LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 17 February 2022

Why did Qatargas buy steam driven LNGCs?

Drewry Shipping Consultants has thrown a light on the rather extraordinary deal in which Qatargas recently bought 10 steam turbine powered LNGCs.

The vessels were purchased for between $10-15 mill each and averaged 23 years of age. They were owned by Japanese interests, including K-Line, MOL and NYK and were period chartered to Qatargas with a purchase option attached.

Drewry said that the acquisition appeared unusual given the long-term viability of these vessels is uncertain, due to the IMO's Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) regulations expected to be implemented from January, 2023.

As has been mentioned in *LNG Shipping News*, the regulations are expected to impact older steam turbine vessels, due to their lower speed, higher fuel consumption and higher boil-off rates.

Steam turbine vessels consume 175 tonnes per day of bunkers, compared to 130 tonnes per day by TFDE vessels and 108 tonnes per day by X-DF types.

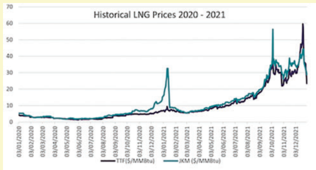
Drewry took a closer look at the transaction and found that it could be advantageous for Qatargas for the following reasons:

1) The company bought the vessels for a speculative price of $10-15 mill per ship, which is about half of Drewry's 20-year secondhand ST vessel value. Even if Qatargas scraps them immediately after purchase, it will still end up with a small profit.
2) Qatar's shipping arm Nakilat has signed an MoU with Karpowership to jointly own and operate FSRUs to cater to the LNG-to-power market worldwide for which some of the steam turbine vessels could be converted.
3) Qatargas can also use the fleet as a buffer until the extensive newbuilding programme delivers new vessels. The company has reserved 151 LNG slots at South Korean and Chinese shipyards, of which 16 were firmed up recently.

With negligible capex for the acquisition of these assets, they will be able to operate at a low cost, despite the environmental compliance-related inefficiencies associated with these types of vessels.

It is also important to note that Qatargas has several cif contracts where these vessels could be used, especially for short-distance trips to India, Pakistan and Bangladesh. ■

SHIPPING NEWS AGENDA



US LNGC exports hit record highs

US LNG exporters set a new loading record last Saturday, when every one of the seven operational terminals was playing host to an LNGC.

In total, the export terminals took in a record 13.3 bill cu ft of natural gas, roughly equivalent to 10% of the US' daily natural gas demand in winter.

About two-thirds of the LNG was bound for the European market, where low supplies and fears of a major conflict in the Ukraine have driven up prices to record levels. Europe receives about 40% of its gas supplies from Russia, which rises to 55% for German consumers.

Recently, a group of 10 senators had asked the US Department of Energy to limit LNG exports until it has determined the effects on domestic gas supplies.

Meanwhile, the spot charter rates for shipping US LNG cargoes to Europe have turned into negative territory in the past week or so.

LNG freight price assessor Spark Commodities said in a tweet last week: "First-ever negative Spark spot #LNG #freight rate: -US$750/day for the Spark30S Atlantic assessment.

"Highlights how current vessel charter payments do not cover the fuel cost of ballasting the vessel back to load port. Lots of ships and few requirements," the tweet said.

Spark Commodities' rates are assessed for a voyage involving load, discharge and back to load.

"If negative, the payment to owners doesn't cover the fuel cost of getting back to load. This is for spot only. Most vessels are on longer time charters," it said.

For the latest average spot rates, see the latest Fearnleys assessment table in this issue.

Meanwhile, medium term contracts hold sway.

For the past two years, record of LNG contract volumes have been recorded, as last year they totalled 52.4 mill tonnes, according to Poten & Partners Jason Feer.

There has been a preference for medium term contracts of between six and 10 years duration, which is accelerating, he added, illustrated by Tellurian agreeing at least three deals recently.

Aggregators and traders now wield the influence in contract negotiations. A step change seen last year was in the pricing mechanisms used, as more diversity took over. For example, more interest was seen in hybrid pricing using a blend of indices, which didn't reflect any trends.

Feer said that recent data highlighted the risk of trying to pick the best index for medium term contracts.

"Is the 10-year deal bankable?" he asked, adding that anything shorter than this would probably not be enough for the banks to back the projects.

European cargoes

Feer also said that Poten had noticed a big surge of LNG going into Europe and said that 2022 would likely look similar to last year in the LNG sector.

For instance, it has been reported that Japanese buyers have diverted at least two Japanese bound cargoes to Europe for February deliveries, while more are expected in March, due to supply concerns over the Russia/Ukraine situation.

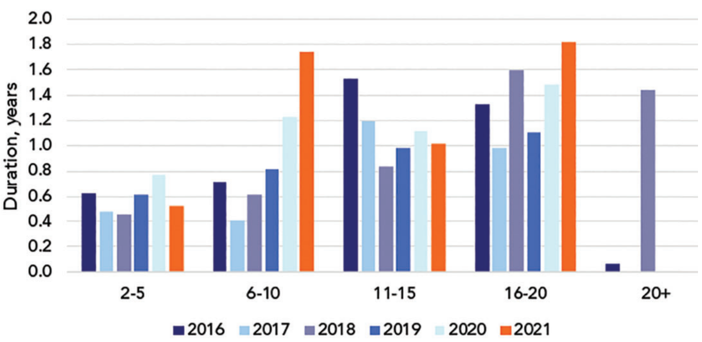
According to newswires, Japan's Minister for Economy, Trade and Industry, Koichi Hagiuda said that Japan had decided to co-operate with the EU and US requests to divert surplus LNG cargoes to Europe in response to severe gas shortages.

"This is about diverting surplus [cargoes] to Europe whilst ensuring stable LNG to Japan," Hagiuda told the media. "Our country is also still in a tough LNG situation for February. We do not necessarily have sufficient room, but we have an outlook of having enough stockpiles to respond to Japan's supply and demand.

"Specifically, a couple of destination-free LNG ships controlled by Japanese companies are heading to and arriving Europe in February," he added. "We expect more ships heading to Europe, and we are requesting [Japanese] companies to consider [diversions] as much as possible by looking at situations beyond April."

European Commission (EC) officials have held talks with key suppliers in recent weeks in a bid to secure additional gas supplies, including Qatar, the US and Azerbaijan. ■

Average Volume of SPA by Tenor and Year Signed



Source: Poten & Partners

NEWS NUDGE

Sempra to develop Mexican projects

Mexico's Federal Electricity Commission (CFE) and Sempra Infrastructure have signed a non-binding memorandum of understanding (MoU) to develop LNG projects.

These include Vista Pacífico LNG, a natural gas liquefaction project in Topolobampo, Sinaloa; a natural gas regasification project in La Paz, Baja California Sur; and the resumption of operations of the Guaymas-El Oro pipeline in Sonora.

Their development would allow CFE to optimise excess natural gas and pipeline capacity from Texas to Topolobampo in order to increase its natural gas supply to its power plants in Baja California Sur. ■

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LNG supply and demand - continued volatility

European gas prices have continued to make headlines across the world.

Simpson Spence Young (SSY) LNG analyst, Thanos Felios, looked at what's behind the LNG price rise and the impact this had on the LNG shipping market.

With Europe relying on Russia for around 35% of its natural gas, the increasing geopolitical tensions between Russia and the West have continued to disrupt supplies, which have been lower than usual in recent months.

