LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 27 April 2017

'Sevilla Knutsen' damaged after grounding incident

The LNGC 'Sevilla Knutsen' was believed to have struck a submerged object during a voyage from Japan to Australia on 17th April, initial reports said.

She was said to have suffered significant damage, including the breaching of the hull, which led to water ingress.

Some ballast tanks were reported flooded. The crew managed to ballast the vessel to keep her stable.

The ship refloated by her own means and proceeded to the US Naval Base in Guanon, however, she was banned from entering the harbour. She then sailed at a reduced speed to Cebu, Philippines, where she anchored on 24th April.

According to Marine Traffic, she was still there on the morning of 26th April.

The local authorities have started an investigation into the cause of the accident. The crew claimed that the vessel gounded on a reeof or an atoll, which was not shown on the charts, according to various reports.

Knutsen LNG's 'Seville Knutsen' is currently anchored off Cebu in the Philippines with bottom damage

The 173,400 cu m LNGC was delivered from Daewoo in 2010 and is classed by DNV GL.

She was one of a series of LNGCs built on the back of a charter to Repsol, which has since been taken over by Shell and flies the Spanish flag being registered in Santa Cruz de Tenerife. ■

Q-Flex arrives at El Ferrol

El Ferrol's Mugardos liquefied natural gas terminal has received its largest LNGC to date.

The Q-Flex 'Al Utouriya' berthed on Tuesday with a gas cargo from Ras Laffan in Qatar.

The terminal had previously passed the exhaustive compatibility audits that the Qatari industry submits to every terminal used by its vessels.

'Al Utouriya' was built by Hyundai Heavy Industries in 2008 and is 315 m in length and 50 m beam. Equipped with the most advanced technology, the ship boasts 40% lower energy and carbon emissions, compared with conventional LNGCs. A Q-Flex can also transport up to 50 % more cargo.

The port of El Ferrol has welcomed its first Q-Flex

The arrival of this large vessel proves the versatility of El Ferrol´s terminal, as it is claimed to be able to receive both high capacity methane and small scale units, such as the 'Coral Energy', which has a maximum cargo capacity of 15,000 cu m.

'Al Utouriya' is the 294th vessel to arrive at Reganosa´s facilities since it came on stream in 2007. ■

SHIPPING NEWS AGENDA

Drewry bearish on LNGC earnings

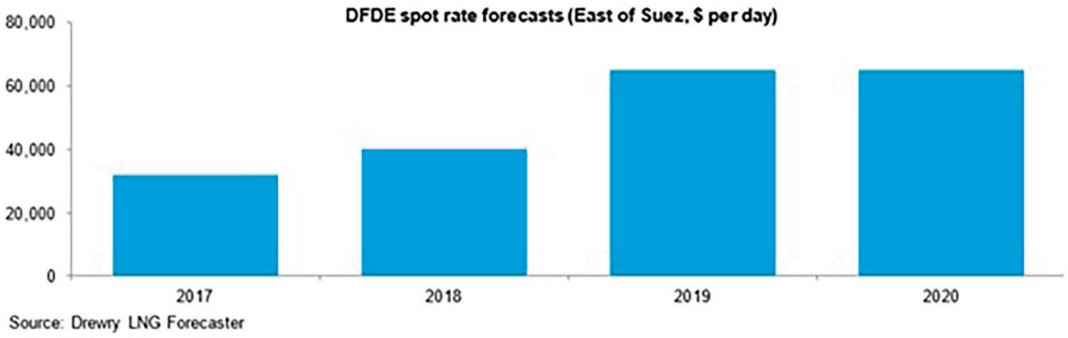
Excess LNGC supply will reduce only gradually going forward with rate recovery pushed back to the latter part of next year, according to the latest edition of the 'LNG Forecaster', published by shipping consultancy Drewry.

Drewry said it maintained a bearish stance on the LNG rate outlook for 2017, due to strong fleet growth, which is expected to be around 13%.

Rates have been falling since the beginning of this year in line with expectations, Drewry said. The spot rate for DFDE type vessels (East of Suez) is currently around $26,000 per day, compared to $37,000 per day at the beginning of the year, a fall of 30%.

"The tremendous weakness observed recently in the freight market highlights the ample vessel supply. We are anticipating two years of aggressive fleet growth with supply expected to expand a further 9% in 2018, which will extend the period of weak freight rate development into next year. Therefore, we do not expect rates to start recovering until the end of 2018 when several new LNG trains from the US are expected to be operating at full capacity," said Shresth Sharma, Drewry's lead LNG shipping analyst.

"As a result, we have trimmed down our forecast for average spot freight rates in 2018 to $40,000 per day from the earlier expectation of $50,000 per day," he concluded. ■



LNGC short listed for Nor-Shipping award

Two juries have selected four candidates for each of the short lists for the Nor-Shipping 2017 Energy Efficiency and Next Generation Awards.

The four vessels chosen for the short list of the Energy Efficiency Award included an LNGC - the Moss-type 'Seri Camellia', whose tanks are enclosed by an integrated hull system, which adds strength to the hull but allows for a decrease in steel weight while at the same time improving aerodynamic efficiency, compared to conventional Moss tank type ships.

The vessel also features Mitsubishi's Ultra Steam Turbine Propulsion Plant, a two-stage feed water heating system, which uses heat recovery to achieve 13% improvement in efficiency over conventional steam turbines. A variety of other energy saving devices and environmentally friendly systems also feature on board the vessel, it was claimed.

