LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 2 April 2020

The new 'normal'?

Large LNG liquefaction project developments are suffering in a coronavirus impacted market, due to low demand, historically low LNG prices, plus an oil price war thrown in for good measure.

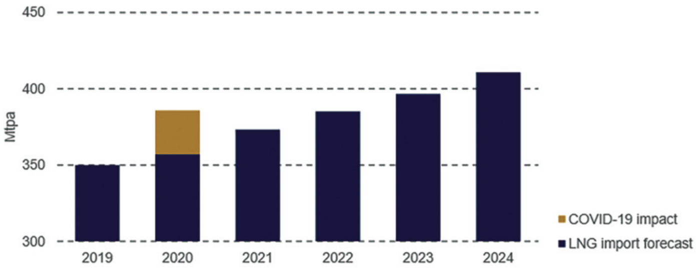
This year's LNG market started with record low spot LNG prices, due to weaker than expected Asian demand growth and additions to liquefaction capacity.

Recovery prospects were weakened by the COVID-19 outbreak in China, as the country's LNG demand took a big hit, with little chance of any significant improvement before 3Q20 at the earliest, Drewry Maritime Research said in an industry note.

Drewry predicted that LNG trade will grow by just 2% this year, due to the low demand. A mild winter and a decline in Asian spot LNG prices have resulted in higher inventories in both Europe and Asia, thereby impacting imports and this scenario is not expected to change, as the market enters the seasonal low-demand period.

The virus outbreak has also affected LNG production, as securing funding, as well as supply deals, has become increasingly difficult for the many planned liquefaction projects. This has forced energy companies to re-assess their investments.

Furthermore, as most of the long-term LNG contracts have oil-linked pricing, the price collapse threatens the profitability of some of the major planned LNG projects. Oil prices tumbled last month after OPEC+ allies – Saudi Arabia and Russia – disagreed on further production cuts.



LNG import forecast with COVID-19 impact. Source: Drewry Maritime Research

FID delays

After a bumper 2019, when 64 mill tonnes per annum of liquefaction capacity reached FID, many other projects were in advanced stages of securing FID during this year.

However, depressed LNG prices and the impact of COVID-19 on LNG demand have led developers to re-evaluate their strategies, resulting in delays in reaching FID and thus start ups.

Major impacted projects include Rovuma LNG (15.2 mill tonnes per annum), Qatar's North Field expansion (33 mill tonnes), Driftwood LNG (27.6 mill tonnes), Rio Grande LNG (27 mill tonnes) and Lake Charles (16.5 mill tonnes per annum).

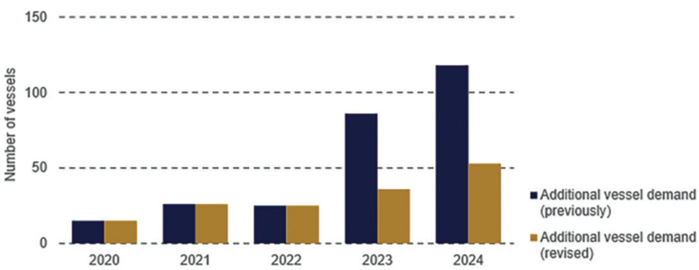
If current conditions continue, it might even lead to some of the planned projects being scrapped. Many projects were based on selling LNG at an average of $8 per mmBtu, which is no longer sustainable, Drewry pointed out.

Most of the mega projects were scheduled to start in 2023/24 and the delay in the planned FIDs, as well as in the projects under construction, will limit liquefaction capacity addition in the next five years.

As for the LNG shipping sector, lower capacity additions will eradicate the possibility of excessive supply thus supporting LNG prices. Additional LNGCs required through 2024 will be reduced by about 40%, to 160 from the 270 LNGCs estimated earlier. Delivery slippages were also expected to increase coinciding with the project delays, Drewry said.

This would lead to lower LNGC orders in the next three years. Deliveries will slow from 2022, while delays in liquefaction projects will also affect the development of LNG regasification infrastructure and other LNG-to-power projects, which will also suppress demand growth.