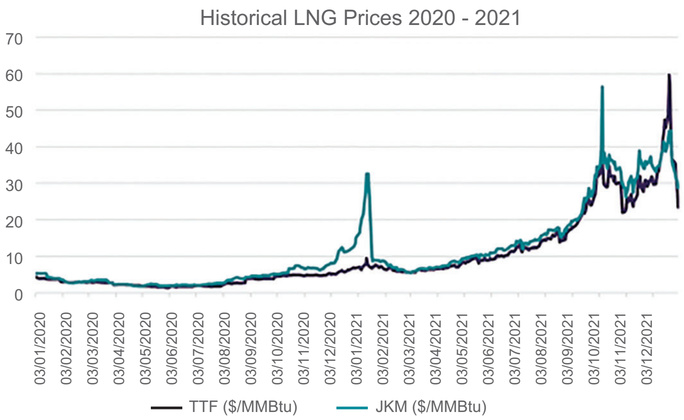
Any more sanctions on Russia from the US are likely to further impact supplies, he said.

European gas storage supplies are low. Storage is mainly used as a buffer during periods of high demand and tight supply, but today, storage is low due to two main factors:

1) The delayed and prolonged cold winter during the first quarter of last year.
2) The struggle to rebuild gas stocks last summer, due to very hot weather, as the summer of 2021 proved to be Europe's hottest on record.

Asian power and gas demand has also been strong, which pulls LNG away from Europe. This is due to a combination of 2021 post-COVID economic recovery, the cold winter of 1Q21 and the determination of the LNG buyers not to be 'caught short' this winter.

This triggered a continuous price rally between JKM and TTF, which led both indices reaching all-time highs last year.



Source: SSY

Drought problems

Severe drought in South America limited hydro-electric output and this has pulled in a significant amount of Atlantic's LNG volumes.

In addition, various LNG facilities experienced outages, which has taken a significant volume of LNG supply off the market. ie, the Norwegian Hammerfest plant has been out of service since September, 2020.

High European carbon prices have also forced power generators to cut coal and use more gas. Carbon prices in Europe reached all times highs in 2021, as the EU reduced the supply of emissions credits, forcing highly polluting providers of energy production to reduce their reliance on coal.

Felios commented: "The very high LNG pricing environment that we are witnessing in Europe is unprecedented. The situation that we are seeing continues a rhetoric of extreme gas/LNG pricing volatility. This in turn has resulted in a more and more volatile shipping market.

"Over the last 18 months, since the end of the first European COVID-19 lockdown, LNG shipping has seen monumental highs in terms of dollar per day charter rates.

"We have also witnessed, as we are now, very low charter rates and rising shipping availability. In simple terms many more ships are staying in the Atlantic Basin (due to high EU demand) and not sailing to the Far East during the end of winter/start of spring.

"This has resulted in shorter tonne-miles and less demand for tonnage to transport the LNG molecules," he said. ■

Cedar LNG advances towards FID

Canadian Haisla Nation-owned Cedar Liquefied Natural Gas Project (Cedar LNG) has reached key milestones for its proposed export facility in Kitimat, British Columbia.

Cedar LNG is a partnership between the Haisla Nation and Pembina Pipeline Corp (Pembina).

With recent advancements in the project's regulatory and engineering development, Haisla Nation Chief Councillor, Crystal Smith, said; "The Cedar LNG project will be the largest First Nation-owned infrastructure project in Canada, creating jobs, contracting and other economic opportunities for the Haisla Nation, the community of Kitimat, neighbouring Indigenous Nations, and the local region.

"Cedar LNG represents long-term growth for our region in a way that protects our land and environment, and we are excited to see the project move forward in its environmental assessment process with innovative technology and reduced environmental footprint," she said.

Cedar LNG recently submitted an application for an Environmental Assessment Certificate (EAC) from the British Columbia Environmental Assessment Office, moving the project into the 180-day application review phase.

This key project milestone comes following detailed studies, engineering and engagement with Indigenous and local communities.

"The submission of our application for an EAC represents another significant step forward in exporting Canadian LNG to overseas markets, while supporting long-term prosperity for the Haisla Nation and the region," said Scott Burrows, Pembina's Interim President and CEO. "Each time we've returned to our design, whether to include community input or account for leading technology, we've made important improvements that have resulted in a superior project that respects the values of the local community and minimises environmental effects."

Crystal Smith Haisla Nation Chief

Cedar LNG has also signed a contract with Black & Veatch and Samsung Heavy Industries (SHI) for the front-end engineering and design (FEED) of the project's proposed FLNG.

Doug Arnell, Cedar LNG CEO, said. "The project's low carbon footprint, coupled with the use of Black & Veatch and Samsung's expertise and technology will result in a state-of-the-art facility the Haisla Nation, British Columbia and Canada can be proud of."

Cedar LNG expects to make a final investment decision (FID) in 2023, following completion of the environmental assessment process.

Subject to additional factors, including regulatory and other approvals, operations are expected to commence in 2027. ■

JERA hedges its bets

JERA Global Markets (JERAGM), the trading arm of Japan's largest utility JERA, has purchased 4.1 mill tonnes of spot LNG in the first 10 months of the fiscal year 2021/22 (April to March).

This compares with 3 mill tonnes in FY 2020/21, JERAGM CEO, Kazunori Kasai, told newswires.

JERAGM's FY 2021/22 spot LNG procurement volumes have so far increased, due to "larger consumption than planned earlier," Kasai told an online press briefing, adding that its purchase volume could increase further by the end of March.

Based in Singapore, JERAGM handles trading and optimisation of parent JERA's volumes of 35 mill tonnes per year of LNG and 20 mill tonnes of coal, operating a fleet of 12 LNGCs.

It primarily supplies LNG to JERA but also supplies LNG to other regional end-users, including European gas markets having access to the Dunkerque LNG import terminal in France.

During the 10 month period, JERAGM delivered more than 200 cargoes, which included its spot procurement of over 63 ships, for JERA.

Cancel options

As part the company's efforts to ensure supply this winter, following tightened power supply and demand balance last winter, Kasai revealed that JERA has introduced a new scheme to secure a certain number of LNG cargoes with cancel options written into the contracts.

Under the scheme, JERAGM had closed deals with JERA for three LNG cargoes originating from North America, which were scheduled to arrive in Japan early in the fiscal year, via the Suez Canal with the cancel options, Kasai said.

The delivery ex-ship (DES) deals, which were linked to the Platts JKM, plus the Dunkerque terminal user fee, allowed JERA to cancel the cargoes if needed in 25 days, or 15 days prior to their arrivals in Japan and divert the cargoes to Dunkerque, Kasai said.

"We first made plans to bring JERAGM's cargoes from North America to Japan with shipping arrangements. JERA, however, might not need these cargoes depending on the supply and demand situation and [the deals allow] to divert the cargoes to Europe, where we have terminal access.

"This allows us to procure cargoes in advance and sell them when the cargoes were not needed," Kasai said, adding that it is part of the JERA group's measures to ensure stable supply even with a certain additional costs.

For the current winter, JERA said last November that it had procured 2 mill tonnes of spot LNG as additional winter supply for November, 2021 to March, 2022 deliveries. ■

Sabine Pass Train 6 ready to come online

Substantial completion of Sabine Pass Train 6 was achieved on 4th February, 2022, according to Cheniere Energy Partners, a subsidiary of Cheniere Energy.