MISC's LNGC 'Seri Camellia' has been short listed for an award

'Seri Camellia' was entered by her owner - MISC Berhad, Malaysia.

At Nor-Shipping 2017, the LNG sector will also be well represented.

High-level participants include Mike Utsler, COO of Woodside Energy, which operates 8% of global LNG supply, Peter Justesen, the Chief Shipping Officer at energy giant ENGIE (Europe's largest LNG importer), Akinwole Omboriowo II, CEO of African Genesis Energy, and Peggy Liu, the Chairperson of the Joint US-China Collaboration for Clean Energy, amongst others.

A special Japanese Nor-Shipping hydrogen delegation will also be in attendance, led by the Japanese Vice Minister of Transportation, the organisers said. Much of the discussions will centre round LNG as a fuel.

Partners from the growing SEA\LNG alliance will also be in attendance.

This type of collaborative working group, which was recently boosted by the arrival of JAX LNG, Petronet LNG and Toyota Tsusho Corp, is, according to the organisers, a model for accelerating clean energy uptake. ■

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ENGIE FSRU to operate in Maharashtra

Indian energy concern, H-Energy Gateway Private, is to charter the FSRU 'GDF SUEZ Cape Ann' from ENGIE initially for five years.

She will be the first FSRU to be operated in India and will be central to the company's LNG regasification project to be built in Maharashtra State.

'GDF SUEZ Cape Ann' has been chartered by H-Energy for five years and is due to arrive at the LNG jetty at Jaigarh port by the third quarter of 2018.

The companies have an option to extend the charterparty agreement beyond the initial term by mutual agreement.

India has chosen its first FSRU. Photo credit ENGIE

Commenting on the partnership, Darshan Hiranandani, H-Energy CEO, said; "We value the relationship with ENGIE and are happy that a global LNG player like ENGIE is part of our FSRU project. We feel that both the companies will enhance their relationship further through various collaboration measures in future as well."

All the necessary studies for port operations, such as navigation simulation, quantitative risk assessment, etc, have been carried out to ensure safe mooring of the FSRU at the new jetty and to berth LNGCs alongside the FSRU to allow ship-to-ship gas cargo transfers.

H-Energy has also awarded the EPCM contract for the construction of a 60 km tie-in pipeline from Jaigarh port to Dabhol to Engineers India (EIL), which is one of the leading consultancy and EPC companies in India. The pipeline construction is expected to be completed by 3Q18.

Work has started at Jaigarh on the construction of jetty for the FSRU project. Hiranandani said, "These are the final set of agreements we had to execute to ensure timely commercial operation of the project, we are extremely pleased by the progress of the project and will ensure that the project is completed as per its planned schedule and achieves its commercial operation by 3Q18." ■

OSM in LNGC crew supply agreement

At a meeting in Manila on 18th April, Ventis and OSM signed a joint venture agreement to provide Filipino crew to "K" Line's LNGC fleet.

Tommy Olofsen, OSM Crew Management Managing Director, said: "Today marks a significant milestone in the relationship between "K" Line group and OSM, in that we have signed an MOU for establishing a joint venture for "K" Line's LNG Filipino manning."

Upon the signing of the agreement, Managing Director of "K" Line LNG Shipping (UK), Yuzuru Goto, said: "We believe this to be an excellent partnership, from a supplier with a genuine maritime heritage, understanding of industry operations and aspirations, and understanding of our corporate values and organisational culture. This gives us complete peace of mind for future compliance, dependability and, importantly for "K" Line's, safe and environmentally responsible operations."

With this joint venture agreement, the expansion of the partnership confirms OSM's position in the growing LNG market, the company claimed. Within the next four years, the number of "K" Line Group LNGCs is expected to grow to about 20. Today, OSM has a total of more than 1,000 LNG crew in a pool and more than 650 on board vessels.

Olofsen concluded: "This development cements the strategic manning relationship between our organisations and signifies the high quality of OSM Crew Management to be selected as global manning partner and JV partner for "K" Line." ■

Ventis President and CEO Jose Ramon R Garcia (left) and Managing Director OSM Crew Management Tommy Olofsen (right)

Bangladesh contracts second floating LNG terminal

Bangladesh state-owned Petrobangla has signed a contract with Summit LNG Terminal, a subsidiary of the Summit Group, to development Bangladesh's second floating LNG terminal.

The company said that a terminal use and implementation agreements for the building of the floating LNG import terminal at Moheshkhali Island in the Bay of Bengal were signed last week.

This will be the second floating LNG terminal in Bangladesh. The first one is being developed by US-based Excelerate Energy Bangladesh at the same location.

Petrobangla agreed the deal under a special government policy that allows it to bypass the tendering process.

Summit has agreed to develop the facility on a build, own, operate, transfer (BOOT) basis with a 9 km subsea pipeline off Moheshkhali within 18 months of signing the final contract. The terminal will handle around 500,000 mill cu ft per day of gas imports.

Summit will transfer the facility to Petrobangla after 15 years of use, while in the interim, Petrobangla will pay 45 cents per mill cu ft to Summit for the services.

The cost of the second project is estimated at $400-$500 mill, which Summit will implement jointly with US-based General Electric as an 20% equity investment partner.

