

LNG Shipping News

An LNG JOURNAL TITLE ON LNG CARRIERS

28 November 2019

LNGCs subject to short term effects

As the LNG spot market continues to mature it will behave more like other bulk shipping sectors, influenced by geopolitical and financial factors, a new report suggests.

LNGC rates are once again booming as the northern hemisphere winter approaches, but the upturn is being supported as much by technical factors as fundamentals.

The latest LNG Market Report from Maritime Strategies International (MSI) noted that spot rates for DFDE tonnage were reported as high as \$130,000 per day in October, up from around \$40,000 per day in the summer.

A similar surge at the same time last year was created by high levels of floating storage, which removed ships from Asian and European position lists.

However, this year, the primary factor has been non-market related; the spill-over into the LNG sector of US sanctions on parts of the COSCO empire, resulting in joint ventures between China

LNG Shipping and companies, including Teekay and MOL, being rendered unable to trade.

Storage capacity full

A rejig of COSCO's ownership structure led to the removal of sanctions in late October, but not before the disruption had spurred the surge in spot rates. At the same time, European LNG storage was reported as full, having remained at high levels throughout the year, to such an extent that vessels are now waiting to get in to terminals to discharge cargoes.

"This highlights the unusual state of the market at present in the face of a global glut of gas. The rise of US production this year and weak demand in Asia has driven volumes to Europe and kept gas prices low throughout the year, with NBP and Henry Hub way below 2018 levels," said

MSI Director, Stuart Nicoll. "This could be a fundamental shift to sustained lower gas prices but the full implications are not yet apparent. The key question is where the additional LNG will go?"

While Europe is saturated with gas and Asian demand brittle, MSI suggested that a re-balancing in the gas market may require a slowdown in US production to raise prices and restore margins. This would mean short-term pain for LNGCs at the expense of longer term gain from US projects yet to be developed.

MSI LNG Analyst, David Bull, added; "When, or even if, the Trade War is resolved, it is assumed that there will be a significant uptick in vessel demand when US cargoes start to flow back to China again. While there will be almost no shipping on the route during 2019 and limited prospect of a near-term resolution, we still posit a resumption in trade between the two countries at some stage in 2020, although this is indicative and subject to revision."

With the LNGC utilisation rate set to remain high over the next couple of years, the sector is poised for further periods of firm spot and short-term charter rates, but MSI believed the industry is at an inflexion point, with decisions made now dictating the trajectory of LNG shipping for the first half of the next decade and beyond. ■



MSI Director Stuart Nicoll

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Qatar to raise LNG production by 64%

Qatar Petroleum (QP) announced earlier this week that it will raise its LNG production capacity to 126 mill tonnes per annum by 2027.

This amounts to an increase of 64% from the current 77 mill tonnes.

“With the additional number of trains for the expansion of LNG, we are going to produce additional amounts of LPG, condensate, ethane and helium. So in addition to LNG facilities, we will be required to build additional facilities for storing and handling LPG. There is a possibility that we may also expand our helium plants. And then for the use of additional amount of ethane, we will also enhance our petrochemical sector,” H E Saad

Sherida Al Kaabi, the Minister of State for Energy Affairs, and President and QP CEO, said.

“There are so many projects to talk about but I want to focus on the gas reserves and LNG expansion project. But I want to assure that all these projects will have a very positive impact on other sectors of the economy, including the petrochemicals, construction and companies in other sectors of the economy will also benefit significantly. This will help increase the government’s revenue as well,” he added.

QP is to build four new LNG trains to boost production.

Construction on the first is due to start next year, and two trains will be staggered at the end of the period.

Qatar, with a huge reserve of over 1,760 trill cu ft of natural gas (including new reserves announced this week), is reinforcing its position as the leading supplier of clean energy in the world, the Minister said.

QP recently signed an agreement with the Belgian independent natural gas transport company Fluxys Belgium to take Zeebrugge LNG’s full capacity in order to export more LNG to the European markets.

“In addition to the Zeebrugge LNG Terminal, which has a capacity to receive about 7 mill tonnes per annum of LNG, we have a terminal in Italy, we have the largest LNG terminal in the UK, and we are looking forward to announce some other projects in Europe.

“(Market) Diversity is something that we are very much looking at. And we are demonstrating it by actually doing it. We have a lot of things on the table, which will be announced at appropriate time,” the Minister said to local journalists at a meeting on Monday. ■

US signs highest long-term LNG export contract volumes

The US has accounted for the world’s highest volume of global long-term LNG export contracts this year, according data and analytics company, GlobalData.

A report, ‘Global Long-Term LNG Contracts Review, 2019 - Golden Pass Signs High Volume Contract with Ocean LNG’, revealed that the US had signed five long-term contracts in 2019 for the export of 22.3 mill tonnes per annum of LNG amounting to about 67% share.

Of these, the contract signed between Golden Pass Products

and Ocean LNG had the highest export volumes per year with 15.6 mill tonnes. LNG is to be supplied from the Golden Pass II LNG liquefaction terminal in Texas for 20 years from 2024 to 2044.

Sunrita Dutta, GlobalData’s Oil and Gas Analyst, said: “The other major long-term LNG contracts signed for export of LNG from the US include a contract

signed between Driftwood LNG and Total Gas & Power North America for export of 2.5 mill tonnes per annum over 15 years. Magnolia LNG and NextDecade Corp also signed contracts for export of 2 mill tonnes each.”

Mozambique signed the second highest long-term LNG contract volumes in 2019 with 9.7 mill tonnes per annum. Mozambique

LNG 1 signed the contracts with different purchasers.

Dutta concluded: “Canada and Papua New Guinea account for the remaining long-term LNG contract volumes signed in 2019. Both countries have signed contracts for export of 0.8 mill tonnes and 0.5 mill tonnes per annum of LNG, respectively.” ■

“ A contract signed between Golden Pass and Ocean LNG was the highest this year at 15.6 mill tonnes per annum for 20 years

GlobalData ”

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NEWS NUDGES

NYK and Pertamina in LNG shipping tie-up

NYK and PT Pertamina International Shipping (PIS), a wholly owned subsidiary of PT Pertamina (Persero), the Indonesian state-owned oil and gas company, have signed a memorandum of understanding (MoU) for energy transportation.