Commissioning has been completed and Cheniere's engineering, procurement and construction (EPC) partner, Bechtel Oil, Gas and Chemicals turned over Train 6's care, custody, and control to Cheniere Partners.

As a result, both companies have now declared substantial completion on all six liquefaction trains at Sabine Pass ahead of each train's guaranteed completion date and within project budgets.

"The accelerated completion of Train 6 once again reflects the world-class standard of execution consistently achieved by the Cheniere and Bechtel teams and we are proud to have the six train vision of Sabine Pass completed safely, ahead of schedule and on budget," said Jack Fusco, Cheniere Partners Chairman, President and CEO.

"With nine total trains across both the Sabine Pass and Corpus Christi projects, the Cheniere liquefaction platform is the second largest in the world, reliably providing our global customer base with clean, secure and affordable energy. We look forward to opportunities to build upon our platform with disciplined, brownfield growth at both sites in the future," he added.

"Cheniere Partners plays a vital role in delivering reliable and safe energy to communities around the world," said Brendan Bechtel, Bechtel Chairman and CEO. "For us to be involved in supporting the development of these extraordinary projects is a great source of pride and we're honoured to help bring Cheniere's vision to reality."

"We have built a great partnership, based on trust and shared goals, that continues to deliver cleaner and more affordable energy for an ever-rising global demand for lower carbon alternatives," added Paul Marsden, President of Bechtel Energy. ■

Sabine Pass' Train 6 is now complete

Calcasieu Pass LNG production comes online

Last month, Venture Global started production at Calcasieu Pass, according to a regulatory filing.

As a result, this facility became the seventh major US LNG export terminal to come online.

First LNG occurred on 19th January, a weekly commissioning filing to the Federal Energy Regulatory Commission (FERC), said.

Calcasieu Pass, which is using modular trains built in Italy, is expected to have a design capacity of 10 mill tonnes per year, which could be increased to 12 mill tonnes under peak conditions.

Venture Global has long-term contracts to offtake Calcasieu Pass LNG with Shell, Edison, Galp, BP, Repsol, PGNiG and the trading arm of China's Sinopec.

Later is was reported that the LNGC 'Yiannis' had arrived at the terminal on 7th February, according to vessel tracking data from S&P Global Platts cFlow trade-flow analytics software.

It was thought that the Maran Gas controlled 174,000 cu m LNGC was due to sail on or about 11th February with a JERA cargo.

According to newswires, on 9th February, the terminal operator gained permission from FERC to load its first export commissioning cargo. ■

KN to purchase FSRU 'Independence'

AB Klaipedos nafta (KN), Lithuania's operator of oil and LNG terminals, is looking to acquire the FSRU 'Independence' at the end of its lease agreement.

In 2021, market research initiated by KN showed that the currently leased FSRU was the most economically advantageous option.

The latest proposal submitted by the company will be subject to the approval by the company's shareholders at the Extraordinary General Shareholders' Meeting to be held on 25th February, 2022.

Under the terms of Lithuanian contract law regarding the terminal, the operator shall select the most economically advantageous offer for the acquisition of an FSRU and shall acquire the unit by 31st December, 2024 at the latest.

The terminal's operation will also be guaranteed until 31st December 2044.

KN also involved commercial, legal and technical service providers to advise the company to select the most economically and technologically advantageous FSRU, the company said.

Market consultation and research on the FSRU's acquisition identified three possible alternatives to the current option: a newly built FSRU, a secondhand FSRU or a converted LNGC.

Details agreed

The FSRU's optimal size and other relevant parameters were defined in co-operation with the consultants, as well as through discussions with potential FSRU suppliers and LNG terminal users, on the basis of which the technical specification for the purchase of FSRUs and other procurement documents were prepared.

When deciding on a specific FSRU, KN considered the life-cycle costs of the vessel, not only the purchase price but also the age, size, expected operating costs and technical features of the proposed vessel. One of the essential requirements was the compatibility of the technology with the investments already made, ie, the construction of the quay and pipeline.

After taking into account all the elements, the potential suppliers acknowledged in principle that they could not offer a more cost-effective solution than the current option - FSRU 'Independence'.

"In deciding on the most economically and technologically advantageous solution, our aim was to provide maximum transparency and a common ground for all market participants to offer alternative solutions to the current FSRU 'Independence' and to ensure a competitive tender.

"The market research involved international expertise, interaction with more than 11 potential FSRU suppliers, which took into account the views of the terminal's existing customers, also an open public procurement procedure was initiated. The entirety of the actions taken had shown that there was no other more cost-effective option than the current one," said Darius Šilenskis, KN CEO.

KN is about to buy FSRU 'Independence'

Following the shareholders' approval, KN will inform Höegh LNG of its decision to exercise the option to acquire the FSRU within the time frame set out in the lease agreement, with a set deadline in December, 2022. The purchase contract should be concluded no later than 6th December, 2024 at a cost of $153.5 mill, excluding VAT.

Once the shareholders decide in favour of the purchase, KN will have to make decisions as to the operation and management and registration of the vessel, which is planned for later this year.

The Höegh LNG-owned FSRU 'Independence' has been on lease to KN since 2014. ■

NEWS NUDGE

Ships - orders and sales

Daewoo Shipbuilding & Marine Engineering Co (DSME) is to build another two LNGCs for Maran Gas Maritime.

The two LNGCs, both declared options, will be delivered in the second half of 2025, DSME said in a filing.

Brokers estimated that each contract worked out at $218.31 mill.

Also in South Korea, Hyundai Samho Heavy Industries has won an order from Nigerian interests for two LNGCs.

The order was rumoured to have been placed by Bono Energy on behalf of Nigeria LNG and was thought to be valued at $223 mill per ship.

Elsewhere Turkish-based Karpower International has bought TotalEnergies 154,000 cu m LNGC 'LNG Unity'.

The vessel was the world's largest LNGC when delivered in 2006 as the 'Provalys'.

She has arrived at Besiktas' Yalova shipyard for conversion and repair work.

Last year, Besiktas entered the LNGC repair market by installing a cryogenic workshop and undertaking staff training.

In addition, the Engie-controlled 73,000 cu m LNGC 'Global Energy', also built in 2006, was reported sold to Asian interests. ■

LNG Japan to develop Indonesian LNG projects

LNG Japan Corp (LJC) has signed a memorandum of understanding (MOU) to partner with Indonesian LNG shipper, PT GTS Internasional Tbk (GTSI).

LJC has participated in Indonesian domestic LNG transportation since 2016 with the LNGC 'Triputra', owned by a joint venture with GTSI and other stakeholders, which has been shipping LNG to Bali and Sulawesi.

In co-operation with GTSI, LJC intends to drive maritime infrastructure, LNG shuttle and FSRU projects in Indonesia.

Kemal Imam Santoso, GTSI President Director, confirmed that both companies would explore the opportunity to collaborate in the projects. "Gas and LNG will be the alternatives of clean energy as a part of fuel transition to net-zero society," he said.

LJC started the Indonesian LNG business by building an LNG liquefication plant in East Kalimantan in the 1970s. ■

Nakilat records highest profit since its formation

Qatar Gas Transport Co (Nakilat) reported a consolidated net profit of QAR1,354 mill in 2021, an increase of 16.7%, compared to QAR1,161 mill recorded for the previous year.