Bangladesh expects to start importing LNG via the first Excelerate floating LNG import terminal next year. ■

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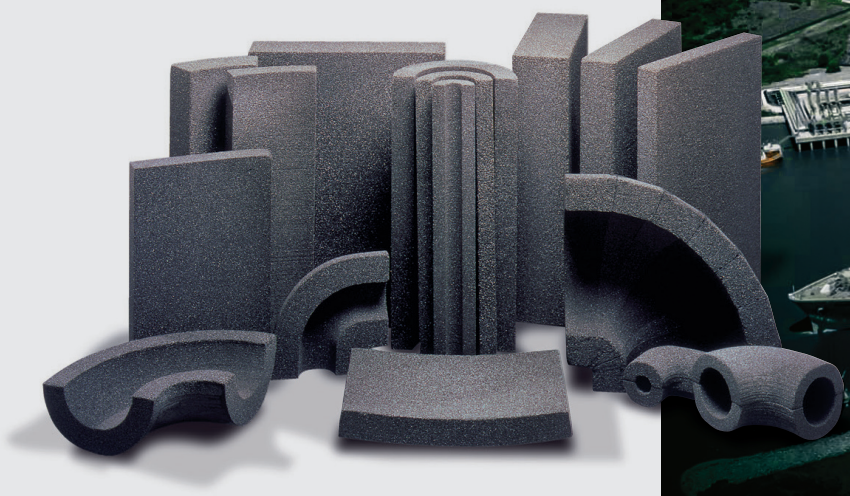


Nakilat's Q1 profit falls

Qatar Gas Transport Company (Nakilat) suffered a 20.4% drop in earnings in the first quarter of 2017.

The LNGC owner and operator reported a net profit of QR191 mill ($52.4 mill), compared to QR240 mill in the same period in 2016.

Nakilat said that the profit fall was down to the effect of reducing estimated scrap value of vessels in accordance with applicable international accounting standards, in addition to reduced operations of a few joint ventures, due to the current economic conditions in the global market.

The company's revenue from the wholly-owned vessels for 1Q17 was also down at QR752.5 mill, compared to last year's QR759.9 mill. However, the share of results from Nakilat's joint ventures showed a larger decrease at QR83.8 mill against QR106.1 mill. The total expenses for the quarter were QR686.1 mill.

Nakilat claimed said that it had maintained a stable operational performance and steady cash flow through its strategic long-term charter agreements with financially strong charterers.

"Despite the current economic downturn and market volatility, Nakilat has been continuously improving its operational activities, which is demonstrated by the successful transition of two vessels in the first quarter of 2017, bringing total vessels operated by Nakilat to 14 vessels to date," Nakilat Managing Director, Eng Abdullah Fadhalah Al Sulaiti, said.

The management of the vessels was transferred as part of the planned and phased transition agreed in October, 2016 between NSQL and Shell. ■

GTT suffers slight revenue drop

GTT (Gaztransport & Technigaz) reported revenues of almost €57 mill for the first quarter of this year, compared with €58.6 mill in 1Q16, a drop of nearly 3%.

New orders received during the quarter included equipment for four FSRUs and one LNGC.

GTT also reported a 6.6% increase in revenues from services. The company also confirmed its 2017 targets.

Philippe Berterottière, GTT Chairman and CEO, commented: "The first quarter of 2017 saw GTT win four new FSRU orders, reflecting the entry of new importing countries into the LNG market, which confirms the long term growth perspectives on this market.

"We are pleased to have positioned ourselves at the right time on this activity segment, a real complement to the LNG carrier segment. We continued to prepare for the future by presenting our brand-new dedicated LPG membrane system, GTT MARSTM, at the Gastech conference and exhibition.

"At financial level, our revenues in the first three months of the year are in line with our expectations and we are carefully monitoring our cost base in order to safeguard our competitiveness," he said.

In recent years, GTT had decided to design new solutions for the offshore LNG industry, in particular for FSRUs. Today, this is a particularly dynamic sector and one that is preferred by the new importing countries for which FSRUs provide a flexible solution and an economical alternative to onshore regasification terminals. The four new orders booked in 1Q17 confirm the relevance of this strategy, the company claimed.

Since 1st January, 2017, GTT's orderbook, which at the time stood at 96 units, has evolved as follows: - 1 LNGC order - 4 FSRU orders - 12 LNG and ethane carrier deliveries - 2 FSRU deliveries.

As at 31st March, 2017, the order book stood at 87 units: - 72 LNG and ethane carriers - 10 FSRUs (including one conversion) - 2 FLNGs - 2 onshore storage tanks - 1 LNG bunker barge.

Subject to any significant delays or order cancellations, GTT confirmed its targets for 2017, namely - revenues in a range of €225-240 mill, a net margin ratio above 50%, a 2017 dividend amount at least equivalent to the dividends paid out in 2015 and 2016, and, for the two subsequent years, a payout ratio of at least 80% of net income available for distribution. ■

Key figures for 1Q17 (€1,000s)

Q1 2016	Q1 2017	Change
Revenue 58.6	56.9	-2.9%
Royalties 55.4	53.5	-3.4%
LNGC/ethane 49.9	46.6	-6.6%
FSRU 4.4	6.3	+42.3%
FLNG 0.6	0.4	-31.3%
Onshore storage 0.2	0	
Barge 0.2	0.1	-57.1%
Services 3.2	3.4	+6.6%

Source: GTT

MISC worried about overcapacity

At MISC Berhad's recent AGM, the company said that last year the LNG segment contributed to two thirds of the group's profits, followed by 20% from offshore business and the remaining from tanker operator - AET.