Going forward, new liquefaction projects will find it hard to get off the drawing board, as investors will be looking for a diversified portfolio of supply and purchase contracts before committing to FID, Drewry warned. ■



Incremental vessel demand projection. Source: Drewry Maritime Research

SHIPPING NEWS AGENDA

Laden LNGCs looking for a home

At least five fully-loaded LNGCs were reported to be idling offshore India, after importers declared *force majeure* last week, according to analysts and shipping sources, talking with newswires.

Gas demand has fallen globally exacerbated by the coronavirus, which has capped industrial output, forcing LNGCs to remain at sea fully laden in several areas.

At least three major Indian energy companies, which is the world's fourth largest LNG importing country, issued *force majeure* notices to suppliers last week, as domestic gas demand slumped and port operations were affected by the recently announced Indian lockdown to curb the spread of the virus.

Five LNGCs were identified as idling off the western Indian coast, said Rebecca Chia, an analyst at data intelligence firm Kpler, talking with Reuters late last week.

Another eight LNGCs, which loaded cargoes last month in Australia, Nigeria, Qatar, Angola and the US, were bound for India, a Singapore-based shipbroker said.

At least four, which had loaded at Ras Laffan, in Qatar, were still in the area, according to Chia and energy data provider Clipperdata.

Qatar has approached several buyers in Asia and Europe offering spot cargoes for either loading or delivery in April, several sources told Reuters.

Indian LNG importers have declared *force majeure*

Traders said Qatar had probably been forced to seek buyers for excess cargoes after being issued with a *force majeure* notice by India's top gas importer, Petronet LNG.

A steep drop in gas demand in Europe, due to lockdowns curtailing industrial operations, has also forced LNG suppliers to find alternative buyers, traders added.

Three more LNGCs are currently thought to be idle in southern Europe, where gas demand has been badly hit, Kpler's Chia added.

Indian lockdown

India imposed a 21-day lockdown on 25th March, and is only allowing the supply of essential commodities. Several industries shut operations and some ports in the country declared *force majeure*.

"India had been the saving grace for the spot LNG market over the past month, buying the fuel when it was cheap," said Ira Joseph, head of global gas and power analytics at S&P Global Platts.

"Gas demand has reduced drastically and it is likely to go down further," a GAIL (India) source said.

India's Gujarat State Petroleum Corp (GSPC) has also issued *force majeure* notices to its LNG suppliers. GSPC has cancelled a tender to import 11 LNG cargoes for deliveries between May, 2020 to March, 2021, a company source said.

As a result, US exports are expected to fall in coming months, Goldman Sachs added.

"We may soon see cargoes meant for India being diverted to China, which is the complete opposite of what happened a month ago," a source said, as China could return to near normality in the not too distant future. ■

US cargo heads for China

An LNGC is currently heading for China from the US, in what will be the first shipment since March, 2019, according to shiptracking data from Refinitiv Eikon and Kpler this week.

The 'SK Resolute' loaded a cargo at the Cameron LNG terminal on 22nd March and was originally heading for Cristobal, Panama, according to the shiptracking data.

Her destination changed to Tianjin in China on 28th March and she is due to arrive at the Chinese port on 28th April, via South Africa, although her destination could change.

If this cargo arrives in China, it would be the first since it raised tariffs on US LNG imports to 25% last year.

In February, China announced that it would grant exemptions on retaliatory duties imposed against 696 US goods after both sides reached a Phase 1 trade deal, which took effect on 14th February.

Companies were supposed to submit their applications on 2nd March and exemptions granted will be valid for a year, according to Reuters. ■

An LNGC has reportedly left Cameron LNG for China

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Spot cargoes abound

LNG suppliers are currently flooding the market with excess spot cargoes, generating fresh price problems, as demand dwindles globally, due to the coronavirus outbreak.

Lockdowns and strict travel curbs to try to slow the spread of the virus have led to a big drop in demand in countries, such as India, Italy and Spain, all major LNG buyers.

The LNG glut has pushed Asian spot prices towards the record low last seen in February when demand sank in China, due to the virus.

Spot LNG prices were already at seasonal lows before the crisis hit following a warm winter and the fallout from the trade war between the US and China.

Total LNG deliveries to Europe are expected to reach nearly 11 mill tonnes, a 14% hike from the previous record set in December, according to IHS Markit, which said the supply push comes as gas demand is collapsing at double digit rates, Reuters reported.

