

LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS

29 April 2021

Total declares Mozambique LNG *force majeure*

Total has now withdrawn all personnel from the Afungi LNG project site in Mozambique, due to security concerns and declared *force majeure*.

This follows the Islamic State-linked insurgent attacks on the town of Palma, which lies close to the construction sites, and acts as the project's centre of operations.

Dozens of civilians were killed and thousands were displaced during the attacks.

In announcing the move, Total said in a statement; "Total expresses its solidarity with the government and people of Mozambique and wishes that the actions carried out by the government of Mozambique and its regional and international partners will enable the restoration of security and stability in Cabo Delgado province in a sustained manner."

Total suspended work on the project at the end of March following the attacks, which have

badly hit the local economy, local media said.

Last week, the Confederation of Economic Associations of Mozambique (CTA) announced that it was to conduct a survey of local businesses in co-operation with Total.

CTA President Agostinho Vuma told local media that affected companies included an Italian contractor building a resettlement village and a Portuguese company building a new airport, the AFP news agency said.

Vuma told AFP that small and medium-sized local businesses have already lost \$90 mill since the latest siege started at Palma on 24th March, leading to the complete cessation of work on the giant LNG project.

This project was due to create around \$2.5 bill in contracts to

Mozambican companies, representing more than a third of Total's total onshore commitments.

In response, one of the major lenders also put out a statement this week.

The Export-Import Bank of the United States (EXIM) said; "Today, (26th April) Total SE, as operator of the Mozambique LNG project, informed the project's concessionaire sponsors that it is currently unable to operate in the Afungi peninsula.

"Copies of that notice were provided to the export credit agencies and lending partners. EXIM staff is reviewing Total's announcement, and we will work with our fellow export credit agencies and lending partners to determine next steps in the coming weeks," the statement said. ■

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South Korean LNG demand to grow

South Korea's LNG demand is expected to rise 15.1% through 2034, the energy ministry said this week.

The hike is on the back of higher LNG demand for bunkering and hydrogen fuel cell cars, as well as a government-led push to reduce power generation using coal and nuclear.

LNG demand is forecast to grow to 47.97 mill tonnes in 2034, compared with this year's estimated consumption of 41.69 mill tonnes, the South Korean Ministry of Trade, Industry and Energy said in its Long-term Natural Gas Supply Plan.

Demand for power generation is projected to increase at an average of 0.33% per year to 20.88 mill tonnes in 2034, from an estimated 20.01 mill tonnes this year.

The long-term LNG demand

forecast is larger than previously thought. In its 2018 Long-term Natural Gas Supply Plan, the ministry had forecast the country's LNG demand to grow by an average of 0.81% annually over the next 13 years.

In October last year, President Moon declared that South Korea will achieve carbon neutrality by 2050 by replacing coal-fired power generation with renewable sources and internal combustion vehicle engines with hydrogen-powered and battery-based electric vehicles.

Under the President's long-term power supply plan, South Korea will permanently shut 30 ageing coal-fired power plants,

around half of its coal-fired power stations currently operating, by 2034.

"The country will prepare for a stable LNG supply as demand for the fuel can possibly be up to 52.53 mill tonnes in 2034, in case of bigger demand for power production," a ministry official told S&P Global Platts.

As part of efforts to ensure a stable supply, South Korea will diversify LNG imports sources, the ministry's statement said.

About 80% of imported LNG comes from five exporters – Qatar, Australia, Oman, Malaysia and Indonesia.

"We will also increase investments in LNG projects overseas

through which we can bring in volumes in equity stakes," the ministry said.

South Korea will also increase co-operation with other LNG importers on flexible contracts, volume swapping and facility sharing.

State-run Korea Gas Corp (KOGAS) will seek to reduce contracts linked to oil prices by expanding contracts on a gas-on-gas basis to avoid fluctuations in oil prices, it said and will also seek mid-term contracts for five to 10 years, rather than rigid long-term contracts.

KOGAS plans to build a fifth LNG storage terminal with a capacity of 2.28 mill kiloliters by 2031. ■

New Fortress completes Golar acquisitions

Golar LNG Limited (GLNG) has completed the sales of Hygo, a 50-50 joint venture between GLNG and Stonepeak Infrastructure Fund II Cayman (G) Ltd, and Golar LNG Partners, LP to New Fortress Energy (NFE).

"The NFE transactions have simplified the group structure and crystallised part of the value of our downstream business," said GLNG Chairman, Tor Olav Troim. "We are impressed with what the Chairman and CEO, Wes Edens, and his team in NFE have created over the last five years. They have, through dynamic, fast track solutions to the energy transition, outcompeted the traditional energy companies.

"Golar is excited to become a major shareholder in NFE and working even more closely with NFE. NFE's expanded portfolio of cash generating assets and inter-

national project opportunities in the advanced stages of development put them in a strong position to accelerate the realisation of the profitable growth ambitions Golar has for its downstream business.

"Golar has materially strengthened its balance sheet as a result of the NFE transactions. This coincides with rising energy prices, and with a global focus on cleaner energy. Golar is now in a strong position to use its unique FLNG capability and experience to produce low cost LNG and meet this rapidly expanding opportunity.

"This can take place through tariff-based production for oil and gas companies, but can also be achieved through direct gas ownership. The cost of buying or farming into proven reserves of stranded or associated gas is currently very attractive," he concluded.

Under the Hygo agreement, NFE acquired all of the outstanding shares for 31,372,549 shares of NFE Class A common stock and \$580 mill in cash. The transaction was costed at a \$3.1 bill enterprise value and a \$2.18 bill equity value at the announcement.

GLNG received 18,627,45 shares of NFE Class A common stock and \$50 mill in cash and Stonepeak received 12,745,098 shares and \$530 mill in cash.

In addition, NFE acquired all of the outstanding common units of GMLP for \$3.55 per common unit in cash. NFE has also acquired GMLP's general partner for equivalent consideration.

This transaction valued GMLP at a \$1.9 bill enterprise value and a \$251 mill common equity value.

Golar received \$81 mill in cash for the sale of its 32% interest in GMLP. ■

LNG Shipping News

2 Prospect Road
St Albans AL1 2AX
United Kingdom
www.lngjournal.com
Tel: +44 (0)20 7253 2700

Publisher

Stuart Fryer

Editor

Ian Cochran
+44 (0)7748 144265
lancochran74@gmail.com

Ad sales enquiries

Narges Jodeyri
+44 (0)20 7017 3406
narges@lngjournal.com

Subscriptions

Stephan Venter
Tel: +44 (0) 20 7253 2700
venter@lngjournal.com

Production

Vivian Chee
Tel: +44 (0) 20 8995 5540
chee@btconnect.com

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Japanese take project finance lending's top three places

Japanese banks took the top three places in Poten's 2021 ranking of LNG project finance lenders, after occupying the top two places the previous year.