"Our income stream is more diversified now unlike in the past where we were more reliant on LNG," said group CEO, Yee Yang Chien. "It will continue to diversify as we move along and we are after income quality,"

He also explained that the group was driven by its five-year strategic plan, MISC2020 that focused on securing sustainable income.

Despite the challenging market condition, Yee said the focus in 2017 will be to replenish the pipeline of growth projects. He also said MISC's performance in 2017 will not be any different from 2016, taking into account the present economic landscape.

Yee described the LNG shipping market as "dire", as it was overwhelmed by the number of unused newbuilding deliveries into the market. This continued to dampen the long-term and short-term charter markets.

Included in MISC's currently fleet of 78 petroleum tankers, 13 chemical tankers are 26 LNGCs, all of which are on long term charters. ■

Evoqua's marine growth prevention system preferred by gas carriers

Evoqua Water Technologies (EWT) patented Chloropac marine growth prevention system (MGPS) is favoured by several LNGC/FSRU operators.

This is due to their high regas seawater flow rates, the company said in a presentation attended by LNG SN's Editor.

An FSRU seawater flow rate can reach up to 24,000 cu m per hour, which can cause marine growth corrosion. Seawater contains several macro and micro fouling organisms, which enter the ship along with the seawater and cultivate on parts of the ship's system.

If preventive measures are not taken, the marine growth can cause damage to the on board critical systems, EWT explained.

As the marine organisms grow and reproduce they decrease the bore of the cooling water pipes, which can lead to blockages and corrosion within the seawater piping system; overheating of water-cooled equipment and systems; reduced efficiency, loss of vessel speed and loss of time; or increasing use of fuel to maintain speed under charter party terms.

ETW's system differs from copper anode technology in that is it an electrochlorination system, which is better suited to larger vessels. "It is a realistic alternative to copper anodes," the company claimed.

Evoqua's chloropac systems has been used in the marine industry for over 50 years. It is proprietary technology, which is claimed to be able to deliver three times more efficiency per cell and is easier and more economical to install.

It has what the company dubbed a 'Fit and Forget' capacity whereby once installed, the equipment only needs to be serviced every five years for cell replacements. The ROI is also claimed to be within three years.

EWT's patented SeaCURE ballast water treatment system (BWTS) is also based on chloropac's cell and technology and the BWTS offers an additional dual purpose operation for MGPS, as well as for ballast water.

A Chloropac system seen on the factory floor at Caldicot, Wales

Most of the LNGCs vessels fitted with EWT's technology are combined LNGCs/FSRUs, so they can be switched between duties, depending upon utilisation and market conditions, the company explained.

ETW said that it covers just over 20% of the market with just under 100 systems installed on gas carriers. ■

Liebherr to equip Yamal Arc7s with shipboard cranes

Liebherr´s ship crane department has started to equip the 15 Arc7 LNGCs building at Daewoo for the Yamal LNG project.

Each LNGC will be fitted with one ship set of four units. In total, Liebherr will deliver 60 CBW 2100 type ship cranes for the project's vessels.

The first set of four Liebherr CBW 2100 ship cranes was delivered to DSME in late autumn of 2016 and were fitted on board Sovcomflot's 172,600 cu m LNGC 'Christophe De Margerie'.

The other 14 LNGCs are being built for Dynagas (five LNGCs), Teekay (six) and MOL (three vessels). They are all specially designed and adapted for sailing in the extreme environmental conditions found around the Russian Yamal peninsula.

The first cranes were installed on the 'Christophe de Margerie' lead vessel in the Arc7 series

Liebherr ship cranes type CBW 2100 have also been customised for extremely low temperatures and high wind speeds. The manoeuvrable and solid design provides the ideal conditions for such operations, the company claimed.

The integrated Arctic temperature package installed on the cranes guarantees a fluently and reliable operation in temperatures down to minus 52 deg C. Furthermore, the CBW type allows safe operation in gale force wind speeds up to 22 m per second.

In order to ensure maximum safety while operating in an explosion proofed working area, the CBW cranes are equipped with gas sensors. The cranes' low-maintenance 4and hard-wearing hydraulic components are also geared for operation in extreme weather conditions.

Two units per ship set are to be used as provision cranes, while the other two units will be on board hose handling cranes. Each crane has a maximum outreach of 26 m and a maximum capacity of 15 tonnes. ■

NEWS NUDGE

Exmar abandons FSRU sales

Exmar has abandoned plans for the sale of its FSRU assets to Vopak.

As previously stated, the finalisation of the deal was subject to consent and co-operation of multiple stakeholders.

The companies said that after careful consideration, they have concluded that these requirements will not be met for the envisaged transaction.

Therefore, the closing of the FRSU transaction between Vopak and Exmar will no longer be pursued.

New training courses announced

Poten & Partners has released dates for its next series of LNG training courses.

The courses are a by-product of the last 10 years internally designed and tested LNG boot camp used to enhance the calibre of its own employees, Poten & Partners explained. The dates and areas covered are -

- **LNG Trading** - Singapore 25th-26th May
- **LNG FSRU Developments** - Houston 12th-14th June
- **LNG Charter Party** - Houston 28th-29th June
- **Tools for Effective Participation in LNG Joint Ventures** - Fremantle 24th-25th August.