Energy transportation demand, especially in LNG, is expected to increase in Indonesia.

This agreement covers ownership and management, while both companies have started discussions concerning a joint business, particularly involving the ownership and management of LNGCs as exclusive partners.

Avenir's second vessel bound for Brazil

Avenir LNG has teamed up with Golar Power to develop the small-scale LNG market in Brazil.

The company will use its second 7,500 cu m LNGC newbuilding to deliver LNG to various ports across Brazil upon her delivery.

She will also offer ship-to-ship bunkering services, adding to the Colombian, Mediterranean and Malaysian operations, which the company currently offers.

Avenir currently has six vessels under construction, comprising four 7,500 cu m and two 20,000 cu m LNGCs, of which, the first vessel was launched earlier this year and is destined for the Malaysian market.

FERC approves four LNG export projects

The US Federal Energy Regulatory Commission (FERC) has approved four LNG export projects and related facilities.

Three projects are to be located along the Brownsville Ship Channel in Brownsville, Texas, and the fourth is the expansion of a currently operating facility near Corpus Christi, Texas.

This marks a significant addition to the number of LNG export facilities approved by FERC this year, the commission said, adding to the seven other projects already approved this year.

"I'm very proud of the hard work that the Commission and its staff have undertaken to continue our processing of LNG applications," FERC Chairman, Neil Chatterjee, said. "The Commission has now completed its work on applications for 11 LNG export projects in the past nine months, helping the US expand the availability of natural gas for our global allies who need access to an efficient, affordable and environmentally friendly fuel for power generation."

Brownsville sites

FERC approved, with conditions, three Brownsville projects - Texas LNG Brownsville; Rio Grande LNG

and Rio Bravo Pipeline Co; and Annova LNG Common Infrastructure and three of its affiliates.

Texas LNG Brownsville would build and operate facilities to export around 4 mill tonnes per year of natural gas as LNG. The Rio Grande LNG Terminal and associated Rio Bravo Pipeline Project would export 27 mill tonnes, while Annova LNG Brownsville Project would export up to 6 mill tonnes per year.

The Commission also approved, with conditions, a proposal by Corpus Christi Stage III and Corpus Christi Liquefaction to site, build and operate the Stage 3 LNG project that would allow the company to liquefy for export an additional 11.45 mill tonnes per year of LNG at Corpus Christi liquefaction's LNG terminal now operating in San Patricio and Nueces counties, Texas.

All four LNG project sponsors have applications pending before the US Department of Energy (DoE) seeking authorisation to export gas to countries without Free Trade Agreements with the US.

Earlier this year, FERC approved LNG projects proposed by Venture Global Calcasieu Pass; Driftwood LNG; Port Arthur LNG; Gulf LNG; Eagle LNG Partners Jacksonville; Venture Global Plaquemines LNG; and Freeport LNG's Train 4 expansion project.

Four other projects are now pending, the Commission said.

In addition, FERC has prepared a final environmental impact statement (EIS) for the Jordan Cove Liquefied Natural Gas (LNG) project and the Pacific Connector Gas Pipeline project.

This LNG terminal would be located in Coos County, Oregon, and would be capable of liquefying up to 1.04 bill cu ft of natural gas per day for export.

The export terminal would be served by about 120 LNGCs per year.

Finally, the DOE has issued a notice stating that it received an application to export domestically produced LNG from the Sabine Pass LNG project.

Comments must be received by 30th December this year.



Rio Grande's NextDecade project is one of four approved by FERC

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Commonwealth commits offtake to Gunvor

Gunvor and Commonwealth LNG have entered into a LNG marketing & gas supply agreement whereby the trading house will secure the exporter's full capacity offtake.

This involves Commonwealth's LNG export project in Cameron Parish, Louisiana, in which, Gunvor will commit to take up to 3 mill tonnes per annum of LNG offtake from the facility.

"In this highly competitive market, it is critical for companies - particularly ones pursuing an LNG greenfield project - to recognise their core competencies and strengths," said Kalpesh Patel, Gunvor Co-Head of LNG Trading. "Commonwealth LNG's engineering and procurement team is best in class. And, now, with the comprehensive support of Gunvor's LNG and US gas marketing team, Commonwealth LNG will excel not only at controlling costs and project execution, but also at commercialising their project and creating the lowest cost offering on the US Gulf Coast."



Gunvor is to take the whole of Commonwealth's LNG offtake

"We are very pleased to announce this strategic partnership with Gunvor, the most active LNG trader in the world," said Paul Varello, Commonwealth's President and CEO. "We believe Gunvor's substantial capabilities in LNG marketing and overall market presence, coupled with Commonwealth's strengths in engineering,

construction and project execution create a dynamic combination that ultimately differentiates Commonwealth from every other US LNG project currently chasing FID."

Commonwealth LNG expects to take a final investment decision (FID) on the project in 1Q21 and deliver the first LNG shipments in 2Q24. ■

First US cargo for Ukraine arrives in Poland

The first US LNG cargo bound for the Ukraine has arrived at the Polish receiving terminal at Swinoujscie.

This shipment represents the start of an alternative, non-Russian gas supply for Ukrainian consumers. "US LNG is coming to Ukraine! Another step in helping Ukraine achieve energy independence," said the US Embassy in Kiev in a twitter post.

Ukraine is dependent upon Russian natural gas for heating and power, and it levies fees on Russian energy producers for providing pipeline capacity to Europe via Ukrainian territory. At a time of high tension between Russia and Ukraine, the gas transit agreement is up for renewal next month.

On 2nd September, the US signed an agreement with Poland and Ukraine to formalise the supply of US natural gas to Kiev. The MOU

calls for the shipment of up to 6 bill cu m per year to Ukraine by 2021.

"The US is ready to help Ukraine achieve its full energy potential with American technology, resources and support," said outgoing US Secretary of Energy, Rick Perry when announcing the deal.

The first 90 mill cu m shipment was handled by Polish Oil and Gas Company (PGNiG) and Energy Resources of Ukraine, a private firm headed by longtime foreign-market utility executive Dale Perry and Ukrainian energy trader Yaroslav Mudryy.

"We contracted this volume for the purpose of injecting and storing it for further delivery to consumers in the winter season - this way

we contribute to the country's energy safety during uncertain and especially risky winter period 2019-2020," said Mudryy. "In this case, taking to the account well developed gas transportation system, Ukraine may not be the last destination for American LNG, it can be successfully delivered to countries like Hungary, Romania and even Moldova."