"Asian buyers are reselling volumes purchased from the US and portfolio sellers are offloading their excess cargoes as well," said Michael Stoppard, IHS Markit chief strategist for global gas, talking with the newswire.

Given the uncertainty, LNG buyers in North Asia had opted for a 'downward quantity tolerance' (DQT) when negotiating their annual delivery programmes. Some buyers are now exercising the clause that allows them to cut volumes by up to 10%.

"We're seeing more sell tenders these days due to a combination of factors like coronavirus and DQT, but this also means that when demand rebounds, buyers will return to the market to seek spot cargoes," a Singapore-based LNG trader said.

A gas trader in Spain said everyone was using all the flexibility available in contracts.

"If a contract is not on the money and has downward flexibility, everyone is doing it in whatever they can: cancelling a cargo, cancelling a volume within a system," a trader told Reuters. "Right now if we could cancel, depending on the contract, we would cancel everything we could."

Cargoes offered

Last week, Qatargas approached buyers in Asia and Europe to offer cargoes for delivery or loading in April, sources said.

Traders said it had likely been forced to seek buyers for its excess cargoes after being issued with a *force majeure* notice by Petronet LNG. Qatar is India's biggest LNG supplier.

Cheniere Energy, the largest US LNG exporter, also offered a cargo for loading in early April from Sabine Pass, which traders claimed was unusual.

In Australia, Malaysia's Petronas offered a cargo for loading in May from the Gladstone plant in which it has an equity stake, likely due to a cancellation from a buyer, an industry source said. ■

More cargo news

In a complete reversal of its gas export business, Cheniere Energy has issued an expression of interest to purchase six LNG shipments for delivery to Europe in late 2020.

Cheniere did not disclose the reason behind this decision, however, some analysts said US LNG exports were not expected to be profitable this summer, according to Bloomberg, and spot cargoes could serve in lieu of Cheniere's own production.

March's Cheniere gas intake was down by about 20% year-on-year.

Elsewhere, Argentina is looking to import 11 LNG cargoes for the upcoming Southern Cone winter, despite growing domestic gas production from its Vaca Muerta production field, and plans to develop large-scale LNG facilities.

Argentine state energy firm Integración Energética Argentina (Ieasa) said prices agreed for the requested shipments were the lowest recorded in the history of the company, averaging around $3 per MMBtu.

"The de-acceleration of the Chinese economy meant the Asian giant had to reject LNG cargoes, which led to oversupply in the market," Ieasa said in a statement.

The first shipment is expected in May, the start of the winter season.

Elsewhere, Bangladesh is seeking to import LNG from the spot market by July in an effort take advantage of low prices and meet the country's growing demand.

Md Kamruzzaman, managing director of state-run Rupantarita Prakritik Gas Company (RPGCL) said last month that several committees had been constituted and they are now working to ensure a smooth start to spot LNG imports.

RPGCL has already inked a master sale and purchase agreement (MSPA), with 14 global suppliers separately to import LNG from the spot market, he said.

A subsidiary of state-run Petrobangla, RPGCL sealed deals with suppliers over the past month, following a competitive bidding process.

These include, Mitsui & Co, Marubeni Corp, Osaka Gas and Jera of Japan; Singapore-based Cheniere Marketing International, Vitol Asia, Trafigura and Diamond Gas International; US-based Excelerate Energy Ltd Partnership, plus Woodside Petroleum of Australia, Eni of Italy, AOT Trading of Switzerland, Malaysian Petronas LNG and a joint venture between Summit Corp & Summit Oil & Shipping of Bangladesh.

RPGCL will procure spot LNG based on market prices, terminal availability, re-gasification capacity and downstream demand, the official said.

Spot LNG should be supplied on a delivered ex-ship basis and the vessel size should range between 125,000 cu m and 220,000 cu m. ■

Gastrade secures capacity bookings

Greece's Gastrade's market test binding phase for capacity reservation at the Alexandroupolis FSRU terminal was successfully completed on 24th March, 2020.

With aggregate binding offers for up to 15 years, reaching 2.6 bill cu m per year, Greek and international natural gas companies, as well as end consumers, confirmed their interest in the reservation of regasification capacity at the FSRU, the company said.

LNG delivered at the terminal will be regasified and sent to markets both in Greece and southeast Europe via the Greek National Natural Gas Transmission system.