The latest report showed that Mizuho and Sumitomo Mitsui Banking Corp (SMBC) had swapped places, as Mizuho moved up to top spot with SMBC dropping to second.

Bank of Tokyo Mitsubishi (MUFG) re-emerged in third place after slipping in the LNG ranking last year from second place the year before.

Three French banks - Societe Generale, Credit Agricole, and BNP Paribas - came fourth, fifth and sixth, respectively, followed by the Industrial and Commercial Bank of China, Italy's Cassa Depositi e Prestiti (CDP) and the Netherlands' ING to tie at eighth place, with Spain's Santander rounding off the top 10, Poten said.

Most of the top places were taken by banks who supplied large tranches of funding for the Mozambique LNG project and provided refinancing for Australia's Ichthys LNG and for US based Cheniere Energy and Freeport LNG Train 3, which attracted a combined \$6.1 bill in funds.

All of the top places, with the exception of CDP, were taken up by lenders, which have a large presence in LNG project finance.

CDP's arrival at such a high position in the rankings is understood to have been due to a big contri-

Rank	Previous	Bank	Country	Amount \$ millions
1	2	Mizuho	Japan	1,818
2	1	Sumitomo Mitsui Banking Corp	Japan	1,813
3	22	Bank of Tokyo Mitsubishi	Japan	1,578
4	8	Societe Generale	France	1,398
5	19	Credit Agricole	France	1,106
6	26	BNP Paribas	France	858
7	6	Industrial and Commercial Bank of China	China	775
8	-	Cassa Depositi e Prestiti	Italy	700
8	3	ING	Netherlands	700
10	5	Santander	Spain	760
		Total		11,506

Source: Poten & Partners

bution to Mozambique LNG for the tranche covered by Italian export credit (ECA) agency SACE, Poten said.

Large tickets

Some of the top 10 banks supplied 'tickets' of over \$500 mill to the two biggest deals, which were concluded for Mozambique attracting \$15.4 bill of debt from banks and export credit agencies (ECAs) and for Ichthys LNG, which attracted \$8.2 bill for a refinancing of both ECA-covered and uncovered debt.

Other deals that influenced the 2021 rankings included Nigeria LNG's Train 7 - a corporate-project finance - hybrid Indian regasification projects and LNGCs structured as limited recourse project finance.

Import projects and LNGCs tend to have a smaller impact on the rankings because their capital expenditure is lower than for liquefaction projects, Poten explained.

In addition, import and LNG-to-power projects are normally supported by development banks and ECAs. They usually attract only small amounts of commercial bank funding, if they can access it.

A total of 74 lenders from 20 countries provided the LNG project finance funds last year. This amounted to almost \$24 bill in loans, which was double the previous years' totals.

Poten's bank ranking focuses on commercial banks, but also includes development banks, ECAs, institutional investors and even finance divisions of equipment manufacturers and contractors, where they have provided funding in tranches alongside commercial banks.

However, the ranking does not include ECA and development bank tranches, where they are separately making direct loans, and often in very large amounts, outside commercial bank tranches, the researcher said. ■

Vires Energy gets nod to proceed with LNG hub

The Philippines Department of Energy has approved A Brown Co subsidiary, Vires Energy Corp's, application allowing it to proceed with an integrated LNG project in Batangas province.

Energy Secretary, Alfonso Cusi, said in a statement he was hoping that Vires would complete all the requirements within six months so that the project would proceed on schedule.

"The proposed integrated natural gas-fired power plant and LNG storage and re-gasification terminal project of Vires Energy Corp. will boost the attainment of our vision to develop the Philippines as a LNG hub in the Southeast Asian region," Cusi said.

The proposed project includes a turret mooring system for the FSRU, a 1.6 km subsea gas pipeline and a 500 MW floating power plant, the largest in the Philippines, which will serve as an anchor market.

Vires plans to use the converted 2009-built LNGC 'BW Paris', with a regasification capacity of up to 3 mill tonnes per year feeding a 500 MW floating power plant.

The FSRU, with about 162,400 cu m storage capacity, will be located 1.6 KM from the southeastern coastline of Batangas Bay in Barangay Simlong, Batangas City.

Cusi said that by securing a permit, this was the first step in developing LNG terminals and other downstream natural gas projects, giving operators the authority to secure all necessary permits and clearances.

The permit is valid for six months.

Vires said that it expected to start commercial operations by January, 2023.

Last year, A Brown acquired 99.995% of Vires' outstanding capital owned by Argo Group of Singapore for P50.2 mill. ■

NEWS NUDGE

Indonesian commissioning cargo

Indonesia's Jawa 1 LNG-to-power project has received its first commissioning cargo - the first of four.

The 145,700 cu m LNGC, 'Tangguh Towuti' recently

berthed alongside the 170,000 cu m 'Jawa Satu' FSRU moored off Karawang Regency in Indonesia's West Java.

According to Jawa Satu Power, the project's power plant operator, 'Tangguh Towuti' loaded the gas at BP's Tangguh facility in Indonesia's Papua Barat Province. LNG produced at Tangguh will now be regularly supplied to the FSRU.

The newbuilding FSRU arrived at Pertamina's Bontang facility on 12th February, following her delivery from Samsung Heavy Industries.

She is operated by Jawa Satu Regas, a joint venture involving Indonesian state-owned Pertamina, and Japan's Marubeni, Sojitz and MOL. The latter will operate and maintain the FSRU. ■

Private Pakistan LNG regas terminals possible

Last week, Pakistan's Oil and Gas Regulatory Authority (OGRA) held a public hearing on private sector petitions for licenses to build LNG re-gasification terminals.

Petitions were submitted for two FSRUs to be used as LNG re-gasification terminals, plus the infrastructure.

Two private companies, Tabeer Energy Private Limited (TEPL) and M/s Energas Terminal Private Limited (ETPL) applied for a license to purchase LNG, re-gasify it at the LNG Terminal and supply the gas to the domestic market and also for their own use.

They require an OGRA con-

struction license before taking final investment decisions (FIDs) on developing the LNG terminals. All of the other regulatory processes are in place, Pakistan's Nation media outlet said.

Both applicants claimed that they had their own private sector customers and would arrange LNG imports without any liability to the Pakistani Government by using the gas pipeline network.

A TEPL representative said that

the company was targeting full terminal operation in 24 months. The terminal will have tie-in facility with Sui Southern gas pipeline network at Port Qasim and will have 750-1,000 mill cu ft per day capacity.

Tabeer's facility would be the first fully integrated terminal where LNG import, re-gasification and sales would be handled by the same company, which would provide huge savings in foreign exchange to the government without any off-take guarantees, it was claimed.