"Currently, the only limitation in the development of exports to Ukraine on an even larger scale is the capacity of gas pipelines in Poland in the direction of Silesia-Podkarpacie. We expect the capacity of these gas pipelines to be expanded by 2021 at the latest," explained Piotr Wozniak, the head of PGNiG's board. ■

NEWS NUDGES

Cove Point loads 100th LNGC

Dominion Energy's Cove Point LNG Terminal loaded its 100th commercial LNGC on 11th November just 19 months after the facility opened.

Located in Lusby, Maryland, the Cove Point LNG Terminal became the US' second largest LNG export facility and the first on the East Coast, when it entered commercial operation on 9th April, 2018.

Cove Point produces LNG under 20-year contracts for ST Cove Point, a joint venture of Sumitomo Corp and Tokyo Gas, and for Gail Global (US) LNG, the US affiliate of GAIL (India).

"This is a major milestone for Dominion Energy and our country as a whole," said Paul Ruppert, Dominion Energy's President of Gas Transmission and Storage. "It reflects not only the world-class design and operational excellence of our facility, but also the environmental progress we are making by reducing global reliance on coal, oil and other carbon-intensive energy sources."

Cove Point is claimed to be unique among US LNG terminals as it is able to import, export, vaporise and send out, and liquefy gas.

Golar LNG in sale and leaseback deal

A Golar LNG subsidiary has signed a sale and leaseback deal with CSSC Shipping, the financial leasing unit of China State Shipbuilding Corp, for one of its 140,000 cu m LNGCs.

CSSC Shipping will purchase the vessel for \$147 mill and charter her back to Golar LNG for \$159.65 mill over a 36-month charter period.

She is to be converted into an FSRU and delivery is scheduled for March next year.

DIF to invest in LNGC newbuildings

Independent infrastructure fund manager, DIF Capital Partners, has signed an agreement with Geogas Maritime and Access Capital Partners, to acquire a 50% stake in a French company that will own and operate five LNGCs.

The remaining 50% will be held by NYK.

The five 174,000 cu m vessels will be built by South Korean shipyards. The first ship is expected to be delivered in April, 2020.

All five ships will fly the French flag and they will be chartered to a French and European utility under long-term contracts and will be project financed under a French lease structure.

Thomas Vieillescazes, DIF's Head of France, said: "This is an excellent opportunity for DIF CIF I to invest in high quality assets and grow DIF's footprint into the expanding LNG sector

alongside strong and experienced counterparties. We're also very proud to participate in a strategic project for the further development of the French LNG sector." ■

Teekay LNG boosted by ship deliveries

Teekay LNG Partners has reported a considerable increase in net income in the third quarter of this year.

GAAP net income was \$47.4 mill, compared with \$26 mill in 3Q18.

Adjusted net income for 3Q19 was \$50.5 mill, compared with \$19.5 mill in the same quarter of 2018, while total adjusted EBITDA was \$180.2 mill, up from \$133 mill recorded in 3Q18.

The company took delivery of fourth and fifth 50% owned Arc7 LNGC newbuildings in August, 2019 and early-November, 2019, respectively. The final Arc7 is expected to be delivered late this month.

Teekay also said that the Bahrain LNG regasification terminal is expected to commence operations before year-end.

Positive impact

The positive impact on earnings came from the nine LNGC newbuildings, which were delivered into the Partnership's consolidated fleet and equity-accounted joint ventures between July, 2018 and August, 2019; higher earnings from the 'Torben Spirit' upon redeployment at a higher charter rate that commenced in December, 2018; higher earnings from the 'Magellan Spirit', which was chartered-in from the Partnership's 52% owned joint venture with Marubeni Corp (MALT Joint Venture) commencing in September, 2018; higher earnings in the MALT Joint Venture from the commencements of the

'Arwa Spirit' and 'Marib Spirit' one-year charter contracts at higher rates in June and July, 2019, respectively, and recognition of drydock hire revenue for the 'Meridian Spirit'; and higher earnings from the Partnership's seven multi-gas carriers.

These increases were partially offset by lower earnings, due to more off-hire days for scheduled drydockings and repairs during 3Q19 for certain LNGCs, compared to the same quarter of the previous year.

"During the third quarter of 2019, Teekay LNG recorded its highest ever quarterly results with adjusted earnings per common unit up almost 3.5x from the same period of the previous year," commented, Mark Kremin, President and CEO of Teekay Gas Group. "We expect Teekay LNG's results will continue to increase, as reflected in our increased and tightened 2019 guidance range and a new, higher 2020 guidance range issued today.

"Based on this foundation of earnings growth expected in 2020, we intend to increase our distributions by 32% to \$1 per common unit per annum, starting with our first quarter of 2020 distribution payable in May 2020. I am also pleased to report that with the recent sale of our last conventional tanker, Teekay LNG is now 100%

focused on our core business of transporting LNG and LPG.

"We are currently in the process of completing the last of our recent phase of growth projects. We have made good progress and anticipate the start-up of the Bahrain regasification terminal before the end of the year. In August and early-November, 2019, we delivered our fourth and fifth Arc7 icebreaking LNGCs for the Yamal LNG project, which immediately commenced their respective long-term charter contracts. We expect the sixth Arc7 to deliver and commence

its long-term charter contract with Yamal in late-November, 2019, which will mark the successful completion of the \$3.5 bill growth programme we commenced in 2013.

"With nearly all of our current growth projects delivered and generating cash flows under long-term contracts, we are moving from a phase of project execution to a period of significant cash flow generation, which we believe will enable the Partnership to allocate capital towards balance sheet delevering and returning capital to unitholders," he concluded. ■



The delivery of the 'Torben Spirit' has helped boost Teekay's results



Golar's loss narrows

Golar LNG suffered a third quarter operating loss of \$13.7 mill, compared to losses of \$23.4 mill in the previous quarter of this year.

Total operating revenues increased from \$96.7 mill in 2Q19 to \$98.7 mill in 3Q19 and voyage, charterhire and commission expenses decreased from \$14.3 mill to \$5.6 mill, both largely due to an improving shipping market.