"This very satisfactory result of the binding phase of the market test for the Alexandroupolis project and the participation of key gas market players in Greece and SE Europe, constitute a critical step towards the materialisation of the project, and eventually the enhancement of the energy diversification and security of supply in Greece, the Balkans and the wider southeast European area," confirmed Konstantinos Spyropoulos, Gastrade's managing director. ■

Woodside bites the bullet

In a statement issued last week, Australian energy developer Woodside outlined its planned cutbacks to cope with the current virus pandemic.

The company claimed that LNG and oil production were not being reduced in the current environment, and deliveries to customers have continued.

Demand has proven resilient for Woodside's product in the core north Asian markets and the company's trading team has recently begun placing some spot production back into China, as industrial output and demand restarts.

Woodside has also agreed with a customer to fix the price of around 2.4 MMboe of LNG production, to further increase revenue certainty.

Australian LNG plant developers have cut back investments

Expenditure cut

This year, the company's total expenditure is due to drop by about 50% to around $2.4 bill. This includes around $100 mill reduction in operating expenditure and another 60% reduction in investment expenditure to $1.7 - $1.9 bill.

The impacts will be:

- Changes to Karratha Gas Plant (KGP) schedule, with the major turnaround for LNG Train 3 deferred to September, 2020 and the major turnaround for LNG Train 4 deferred to August, 2021.
- Reduction for 2020 of KGP's life extension activities scope.
- Delay in Woodside's targeted FID for Scarborough and Pluto Train 2 to 2021, plus a FID for Browse.

Finalisation of commercial agreements and regulatory approvals will continue for Scarborough, Pluto Train 2 and Browse and there will be some ongoing engineering work in preparation for FIDs.

Woodside CEO, Peter Coleman, said; "The unprecedented circumstances that have unfolded globally over recent weeks are impacting our people, our business and our industry. Our immediate priorities have been minimising the risks from COVID-19 to staff, contractors and the communities where we operate, and maintaining our ability to deliver gas to the Western Australian and overseas customers who depend on us.

"We are also responding to the lower, more volatile oil price environment by taking difficult but prudent decisions to reduce our expenditure for this year and to delay targeted final investment decisions on our growth projects at Scarborough, Pluto Train 2 and Browse.

"These are extraordinary times, that no one could have foreseen, but Woodside enters this period of significant uncertainty with one of the stronger balance sheets in our industry and world-class, low-cost producing assets, which are resilient to commodity price fluctuations.

"Our disciplined approach to cash flow and debt management has positioned us to respond quickly and decisively. The measures we are implementing will preserve cash during these challenging months and ensure that in the longer term we can successfully execute the growth strategy we have in place.

"The development of the Scarborough and Browse gas resources through Woodside's proposed Burrup Hub remains among the world's most cost-competitive LNG investment opportunities and one which will provide significant economic returns to shareholders, governments and communities for decades to come," he said.

Woodside's 1Q20 report is to be released to the ASX on 16th April, 2020 and will provide further information, the company said. ■

Woodfibre delayed

Canada's Woodfibre LNG construction has been delayed, partly due to COVID-19, the company said last week.

Woodfibre has applied to the Canadian British Columbia provincial Environmental Assessment Office for an extension to its Environmental Assessment Certificate, which is set to expire in October.

The company said it was seeking an extension of the certificate for five years. Construction, expected to begin this summer, is now due to start in the summer of next year.

The reasons given for the delay include uncertainty and work stoppages caused by COVID-19, such as the shut down of the Chinese fabrication yard that was manufacturing equipment for the Squamish, BC facility.

In addition, the US construction company which Woodfibre LNG was dealing with for marine work ran into financial trouble, which has slowed work down.

"Last fall, Woodfibre LNG was nearing finalisation of an EPC contract and announcement of a Final Investment Decision when our preferred contractor for engineering, procurement and module fabrication, encountered financial challenges," explained President, David Keane.

"In January, 2020, our preferred contractor filed for Chapter 11 bankruptcy protection in the US and is now undergoing proceedings, which are expected to continue until July, 2020 at the earliest.