Total revenue for the year was QAR4,142 mill, an increase of 3.1%.

As a result, the Board recommended a cash dividend of QAR0.12 per share.

Last year, the COVID-19 global pandemic continued to create very challenging and volatile conditions across the global shipping, as well as maritime industry.

However, with a solid business continuity and long-term strategies in place, Nakilat delivered excellence on both operational and financial fronts, the company claimed.

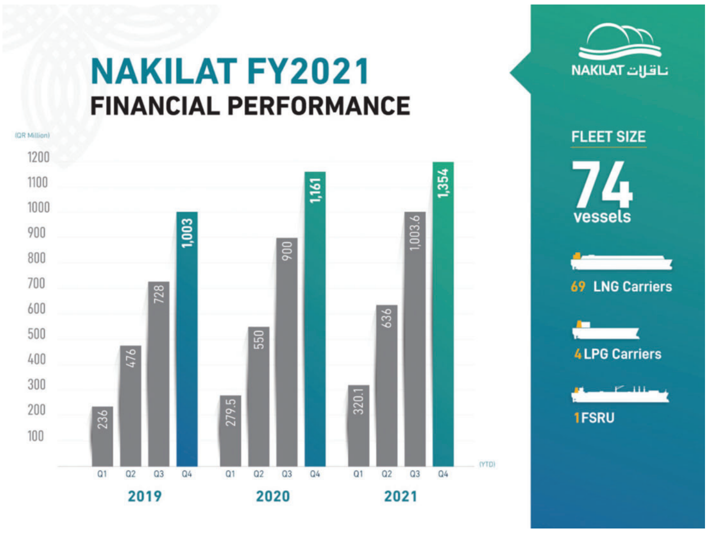
HE Dr Mohammed Bin Saleh Al Sada, Nakilat's Board of Directors Chairman, said: "Despite the unique challenges faced by the company, we continued to build on our operational response to the pandemic, enabling us to adapt swiftly and ensure business continuity to create value for our shareholders and customers.

"Looking ahead, Nakilat's Board of Directors remains committed to upholding and implementing the highest standards of corporate governance, as well as robust risk management, business continuity preparedness and various internal measures throughout the organisation towards supporting sustainable business growth, uphold our employees' wellbeing and reinforcing investors' confidence in the company," he said.

Eng Abdullah Al Sulaiti, Nakilat CEO, added: "Our excellent financial performance in 2021 is the direct result of our commitment to deliver value to our stakeholders and customers. The company persevered and has managed to sustain its growth momentum while continuing to create value for our shareholders, thanks to the valuable efforts and contributions of our employees and seafarers.

"In line with our drive towards sustainable growth, the publishing of our 2020 ESG report was a culmination of a concerted effort by the company over the past two years to establish a world-class reporting system that accurately reflects environmental, social and corporate governance in the company, as well as our commitment to full transparency towards all stakeholders and shareholders.

"We extend our appreciation to QatarEnergy for their support, as well as our strategic partner, Qatargas in playing a significant role to ensure our robust financial performance. Such synergies help drive the company's vision to be a global leader and provider of choice for energy transportation and maritime services," he said. ■



Clucas to lead SIGTTO

The Society of International Gas Tanker and Terminal Operators (SIGTTO) has appointed Chris Clucas as Interim General Manager to replace Andrew Clifton.

Clucas is expected to be in the role for around four to six months.

He is principal at Liquefied Gas Consultancy and has been involved in the LNG business for 50 years. He was past Chair of SIGTTO's General Purposes Committee and of SIGTTO's Panel.

Clucas was also elected Founder President of SIGTTO's sister organisation, the Society for Gas as a Marine Fuel (SGMF) and is the current Secretary.

SIGTTO also announced that Faststream Recruitment Group had been retained as an exclusive search partner to source a new General Manager.

The successful candidate will have proven tenure in a managerial level position within the liquefied gas shipping and/or terminal industry.

Previous experience or dealings within SIGTTO or the IMO would be highly advantageous, the society said. ■

Clucas is to head up SIGTTO on an interim basis

NEWS NUDGE

On board methane slip abatement system test

Ecospray is working on developing a solution for methane slip reduction and is carrying out several tests, including an on board pilot system.

Results are expected to be available this summer.

This solution is applicable not only to LNGCs, but also to all LNG fuelled vessels, even those fitted with dual-fuel engines, the company explained.

LNG Shipping News will report on the results when they are released.

'Prelude' to remain offline

'Prelude' FLNG, located offshore Western Australia, is to remain closed for most of the first quarter of 2022, Shell CEO Ben van Beurden confirmed.

Following Shell's fourth-quarter 2021 results presentation, van Beurden told news outlets that the company needs to carefully resolve the issues at the facility before the restart.

He said that Shell had found an electrical fault in the battery systems associated with the uninterruptible power supply.

The restart delay is also due to strict Australian pandemic rules currently in place.

In December last year, Shell shut down the FLNG, due to a fire incident and power outage.

Due to the fire, Australian offshore safety regulator NOPSEMA ordered Shell to keep the FLNG offline, saying that the facility was at risk of suffering a "catastrophic failure."

van Beurden said that Shell is working closely with NOPSEMA to fix the issues. ■

LNGCs boost Capital's revenue

Mixed fleet owner, Capital Products Partners, reported fourth quarter net income of $40 mill, compared with $7.3 mill for 4Q20.

Total revenue was $63.6 mill for the quarter, compared to $35.1 mill during 4Q20.

The revenue increase was primarily attributable to a 38% rise in the average number of vessels in the fleet, following the acquisition of three containerships and six LNGCs during 2H21, contributing $22.1 mill of total revenue in 4Q21, partly offset by the sale of two containerships last year.

As of 31st December, 2021, total total partners' capital amounted to $525.5 mill, an increase of $103.4 mill, compared to the total at the end of 2020.

This increase reflected net income for 2021, $15.3 mill representing the value of 1.15 mill common units issued as part of the payment to acquire the LNGCs 'Aristos I' and 'Aristarchos' on 3rd September, 2021 and the amortisation associated with the equity incentive plan, partly offset by distributions declared and paid during the period of $7.6 mill and the repurchase of the Partnership's common units for an aggregate amount of $4.5 mill.

At the end of last year, the Partnership's total debt was $1,317.4 mill, an increase of $937.7 mill, compared to $379.7 mill as at the end of December, 2020.

This debt rise was attributable to the assumption of $876.3 mill of debt in connection with the acquisition of the six LNGCs, the adding of $36 mill total debt attached to the acquisition of the three containerships in February, 2021 and the issuing of €150 mill bonds on the Athens Exchange.

This was partly offset by the sale of two ships in December, 2021 and the debt repayment under the respective financing arrangements totalling $96.2 mill and scheduled principal payments of $49.3 mill during the period.

LNGC acquisitions

During 4Q21, the Partnership took delivery of four LNGCs - 'Attalos', 'Asklipios', 'Adamastos' and 'Aristidis I', completing the six 174,000 cu m latest generation X-DF LNGCs' acquisition programme. They were built between 2020/ 2021 at Hyundai Heavy Industries.

The six vessels were acquired for a total of $1,222.8 mill, comprising (i) $331.2 mill of cash on hand including bond proceeds, (ii) the assumption of $866.3 mill of secured debt, (iii) the issuance to the seller of the vessels of 1.15 mill common units having an aggregate value of $15.3 mill and (iv) $10 mill of unsecured, interest free seller's financing.