Revenues from vessel and other operations, including management fee income, was \$44.1 mill and, net of voyage, charterhire and commission expenses, increased by \$10.6 mill to \$38.5 mill in 3Q19.

Assisted by multi-year low summer LNG prices, and a contango in the gas market, encouraged a number of sellers to use vessels for floating storage ahead of the Northern hemisphere winter.

Vessel availability decreased and both sentiment and as a result, spot rates increased toward the end of the quarter. Full fleet TCE earnings increased from \$24,400 in 2Q19 to \$35,200 in 3Q19, although utilisation at 65% was in line with the previous quarter.

Drydockings

Despite improving rates, revenue

continued to be negatively impacted by the positioning and scheduled drydocking of a further three vessels during the quarter.

In line with previous quarters, FLNG 'Hilli Episeyo' generated operating revenues of \$54.5 mill, including base tolling fees and amortisation of pre-acceptance amounts recognised.

Iain Ross, Golar LNG CEO, said: "Further progress has been made this quarter toward the company's goal of being the leading independent developer of long-term LNG infrastructure. Significant progress has been made on execution of the company's downstream LNG distribution strategy and on strengthening the company's financial position.

"Continued strong growth in LNG production around the world and associated lower pricing together with customer's increased focus on their ESG responsibility is also accelerating their appetite to switch from burning coal, fuel oil and diesel

to cheaper and cleaner LNG.

"The recent award of Golar Power's second 25-year gas to power project supports our strategy to transform Golar into a world leading LNG infrastructure player delivering flexible energy solutions that provide much needed stability to an energy grid that has seen substantial renewable energy growth.

"The Barcarena 605 MW PPA award underpins the development of a second hub terminal in Brazil. This project, together with progress on downstream distribution of LNG using spare FSRU capacity, transforms Golar Power from a single project company into a business with significant and demonstrable growth potential.

"This potential will be realised through the introduction of new and more efficient technology that can be integrated in a user-friendly way that makes it easier for customers to switch to LNG. This approach will also

facilitate bespoke solutions for smaller customers allowing for demand aggregation, something larger LNG producers have paid little attention to.

"Increasing interest from oil majors and NOCs, appreciative of our low cost and flexible FLNG solutions and impressed by our flawless operational track record is also encouraging. Part monetisation of a current contract and use of a shipyard able to offer more attractive payment terms provides the potential to lift additional FLNG projects.

"The proposed shipping spin-off in its planned form, has, disappointingly for the Board, not yet been completed. This is due to a misalignment between the founding parties of the proposed newco causing Golar to withdraw from the process. Golar remains committed to splitting the ships into a separate vehicle and is revising the mechanism that it will use to achieve this," he concluded. ■

'WilForce' re-enters service

The Awilco LNG Group has recorded freight income for the third quarter this year of \$6.7 mill, up from \$3.9 mill reported for 2Q19.

This rise was attributable to 'WilPride', which was delivered on an eight month contract on 9th July.

In addition, as a result of being struck by another vessel at the end of May this year, 'WilForce' was off-hire until repairs were completed in mid-September.

Loss of hire insurance at \$65,000 per day compensated for some of the lost timecharter hire in the off-hire period, totalling \$4.4 mill in 3Q19 and \$1.1 mill in 2Q19.

EBITDA for the quarter was \$7.4 mill.

Off-hire

Fleet utilisation for the quarter was 45%, compared to 56% in the previous quarter, due to 'WilForce's' extensive off-hire following the collision.

Total expenses towards repairs of the machinery and collision damage to the 'WilForce' was \$0.6 mill in 3Q19 and \$5.6 mill in 2Q19. Corresponding hull & machinery insurance claims totalling \$0.4 were recognised as other income in 3Q19 (\$6 mill in 2Q19).

Total equity as at 30th September, 2019 was \$102.6 mill, compared with \$103.7 mill at the previous quarter end. Current liabilities were \$274.1 mill, compared to \$282.5 mill in 2Q19, of which \$262.2 mill was related to the 'WilForce' and 'WilPride' financial lease liabilities and \$4.7 mill provisions for repair of 'WilForce'.

The repurchase obligations for 'WilForce' and 'WilPride' mature on 31st December this year, plus/minus 60 days in the Group's favour.

On 2nd August, 2019 a term sheet for the refinancing of the two vessels was agreed

and signed with CCB Financial Leasing. On 18th October, 2019 the facility was credit approved. This sale/leaseback facility has a 10-year tenor and is expected to enable a full take out of the company's current sale/leaseback facilities at attractive terms.

The facility is expected to close in 4Q19/1Q20 subject to documentation and customary closing conditions.

In a later stock exchange filing, Awilco said it had agreed with other LNGC shipowners to discontinue discussions on establishing a consolidated LNG shipping structure.

The company said that it had contracted historically high earnings through the winter period. The 'WilForce' timecharter contract is estimated to contribute a monthly EBITDA of about \$3.4 mill. ■

Higher rates propel Flex LNG into profit

Flex LNG has reported an increase in revenues to \$29.8 mill for the third quarter 2019, compared to \$19 mill for 2Q19.

The average 3Q19 daily TCE rate was \$58,222, compared to \$46,266 per day for the previous quarter.

Adjusted EBITDA was \$21.8 mill for the third quarter, compared with \$11.3 mill for 2Q19.

The company reported a net income of \$0.5 mill for 3Q19, compared to a net loss of \$3.9 mill for the second quarter.

In July, 2019, Flex LNG executed the \$300 mill sale and charterback transaction with Hyundai Glovis for the LNGCs 'Flex Endeavour' and 'Flex Enterprise'.

During the next month, the company took delivery of its sixth newbuilding LNGC, 'Flex Courageous'.

In October, 2019, Flex LNG Fleet Management received the Document of Compliance qualifying the company for in-house technical shipmanagement services.

A month later, the company received firm commitments from a syndicate of 11 banks and the Export-Import Bank of Korea (KEXIM) for a \$629 mill financing for the five newbuildings scheduled for delivery in 2020.

The Board has declared a cash dividend for the third quarter of \$0.10 per share.

Øystein Kalleklev, Flex LNG Management CEO, commented: "In line with our expectations, the freight market has become

increasingly tighter in the second half of 2019 resulting in much more favourable market conditions despite low gas prices.