"Amidst unprecedented global uncertainty, I want to be clear that the Woodfibre LNG project is still moving ahead. We are continuing to work with our indigenous and commercial partners to meet all of our pre-construction commitments," Keane stressed. ■

NEWS NUDGE

Tellurian extends loan maturity

Tellurian has amended the terms of its 2019 Term Loan.

This includes an 18-month extension of the maturity date to 23rd November, 2021.

President and CEO, Meg Gentle, said, "As announced in early March, we are making necessary changes amid challenging global conditions. We have restructured the organisation and entered into an agreement to extend our Term Loan maturity to late 2021, which swiftly completes the second critical step toward resiliency in the current market.

We are working remotely with potential equity partners for the Driftwood project and implementing measures to keep our team safe and productive to regain commercial momentum when the effects of COVID-19 subside," she said. ■

Santos' response to COVID-19

Australian LNG supplier, Santos has also announced financial measures deemed appropriate to the current environment to ensure it continues as a low-cost, reliable and high performance business throughout the cycle.

These include -

- $550 mill (38%) reduction in 2020 capital expenditure;
- $50 mill reduction in 2020 cash production costs;
- A target 2020 free cash flow breakeven oil price of $25 per barrel.

In the first two months of 2020, Santos generated $186 mill in free cash flow, the company said, resulting in cash on hand of $1.2 bill at the end of February.

Managing Director and CEO, Kevin Gallagher, said that the company is committed to supporting the local government and community efforts to limit the spread of the virus, and supporting business continuity.

Fixed-price gas sales contracts are expected to account for about 35% of sales volumes this year. In addition, Santos has 6.2 mill barrels of oil production hedged in 2020 at a floor price of $54 per barrel.

Spending reduction

Forecast major growth capital expenditure has been reduced by $350 mill, reflecting re-phasing in expenditure for the Barossa and PNG LNG expansion projects, the company explained.

The ConocoPhillips acquisition is expected to be completed in the first half of this year, subject to third-party consents and regulatory approvals. As a result, Santos' interest in Bayu-Undan and Darwin LNG will increase to 68.4% and provide a significant boost to production and cash flows.

Santos had already announced a conditional agreement to sell 25% interests in Bayu-Undan and Darwin LNG to SK E&S for $390 mill and is in advanced discussions with a number of parties for equity in Barossa.

Gallagher added: "The initiatives announced demonstrate we are taking decisive action to ensure Santos is well-positioned in a lower oil price environment.

"Whilst the current oil price dynamic is challenging, the eventual recovery will create opportunities for companies positioned to act on them. Our strategy to leverage existing assets and infrastructure remains unchanged and we expect to pursue these exciting opportunities when conditions permit.

"However, given the uncertain economic impact of COVID-19

Santos CEO Kevin Gallagher

combined with the lower oil price, we expect to defer FID on Barossa until business conditions improve. Barossa remains an important project for Santos due to its brownfield nature and its low cost of supply.

"Santos today is in control of our capital expenditure profile. All our major capital projects are yet to take final investment decisions, providing flexibility in commitment timing and our production levels from our current assets are relatively steady for the next four or five years without any new growth projects," Gallagher concluded. ■

'Golar Nanook' starts earning

On 23rd March, Golar Power, a joint venture between Golar LNG Ltd and Stonepeak Infrastructure Partners, reached COD on the 1.5 GW Brazilian Porto de Sergipe I power project.

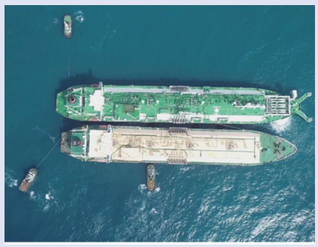
This also triggered the start of bareboat charter payments for the 100% Golar Power owned FSRU 'Golar Nanook'. Annual revenues less forecast operating costs, amounting to $43.9 mill, adjusted annually for inflation based on US CPI, are expected.

Revenues less forecast opex over the life of the 'Golar Nanook's' contract without further inflation adjustment are estimated at $1.1 bill, of which Golar LNG's 50% share is expected to be $549 mill.

Further upside can be expected from the downstream LNG distribution business that will be developed using the significant spare capacity on board the FSRU, Golar said.

A couple of days earlier, Golar Power had received a commercial operations certificate from ANEEL (Brazilian Electricity Regulatory Agency) to allow the power plant to start operations.