Jerry Kalogiratos, CEO of the General Partner, commented: "We are very pleased that in the fourth quarter of 2021 we completed our six, latest generation LNG carrier fleet acquisition programme, which we set out earlier in the year, valued at more than $1.2 bill, as the remaining four LNGCs joined our fleet.

"This was achieved by using all financial levers at our disposal, including the issue of a €150 mill bond listed on the Athens Exchange at an attractive pricing and with minimal common unit equity issuance. The six LNGCs acquisition together with the three panamax container vessels we acquired at the beginning of this year, resulted in an addition of $1.3 bill in book value of assets and approximately $1.5 bill in contracted revenue.

"We believe that the Partnership is optimally positioned across a number of different fronts to significantly benefit from these transactions in the coming years. First and foremost, we expect these acquisitions to be highly accretive to our earnings and cash flow generation, hence allowing the Partnership to both solidify and increase our common unit distribution over time, as we grow our fleet.

"Moreover, with these transactions, we have lowered the average age of our fleet from 10.8 years to 7.8 years and decreased the environmental footprint of the Partnership by introducing LNG as fuel of choice for certain of our vessels. At the same time, we are further diversifying our revenue sources and customer base, while we establish our presence in the LNG market with a sizeable fleet and investment.

"In view of the above, we remain steadfast in our belief that the LNG market is a high growth industry supported by positive long-term fundamentals, as both natural gas and LNG are expected to play a key role in the energy transition to net zero," he concluded. ■

Capital has profited from the inclusion of six LNGCs

NEWS NUDGE

Lake Charles LNG to be put back

It has been reported that Energy Transfer and partner Trunkline Gas have asked the US Federal Energy Regulatory Commission (FERC) to extend the permit to allow the building of the Lake Charles LNG plant by three years to 2028.

Both companies reportedly blamed the impact of global market conditions on their ability to reach a final investment decision (FID) and secure long-term offtake contracts.

The proposed 16.4 mill tonnes per year plant and pipeline modifications were originally planned to enter service by late 2020, but in 2019 was granted permission for an extension to December, 2025.

Lake Charles LNG has secured all necessary federal, state and local permits related to its construction, local sources claimed. ■

Flex LNG announces record results

Olso-based Flex LNG has reported record revenues of $114.6 mill for the fourth quarter 2021, compared to $81.8 mill for the previous quarter.

Net income was also at an all time high of $69.4 mill and basic earnings per share of $1.31 for 4Q21, compared to $32.8 mill and an EPS of $0.62 for the third quarter of last year. Adjusted net income was $62.8 mill, compared to $32 mill for 3Q21.

EBITDA was also a record $95.5 mill for 4Q21, compared to $64.5 mill in the previous quarter.

The average TCE rate was $95,908 per day, compared to $68,341 per day for 3Q21.

Flex LNG said it had secured attractive long-term timecharters with a mixed portfolio of market rate, spot and fixed rate contracts. As of 16th February, the fleet had an aggregate of 32 years firm periods and with charterer's options, this could rise to over 65 years, if they are firmed up.

CEO Øystein Kalleklev, said: "We are pleased to deliver knockout results for the fourth quarter as guided. Fuelled by four ships exposed to a red-hot spot market, revenues for the fourth quarter jumped from $82 mill to $115 mill, slightly ahead of our guidance of approximately $110 mill.

"Our average Time Charter Equivalent earnings came in at a solid $95,908 per day, beating the $94,000 per day we managed to achieve during fourth quarter 2019 and close to the $97,571 per day achieved in fourth quarter 2018. In the past, we had significantly higher spot exposure, so by being able to beat previous trading results also reflects that during 2021 we have secured an outstanding portfolio of fixed hire timecharters.

"Higher top line also resulted in a fatter bottom line in fourth quarter with our net income and adjusted net income coming in at a healthy $69.4 mill and $62.8 mill, respectively. Overall, for the year we delivered net income and adjusted net income of $162 mill and $145 mill, respectively, which we deem attractive.

"In November, we announced a balance sheet optimisation programme. By de-risking our commercial strategy through adding substantial long-term backlog we reached out to financiers with the aim of unlocking $100 mill of cash from our balance sheet. Today, we are announcing $695 mill of new financing. These financings will release another $87 mill in cash on top of the $38 mill announced in November through the 'Flex Volunteer' sale and charterback.

"We have thus already over-delivered on the programme initiated in November with $125 mill unlocked overall, which will contribute to further growth of our cash balance, which stood at a lofty $201 mill at year end. Hence, we have a super strong liquidity position, enabling us to act quickly on opportunities if they arise.

"The spot freight market went from red-hot in November to ice cold in January, despite elevated gas prices. The primary reason for the spot market slump was that the European gas market went haywire in December, due to concerns about gas availability, coupled with a tense security situation in Ukraine with potential implications for Russian pipeline flows to Europe.

"This resulted in European gas prices trading at a premium to Asian gas prices, which effectively closed the West/East arbitrage, having a detrimental effect on sailing distances and thus increased the availability of ships.

"As the market shake out subsides, we do however think the freight market will re-balance as volume growth in 2022 is expected to exceed 2021, while the number of newbuildings set for delivery this year is about half of last year.

"We are guiding revenues for 2022 in line with what we achieved in 2021, despite the soft spot market at the beginning of the first quarter 2022," he concluded. ■

N-KOM and ABS team up for remote surveys

Qatar LNGC repairer N-KOM is to team up with ABS to explore the possibility of using remote surveys.

A joint development project (JDP) was agreed between ABS and Nakilat – Keppel Offshore & Marine Ltd (N-KOM) to examine how techniques developed by the class society for its programme of remote in-service surveys can be applied to surveys and inspections at the Ras Laffan shipyard.

Remote inspection technologies will be applied to six class surveys to test how they can then be used to verify the required survey or inspection by ABS surveyors to optimise scheduling and minimise downtime for both the shipyard, vessels and ABS.

The JDP will examine how remote techniques can be carried out on rudder clearance inspection; stern tube weardown inspection; rudder plug opening inspection; boiler safety valve testing; fit-up inspections prior to welding and final weld visual inspection of non-critical items.

N-KOM CEO, Damir Glavan, said: “As one of the leading shipyards in the Middle East, N-KOM is committed to providing value-added services and solutions to our customers. In this spirit, we have worked closely with ABS to develop the remote inspection technique which would enhance our operational efficiency during the vessel repair and maintenance process.

“This will enable us to meet class inspections requirements and fulfill our delivery commitment to clients while upholding our commitment to provide safe, time-saving and quality services,” he said.

“We are taking our leadership in remote survey of operational vessels and applying that experience and insight to the shipyard. Together with our partners, we are committed to advancing safety and efficiency to augment surveys after construction with the application of the latest digital techniques.

“The potential of these technologies is significant and while we will begin with these initial six survey items, over time, as the approach is proven, we can potentially expand the scope,” said Patrick Ryan, ABS Senior Vice President, Global Engineering and Technology. ■

Keppel to proceed with FSRU conversion

Keppel Offshore & Marine (Keppel O&M), through its wholly-owned subsidiary Keppel Shipyard, has been awarded three contracts worth around S$250 mill.

One of the contracts was for the conversion of an LNGC into an FSRU.