Nakilat LNGC marks coatings milestone

Subject of a takeover attempt from PPG, AkzoNobel reached a landmark recently with the 1,000th application of Intersleek 1100SR, the biocide-free fouling control coating, part of the patented International range.

This milestone was achieved with a coating applied to the LNGC 'Al Gattara' operated by Nakilat Shipping Qatar.

Claimed to be deliver outstanding macro and micro fouling control with improved static resistance, even in warm waters, the product enables vessels to reduce drag and achieve fuel efficiency and emissions savings of 9% on average.

Moreover, shipowners and operators that upgrade from a biocidal coating to a biocide-free solution from the Intersleek range are eligible to enrol in AkzoNobel's carbon credits initiative, which financially rewards them for investing in sustainable technologies.

"The rapid adoption of Intersleek 1100SR shows that shipowners and operators are realising the benefits of investing in sustainable hull coatings," said Oscar Wezenbeek, AkzoNobel's Marine Coatings business managing director. "The fuel savings delivered by Intersleek 1100SR – and the fact that it allows vessels to get up to speed even after long stationary periods – mean it is not only a sustainable solution in terms of de-carbonisation, but also a solid financial investment. We're delighted to see so much support for a technology which is playing a leading role in our ongoing commitment to making shipping more sustainable."

With around five vessels coated per week since its launch, Intersleek 1100SR's uptake by LNGC owners means the company's Intersleek coatings are now used on 35% of the global LNGC fleet.

Intersleek 1100SR was launched in February, 2013 when it was claimed to be the shipping industry's first patented slime release biocide-free fouling control coating.

The 1,000th application of Intersleek 1100SR comes as the Intersleek range celebrates its 21st anniversary this year, having saved $3 bill of fuel and 32 mill tonnes of CO2 to date, AkzoNobel said. ■

> **"The rapid adoption of Intersleek 1100SR shows that shipowners and operators are realising the benefits of investing in sustainable hull coatings"**
>
> *- Oscar Wezenbeek, AkzoNobel's Marine Coatings business managing director*

Baltic Exchange outlines plans for LNG index

The Baltic Exchange, recently purchased by Singapore's SGX, is investigating the setting up of a freight LNG index.

This will support SGX's spot LNG pricing and Singapore's emergence as a regional natural gas market hub.

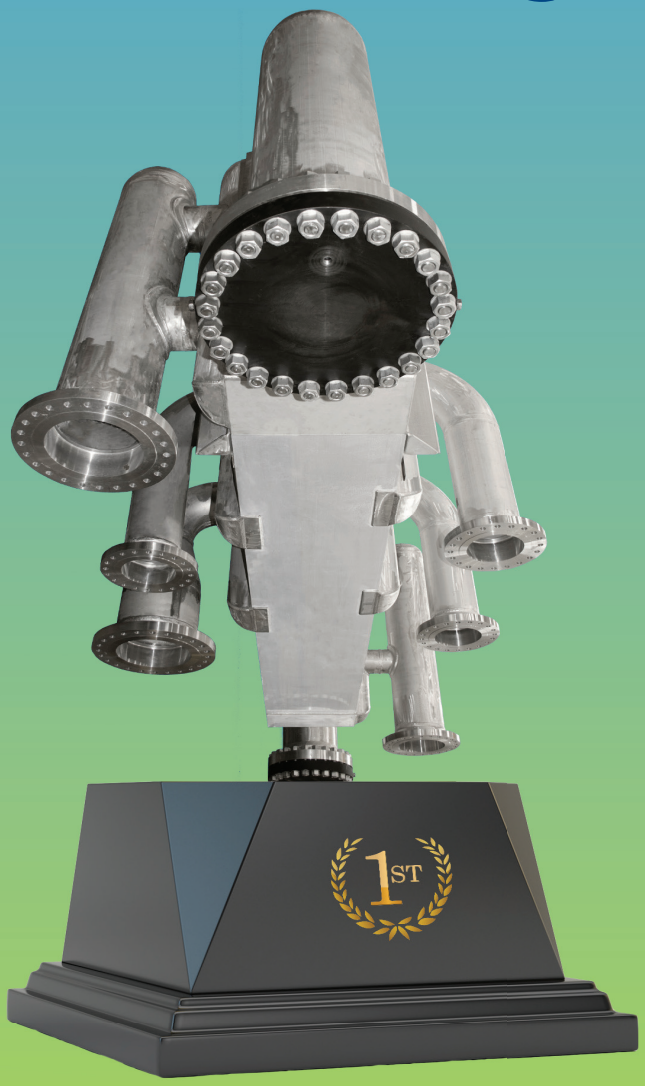
Newly appointed Baltic Exchange CEO Mark Jackson announced the move this week when setting out the Exchange's vision of the near-future in a speech in Singapore, during the MPA Singapore Maritime and Singapore Iron Ore Weeks.

'Ougarta' delivered

Hyproc's latest LNGC 'Ougarta' was delivered in February.

The Algerian flag 170,000 cu m TFDE vessel was delivered from Hyundai and has arrived in Algeria to load her first cargo.