Third FSRU

ETPL said it had secured a license, land allocation and related regulatory approvals to build an LNG terminal next year. The company said that this would be the third FSRU to be used in Pakistan but the first wholly private sector owned project

The two existing terminals of 600 mill cu ft per day capacity each were contracted to the government.

ETPL claimed that the country's existing terminal's capacity usage was the highest in the world, as they had no downstream storage that could cause serious supply problems in case of outages, the Nation reported.

However, since these announcements, the Pakistan Ministry of Maritime Affairs has asked the government not to allocate the additional capacity available at the LNG terminals at Port Qasim to the private sector.

In a letter to the Economic Coordination Committee (ECC), the Maritime Ministry suggested that instead of providing the additional capacity to the private sector the government needed to establish two new LNG terminals at Port Qasim.

The ministry warned that the impact of utilisation of the excess capacity by LNG terminal operators and its potential impact on the LNG supply chain must be determined by an independent international consultant.



Port Qasim might see private terminals soon

KN to undertake Klaipeda capacity study

Lithuanian LNG terminal operator AB Klaipėdos nafta (KN) is to launch the annual Klaipėda LNG terminal capacity allocation for the new gas year, which starts on 1st October, 2021.

"This gas year has been intense when it comes to the operation of the LNG terminal. Last year during the capacity allocation procedure the most capacity was booked in the entire history of the LNG terminal.

"At the end of the gas year a significant amount of additional capacity was booked. This was due to the low LNG prices on the market and LNG buyers in Europe actively took advantage. In the first quarter of 2021 a peak in the Asian spot market was observed, as well as the diversion of some LNG cargoes to that region, though the supply of natural gas through the Klaipėda LNG termi-

nal remains important to its customers.

"This year may be important for customers, who are planning their activities and willing to reserve LNG terminal capacities also due to the planned completion of the GIPL connection between Lithuania and Poland, which opens up additional market potential in 2022," explained Mindaugas Navikas, KN's Chief Sales Officer.

During the current 2021 gas year (from 1st October, 2020 to 30th September, 2021), 41 LNGCs have arrived at the Klaipėda terminal thus far, compared with 42 last year, and another nine are due by the end of this gas year.

During this period, 1.73 mill cu m of LNG were delivered to Klaipėda, most of which (82%) came from the US.

"This year, we set ourselves the task to answer the question what long-term capacity allocation and tariff mechanism is the most suitable for operations of Klaipėda LNG terminal. For this reason, a study will be carried out by external experts comparing the capacity allocation and pricing mechanisms of LNG terminals operating in Europe.

"Finding the optimal model suitable for our terminal will undoubtedly change both the principles of capacity allocation and the

pricing itself, but no changes are planned for this particular gas year yet," Navikas added.

The total amount of the allocated LNG terminal capacity is 3.75 bill cu m. KN will accept applications from potential users of the LNG terminal to 24th May.

To undertake the study, KN has signed an agreement with Swedish-based AFRY, which will look at the long-term capacity allocation and pricing model.

The study will provide the best long-term capacity allocation mechanism as well as the tariffs applicable to the Klaipėda LNG terminal. The results are due to be presented in 2H21, KN said.

IEASA launches tender for winter LNG cargoes

Argentina's state-owned energy company IEASA, formerly ENARSA, has launched a tender to buy 13 LNG cargoes.

The cargoes are to be delivered to the Bahía Blanca receiving terminal between May and August this year and were purchased through six tenders.

Including the new cargoes, the company's shipments will number 37, exceeding the 33 that had arrived during last year's winter season.

Deliveries will be made to Excelerate Energy's FSRU moored at the port in order to regasify the LNG and transfer it into the gas pipeline operated by Transportadora de Gas del Sur (TSN), according to Argen-

tine news service Econojournal.

The first shipment is due to arrive at Bahia Blanca in May, followed by four in June, five in July, and the remaining three in August, according to the tender notice.

According to Econojournal estimates, IEASA will need to purchase 55 cargoes this year to meet natural gas demand during the winter. However, this number could increase if strikes in Neuquén province continue, which have paralysed the local hydrocarbon activity.

IEASA had already held a LNG

tender on 18th March, in which it acquired 24 cargoes totalling 1.41 bill cu m of gas to be delivered to Escobar between May and September.

In the March auction, 14 companies offered a weighted average price of \$6.50 per MMBTU. The country's energy department estimated that it would pay \$7.25 per MMBTU, according to local media.

During the earlier auction, BP won 15 shipments, followed by Gunvor with five, Total was awarded two, while Trafigura and Naturgy won one each. ■

Terminal closures

Rotterdam's Dutch Gate LNG receiving terminal, owned jointly by Gasunie and Vopak, will close in June for maintenance.

This will be the site's first major maintenance period since the start of operations almost 10 years ago.

In its quarterly results presentation, Vopak said that following 10 years of continuous, safe and successful LNG operations, Gate terminal in Rotterdam will start its major maintenance turnaround to ensure the best in class service for its customers.

The maintenance work will last for about a month starting 15th June, Vopak added.

Elsewhere, Norwegian energy giant, Equinor has revised its estimated restart date for its Arctic LNG plant at Hammerfest to 31st March next year.

This is to allow more time for repairs after a fire badly damaged the export terminal last year, the company said.

Equinor had previously scheduled a restart for 1st October this year. ■

Stade LNG's binding season pushed back

Hanseatic Energy Hub, (HEH), the developer of the planned LNG import terminal at Stade in northern Germany, has pushed back the binding phase of its capacity open season towards the end of September, a company official told S&P Global Platts.

The 12 bill cu m per year Stade LNG terminal is the largest of two remaining LNG plants under consideration in northern Germany, and HEH had planned to invite binding capacity bids in the second quarter of 2021.

"We are actually extending the timeline of the current phase – preparation for the binding phase – to allow us longer to work together with all interested parties to fine-tune the products and finalise the contract," explained Danielle

Stoves, HEH's Commercial and Regulatory Director talking with Platts. "We are therefore now planning to launch the binding phase in the second half of September."

HEH completed the first non-binding phase of the capacity open season in February, and had claimed market interest from global participants that supported the 'full planned capacity' of the facility.

The project received a further boost last month when Belgian gas infrastructure operator Fluxys

agreed to join the project as an industrial partner.

"We are working closely with Fluxys during this stage to ensure that we leverage their expertise and experience," Stoves said, adding: "Interest in the terminal continues to grow."

The entry of Fluxys into the project followed a recent investment into HEH by private markets firm Partners Group.

Commercial operations are due to start in 2026. ■

Jacobs wins FGEN LNG terminal contract

Dallas-based engineering company, Jacobs has been contracted by FGEN LNG Corp to deliver the engineering, procurement and construction (EPC) for an interim offshore terminal to be located at Batangas City, Philippines.