"Flex LNG has been very well positioned for the stronger market with ships available in the spot market, as well as ships on variable rates linked to these freight rates. We are today delivering results in line with guidance for third quarter and our fourth quarter is booked at considerable higher rates with revenue expectations of about \$50 to \$55 mill.

"During the year we have also secured close to \$1.3 bill of attractive long-term financing

and this together with our in-house shipmanagement company means we are well positioned for the journey ahead," he said.

Meanwhile, Gunvor is to charter a Flex LNG newbuilding for up to 10 years.

The initial contract is for five years, with options to extend to 10, the companies confirmed. The 173,400 cu m vessel is under construction at Daewoo Shipbuilding & Marine Engineering.

The vessel, to be called 'Flex Artemis', is scheduled for delivery in August next year. The contract terms were not revealed, except to say that it will partly be based on a variable rate. ■

Early loan repayment hits Dynagas bottom line

Dynagas LNG Partners suffered a net loss of \$4.7 mill for the three months ended 30th September, 2019, compared to a net loss of \$0.7 mill in 3Q18.

The 3Q19 net loss included a \$7.5 mill one-off non-cash write-off expense from the accelerated amortisation of the deferred loan fees, as a result of the early prepayment of the Term Loan B facility.

Adjusted net income and distributable cash flow for the quarter were \$2.8 mill and \$7 mill, respectively, compared to \$3.3 mill and \$7.5 mill, respectively, for 3Q18, which represents a net decrease of \$0.5 mill in both, or 15.2% and 6.7%, respectively, mainly due to increased financing expenses.

Voyage revenues for the quarter were \$34.4 mill, compared to \$31.3 mill for the corresponding period of 2018, which represents an increase of \$3.1 mill.

Excluding amortisation of fair value of acquired timecharters and amortisation of deferred revenue, voyage revenues quarter on quarter increased by \$1.5 mill, mainly as a result of - the increase of the voyage revenues



Dynagas' 'Clean Energy' is earning a higher charter rate

earned on the 'Clean Energy' in 3Q19, which was delivered to its eight-year charter with Gazprom Marketing and Trading Singapore in the middle of July, 2018.

Prior to the delivery to Gazprom, the vessel was trading in the spot market at a lower charter rate for the corresponding period in 3Q18.

In addition, the higher revenues earned on the 'Yenisei River' in

the 3Q19, as the vessel had its scheduled drydock, special survey and no revenues earned for the corresponding period in 3Q18.

The increase in voyage revenues was partially offset by the lower revenues earned on the 'Arctic Aurora', which in August 2018, rolled-over into its new charter with Equinor at a lower charter rate compared to its previous contract.

The Partnership reported average daily hire gross of commissions of around \$62,200 per day per vessel in 3Q19, compared to about \$59,800 per day per vessel in the corresponding period of 2018.

Adjusted EBITDA for 3Q19 was \$23.8 mill, compared to \$23.5 mill for the corresponding period of 2018. The increase of \$0.3 mill, or 1.3%, was mainly due to the net effect of the increase in the revenues and increase in the vessel's operating expenses.

As of 30th September, 2019, the Partnership reported total cash of \$317.6 mill (including \$300 mill of restricted cash of which \$250 mill was earmarked for the repayment of the notes) and a working capital deficit of \$45.8 mill - as of 31st December, 2018 the working capital deficit was \$159.8 mill.

The Partnership's outstanding debt as of the same date was \$925 mill, which included \$675 mill under its credit facility and the notes, which were repaid in full on 30th October, 2019. ■

AG&P invests in small-scale shipping

Atlantic Gulf & Pacific (AG&P) has invested in Kanfer Shipping (Kanfer), a Norwegian-based developer of small-scale LNGCs, breakbulk solutions, floating storage facilities, as well as LNG bunkering.

Kanfer has designed a patented, barge type vessel that is claimed to enable breaking LNG bulk cargoes easier, faster and more efficient.

This small-scale design uses the patented Detachable Stern Vessel (DSV) design to create an enhanced version of an articulated tug barge (ATB).

Kanfer's shallow draft DSV will be able to ship LNG to and from an FSU, FSRU or land-based LNG terminals, via a small and manoeuvrable barge that will be able to access berths up rivers and along coasts.

Design advantages

The design's advantages will enable new LNG services to be made available for smaller demand areas or for larger demand centres

in places that are less accessible.

"AG&P's goal is to bring LNG to new markets. One of the missing links has been the capability to break-bulk LNG affordably. Kanfer's designs unlock these new markets and solve a critical gap in the LNG supply chain for nascent and growing markets. We are thus delighted to bring Kanfer Shipping into AG&P's group of companies.

"Under Stig Hagen's visionary leadership, Kanfer has brought new and exciting solutions to the maritime industry that provide a compelling alternative to traditional, capital-intensive onshore LNG facilities," claimed Karthik Sathyamoorthy, AG&P's President of LNG Terminals and Logistics.

"We have worked long and hard at Kanfer to find a real solution

to the LNG virtual pipeline - one that stands on its commercial and technical merits. Now, we are honoured to be partnered with AG&P, a global trailblazer in LNG solutions and gas logistics.

"Together, we will reduce the cost of LNG infrastructure through Kanfer's innovative solutions and provide a more robust solution to improve availability and accessibility. I am very excited about the possibilities," Stig Anders Hagen, Managing Partner at Kanfer Shipping, added.

"AG&P has recognised the rapid and accelerating market shift to LNG as a primary fuel for land and marine applications. Three years ago, we invested in Gas Entec, the leading LNG terminal, bunkering and fuel system engineering company,

and today in Kanfer Shipping to create a unique and compelling ecosystem for the development of LNG and gas delivery systems.

"Kanfer's expertise complements and expands our passion for an integrated approach to LNG logistics and will enable us to reach new customers in Southeast Asia, the Caribbean and beyond," said Jose Ibazeta, Director of AG&P.

Kanfer has already co-ordinated with global LNG companies to provide solutions to deliver natural gas from FSUs to small demand centres or remote markets.

Earlier this year, the company signed an agreement with ADNOC Shipping & Logistics for the small-scale LNG segment. Later Japan's INPEX Corp also joined the co-operative venture. ■

GTT installs simulator at MTC Hamburg

GTT Training, a specialist LNG training and simulation provider, has installed G-Sim LNG simulator software at the MTC Maritime Training Centre in Hamburg.