Chart Brazed Aluminum Heat Exchangers



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WORLD LNG CARRIER ORDERBOOK

Name	Segment	Status	Yard	Design	Prop	Capacity	Delivery Date	Ordered	Imo	Hull No	Primary Owner
Asia Venture	LNGC	Order	Samsung	TZ Mk. III	TFDE	160000	01/04/2017	2012	9680190	2070	Chevron
Kawasaki Sakaide 1718	LNGC	Order	Kawasaki	Moss	TFDE	180000	01/04/2017	2013	9698123	1718	K-Line
Hyundai Princepia	LNGC	Order	DSME	GT NO 96	TFDE	174000	01/04/2017	2014	9761841	2451	Hyundai LNG Shipping
SM Eagle	LNGC	Order	DSME	GT NO 96	TFDE	174000	01/04/2017	2014	9761827	2449	Korea Line
Hyundai Peacepia	LNGC	Order	DSME	GT NO 96	TFDE	174000	01/05/2017	2014	9761853	2452	Hyundai LNG Shipping
Daewoo 2450	LNGC	Order	DSME	GT NO 96	TFDE	174000	01/05/2017	2014	9761839	2450	Korea Line
Jmu Tsu 5070	LNGC	Order	Japan Marine United Corp (Jmu)	SPB	TFDE	165000	01/05/2017	2014	9736092	5070	MOL
Hudong-Zhonghua H1717a	LNGC	Order	Hudong-Zhonghua	Membrane	TFDE	174000	01/06/2017	2012	9672844	H1717A	China LNG Shipping Holdings
Hudong-Zhonghua H1719a	LNGC	Order	Hudong-Zhonghua	Membrane	TFDE	174000	01/06/2017	2013	9694751	H1719A	China LNG Shipping Holdings
Oceanic Breeze	LNGC	Order	Mitsubishi H.I.	Moss	STRH	155300	01/07/2017	2013	9698111	2310	K-Line
Seri Cempaka	LNGC	Order	Hyundai Heavy	Moss	STRH	150000	01/07/2017	2013	9714290	2731	Petronas
Murex	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/07/2017	2013	9705641	2416	Teekay LNG
Daewoo 2462	LNGC	Order	DSME	GT NO 96	TFDE	180000	01/07/2017	2015	9771913	2462	MOL
Bishu Maru	LNGC	Order	Kawasaki	Moss	TFDE	164700	01/08/2017	2013	9691137	1713	K-Line
Seri Camar	LNGC	Order	Hyundai Heavy	Moss	STRH	150000	01/08/2017	2013	9714305	2732	Petronas
Jmu Tsu 5071	LNGC	Order	Japan Marine United Corp (Jmu)	SPB	TFDE	165000	01/08/2017	2014	9752565	5071	NYK
Daewoo 2417	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/08/2017	2013	9705653	2417	Teekay LNG
Daewoo 2421	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/08/2017	2014	9768368	2421	Dynagas
Hudong-Zhonghua H1718a Holdings	LNGC	Order	Hudong-Zhonghua	Membrane	TFDE	174000	01/09/2017	2013	9694749	H1718A	China LNG Shipping
Samsung 2153	LNGC	Order	Samsung	KC-1	TFDE	174000	01/09/2017	2014	9761803	2153	SK Shipping
Samsung 2154	LNGC	Order	Samsung	KC-1	TFDE	174000	01/09/2017	2014	9761815	2154	SK Shipping
Daewoo 2426	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	30/09/2017	2014	9750658	2426	MOL
Castillo De Caldelas	LNGC	Order	Imabari	TZ Mk. III	MEGI	178000	01/10/2017	2014	9742819	8188	Elcano
Mitsubishi Nagasaki 2316	LNGC	Order	Mitsubishi H.I.	Moss	STRH	153000	01/10/2017	2014	9743875	2316	NYK
SK Resolute	LNGC	Order	Samsung	TZ Mk. III	XDF	182000	01/10/2017	2013	9693173	2081	SK Shipping
Hudong-Zhonghua H1720a	LNGC	Order	Hudong-Zhonghua	Membrane	TFDE	174000	01/10/2017	2012	9672818	H1720A	China LNG S Holdings
Jmu Tsu 5072	LNGC	Order	Japan Marine United Corp (Jmu)	SPB	TFDE	165000	01/10/2017	2014	9758832	5072	MOL
Eduard Toll	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	31/10/2017	2014	9750696	2423	Teekay LNG
Castillo De Merida	LNGC	Order	Imabari	TZ Mk. III	MEGI	178000	01/11/2017	2014	9742807	8177	Elcano
Seri Cemara	LNGC	Order	Hyundai Heavy	Moss	STRH	150000	01/12/2017	2014	9756389	2735	Petronas
Kawasaki Sakaide 1731	LNGC	Order	Kawasaki	Moss	TFDE	177000	01/12/2017	2015	9774135	1731	MOL
Daewoo 2453	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/12/2017	2014	9770921	2453	Teekay LNG
Rudolf Samoylovich	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/12/2017	2014	9750713	2425	Teekay LNG
Daewoo 2422	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/12/2017	2014	9768370	2422	Dynagas
Daewoo 2424	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	31/12/2017	2014	9750701	2424	MOL
Flex Endeavour	LNGC	Order	DSME	GT NO 96	MEGI	172400	01/01/2018	2014	9762261	2447	John Fredriksen
Flex Enterprise	LNGC	Order	DSME	GT NO 96	MEGI	172400	01/01/2018	2014	9762273	2448	John Fredriksen
SK Audace	LNGC	Order	Samsung	TZ Mk. III	XDF	182000	01/01/2018	2013	9693161	2080	SK Shipping
Hudong-Zhonghua H1664a	LNGC	Order	Hudong-Zhonghua	GT NO 96	TFDE	174000	01/01/2018	2014	9750232	H1664A	Teekay LNG
Pan Asia	LNGC	Order	Hudong-Zhonghua	GT NO 96	TFDE	174000	01/01/2018	2014	9750220	H1663A	Teekay LNG
BW Tulip	LNGC	Order	DSME	GT NO 96	MEGI	173000	01/01/2018	2014	9758064	2435	BWGas
Daewoo 2460	LNGC	Order	DSME	GT NO 96	MEGI	174000	01/01/2018	2014	9766889	2460	Chandris
Teekay NB-6	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/02/2018	2014	9770933	2454	Teekay LNG
Hyundai Ulsan 2800	LNGC	Order	Hyundai Heavy	TZ Mk. III	XDF	174000	01/02/2018	2014	9748899	2800	GasLog
Daewoo 2443	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/02/2018	2014	9766554	2443	BP
Jmu Tsu 5073	LNGC	Order	Japan Marine United Corp (Jmu)	SPB	TFDE	165000	01/02/2018	2014	9758844	5073	MOL
Samsung 2130	LNGC	Order	Samsung	TZ Mk. III	XDF	174000	01/03/2018	2014	9744013	2130	GasLog
Daewoo 2442	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/03/2018	2014	9766542	2442	BP
Hyundai Ulsan 2801	LNGC	Order	Hyundai Heavy	TZ Mk. III	XDF	174000	01/03/2018	2014	9748904	2801	GasLog