'Golar Nanook' is a newbuilding FSRU with 170,000 cu m of LNG storage capacity, capable of supplying more than 21 mill cu m per day of natural gas. ■



Golar Power's 'Golar Nanook' has commenced operations

Zeebrugge sees record LNG operations

During the first quarter of this year, a record 74 LNGC operations took place at Fluxys Zeebrugge terminal.

Both February and March broke the record for the number of ships handled per month, the terminal operator said, explaining that 15 LNGCs were handled in January, 27 in February and 32 last month.

Some 56 out of the 74 ship operations were transhipments with vessels arriving from Yamal in icebreaking LNGCs to have their cargoes transferred to conventional LNGCs.

For 2019, Fluxys reported a turnover of €531 mill, up from €503.2 mill recorded for 2018. Net profit was €69.5 mill, compared with €54.5 mill in the previous year.

Infrastructure investments amounted to €91.3 mill, mainly for the construction of the fifth storage tank at the Zeebrugge LNG terminal.

Last year 130 LNGCs berthed at Zeebrugge, easily breaking the previous record of 82 vessels in 2009.

In addition to handling large volumes of LNG, the Zeebrugge terminal diversified its portfolio to capitalise on the new market for small-scale LNG.

In September, 2019, Qatar Terminal Limited booked the available unloading slots on a long term basis, as the current long-term contracts expire through 2044 with the option of early termination at the end of 2039.

Later, in December, 2019, the Zeebrugge LNG terminal commissioned a fifth storage tank and associated process facilities for commercial use. This marked the start of the long-term transhipment contract concluded with Yamal Trade in 2015.

Under the 20-year contract with Yamal Trade, up to 8 mill tonnes of LNG can be transhipped at the Zeebrugge terminal annually. Before the new capacity became available, the terminal had already been performing transhipments between two berthed ships simultaneously since May, 2018. ■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Energy Transfer to go it alone

Energy Transfer is to take over development of the Lake Charles LNG export project, following Shell's announcement that it will not to proceed with its equity investment.

Shell told Energy Transfer that its decision was made in light of current market conditions.

As a result, Energy Transfer will take over the role of lead project developer and will continue to work on the project. The company said that it would evaluate various alternatives to advance the project, including the possibility of bringing in one or more equity partners and reducing the size of the project from three trains, totalling 16.45 mill tonnes per year, to two trains aggregating 11 mill tonnes.

"We continue to believe that Lake Charles is the most competitive and credible LNG project on the Gulf Coast," said Tom Mason, Executive Vice President and President - LNG. "Having the ability to capitalise on our existing regasification infrastructure at Lake Charles provides a cost advantage over other proposed LNG projects on the Gulf Coast.

"The Lake Charles project also benefits from its unparalleled connectivity to Energy Transfer's existing nationwide interstate and intrastate pipeline system that provides direct access to multiple natural gas basins in the US," he explained.

Energy Transfer and Shell signed a project framework agreement in March, 2019, under which the two companies agreed to share the cost of its development.

Lake Charles LNG developer is to go it alone

Since then, the two companies have jointly undertaken the engineering, procurement and construction (EPC) bidding process.

Shell will support Energy Transfer in this process through the receipt of commercial EPC bids in the second quarter of this year. In addition, the energy major will continue to support the company during a transition period to facilitate its plans to continue project development.

"We remain in discussions with several significant LNG buyers from Europe and Asia regarding LNG offtake arrangements as well as, in some cases, a potential equity investment in the project," said Mason. "In light of the advanced state of the development of the project, we remain focused on pursuing this project on a disciplined, cost efficient basis and, ultimately, the decision to make a final investment decision (FID) will be dependent on market conditions and capital expenditure considerations."

Energy Transfer owns an existing regasification facility in Lake Charles, Louisiana that was originally built in 1982. This facility consists of four LNG storage tanks, two deepwater berths in the Calcasieu Channel and other infrastructure assets. ■

NEWS NUDGE

Sakhalin extends Svitzer contract

Copenhagen-based towage company Svitzer has won a 10-year extension of a marine service contract with Sakhalin Energy Investment Company, a consortium set up to develop and manage the oil and gas Sakhalin-II project.