Completed in September 2019, the installation consists of one instructor and three student stations and also includes the model libraries that allow for training dedicated to various types of LNGCs, plus LNG fuel gas handling and bunkering systems.

The centre will be used by MTC Hamburg to expand its training portfolio in particular in the support of requirements to train personnel for service on LNG-fuelled vessels.

Ray Gillett, GTT Training's Director and General Manager, said, "We are very pleased to receive this contract, and to be able to assist MTC Hamburg in their continuing commitment in providing the trained personnel that are required to service the vessels that carry and use LNG.

"We are committed to work with the industry to provide them with the training tools they require and this contract provides a good example of that commitment," he said. ■

ABS recognises BOG initiative

ABS has awarded Approval in Principle (AIP) to Samsung Heavy Industries (SHI) for its X-Reli LNG Boil Off Gas Expander, part of SHI's Expansion Re-Liquefaction System.

X-Reli is optimised for low and medium pressure application, which SHI said offers increased efficiency and reliability over existing high-pressure re-liquefaction systems.

"Re-liquefaction is a useful capability for owners and operators, offering increased flexibility and the potential to maximise cargo delivery. The ability to operate this at low or medium pressure reduces barriers to adoption of the technology and ABS is proud to be able to facilitate this," said Eric Kleess, ABS Senior Vice President, Eastern Hemisphere Operations.

The system increases re-liquefaction capacity using expansion technology, which enables the generated boil off gas from the cargo tank, except the fuel gas for generator engines, to be re-liquefied.

"By gaining the ABS AIP Certificate for the X-Reli System, SHI has secured approval of its competitive re-liquefaction solution, which has been developed to meet the various needs of shipowners," said SHI Ship & Offshore Research Institute Vice President, Dr Yong Lae Shim. "The X-Reli system will be tightly integrated with SHI's (patented) smart ship solution SVESSEL - SVESSEL Onboard and SVESSEL Onshore - to assure quality and performance. It will become one of SHI's core technologies for LNG carriers, alongside its LNG cargo tank technology."

ABS has reviewed the suitability and feasibility of the re-liquefaction system design to confirm the system would comply with current ABS Rules. ■

WORLD LNG CARRIER ORDERBOOK

Name	Delivery	Capacity	Propulsion	Containment	Primary Owner	Yard	Ordered
Energy Universe	01/08/2019	165000	TFDE	SPB	MOL	Japan Marine United	01/02/2014
Georgiy Ushakov	11/09/2019	172000	TFDE - Azipod	GT NO 96	Teekay LNG	DSME	01/07/2014
Nikolay Urvantsev	15/07/2019	172410	TFDE - Azipod	GT NO 96	MOL	DSME	01/07/2014
Yakov Gakkel	25/10/2019	172000	TFDE - Azipod	GT NO 96	Teekay LNG	DSME	01/07/2014
Marvel Pelican	15/12/2019	155000	TFDE	Moss	MOL	Kawasaki	01/09/2014
Marvel Heron	20/09/2019	177000	STaGE	Moss	MOL	Mitsubishi H.I.	01/01/2015
Marvel Swan	15/10/2021	178000	MEGI		K-Line	Imabari	15/05/2015
BW Pavilion Aranda	10/09/2019	173400	MEGI	GT NO 96	BWGas	DSME	01/09/2015
Daewoo 2466	15/10/2019	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	01/06/2016
Daewoo 2467	15/10/2019	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	01/06/2016
Gaslog Windsor	15/04/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/09/2016
Daewoo 2469	01/04/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	16/12/2016
Rias Baixas Knutsen	15/07/2019	180000	MEGI	GTT Mark III Flex	Knutsen	Hyundai	01/03/2017
Flex Courageous	15/08/2019	173400	MEGI	GT NO 96	Flex LNG	DSME	02/03/2017
MOL Hudong-Zhonghua 1/4	15/12/2019	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 2/4	01/03/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 3/4	15/07/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 4/4	01/10/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
Gaslog Warsaw	15/07/2019	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/12/2017
Daewoo 2478	15/05/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	06/12/2017
Elisa Larus	30/03/2020	174000	XDF	GTT Mark III Flex	NYK	Hyundai	01/01/2018
SHI #1	15/07/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	01/01/2018
SHI #17	15/10/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	01/01/2018
HHI / Total	15/01/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	04/01/2018
HHI / Total / Sovc	28/02/2020	174000	XDF	GTT Mark III Flex	Sovcomflot	Hyundai	04/01/2018
BW Magnolia	15/12/2019	173400	MEGI	GT NO 96	BWGas	DSME	01/02/2018
BW Pavilion Aramhera	15/06/2020	173400	MEGI	GT NO 96	BWGas	DSME	01/02/2018
HHI / Cardiff #1	15/02/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	01/02/2018
HHI / Cardiff #2	15/04/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	01/02/2018
Flex Reliance	15/07/2020	173400	MEGI	GT NO 96	Flex LNG	DSME	28/02/2018
Flex Resolute	15/08/2020	173400	MEGI	GT NO 96	Flex LNG	DSME	28/02/2018
Flex Amber	15/07/2020	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	01/03/2018
Flex Aurora	15/05/2020	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	01/03/2018
SHI Gaslog #1	15/04/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/03/2018
Samsung 2271	15/04/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	09/03/2018
DSME Minerva #1	15/01/2021	173400	MEGI	GT NO 96	Minerva Marine	DSME	15/03/2018
DSME Minerva #2	15/04/2021	173400	MEGI	GT NO 96	Minerva Marine	DSME	15/03/2018
Traiano Knutsen	15/06/2020	180000	MEGI	GTT Mark III Flex	Knutsen	Hyundai	23/03/2018
DSME 2483	15/08/2020	173400	MEGI	GT NO 96	Alpha Gas	DSME	28/03/2018
DSME 2484	01/12/2020	173400	MEGI	GT NO 96	Alpha Gas	DSME	28/03/2018
SHI Gaslog #2	15/07/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	30/05/2018
DSME 2487	15/01/2021	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	05/06/2018
Maran Gas DSME	15/09/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	05/06/2018
DSME 2485	15/04/2021	173400	MEGI	GT NO 96	Alpha Gas	DSME	07/06/2018