This involves the modification of an existing fuel jetty to accommodate an FSRU, as well as the LNGCs, to import LNG.

Work includes modifications to the jetty head, berthing and mooring facilities; a trestle bridge with high-pressure gas pipeline and utilities; plus a jetty monitoring building and control room.

As owner's engineer, Jacobs will undertake the design review, pro-

ject management and supervision of the construction.

"Wherever you are in the world, access to a stable and reliable power supply is critical for advancing social and economic development," said Jacobs People & Places Solutions Executive Vice President, Patrick Hill. "Supporting a project that will help deliver a more reliable, lower carbon power supply for the people of the

Philippines further demonstrates Jacobs' commitment to a more sustainable future."

The modified terminal will help meet the power demands of 4.5 mill homes by supplying LNG to existing gas-fired power plants, which in 2019 were responsible for delivering 13,876 GWh into the Luzon grid.

"Jacobs' extensive track record of providing owner's engineer ser-

vices across many diverse and challenging infrastructure projects and their particular experience in LNG projects were major considerations in our decision to award the owner's engineer role to them," said FGEN LNG, CEO and CCO, Jon Russell. "We are confident that they will provide valuable support to FGEN LNG in the execution of this project of national significance." ■

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Nakilat achieves a 14.5% net profit increase

Nakilat has announced a 14.5% increase in net profit in the first quarter of this year.

Net profit was QR320.1 mill, compared to QR279.5 mill reported for the same period of 2020.

Nakilat said that it remained committed to achieving its vision and continued to deliver robust financial performance and sustained operational excellence, despite the challenges brought about by the COVID-19 pandemic.

The company claimed that it had maintained its track record of delivering clean energy to worldwide destinations without any interruptions.

In addition, Nakilat said that its shiprepair, offshore fabrication,

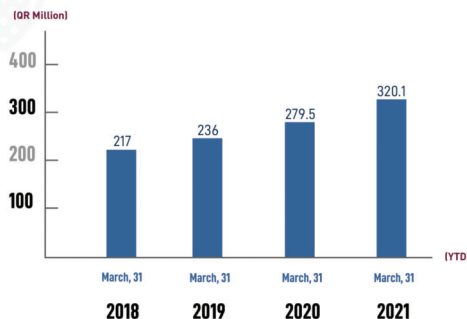
towage and other maritime services remained fully operational.

The key 1Q21 financial highlights were:

- Net profit of QAR320.1 mill, an increase of 14.5%.
- Operating expenses decreased by 4.1%.
- General and administrative expenses decreased by 28.1%.

With solid business continuity plans and robust infrastructures in place, Nakilat has been able to swiftly adapt to the evolving situation and remain focused on creating value for its shareholders and customers, the company said in a statement.

NAKILAT Q1 FINANCIAL PERFORMANCE



The company was recently certified for ISO 22301:2019 (Business Continuity Management Systems), which demonstrated its

pro-active approach in ensuring the maturity of its business continuity management systems across all operations.



FLEET SIZE

74 vessels

69 LNG Carriers

4 LPG Carriers

1 FSRU

*Includes 2 newbuilds

Santos forecasts \$1 mill free 2021 cash flow

Santos' strong base business generated \$302 mill free cash flow in first quarter of this year, the oil and gas company reported.

First quarter production of 24.8 mill boe was 39% above the 1Q20, primarily due to the ConocoPhillips acquisition, which was completed in May, 2020.

However, production was 2% lower than 4Q20, primarily due to lower domestic gas demand in Western Australia and unplanned maintenance at PNG, offset by strong production from Bayu-Undan.

Higher GLNG equity gas production from the Roma and Arcadia fields supported annualised LNG production of 6.4 mill tonnes per annum in 1Q21.

Revenue for the quarter of \$964 mill was stronger despite the contractual 3-month lag in oil-linked LNG prices and lower overall sales volumes, Santos said.

Net debt at the end of 1Q21, including leases, was \$3.6 bill after payment of the \$104 mill 2020 final dividend while the gearing was 33.6%.

FIDs taken

During the period, Santos took FID to proceed with the \$3.6 bill gross Barossa gas and condensate project to backfill Darwin LNG plus

the \$600 mill gross Darwin LNG life extension and pipeline tie-in projects.

Santos Managing Director and CEO, Kevin Gallagher said Santos had delivered another strong quarter of production and sales volumes, and strong free cash flow, as the business benefited from higher commodity prices and a low free cash flow breakeven oil price.

This was despite the three-month lag in oil-linked LNG prices, which should see stronger prices in the second quarter.

"Our consistent and successful strategy combined with the disciplined, low-cost operating model continue to drive strong performance across our diversified portfolio. Free cash flow generation of \$302 mill in the first quarter demonstrates our diversification and leverage to oil price. We are currently forecasting more than \$1 bill in free cash flow for the year at current oil prices.

"The strategy to grow around our five core asset hubs has not changed since 2016. As we now enter a growth phase with FID on Barossa, we will remain disciplined in managing our major project



Santos' Kevin Gallagher

costs, consistent with our operating model.

"It is a great achievement to have extended the life of Bayu-Undan following the approval of the infill drilling programme and taken FID on the Barossa project less than a year after we completed the ConocoPhillips acquisition.

"Last December we announced an ambitious roadmap to net-zero emissions by 2040. Our Moomba carbon capture and storage project is FID-ready, subject to eligibility for Australian Carbon Credit Units. First injection is expected to commence in 2024 and importantly this project represents a step-change in emission reduction," Gallagher said.

Höegh's share sale to go through

Höegh LNG Holdings' (HLH) recommended offer by Leif Höegh & Co Ltd (LHC) and funds managed by Morgan Stanley Infrastructure Partners (MSIP), through a 50/50 joint venture, Larus Holding Limited, is to go ahead.

However, it is still subject to the customary closing conditions.

HLH said that the required waivers of specific change of control and/or de-listing provisions, in relation to certain of the company's secured credit agreements, had been obtained.

It is expected that the transaction's will be completed during the week commencing 3rd May, 2021.

Immediately following its completion, the amalgamated company would be wholly-owned by the joint venture, and as a result, HLH's common shares will be de-listed from the Oslo Stock Exchange.

GTT reports revenue drop - bullish going forward

Membrane tank containment designer GTT has reported a 15% revenue drop to €88 mill in the first quarter of this year, compared with 1Q20.

Philippe Berterottière, GTT's Chairman and CEO, said: "Since the beginning of 2021, we have received six orders for LNG carriers and two orders for ethane carriers."

"In addition, Qatar's decision in February this year to invest in a new gas liquefaction plant, as well as the various other liquefaction projects under construction, represent significant order potential for our core business."