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 26 April 2017

Name	Segment	Status	Yard	Design	Prop	Capacity	Delivery Date	Ordered	Imo	Hull No	Primary Owner
MOL E.On.	LNGC	Order	DSME	GT NO 96	TFDE	179900	01/04/2018			TBN	MOL
Kawasaki Sakaide 1720	LNGC	Order	Kawasaki	Moss	TFDE	164000	01/04/2018	2014	9749609	1720	K-Line
Mitusi NB 2 Cameron	LNGC	Order	Kawasaki	Moss	STRH	155000	01/04/2018	2014	9759252	1729	MOL
Daewoo 2441	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/04/2018	2014	9766530	2441	BP
Mitsui Cameron Shi NB 1	LNGC	Order	Samsung	Mark III Flex	TFDE	177000	01/05/2018	2014	9760768	2148	MOL
Samsung 2149	LNGC	Order	Samsung	Mark III Flex	TFDE	177000	01/05/2018	2014	9760770	2149	MOL
Mitsui KHI NB 1	LNGC	Order	Kawasaki	Moss	STRH	155000	01/05/2018	2014	9759240	1728	MOL
Daewoo 2432	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/05/2018	2014	9750660	2432	MOL
Daewoo 2430	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/05/2018	2014	9750725	2430	Teekay LNG
Daewoo 2455	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/05/2018	2014	9770945	2455	Teekay LNG
Daewoo 2464	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/05/2018	2015	9785158	2464	Chandris
Mitsubishi Nagasaki 2324	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	165000	01/06/2018	2015	9779226	2324	NYK
Daewoo 2458	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/06/2018	2015	9767950	2458	Maran Gas Maritime
Daewoo 2444	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/06/2018	2014	9766566	2444	BP
Daewoo 2427	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/06/2018	2014	9768382	2427	Dynagas
Hudong-Zhonghua H1665a	LNGC	Order	Hudong-Zhonghua	GT NO 96	TFDE	174000	01/06/2018	2014	9750244	H1665A	Teekay LNG
Samsung 2107	LNGC	Order	Samsung	TZ Mk. III	MEGI	174000	01/07/2018	2013	9709025	2107	Flex LNG
BW Lilac	LNGC	Order	DSME	GT NO 96	MEGI	173000	01/07/2018	2014	9758076	2436	BWGas
Daewoo 2445	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/07/2018	2014	9766578	2445	BP
Samsung 2150	LNGC	Order	Samsung	Mark III Flex	TFDE	177000	10/07/2018	2014	9760782	2150	MOL
Daewoo 2446	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/08/2018	2014	9766580	2446	BP
Mitsubishi Nagasaki 2323	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	180000	01/08/2018	2015	9774628	2323	MOL
Daewoo 2431	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/09/2018	2014	9750737	2431	Teekay LNG
MOL NB 2 Freeport	LNGC	Order	Kawasaki	Moss	STaGE	177000	01/10/2018	2015	9791200	1734	MOL
Mitsubishi Nagasaki 2325	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	165000	01/10/2018	2015	9779238	2325	NYK
Mitsubishi Nagasaki 2326	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	180000	01/10/2018	2015	9796781	2326	NYK
Samsung 2108	LNGC	Order	Samsung	TZ Mk. III	MEGI	174000	31/10/2018	2013	9709037	2108	Flex LNG
Daewoo 2428	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/11/2018	2014	9768394	2428	Dynagas
NYK NB 2 Freeport	LNGC	Order	Kawasaki	Moss	STaGE	177000	01/12/2018	2015	9791212	1735	MOL
Mitsubishi Nagasaki 2327	LNGC	Order	Mitsubishi H.I.	Moss	STRH	180000	01/12/2018	2015	9796793	2327	NYK
Daewoo 2429	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/12/2018	2014	9768526	2429	Dynagas
Daewoo 2456	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/01/2019	2015	9753014	2456	Maran Gas Maritime
Pan Africa	LNGC	Order	Hudong-Zhonghua	GT NO 96	TFDE	174000	01/01/2019	2014	9750256	H1666A	Teekay LNG
Daewoo 2433	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/01/2019	2014	9750749	2433	Teekay LNG
Daewoo 2459	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/01/2019	2015	9767962	2459	Maran Gas Maritime
SK Shipping SK E&S NB1	LNGC	Order	Hyundai Heavy	TZ Mk. III Flex	XDF	180000	01/02/2019	2016	9810549	2937	SK Shipping
Hyundai Samho S856	LNGC	Order	Hyundai Samho	TZ Mk. III	MEGI	174000	01/02/2019	2015	9781918	S856	Teekay LNG
Mitsubishi Nagasaki 2332	LNGC	Order	Mitsubishi H.I.		STaGE	165000	01/02/2019	2015	9810020	2332	Mitsubishi
Samsung 2131	LNGC	Order	Samsung	TZ Mk. III	XDF	174000	01/03/2019	2014	9744025	2131	GasLog
Hyundai Samho S857	LNGC	Order	Hyundai Samho	TZ Mk. III	MEGI	174000	01/03/2019	2015	9781920	S857	Teekay LNG
Mitsubishi Nagasaki 2321	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	177000	01/04/2019	2015	9770438	2321	NYK
Daewoo 2457	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/04/2019	2014	9753026	2457	Maran Gas Maritime
SK Shipping SK E&S NB2	LNGC	Order	Hyundai Heavy	TZ Mk. III Flex	XDF	180000	01/05/2019	2016	9810551	2938	SK Shipping
Mitsubishi Nagasaki 2322	LNGC	Order	Mitsubishi H.I.	Moss	STaGE	177000	01/06/2019	2015	9770440	2322	MOL
Flex Constellation	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/06/2019	2017	9825427	2470	John Fredriksen
Nb Gaslog - Centrica Samsung 2212	LNGC	Order	Samsung	GTT Mark V	XDF	180000	01/07/2019	2016	9816763	2212	GasLog
Flex Courageous	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/08/2019	2017	9825439	2471	John Fredriksen
Hyundai Ulsan 2964	LNGC	Order	Hyundai Heavy	TZ Mk. III Flex	MEGI	180000	01/08/2019	2017	9825568	2964	Knutsen
Samsung 2213	LNGC	Order	Samsung	GTT Mark V	XDF	180000	01/09/2019	2016	9819650	2213	GasLog
Daewoo 2489	LNGC	Order	DSME	GT NO 96	MEGI	173400	01/11/2019	2015	9792606	2489	BWGas
Daewoo 2434	LNGC	Order	DSME	GT NO 96	TFDE - Azipod	172410	01/11/2019	2014	9750672	2434	Teekay LNG
Maran Gas NB1	LNGC	Order	DSME	GT NO 96	MEGI	173400	19/11/2019	2016	9810379	2467	Maran Gas Maritime
Maran Gas NB2	LNGC	Order	DSME	GT NO 96	MEGI	173400	19/11/2019	2016	9810367	2466	Maran Gas Maritime
Trinity J/V (Mitsui & Co.)	LNGC	Order	Imabari	GTT Mark III Flex	MEGI	178000	01/01/2020			TBN	K-Line
Imabari Saijo 8200	LNGC	Order	Imabari		MEGI	178000	01/10/2021	2015	9778923	8200	Trinity LNG Transport SA