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 August 2019

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Nikolay Urvantsev	15/07/2019	172410	TFDE - Azipod	GT NO 96	MOL	DSME	01/07/2014
Yakov Gakkel	25/10/2019	172000	TFDE - Azipod	GT NO 96	Teekay LNG	DSME	01/07/2014
Marvel Pelican	15/12/2019	155000	TFDE	Moss	MOL	Kawasaki	01/09/2014
Marvel Heron	20/09/2019	177000	STaGE	Moss	MOL	Mitsubishi H.I.	01/01/2015
Marvel Swan	15/10/2021	178000	MEGI		K-Line	Imabari	15/05/2015
BW Pavilion Aranda	10/09/2019	173400	MEGI	GT NO 96	BWGas	DSME	01/09/2015
Daewoo 2466	15/10/2019	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	01/06/2016
Daewoo 2467	15/10/2019	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	01/06/2016
Gaslog Windsor	15/04/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/09/2016
Daewoo 2469	01/04/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	16/12/2016
Rias Baixas Knutsen	15/07/2019	180000	MEGI	GTT Mark III Flex	Knutsen	Hyundai	01/03/2017
Flex Courageous	15/08/2019	173400	MEGI	GT NO 96	Flex LNG	DSME	02/03/2017
MOL Hudong-Zhonghua 1/4	15/12/2019	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 2/4	01/03/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 3/4	15/07/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
MOL Hudong-Zhonghua 4/4	01/10/2020	174000	MEGI	GT NO 96	MOL	Hudong-Zhonghua	01/07/2017
Gaslog Warsaw	15/07/2019	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/12/2017
Daewoo 2478	15/05/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	06/12/2017
Elisa Larus	30/03/2020	174000	XDF	GTT Mark III Flex	NYK	Hyundai	01/01/2018
SHI #1	15/07/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	01/01/2018
SHI #17	15/10/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	01/01/2018
HHI / Total	15/01/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	04/01/2018
HHI / Total / Sovc	28/02/2020	174000	XDF	GTT Mark III Flex	Sovcomflot	Hyundai	04/01/2018
BW Magnolia	15/12/2019	173400	MEGI	GT NO 96	BWGas	DSME	01/02/2018
BW Pavilion Aramhera	15/06/2020	173400	MEGI	GT NO 96	BWGas	DSME	01/02/2018
HHI / Cardiff #1	15/02/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	01/02/2018
HHI / Cardiff #2	15/04/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	01/02/2018
Flex Reliance	15/07/2020	173400	MEGI	GT NO 96	Flex LNG	DSME	28/02/2018
Flex Resolute	15/08/2020	173400	MEGI	GT NO 96	Flex LNG	DSME	28/02/2018
Flex Amber	15/07/2020	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	01/03/2018
Flex Aurora	15/05/2020	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	01/03/2018
SHI Gaslog #1	15/04/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	01/03/2018
Samsung 2271	15/04/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	09/03/2018
DSME Minerva #1	15/01/2021	173400	MEGI	GT NO 96	Minerva Marine	DSME	15/03/2018
DSME Minerva #2	15/04/2021	173400	MEGI	GT NO 96	Minerva Marine	DSME	15/03/2018
Traiano Knutsen	15/06/2020	180000	MEGI	GTT Mark III Flex	Knutsen	Hyundai	23/03/2018
DSME 2483	15/08/2020	173400	MEGI	GT NO 96	Alpha Gas	DSME	28/03/2018
DSME 2484	01/12/2020	173400	MEGI	GT NO 96	Alpha Gas	DSME	28/03/2018
SHI Gaslog #2	15/07/2020	180000	XDF	GTT Mark III Flex	GasLog	Samsung	30/05/2018
DSME 2487	15/01/2021	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	05/06/2018
Maran Gas DSME	15/09/2020	173400	MEGI	GT NO 96	Maran Gas Maritime	DSME	05/06/2018
DSME 2485	15/04/2021	173400	MEGI	GT NO 96	Alpha Gas	DSME	07/06/2018