Keppel Shipyard received the Final Notice to Proceed (FNTP) from GAS-fifteen, a wholly-owned subsidiary of GasLog Carriers, for the engineering procurement construction (EPC) conversion project.

This follows Keppel’s announcement on 25th November last year that it had signed a Limited Notice to Proceed (LNTP) to commence the project’s early work.

The yard will carry out the EPC of the regasification skid, as well as the supporting systems, such as boilers, spread-mooring, offloading, electrical and automation systems.

When completed, the FSRU will be deployed offshore about 17 km southwest of Alexandroupolis, Northern Greece.

The FSRU will have an overall delivery capacity of around 5.5 bill cu m per year, with a peak send out of 22 mill cu m per day.

She will eventually come under the control of Greek company GASTRADE and will supply the markets of Southeastern Europe with natural gas.

This is the sixth major FSRU conversion that Keppel Shipyard will have undertaken, having converted the world’s first unit in 2008. ■

NEWS NUDGE

GTT to support Nakilat

GTT has signed a Technical Services Agreement (TSA) with Nakilat.

GTT will support Nakilat with the maintenance and operation of its fleet of 26 vessels, all of which are equipped with Mark III or NO96 technologies.

This agreement includes GTT on-site technical assistance for inspection, maintenance, repairs, operations and engineering services.

Nakilat will also benefit from access to GTT’s HEARS® emergency hotline, which enables shipowners and their crews to contact company experts 24/7 to respond to operational issues.

In addition, GTT has received an order from Chinese shipyard Hudong-Zhonghua Shipbuilding to design the tanks of six newbuilding 174,000 cu m LNGCs.

Their deliveries will take place between the fourth quarter of 2024 and the third quarter of 2026.

Cargoes

Algeria is to deliver more LNG cargoes to Greece’s DEPA, according to state-owned energy company Sonatrach.

A long-term sale and purchase contract with DEPA has also been extended, Sonatrach said, without indicating the volumes.

DEPA’s LNG is regasified at the Revithoussa LNG import terminal. ■

Monthly Large LNGC Values*

Newbuildings (174,000 cu m)	$206.65 mill
Five years old (174,000 cu m)	$164.87 mill
Total Fleet (541 ships)	$66.55 bill
Orderbook (172 ships)	$36.66 bill

**Source: VesselsValue (01/02/22)*

**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	$26,500	-$3,500
West of Suez	$26,500	-$3,500
12 mos T/C	$75,000	-$12,000

**Since last report (03/02/22)*

Source: Fearnleys (16/02/22)

WORLD LNG CARRIER ORDERBOOK

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Clean Cajun	Unknown	XDF	Hyundai Heavy	Q1, 2022	200000	Dynagas
Elisa Aquila	Gtt Mkiii Flex	XDF	Hyundai Samho	Q1, 2022	174000	NYK
Global Sealine	Gtt96 Gw	XDF	DSME	Q1, 2022	173400	Nakilat
Maran Gas Kythira	Gtt96 Gw	XDF	DSME	Q1, 2022	174000	Maran Gas Maritime
Orion Sea	Gtt Mkiii Flex	XDF	Samsung	Q1, 2022	174000	JP Morgan
Orion Star	Gtt Mkiii Flex	XDF	Samsung	Q1, 2022	174000	JP Morgan
Alexey Kosygin	Gtt Mkiii	TFDE - Azipod	Zvezda SSK	Q1, 2023	172600	Smart LNG
Asterix I	Gtt Mkiii Flex	XDF	Hyundai Heavy	Q1, 2023	174000	Capital Gas
Hudong-zhonghua H1837a	Gtt96 L03+	XDF	Hudong-Zhonghua	Q1, 2023	79960	Shenzhen Gas
Hyundai Ulsan 3243	Unknown	XDF	Hyundai Heavy	Q1, 2023	174000	Knutsen
Samsung 2364	Gtt Mkiii Flex+	XDF	Samsung	Q1, 2023	174000	MISC
Samsung 2365	Gtt Mkiii Flex+	XDF	Samsung	Q1, 2023	174000	MISC
United Glory	Unknown	XDF	Hudong-Zhonghua	Q1, 2023	174000	ULT
DSME 1/4	Unknown	ME-GA	DSME	Q1, 2024	174000	MOL
Hudong-zhonghua H1829a	Gtt96 L03+	XDF	Hudong-Zhonghua	Q1, 2024	170520	CSSC
Hyundai Samho 8148	Unknown	XDF	Hyundai Heavy	Q1, 2024	174000	Knutsen
Hyundai Samho 8149	Unknown	ME-GA	Hyundai Samho	Q1, 2024	174000	Knutsen
Hyundai Ulsan 3244	Unknown	XDF	Hyundai Heavy	Q1, 2024	174000	Knutsen
Hyundai Ulsan 3292	Unknown	ME-GA	Hyundai Heavy	Q1, 2024	200000	Dynagas
Hyundai Ulsan 3293	Unknown	ME-GA	Hyundai Heavy	Q1, 2024	200000	Dynagas
Hyundai Ulsan 3294	Unknown	XDF	Hyundai Heavy	Q1, 2024	174000	Hyundai LNG Shipping
Hyundai Ulsan 3297	Unknown	XDF	Hyundai Heavy	Q1, 2024	174000	Hyundai LNG Shipping
Samsung 2461	Gtt Mkiii Flex	ME-GA	Samsung	Q1, 2024	180000	Celsius Shipping
Samsung Sovcomflot 4/4	Gtt Mkiii Flex	XDF	Samsung	Q1, 2024	174000	NYK
SHI Oct 1/4		Other/unknown	Samsung	Q1, 2024	174000	JP Morgan
ULT #5	Gtt96 L03+	XDF	Hudong-Zhonghua	Q1, 2024	174000	ULT
ULT #6	Gtt96 L03+	XDF	Hudong-Zhonghua	Q1, 2024	174000	ULT
BW DSME 1/2		ME-GA	DSME	Q1, 2025	174000	BWGas
Hudong-Zhonghua QP #3	Unknown	Other/unknown	Hudong-Zhonghua	Q1, 2025	175000	Qatar Petroleum
Qatar DSME 1/4	Unknown	MEGI	DSME	Q1, 2025	174000	Qatar Petroleum
Qatar HHI 1		Other/unknown	Hyundai Heavy	Q1, 2025	174000	Qatar Petroleum
Qatar HHI 2		Other/unknown	Hyundai Heavy	Q1, 2025	174000	Qatar Petroleum
Qatar SHI 1/2		ME-GA	Samsung	Q1, 2025	174000	Qatar Petroleum
Qatar SHI 2/2		ME-GA	Samsung	Q1, 2025	174000	Qatar Petroleum
Clean Copano	Unknown	XDF	Hyundai Heavy	Q2, 2022	200000	Dynagas
Grace Freesia	Gtt Mkiii Flex	XDF	Hyundai Samho	Q2, 2022	173000	NYK
Hudong-zhonghua H1788a	Gtt96	XDF	Hudong-Zhonghua	Q2, 2022	79960	K-Line
Lagenda Serenity	Gtt96 L03+	XDF	Hudong-Zhonghua	Q2, 2022	79960	K-Line
Samsung 2337	Gtt Mkiii Flex	XDF	Samsung	Q2, 2022	174000	JP Morgan
Vivit Arabia Lng	Gtt Mkiii Flex	XDF	Hyundai Samho	Q2, 2022	174000	H-Line
Daewoo 2515	Unknown	TFDE - Azipod	DSME	Q2, 2023	172500	Sovcomflot
El Ferrol Knutsen	Unknown	XDF	Hyundai Heavy	Q2, 2023	174000	Knutsen
Extremadura Knutsen	Unknown	XDF	Hyundai Heavy	Q2, 2023	174000	Knutsen
Hudong-zhonghua H1833a	Unknown	XDF	Hudong-Zhonghua	Q2, 2023	174000	ULT
Samsung 2426	Unknown	XDF	Samsung	Q2, 2023	174000	Pan Ocean
Daewoo 2522	Unknown	MEGI	DSME	Q2, 2024	174000	Hyundai LNG Shipping
DSME 2/4	Unknown	ME-GA	DSME	Q2, 2024	174000	MOL
Hudong-zhonghua H1830a	Gtt96 L03+	XDF	Hudong-Zhonghua	Q2, 2024	170520	CSSC

