd January 2019

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Samsung/Cardiff 1	Samsung	GTT Mark III Flex	174000	XDF	Dec-20	Nov-18	Cardiff Marine
Samsung/Cardiff 2	Samsung	GTT Mark III Flex	174000	XDF	Jan-21	Nov-18	Cardiff Marine
HHI / Cardiff 1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Mar-21	Nov-18	Cardiff Marine
HHI / Cardiff 2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Apr-21	Nov-18	Cardiff Marine
HHI/Latsco 1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jan-21	Nov-18	Latsco Shipping
HHI/Latsco 2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Mar-21	Nov-18	Latsco Shipping
Samsung/NYK 1	Samsung	GTT Mark III Flex	174000	XDF	Aug-21	Dec-18	NYK
Samsung/NYK 2	Samsung	GTT Mark III Flex	174000	XDF	Nov-21	Dec-18	NYK
DSME BW 1	DSME	GT NO 96	174000	MEGI	Feb-21	Dec-18	BWGas
DSME BW 2	DSME	GT NO 96	174000	MEGI	Jun-21	Dec-18	BWGas
DSME Maran Gas	DSME	GT NO 96	173400	MEGI	Jun-21	Dec-18	Maran Gas Maritime
HHI NYK 1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Nov-20	Dec-18	NYK
HHI NYK 2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Mar-21	Dec-18	NYK
HHI NYK 3	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Jun-21	Dec-18	NYK
DSME MOL 1	DSME	GT NO 96	180000	MEGI	May-21	Dec-18	MOL
DSME MOL 2	DSME	GT NO 96	173400	MEGI	Jun-21	Dec-18	MOL
HHI Sov 1	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Sep-20	Dec-18	Sovcomflot
HHI Sov 2	Hyundai Heavy	GTT Mark III Flex	174000	XDF	Feb-21	Dec-18	Sovcomflot
Samsung GasLog 1	Samsung	GTT Mark III Flex	180000	XDF	Jun-21	Dec-18	GasLog
Samsung GasLog 2	Samsung	GTT Mark III Flex	180000	XDF	Aug-21	Dec-18	GasLog
Samsung Cardiff	Samsung	GTT Mark III Flex	174000	XDF	Mar-21	Dec-18	Cardiff Marine
DSME Alpha	DSME	GT NO 96	174000	MEGI	Oct-21	Dec-18	Alpha Gas
Samsung/ Navigare	Samsung	GTT Mark III Flex	174000	XDF	Mar-21	Dec-18	Navigare

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 = 23rd January 2019



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WORLD SMALL SCALE LNG FLEET*

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

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 = 4th March 2019

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	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 EnergyICE	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	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
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
2020	Eesti Gaas TBN	6,000	LNG	NWE	Yes	Eesti Gaas
2020	ENN TBN	8,500	LNG	China	Yes	ENN
2021	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2021	Knutsen TBN	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	Gazprom Neft TBN	5,800	LNG	Russia	Yes	Gazprom Neft
2021	PE TBN	12,000	LNG	Singapore	Yes	MOL
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2022	Stolt TBN	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2022	Stolt TBN	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2024	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2024	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2026	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2026	Stolt TBN (option)	20,000	LNG	Worldwide	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 = 4th March 2019