"On the innovation front, we have obtained several approvals from classification societies to develop new innovative technologies. GTT maintains a constant effort on R&D to meet its customers' energy transition needs and the increased requirements they face. In addition, the new contract between Elogen and energy company E.ON demonstrates our subsidiary's strong sales momentum and the attractiveness of its offer enabling

the production of green hydrogen.

"From a financial standpoint, revenues for the first quarter of 2021 are in line with our expectations. They were down 15% compared to 1Q20, which recorded an exceptionally high level following particularly strong order intake, however were up 49% compared with 1Q19."

"In the absence of any delays in shipbuilding schedules to date, we are confirming our full-year targets," he said.

In the LNGC sector, GTT reported consolidated revenue of €87.6 mill for 1Q21, down 15% compared with 1Q20, which fully benefited from order intakes in 2018 and 2019.

Newbuilding revenue drop

Revenue from newbuildings was €82.8 mill, down 17%. Royalties from LNG and ethane carriers

amounted to €72.2 mill, while FSRU revenues were €3.4 mill, FSUs €2 mill and FLNGs €0.7 mill.

Other royalties were up significantly compared to 2020. These included €3.1 mill from LNG as fuel (up 81%) and €1.mill from GBS (up 93%).

Revenues from services were €4.7 mill, up 55% compared with 1Q20, due in particular to the acquisitions made. Revenues from maintenance and support services for vessels in operation, pre-engineering studies and training services also increased.

On 31st March, 2021, the orderbook, excluding LNG as a fuel, stood at 125 units, compared with 147 units as of 1st January this year.

In the absence of any significant order delays or cancellations, GTT confirmed its targets for 2021 as consolidated revenues of between €285 mill and €315 mill and consolidated EBITDA of between

€150 mill and €170 mill.

Later, GTT unveiled the NO96 Super+, an evolution of the NO96 cargo containment system (CCS), which has recently received an Approval in Principle (AiP) from class society Bureau Veritas (BV).

NO96 Super+ offers a guaranteed boil-off rate (BOR) of 0,085%V per day for the current LNGC design of 174.000 cu m.

In addition, last week, the company said it had received an order from Hyundai Heavy Industries (HHI) for the tank design of three new LNGCs on behalf of an Asian shipowner.

As part of this order, GTT will design the tanks of the vessels, which will have a capacity of 174,000 cu m each. The LNGC tanks will be fitted with the GTT Mark III Flex membrane containment system.

Deliveries of the vessels are scheduled between the second and third quarters of 2024. ■

Wilhelmshaven to switch from LNG to hydrogen

German utility Uniper has cancelled plans to build an LNG regas terminal at Wilhelmshaven in favour of a hydrogen facility.

Under the name 'Green Wilhelmshaven,' Uniper plans to establish a German national hub for hydrogen at Wilhelmshaven and is working on a corresponding feasibility study.

Originally, Uniper explored the

idea of constructing an LNG floating import terminal using an FSRU at the Wilhelmshaven site.

However, in October, 2020, a market test proved that there was not enough interest in the LNG sector in terms of booking large,

long-term capacities for LNG regasification in Germany.

MOL had ordered an FSRU at Daewoo Shipbuilding & Marine Engineering (DSME) on the back of an agreement with Uniper.

This order has now been renego-

tiated as an LNGC at half the original contract price at Won226 bill, a sharp fall from the original price of Won410.6 bill, Yonhap reported.

The LNGC is to be delivered by October, 2023, DSME said in a filing, the newswire reported. ■

NEWS NUDGE

MET Croatia receives first cargo

Croatia's Krk LNG terminal has received the first gas delivery to MET Croatia.

The 145,000 cu m LNGC 'Methane Nile Eagle' arrived on 26th April, bringing a cargo from Zeebrugge.

Her arrival is Croatia's fifth LNG cargo imported thus far, and is the first one to originate from an EU port.

"Since the terminal started in January, 2021, it has been a rather turbulent beginning of operations, with pricing anomalies and arbitrary situations on the global scale and changes to the delivery schedule locally at the terminal. However, since March the arrival of vessels to the ter-

terminal has stabilised," explained Mario Matković, MET Croatia Energy Trade CEO.

Croatian gas supplier MET Croatia Energy Trade, part of Swiss-based energy company MET Group, is to import 2.67 bill cu m through Krk over seven years.

Regas system tested

Samsung Heavy Industries (SHI) completed the pilot test of its LNG regasification system earlier

this month.

S-REGAS is claimed to be the world's first LNG regasification system for FSRUs, combined with cold power generation technologies, SHI said.

Cold power generation is the electric power generation using energy produced during the LNG vaporisation process.

S-REGAS can generate 16 MW of electricity, the company added. ■

Wärtsilä signs maintenance agreement with Latsco

Wärtsilä has won another LNGC optimised maintenance agreement.

The company has signed a five-year agreement with Greek-based Latsco LNG Marine Management to maintain the main engines of two 174,000 cu m LNGCs, 'Hellas Diana' and 'Hellas Athina'.

"This agreement will ensure that these vessels can operate with maximum reliability, availability, and performance. This is of real value to us, and we very much appreciate Wärtsilä's capabilities in delivering highly efficient maintenance support via its global network," said Kostas Vlachos, Latsco LNG Marine Management COO.

The two vessels were built at Hyundai Heavy Industries (HHI). The 'Hellas Diana' entered



Two Latsco LNGCs have signed up with Wärtsilä

service at the end of March this year, while the 'Hellas Athina' is

scheduled to enter service in September.

Both are fitted with WinGD X-DF dual-fuel engines. ■

NEWS NUDGE

New Ships

China State Shipbuilding Corp's (CSSC) Hudong-Zhonghua Shipbuilding recently completed the sea trials of Dynagas' first FSRU.

The shipyard claimed that the FSRU 'Transgas Power' completed her trials a week ahead of schedule.

She will now run gas trials prior to her delivery to Dynagas.

'Transgas Power' is the first of two FSRUs ordered by the Greek company, the second being 'Transgas Force'. Both will be capable of operating as LNGCs.

Each of the three regasification units has a capacity of 250 mill cu ft per day of gas. The rated send-out capacity is around 500 mill cu ft per day.

Elsewhere, GasLog's 180,000 cu m 'GasLog Wellington' left Samsung Heavy Industries yard in Geoye last weekend to start its sea trials.

GasLog expects the sea trials to be completed on 1st May before her gas trials.

The LNGC should be delivered to charterer Cheniere in the middle of June.

She is the third WinGD dual-fuel propulsion, GTT's Mark III Flex Plus containment system fitted vessel out of four for a Cheniere charter.

Dynagas has also signed an extended charterparty agreement with Equinor for the employment of the 2013-built Ice Class LNGC 'Arctic Aurora' for another two years.

Under the terms of the charter, 'Arctic Aurora' is due to be delivered to Equinor in September, 2021 in direct continuation of her current charter with the Norwegian energy company.