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 = 9th December 2021

Fearnley LNG

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Hyundai Ulsan 3295	Unknown	XDF	Hyundai Heavy	Q2, 2024	174000	Hyundai LNG Shipping
Samsung 2579	Gtt Mkiii Flex	ME-GA	Samsung	Q2, 2024	180000	Celsius Shipping
SHI Oct 2/4		Other/unknown	Samsung	Q2, 2024	174000	JP Morgan
BW DSME 2/2		ME-GA	DSME	Q2, 2025	174000	BWGas
Hudong-Zhonghua QP #4	Unknown	Other/unknown	Hudong-Zhonghua	Q2, 2025	175000	Qatar Petroleum
Hyundai Ulsan 3320	Unknown	ME-GA	Hyundai Heavy	Q2, 2025	174000	JP Morgan
Qatar DSME 3/4		MEGI	DSME	Q2, 2025	174000	Qatar Petroleum
Qatar HHI 3		Other/unknown	Hyundai Heavy	Q2, 2025	174000	Qatar Petroleum
Samho Capital 1/3	Mark III Flex	ME-GA	Hyundai Samho	Q2, 2025	174000	Capital Gas
Samho Capital 2/3	Mark III Flex	ME-GA	Hyundai Samho	Q2, 2025	174000	Capital Gas
Bw Cassia	Gtt96 Gw	MEGI	DSME	Q3, 2022	174000	BWGas
Bw Iris	Gtt96 Gw	MEGI	DSME	Q3, 2022	174000	BWGas
Prism Diversity	Unknown	XDF	Hyundai Heavy	Q3, 2022	180000	SK Shipping
Santander Knutsen	Unknown	XDF	Hyundai Heavy	Q3, 2022	174000	Knutsen
Sm Albatross		XDF	Hyundai Heavy	Q3, 2022	174000	Korea Line
Sm Bluebird		XDF	Hyundai Heavy	Q3, 2022	174000	Korea Line
Daewoo 2516	Unknown	TFDE - Azipod	DSME	Q3, 2023	172500	Sovcomflot
Daewoo 2517	Unknown	TFDE - Azipod	DSME	Q3, 2023	172500	MOL
H-line #3	Gtt Mkiii Flex	XDF	Hyundai Samho	Q3, 2023	174000	H-Line
Hudong-zhonghua H1838a		XDF	Hudong-Zhonghua	Q3, 2023	79960	K-Line
Hyundai Samho 8105	Gtt Mkiii Flex	XDF	Hyundai Samho	Q3, 2023	174000	Sovcomflot
Hyundai Ulsan 3290	Unknown	ME-GA	Hyundai Heavy	Q3, 2023	200000	Dynagas
Lng Harmony	Unknown	XDF	Hyundai Heavy	Q3, 2023	174000	JP Morgan
Orion Sage	Unknown	XDF	Hyundai Heavy	Q3, 2023	174000	JP Morgan
Samsung 2425	Unknown	XDF	Samsung	Q3, 2023	174000	Maran Gas Maritime
Samsung 2459	Gtt Mkiii Flex	ME-GA	Samsung	Q3, 2023	180000	Celsius Shipping
Samsung Sovcomflot 1/4	Gtt Mkiii Flex	XDF	Samsung	Q3, 2023	174000	NYK
Sm Golden Eagle	Unknown	XDF	Hyundai Heavy	Q3, 2023	174000	Korea Line
Zvezda 042	Gtt Mkiii	TFDE - Azipod	Zvezda SSK	Q3, 2023	172600	Smart LNG
DSME 3/4	Unknown	ME-GA	DSME	Q3, 2024	174000	MOL
DSME 4/4	Unknown	ME-GA	DSME	Q3, 2024	174000	MOL
DSME MOL	Unknown	ME-GA	DSME	Q3, 2024	174000	MOL
Hyundai Ulsan 3221	Unknown	XDF	Hyundai Heavy	Q3, 2024	174000	Pan Ocean
Hyundai Ulsan 3224	Unknown	ME-GA	Hyundai Heavy	Q3, 2024	174000	Pan Ocean
Hyundai Ulsan 3296	Unknown	XDF	Hyundai Heavy	Q3, 2024	174000	Hyundai LNG Shipping
Hyundai Ulsan 3298	Unknown	XDF	Hyundai Heavy	Q3, 2024	174000	Hyundai LNG Shipping
Maran DSME	Gtt96 Gw	MEGI	DSME	Q3, 2024	174000	Maran Gas Maritime
Samsung 2473	Unknown	XDF	Samsung	Q3, 2024	174000	Maran Gas Maritime
Samsung 2474	GTT Mark III Flex	XDF	Samsung	Q3, 2024	174000	Maran Gas Maritime
Samsung 2584	Gtt Mkiii Flex	ME-GA	Samsung	Q3, 2024	180000	Celsius Shipping
Samsung 2585	Gtt Mkiii Flex	ME-GA	Samsung	Q3, 2024	180000	Celsius Shipping
SHI Oct 3/4		Other/unknown	Samsung	Q3, 2024	174000	JP Morgan
Sovcomflot #1	Gtt Mkiii Flex	XDF	Hyundai Samho	Q3, 2024	170520	Sovcomflot
Sovcomflot #2	Gtt Mkiii Flex	XDF	Hyundai Samho	Q3, 2024	170520	Sovcomflot
Zvezda 046	Unknown	TFDE - Azipod	Zvezda SSK	Q3, 2024	172600	Smart LNG
Zvezda 047	Unknown	TFDE - Azipod	Zvezda SSK	Q3, 2024	172600	Smart LNG
Hyundai Samho 8102	Unknown	ME-GA	Hyundai Heavy	Q3, 2025	174000	Knutsen
Hyundai Ulsan 3321	Unknown	ME-GA	Hyundai Heavy	Q3, 2025	174000	JP Morgan
Qatar DSME 2/4		MEGI	DSME	Q3, 2025	174000	Qatar Petroleum
Qatar HHI 4		Other/unknown	Hyundai Heavy	Q3, 2025	174000	Qatar Petroleum