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Data last updated = 26 April 2017

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 Bahrain Vision	12,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Conception	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Invention	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Unikum	12,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2014	LNG-Oil combi**	2,000	LNG	Germany	Yes	Veka
2014	Short Sea LNG Tanker **	4,000	LNG	Germany	Yes	Veka
2015	10 small carriers TBN**	5,000	LNG			Bimantara Group
2015	Jahre TBN**	6,200	LNG	Norway	Yes	Donsotank/Jahre Marine
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	LNG bunker barge 1†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 2†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 3†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG Inland bunker**	800	LNG	Germany	Yes	Veka
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2015	TBN	14,000	LNG	China	Yes	Zhejiang Huaxiang
2015	TBN 1	27,500	LNG	China?		Danyang?
2015	TBN 2	27,500	LNG	China?		Danyang?
2015	TBN 3	27,500	LNG	China?		Danyang?
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	Dalian TBN	28,000	LNG	China	Yes	Dalian Inteh Group
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvovation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG

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Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2016	Navigator Aurora	35,000	Ethane/Ethylene	Markus Hood - Stenungsund	Ethane, for Borealis	Navigator
2016	Ocean Yield TBN	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
2016	Ocean Yield TBN	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2016	Shell Bunker Barge TBN 1	6,500	LNG	Northwest Europe	Yes	Shell
2016	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2016	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2016	Shell Bunker Barge TBN 4	3,000	LNG	Northwest Europe	Yes	Shell
2017	Yuan He 1	30,000	LNG	China	Yes	CSR
2017	ENGIE Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	JS Ineos Invention	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	JS Ineos Intuition	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Navigator Eclipse	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Nova	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Prominence	35,000	Ethane/Ethylene	US	Ethane	Navigator
2018	Bernhard Schulte TBN	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	CME TBN†	2,200	LNG	US Coast	Yes	CME
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line

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