Annual gross revenues from the new agreement are expected to be about \$21.5 mill, Dynagas said.

In addition, Awilco LNG has announced that the 2013-built 156,000 cu m TFDE 'WilForce' has entered into a new 12-month charterparty contract from the end of this month in direct continuation from her current charter.

The latest extension will help contribute an annual EBITDA of about \$18 mill during the charter period.

Korea Shipbuilding & Offshore Engineering (KSOE) has won a Won636 bill order from an Asian company to build three LNGCs.

Brokers reported that the 174,000 cu m LNGCs will be constructed by Hyundai Heavy Industries for Hyundai LNG Shipping and will be long term chartered to Petronas once delivered in 2024.

A price of \$189.5 mill per ship was quoted and the contract also includes three separate options for one vessel.

Pan Ocean has also reportedly ordered an 18,000 cu m LNG bunker vessel at Hyundai Mipo for \$55 mill.

She is due for delivery in 2023.

TMC appoints CEO

TMC Compressors (TMC), has appointed Christian Ness as its new CEO.

Ness succeeds Per Kjellin who will continue to work for TMC as

advisor in the company's business development team. He will also join the board.

"This is a well-run business so my mandate is to manage the excellent foundation that is already in place, but also to identify new and innovative ways of enabling the marine and offshore industries to become more sustainable from both an environmental and cost perspective," Ness said.

"TMC has always believed that the supplier industry should play a key part in developing green technologies that can help drive down shipowners' and operators' lifecycle costs and help reduce the shipping and offshore industries' climate footprint. We will continue our technology development along this path," he added.

Ness joins TMC from his position as Managing Director of TMC's parent company, Nessco Holding.

Prior to this, he was managing director for Nessco AS, a Norwegian supplier of compressors, vacuum pumps, blowers and associated services. ■

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LNGC 'Methane Patricia Camila' completes air lubrication trials

Clean technology company, Silverstream Technologies' air lubrication system, the patented Silverstream System, has delivered significant fuel and emissions savings during tests on the Shell-chartered 170,000 cu m LNGC 'Methane Patricia Camila'.

Following the testing of the retrofit, Silverstream and Shell's engineers claimed that a 6.6% net saving was generated by the system.

The air lubrication system was tested at various vessel speeds during the LNGC's normal operations to calculate fuel and emissions savings.

The Silverstream System produces a thin layer of microbubbles along a vessel's full flat bottom, reducing frictional resistance between the water and the hull.

It was retrofitted on the 2010-built LNGC during her October 2020 planned drydocking at the Sembcorp Marine Admiralty Shipyard in Singapore.

The project was installed within the planned drydocking period, and was delivered on budget, Silverstream said.

From design through to installation, the technology was reviewed and approved by ABS in accordance with the class society's guidance note for air



The LNGCs underside with the air lubrication system

lubrication technology.

Noah Silberschmidt, Founder & CEO, Silverstream Technologies, said: "It is great to announce that retrofitting the Silverstream System on board the 'Methane Patricia Camila' - has already had a significant positive impact on fuel consumption and emissions, with

6.6% savings verified during initial testing. We'd like to thank our colleagues and partners at Shell for their confidence in our technology, and also for their vision and commitment to pioneer proven clean technologies within shipping.

"Shipping requires solutions to solve the de-carbonisation chal-

lenge today. With fuel bills only set to rise in the future, owners need to invest in fuel-agnostic technologies that are proven to save costs and emissions, without impacting the flexibility or profitability of the vessel. We are proud of the role that our technology can play to solve this challenge," he said. ■

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	\$185.65 mill
Five years old (160,000 cu m)	\$141.87 mill
Total Fleet (513 ships)	\$56.12 bill
Orderbook (125 ships)	\$24.01 bill

Source: VesselsValue (27/04/21)

*The above is updated each month courtesy of VesselsValue

LNG rate assessments

Spot market (155,000-165,000 cu m)

Region	This week	Change*
East of Suez	\$60,000	+\$20,000
West of Suez	\$73,000	+\$20,000
12 mos T/C	\$74,000	+\$13,000

*Since last report (15/04/21)

Source: Fearnleys (28/04/21)



LNG OneWorld.com

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	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
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	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
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	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coral Encanto	30,000	LNG	China	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	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya

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

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

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

** = project shelved † = Data to be verified Data last updated = 28th April 2021

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	Green Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	Cardissa	6,500	LNG	Northwest Europe	Yes	Shell
2018	Kairos	7,500	LNG	Baltic	Yes	Bernhard Schulte
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	Bunker Breeze	1,200	LNG	Barcelona	Yes	Suardiaz Energy Shipping
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2019	SM Jeju LNG1	7,500	LNG	Korea	Yes	Korea Line
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Avenir Advantage	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Accolade	7,500	LNG	Mediterranean	Yes	Avenir LNG
2020	Avenir Aspiration	7,500	LNG		Yes	Avenir LNG
2020	Kaguya	3,500	LNG	Japan	Yes	CLS
2020	CNTIC VPOWER Global	28,000	LNG	Myanmar	Yes	Dalian Inteh Group
2020	Ecobunker Tokyo Bay	2,500	LMG	Japan	Yes	Ecobunkers
2020	Optimus	6,000	LNG	NWE	Yes	Elenger
2020	ENN TBN	8,500	LNG	China	Yes	ENN
2020	FueLNG Bellina	7,500	LNG	Singapore	Yes	FueLNG
2020	SM Jeju LNG2	7,500	LNG	Korea	Yes	Korea Line
2020	Q-LNG 4000	4,000	LNG	US Coast	Yes	Q-LNG Transport/Harvey Gulf
2020	Flexfueller 002	1,480	LNG	Antwerp	Yes	Titan LNG
2021	Avenir Ascension	7,500	LNG		Yes	Avenir LNG
2021	Avenir Allegiance	20,000	LNG	Worldwide	Yes	Avenir LNG
2021	Bergen LNG	850	LNG	Norway	Yes	Bergen Tankers
2021	Dmitry Mendeleev	5,800	LNG	Russia	Yes	Gazprom Neft
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2021	Ravenna Knutsen	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	PE TBN	12,000	LNG	Singapore	Yes	MOL
2021	TBN	18,600	LNG	Mediterranean	Yes	MOL
2021	TG TBN	500	LNG	Korea	Yes	Trans Gas
2022	Veder TBN	30,000	LNG	Worldwide	Yes	Anthony Veder
2022	Avenir Achievement	20,000	LNG	Worldwide	Yes	Avenir LNG
2022	Kuntsen TBN	5,000	LNG	Spain	Yes	Knutsen OAS
2022	Clean Cañaveral	5,400	LNG	USG	Yes	PNE
2023	Cryopeak TBA	4,000	LNG	West Canada	Yes	Cryopeak
2023	Kuntsen TBN	12,500	LNG	Spain	Yes	Knutsen OAS
2023	SM Jeju LNG3	7,500	LNG	Korea	Yes	Korea Line
2023	Pan Ocean TBN	18,000	LNG	USG	Yes	Pan Ocean Co
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG