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 = 9th December 2021

Fearnley LNG

Name	Containment system	Propulsion	Yard	Delivery date	Capacity	Primary Owner
Samho Capital 3/3	Mark III Flex	ME-GA	Hyundai Samho	Q3, 2025	174000	Capital Gas
Zvezda 051	Unknown	TFDE - Azipod	Zvezda SSK	Q3, 2025	172600	Smart LNG
Zvezda 052	Unknown	TFDE - Azipod	Zvezda SSK	Q3, 2025	172600	Smart LNG
Tenergy	Gtt Mkiii Flex	XDF	Hyundai Heavy	Q4, 2021	174000	Tsakos Energy Navigation
Vivirt City Lng	Gtt Mkiii Flex	XDF	Hyundai Samho	Q4, 2021	174000	H-Line
Alicante Knutsen	Unknown	XDF	Hyundai Heavy	Q4, 2022	174000	Knutsen
Daewoo 2514	Unknown	TFDE - Azipod	DSME	Q4, 2022	172500	Sovcomflot
Hudong-zhonghua H1831a	Not Applicable	XDF	Hudong-Zhonghua	Q4, 2022	174000	ULT
Huelva Knutsen	Unknown	XDF	Hyundai Heavy	Q4, 2022	174000	Knutsen
Lng Prosperity		XDF	Hyundai Heavy	Q4, 2022	174000	JP Morgan
Malaga Knutsen	Unknown	XDF	Hyundai Heavy	Q4, 2022	174000	Knutsen
Minerva Amorgos	Gtt Mkiii Flex+	XDF	Samsung	Q4, 2022	174000	Minerva Marine
Orion Song		XDF	Hyundai Heavy	Q4, 2022	174000	JP Morgan
Amore Mio I	Gtt Mkiii Flex	ME-GA	Hyundai Heavy	Q4, 2023	174000	Capital Gas
Axios II	Gtt Mkiii Flex	ME-GA	Hyundai Heavy	Q4, 2023	174000	Capital Gas
Daewoo 2518	Unknown	TFDE - Azipod	DSME	Q4, 2023	172500	MOL
Daewoo 2519	Unknown	TFDE - Azipod	DSME	Q4, 2023	172500	MOL
Daewoo 2520	Unknown	MEGI	DSME	Q4, 2023	174000	MOL
Daewoo 2521	Unknown	MEGI	DSME	Q4, 2023	174000	Hyundai LNG Shipping
Hyundai Samho 8101	Unknown	XDF	Hyundai Heavy	Q4, 2023	174000	Knutsen
Hyundai Samho 8139	Unknown	XDF	Hyundai Samho	Q4, 2023	174000	Knutsen
Hyundai Ulsan 3291	Unknown	ME-GA	Hyundai Heavy	Q4, 2023	200000	Dynagas
Jiangnan H2637	Gtt Mkiii Flex	XDF	Jiangnan	Q4, 2023	79800	Jovo Energy
Samsung 2460	Gtt Mkiii	ME-GA	Samsung	Q4, 2023	180000	Celsius Shipping
Samsung Sovcomflot 2/4	Gtt Mkiii Flex	XDF	Samsung	Q4, 2023	174000	NYK
Samsung Sovcomflot 3/4	Gtt Mkiii Flex	XDF	Samsung	Q4, 2023	174000	NYK
Sm Kestrel	Unknown	XDF	Hyundai Heavy	Q4, 2023	174000	Korea Line
ULT #4	Gtt96 L03+	XDF	Hudong-Zhonghua	Q4, 2023	174000	ULT
Zvezda 043	Gtt Mkiii	TFDE - Azipod	Zvezda SSK	Q4, 2023	172600	Smart LNG
Zvezda 044	Gtt Mkiii	TFDE - Azipod	Zvezda SSK	Q4, 2023	172600	Smart LNG
Zvezda 045	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2023	172600	Smart LNG
DSME Gaslog 1/4		MEGI	DSME	Q4, 2024	174000	GasLog
DSME Gaslog 2/4		MEGI	DSME	Q4, 2024	174000	GasLog
Hudong-Zhonghua QP #1	Unknown	Other/unknown	Hudong-Zhonghua	Q4, 2024	175000	Qatar Petroleum
Hudong-Zhonghua QP #2	Unknown	Other/unknown	Hudong-Zhonghua	Q4, 2024	175000	Qatar Petroleum
Hyundai Samho 8100	Unknown	XDF	Hyundai Heavy	Q4, 2024	174000	Knutsen
Hyundai Ulsan 3222	Unknown	XDF	Hyundai Heavy	Q4, 2024	174000	Pan Ocean
Hyundai Ulsan 3225	Unknown	ME-GA	Hyundai Heavy	Q4, 2024	174000	Pan Ocean
Hyundai Ulsan 3299	Unknown	XDF	Hyundai Heavy	Q4, 2024	174000	Hyundai LNG Shipping
Maran DSME 2	Gtt96 Gw	MEGI	DSME	Q4, 2024	174000	Maran Gas Maritime
Orion Sky	Unknown	XDF	Hyundai Heavy	Q4, 2024	174000	JP Morgan
SHI Oct 4/4		Other/unknown	Samsung	Q4, 2024	174000	JP Morgan
Zvezda 048	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2024	172600	Smart LNG
Zvezda 049	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2024	172600	Smart LNG
Zvezda 050	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2024	172600	Smart LNG
DSME Gaslog 3/4		MEGI	DSME	Q4, 2025	174000	GasLog
DSME Gaslog 4/4		MEGI	DSME	Q4, 2025	174000	GasLog
Qatar DSME 4/4		MEGI	DSME	Q4, 2025	174000	Qatar Petroleum
Zvezda 053	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2025	172600	Smart LNG
Zvezda 054	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2025	172600	Smart LNG
Zvezda 055	Unknown	TFDE - Azipod	Zvezda SSK	Q4, 2025	172600	Smart LNG

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Data last updated = Data last updated = 9th December 2021

Fearnley LNG

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 Independence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvovation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
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	Spain	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
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Green Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	New Frontier 1	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

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Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
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	FueLNG Bellina	7,500	LNG	Singapore	Yes	FuelLNG
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	Xin Ao Pu Tuo Hao	8,500	LNG	China	Yes	ENN
2021	Avenir Ascension	7,500	LNG		Yes	Avenir LNG
2021	Avenir Allegiance	20,000	LNG	China	Yes	SSES
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	Gas Vitality	18,600	LNG	Mediterranean	Yes	MOL
2021	TG TBN	500	LNG	Korea	Yes	Trans Gas
2021	Titan Hyperion	8,000	LNG	Benelux	Yes	Titan LNG
2022	Coral Nordic	30,000	LNG	Worldwide	Yes	Anthony Veder
2022	Avenir Achievement	20,000	LNG	Worldwide	Yes	Avenir LNG
2022	Haugesund Knutsen	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
2023	Krios	4,200	LNG	Benelux	Yes	Titan LNG
2023	Fratelli Cosulich TBN	8,000	LNG	Mediterranean	Yes	Fratelli Cosulich
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	Kanfer TBN	6,000	LNG	Worldwide	Yes	Kanfer Shipping
2023	K Line TBN	18,000	LNG	Korea	Yes	K Line
2023	PNE TBN	5,500	LNG	USG	Yes	PNE
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2024	TBN	30,000	LNG	Australia	Yes	Anthony Veder ?
2024	Crowley TBN	12,000	LNG	US Coast	Yes	Crowley Maritime
2024	CNOOC TBN	12,000	LNG	China	Yes	CNOOC
2024	TBN	12,500	LNG	Worldwide	Yes	???
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG
2026	Avenir TBN (option)	20,000	LNG	Worldwide	Yes	Avenir LNG

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