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 August 2019

Name	Delivery	Capacity	Propulsion	Containment	Primary Owner	Yard	Ordered
Cool Discoverer	15/08/2020	174000	XDF	GTT Mark III Flex	Thenamaris	Hyundai	19/06/2018
Flex Vigilant	15/03/2021	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	30/06/2018
Flex Volunteer	15/11/2020	174000	XDF	GTT Mark III Flex	Flex LNG	Hyundai	30/06/2018
Aristarchos	15/03/2021	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	01/07/2018
Aristidis I	15/11/2020	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	01/07/2018
Aristos I	15/10/2020	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	01/07/2018
Attalos	15/06/2021	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	01/07/2018
Flex Freedom	15/10/2020	173400	MEGI	GT NO 96	Flex LNG	DSME	05/07/2018
Celcius #1	15/10/2020	180000	XDF	GTT Mark III Flex	Celcius Shipping	Samsung	01/08/2018
Celcius #2	15/12/2020	180000	XDF	GTT Mark III Flex	Celcius Shipping	Samsung	01/08/2018
HHI 3037	15/09/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	15/08/2018
SHI 2300	15/10/2020	174000	XDF	GTT Mark III Flex	GasLog	Samsung	15/08/2018
SHI 2301	15/12/2020	174000	XDF	GTT Mark III Flex	GasLog	Samsung	15/08/2018
HHI 3038	15/11/2020	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	15/09/2018
Cool Racer	15/01/2021	174000	XDF	GTT Mark III Flex	Thenamaris	Hyundai	27/09/2018
SHI NYK	15/04/2021	174000	XDF	GTT Mark III Flex	NYK	Samsung	28/09/2018
SHI Minerva #1	15/01/2021	174000	XDF	GTT Mark III Flex	Minerva Marine	Samsung	15/10/2018
HHI 3039	15/03/2021	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	15/11/2018
HHI 3112	15/01/2021	174000	XDF	GTT Mark III Flex	Cardiff Marine	Hyundai	15/11/2018
HHI Latsco #1	15/02/2021	174000	XDF	GTT Mark III Flex	Latsco Shipping	Hyundai	25/11/2018
HHI Latsco #2	15/08/2021	174000	XDF	GTT Mark III Flex	Latsco Shipping	Hyundai	25/11/2018
SHI 2306	15/09/2021	174000	XDF	GTT Mark III Flex	NYK	Samsung	03/12/2018
SHI 2307	15/11/2021	174000	XDF	GTT Mark III Flex	NYK	Samsung	03/12/2018
DSME 2496	15/02/2021	174000	MEGI	GT NO 96	BWGas	DSME	05/12/2018
DSME 2497	15/06/2021	174000	MEGI	GT NO 96	BWGas	DSME	05/12/2018
DSME 2495	15/05/2021	173400	MEGI	GT NO 96	Nakilat	DSME	10/12/2018
HHI NYK DG #1	15/09/2020	174000	XDF	GTT Mark III Flex	NYK	Hyundai	11/12/2018
HHI NYK DG #2	15/05/2021	174000	XDF	GTT Mark III Flex	NYK	Hyundai	11/12/2018
HHI NYK DG #3	15/06/2021	174000	XDF	GTT Mark III Flex	NYK	Hyundai	11/12/2018
DSME Dec #1	15/12/2020	180000	MEGI	GT NO 96	MOL	DSME	15/12/2018
DSME Dec #2	15/02/2021	180000	MEGI	GT NO 96	MOL	DSME	15/12/2018
SHI Navigare	15/03/2021	173400	XDF	GTT Mark III Flex	Navigare	Samsung	15/12/2018
HHI Sovcom #1	30/08/2020	174000	XDF	GTT Mark III Flex	Sovcomflot	Hyundai	19/12/2018
HHI Sovcom #2	15/12/2020	174000	XDF	GTT Mark III Flex	Sovcomflot	Hyundai	19/12/2018
Alpha Gas	15/06/2021	174000	MEGI	GT NO 96	Alpha Gas	DSME	27/12/2018
SHI Gaslog CE #1	15/06/2021	180000	XDF	GTT Mark III Flex	GasLog	Samsung	27/12/2018
SHI Gaslog CE #2	15/08/2021	180000	XDF	GTT Mark III Flex	GasLog	Samsung	27/12/2018
SHI #18	15/03/2021	174000	XDF	GTT Mark III Flex	Cardiff Marine	Samsung	31/12/2018
Celcius #3	15/02/2021	180000	XDF	GTT Mark III Flex	Celcius Shipping	Samsung	15/01/2019
Celcius #4	15/04/2021	180000	XDF	GTT Mark III Flex	Celcius Shipping	Samsung	15/01/2019
SHI Minerva #2	15/09/2021	174000	XDF	GTT Mark III Flex	Minerva Marine	Samsung	15/01/2019
CSSC #1	15/09/2021	178000	XDF	GT NO 96	CSSC	Hudong-Zhonghua	30/01/2019
CSSC #2	15/02/2022	178000	XDF	GT NO 96	CSSC	Hudong-Zhonghua	30/01/2019
DSME Maran	15/05/2021	174000	MEGI	GTT Mark III Flex	Nakilat	DSME	15/02/2019
Samsung Feb #1	15/03/2022	174000	XDF	GTT Mark III Flex		Samsung	15/02/2019

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Data last updated = Data last updated = 6th August 2019

Name	Delivery	Capacity	Propulsion	Containment	Primary Owner	Yard	Ordered
Samsung Feb #2	15/03/2022	174000	XDF	GTT Mark III Flex		Samsung	15/02/2019
Samsung Feb #3	15/03/2022	174000	XDF	GTT Mark III Flex		Samsung	15/02/2019
Capital Gas #5	15/07/2021	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	25/02/2019
DSME Maran #2	15/08/2021	173400	XDF	GTT Mark III Flex	Nakilat	DSME	25/02/2019
DSME Maran #3	15/10/2021	173400	XDF	GTT Mark III Flex	Nakilat	DSME	25/02/2019
SHI Mar19	15/03/2022	174000	XDF	GTT Mark III Flex	Nisshin Shipping	Samsung	20/03/2019
DSME Maran 2504	15/01/2022	174000	MEGI	GT NO 96	Maran Gas Maritime	DSME	01/04/2019
H Samho NYK	15/03/2022	174000	XDF	GTT Mark III Flex	NYK	Hyundai	01/04/2019
HHI Samho Edison	15/01/2022	174000	XDF	GTT Mark III Flex	NYK	Hyundai	10/04/2019
Capital Gas #6	15/09/2021	174000	XDF	GTT Mark III Flex	Capital Gas	Hyundai	15/04/2019
Samsung N/A	15/01/2022	174000	XDF	GTT Mark III Flex	Minerva Marine	Samsung	01/05/2019
DSME May19	15/05/2022	174000	MEGI	GT NO 96	Maran Gas Maritime	DSME	14/05/2019
DSME MOL #3	15/07/2021	173400	MEGI	GT NO 96	MOL	DSME	15/05/2019
Hyundai European #1	15/03/2022	180000	XDF	GTT Mark III Flex	Dynagas	Hyundai	22/05/2019
Hyundai European #2	15/06/2022	180000	XDF	GTT Mark III Flex	Dynagas	Hyundai	22/05/2019
Samsung 2019 #10	15/06/2022	174000	XDF	GTT Mark III Flex	Morgan Stanley	Samsung	08/06/2019
Samsung 2019 #9	15/01/2022	174000	XDF	GTT Mark III Flex	Morgan Stanley	Samsung	08/06/2019
HHI SK E&S	15/09/2021	180000	XDF	GTT Mark III Flex	SK Shipping	Hyundai	10/07/2019

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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	Pelita Energy	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Coral Favia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2010	Coral Fraseri	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	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
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
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	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 Innovation	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)
2017	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
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

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Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
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	Coral Encanto	30,000	LNG	China	Yes	Anthony Veder
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2018	LNG London	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	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
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Q-LNG 4000	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	FuelLNG TBN	7,500	LNG	Singapore	Yes	FuelLNG
2020	CLS TBN	3,500	LNG	Japan	Yes	CLS
2020	Elenger TBN	6,000	LNG	NWE	Yes	Elenger
2020	ENN TBN	8,500	LNG	China	Yes	ENN
2020	Flexfueller 002	1,480	LNG	Antwerp	Yes	Titan LNG
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
2022	PNE TBN	5,400	LNG	USG	Yes	PNE
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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