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

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

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

** = project shelved † = Data to be verified Data last updated = 28th April 2021

WORLD LNG CARRIER ORDERBOOK

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Bw Lesmes	GTT 96 GW	MEGI	DSME	01/03/2021	174000	BWGas
Marvel Swan	Unknown	XDF	Samsung	01/03/2021	173400	Navigare
Lngships Empress	GTT MK III Flex	XDF	Samsung	01/03/2021	174000	TMS Cardiff Gas
Hellas Diana	GTT MK III Flex	XDF	Hyundai	01/03/2021	174000	Latsco Shipping
Lngships Athena	GTT MK III Flex	XDF	Hyundai	01/03/2021	174000	TMS Cardiff Gas
Lng Adventure	GTT MK III Flex	XDF	Samsung	01/03/2021	174000	NYK
Lngship Manhattan	GTT MK III Flex	XDF	Hyundai	01/04/2021	174000	TMS Cardiff Gas
Celsius Charlotte	Unknown	XDF	Samsung	01/05/2021	180000	Celsius Shipping
Diamond Gas Crystal	GTT MK III Flex	XDF	Hyundai	01/05/2021	174000	NYK
Flex Vigilant	GTT MK III Flex	XDF	Hyundai	01/05/2021	174000	Flex LNG
Energy Integrity	GTT 96 GW	MEGI	DSME	01/05/2021	173400	Alpha Gas
Yiannis	GTT 96 GW	MEGI	DSME	01/06/2021	174000	Maran Gas Maritime
Mu Lan	GTT 96 L03+	XDF	Hudong-Zhonghua	01/06/2021	174000	CSSC
Bw Helios	GTT 96 GW	MEGI	DSME	01/06/2021	174000	BWGas
Energy Intelligence	GTT 96 GW	MEGI	DSME	01/06/2021	174000	Alpha Gas
Gaslog Wellington	GTT MK III Flex+	XDF	Samsung	01/06/2021	180000	GasLog
Isabella	GTT 96 GW	XDF	DSME	01/06/2021	174000	Maran Gas Maritime
Aristarchos	GTT MK III Flex	XDF	Hyundai	01/06/2021	174000	Capital Gas
Mol Hestia	Unknown	MEGI	DSME	01/07/2021	174000	MOL
Minerva Chios	GTT MK III Flex+	XDF	Samsung	01/07/2021	174000	Minerva Marine
Minerva Limnos	GTT 96 GW	MEGI	DSME	01/07/2021	173400	Minerva Marine
Adamastos	GTT MK III Flex	XDF	Hyundai	01/08/2021	174000	Capital Gas
Samsung 2314	Unknown	XDF	Samsung	01/08/2021	180000	Celsius Shipping
Gaslog Winchester	GTT MK III Flex+	XDF	Samsung	01/08/2021	180000	GasLog
Attalos	GTT MK III Flex	XDF	Hyundai	01/08/2021	174000	Capital Gas
Asklipios	GTT MK III Flex	XDF	Hyundai	01/09/2021	174000	Capital Gas
Daewoo 2504	GTT 96	XDF	DSME	01/09/2021	174000	Maran Gas Maritime
Global Sea Spirit	GTT 96 GW	XDF	DSME	01/09/2021	173400	Nakilat
Samsung 2306	GTT MK III Flex	XDF	Samsung	01/09/2021	174000	NYK
Diamond Gas Victoria	GTT MK III Flex	XDF	Hyundai	01/09/2021	174000	NYK
Hellas Athina	GTT MK III Flex	XDF	Hyundai	01/09/2021	174000	Latsco Shipping
Samsung 2355	GTT MK III Flex	XDF	Samsung	01/10/2021	174000	NYK
Daewoo 2507	GTT 96 GW	XDF	DSME	01/10/2021	174000	Maran Gas Maritime
Hyundai Ulsan 2939	GTT MK III Flex	XDF	Hyundai	01/10/2021	180000	SK Shipping
Daewoo 2506	GTT 96	MEGI	DSME	01/11/2021	174000	Maran Gas Maritime
Hyundai Samho 8025		XDF	Hyundai	01/12/2021	174000	H-Line
Tenergy	GTT MK III Flex	XDF	Hyundai	01/12/2021	174000	Tsakos Energy Navigation
Samsung 2336	GTT MK III Flex	XDF	Samsung	01/12/2021	174000	JP Morgan
Global Sealine	GTT 96 GW	XDF	DSME	01/12/2021	173400	Nakilat
Samsung 2307	GTT MK III Flex	XDF	Samsung	01/12/2021	174000	NYK
Hyundai Samho 8032	GTT MK III Flex	XDF	Hyundai	01/01/2022	174000	NYK
Gui Ying	GTT 96 L03+	XDF	Hudong-Zhonghua	01/01/2022	174000	CSSC
Daewoo 2508	Unknown	XDF	DSME	01/03/2022	174000	Maran Gas Maritime

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 = 3rd March 2021

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Hudong-zhonghua H1829a	GTT 96 L03+	XDF	Hudong-Zhonghua	01/03/2022	170520	CSSC
Samsung 2319	GTT MK III Flex	XDF	Samsung	01/03/2022	174000	JP Morgan
Elisa Aquila	GTT MK III Flex	XDF	Hyundai	01/03/2022	174000	NYK
Clean Cajun	Unknown	XDF	Hyundai	01/04/2022	200000	Dynagas
Hyundai Samho 8033	GTT MK III Flex	XDF	Hyundai	01/06/2022	173000	NYK
Hyundai Samho 8026	GTT MK III Flex	XDF	Hyundai	01/06/2022	174000	H-Line
Hudong-zhonghua H1830a	GTT 96 L03+	XDF	Hudong-Zhonghua	01/06/2022	170520	CSSC
Samsung 2337	GTT MK III Flex	XDF	Samsung	01/07/2022	174000	JP Morgan
Clean Copano	Unknown	XDF	Hyundai	01/07/2022	200000	Dynagas
Hyundai Samho 8091	Unknown	XDF	Hyundai	01/08/2022	174000	Knutzen
Hyundai Ulsan 3185		XDF	Hyundai	01/08/2022	174000	Korea Line
Daewoo 2509	Unknown	MEGI	DSME	01/08/2022	174000	BWGas
Daewoo 2510	Unknown	MEGI	DSME	01/09/2022	174000	BWGas
Prism Diversity	Unknown	XDF	Hyundai	01/09/2022	180000	SK Shipping
United Prosperity	Not Applicable	XDF	Hudong-Zhonghua	01/10/2022	174000	China LNG Shipping
Hyundai Samho 8092	Unknown	XDF	Hyundai	01/10/2022	174000	Knutzen
Hyundai Ulsan 3186		XDF	Hyundai	01/10/2022	174000	Korea Line
Hyundai Ulsan 3187		XDF	Hyundai	01/11/2022	174000	JP Morgan
Hyundai Samho 8093	Unknown	XDF	Hyundai	01/11/2022	174000	Knutzen
Minerva Amorgos	GTT MK III Flex+	XDF	Samsung	01/11/2022	174000	Minerva Marine
Hyundai Ulsan 3243	Unknown	XDF	Hyundai	01/12/2022	174000	Knutzen
Daewoo 2514	Unknown	TFDE - Azipod	DSME	01/12/2022	172500	Sovcomflot
Hyundai Ulsan 3188		XDF	Hyundai	01/12/2022	174000	JP Morgan
Hyundai Samho 8094	Unknown	XDF	Hyundai	01/12/2022	174000	Knutzen
United Glory	Unknown	XDF	Hudong-Zhonghua	01/01/2023	174000	China LNG Shipping
Samsung 2364	GTT MK III Flex+	XDF	Samsung	01/01/2023	174000	MISC
Hyundai Ulsan 3111	GTT MK III Flex	XDF	Hyundai	01/01/2023	174000	Capital Gas
Hyundai Ulsan 3244	Unknown	XDF	Hyundai	01/02/2023	174000	Knutzen
Samsung 2365	GTT MK III Flex+	XDF	Samsung	01/02/2023	174000	MISC
Samsung 2426	Unknown	XDF	Samsung	01/03/2023	174000	Pan Ocean
Hyundai Ulsan 3189	Unknown	XDF	Hyundai	01/03/2023	174000	JP Morgan
Zvezda 041	GTT MK III	TFDE - Azipod	Zvezda SSK	01/03/2023	172600	Smart LNG
Daewoo 2515	Unknown	TFDE - Azipod	DSME	01/04/2023	172500	MOL
United Fortune	Unknown	XDF	Hudong-Zhonghua	01/04/2023	174000	China LNG Shipping
Hyundai Samho 8095	Unknown	XDF	Hyundai	01/05/2023	174000	Knutzen
Hyundai Ulsan 3190	Unknown	XDF	Hyundai	01/05/2023	174000	JP Morgan
Hyundai Samho 8096	Unknown	XDF	Hyundai	01/06/2023	174000	Knutzen
Samsung 2425	Unknown	XDF	Samsung	01/07/2023	174000	Maran Gas Maritime
Daewoo 2516	Unknown	TFDE - Azipod	DSME	01/07/2023	172500	Sovcomflot
Hyundai Samho 8105		XDF	Hyundai	01/08/2023	174000	Sovcomflot
Hyundai Ulsan 3191	Unknown	XDF	Hyundai	01/09/2023	174000	Korea Line
Daewoo 2517	Unknown	TFDE - Azipod	DSME	01/09/2023	172500	Sovcomflot
Zvezda 042	GTT MK III	TFDE - Azipod	Zvezda SSK	01/09/2023	172600	Smart LNG
Hyundai Ulsan 3198	Unknown	XDF	Hyundai	01/10/2023	174000	Korea Line

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Daewoo 2518	Unknown	TFDE - Azipod	DSME	01/10/2023	172500	MOL
Zvezda 043	GTT MK III	TFDE - Azipod	Zvezda SSK	01/10/2023	172600	Smart LNG
Zvezda 044	GTT MK III	TFDE - Azipod	Zvezda SSK	01/11/2023	172600	Smart LNG
Daewoo 2519	Unknown	TFDE - Azipod	DSME	01/12/2023	172500	MOL
Zvezda 045	Unknown	TFDE - Azipod	Zvezda SSK	01/12/2023	172600	Smart LNG
Samsung 2393	Unknown	XDF	Samsung	01/01/2024	174000	NYK
Samsung 2394	Unknown	XDF	Samsung	01/02/2024	174000	NYK
SHI Maran 1	GTT MK III Flex	XDF	Samsung	15/02/2024	174000	Maran Gas Maritime
SHI Maran 2	GTT MK III Flex	XDF	Samsung	15/02/2024	174000	Maran Gas Maritime
SHI #1	GTT MK III Flex	XDF	Samsung	15/02/2024	174000	Maran Gas Maritime
SHI #2	GTT MK III Flex	XDF	Samsung	15/02/2024	174000	Maran Gas Maritime
Hyundai Ulsan 3221	Unknown	XDF	Hyundai	01/07/2024	174000	Pan Ocean
Hyundai Ulsan 3222	Unknown	XDF	Hyundai	01/08/2024	174000	Pan Ocean
Samsung 2395	Unknown	XDF	Samsung	01/08/2024	174000	NYK
Zvezda 046	Unknown	TFDE - Azipod	Zvezda SSK	01/08/2024	172600	Smart LNG
Samsung 2396	Unknown	XDF	Samsung	01/09/2024	174000	NYK
Zvezda 047	Unknown	TFDE - Azipod	Zvezda SSK	01/09/2024	172600	Smart LNG
HHI 2/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	MOL
HHI 3/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	MOL
HHI 4/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	MOL
HHI 5/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	MOL
HHI 6/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	K-Line
HHI 7/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	K-Line
HHI 8/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	K-Line
HHI 9/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	K-Line
HHI 1/9	GTT MK III Flex	XDF	Hyundai	15/09/2024	174000	MOL
Hyundai Ulsan 3223	Unknown	XDF	Hyundai	01/10/2024	174000	JP Morgan
Zvezda 048	Unknown	TFDE - Azipod	Zvezda SSK	01/10/2024	172600	Smart LNG
Hyundai Samho 8100	Unknown	XDF	Hyundai	01/11/2024	174000	Knutson
Zvezda 049	Unknown	TFDE - Azipod	Zvezda SSK	01/11/2024	172600	Smart LNG
Zvezda 050	Unknown	TFDE - Azipod	Zvezda SSK	01/12/2024	172600	Smart LNG
Zvezda 051	Unknown	TFDE - Azipod	Zvezda SSK	01/08/2025	172600	Smart LNG
Zvezda 052	Unknown	TFDE - Azipod	Zvezda SSK	01/09/2025	172600	Smart LNG
Zvezda 053	Unknown	TFDE - Azipod	Zvezda SSK	01/10/2025	172600	Smart LNG
Zvezda 054	Unknown	TFDE - Azipod	Zvezda SSK	01/11/2025	172600	Smart LNG
Zvezda 055	Unknown	TFDE - Azipod	Zvezda SSK	01/12/2025	172600	Smart LNG

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 = Data last updated = 3rd March 2021



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