Svitzer has been providing towage services to the Sakhalin-II since 2007. The extension, which comes into effect in November, 2022, involves the mooring of more than 1,800 LNGCs using a fleet of four Robert Allen icebreaking tugs and two mooring boats. These vessels are operated by a team of 58 Russian crew members, supported by nine onshore staff.

Commenting on the extension, Alan Bradley, Svitzer's Cluster Manager - Asia, said;"We are very pleased that Sakhalin Energy Investment Company have chosen Svitzer as their preferred partner for 10 more years. With the extension, we are able to continue to play an important role in ensuring that oil, gas, food and supplies are reaching people and homes. Our goal is to ensure we always support the customer's business by providing efficient marine services in their terminal – the extension of a contract as significant as this one gives us confidence that we are adding value." ■

Sempra updates developments

Last week, Sempra Energy gave an update on its various LNG projects.

Cameron LNG liquefaction-export project Phase 1 in Hackberry, Louisiana, is nearing completion, the company said.

Once complete, Sempra Energy's share of full-year run-rate earnings from Phase 1, which includes the first three trains, are projected to be between $400 mill and $450 mill annually under Cameron LNG's tolling agreements.

Sempra Energy explained that it indirectly owns 50.2% of Cameron LNG, which is jointly owned by affiliates of Sempra LNG, Total, Mitsui & Co and Japan LNG Investment, a company jointly owned by Mitsubishi Corp and Nippon Yusen Kabushiki Kaisha (NYK).

Elsewhere, Phase 1 of the Energía Costa Azul (ECA) LNG liquefaction-export project, under development in Baja California, Mexico, continues to move forward.

Last month, ECA LNG signed a fixed-price, lump-sum, turn-key engineering, procurement and construction (EPC) contract with Technip. ECA LNG is targeting a FID in 2Q20.

Additionally, earlier last month, Port Arthur LNG and Bechtel Oil, Gas, and Chemicals, signed a fixed-price EPC contract for the Port Arthur LNG liquefaction project under development in Texas and site preparation work continues.

While the majority of Sempra Energy's businesses are considered critical by the US Government and are currently operating without material disruptions, the fast-evolving global health crisis adds more uncertainty to the projections, the company stressed.

As for Port Arthur, the US Department of Energy (DOE) confirmed that it had received an application by Port Arthur LNG Phase II for authorisation to export domestically produced LNG.

Comments must be received by 29th April. ■

NEWS NUDGE

Markets

Broking sources have reported that Maran Gas has exercised yet another option for a 170,000 cu m LNGC from Daewoo.

The $192 mill vessel was thought to be the 13th ordered from the South Korean yard. She is due for delivery in 2022.

Several deliveries in LNG Shipping News LNGC orderbook, which see, look likely to slip backwards, due to the current situation, Fearnleys said.

In the charter market, ExxonMobil was believed to have chartered the 176,300 cu m, 2016-built 'Rioja Knutsen' on a relet.

The rate was reported as $64,000 per day.

Transhipments return to Honningsvåg

Novatek and Tschudi are reportedly returning to Honningsvåg to undertake ship-to-ship LNG transfers.

Following a successful reloading operation in 2019, the companies have earmarked more STS operations to transfer LNG from Yamal Arc 7 tonnage to conventional vessels.

Between November 2018 and June 2019, 123 LNG cargoes were transhipped from Arc7s to conventional LNGCs, local news sources said.

Last year, Novatek said that the operation in Norwegian waters would be a 'one off' and it would instead be looking to transfer LNG in Russian waters off Kildin Island, northeast of Murmansk.

In the medium-term, the company was thought to be trying to establish a permanent transhipment terminal near Vidyaevo, also on the Kola peninsula.

Tschudi was reported to have received an updated operating permit on 30th September, 2019. At that time the number of permitted transfers was increased from 165 to 207 per calendar year, out of which, 140 LNG transfers are allowed.

A Notice to Mariners issued in February this year warned of shipping activity around Honningsvåg stating that operations could be expected between 22nd March and 15th May. ■

Höegh gets funding commitment

Höegh LNG Holdings has received a commitment letter from five of the company's banks for an amendment and extension plus a $45 mill increase of the debt facility for the FSRU 'Independence'.

This covers the FSRU's debt facility's commercial tranche of $61 mill maturing in May, 2020, which will now be increased by $45 mill to $106 mill with maturity in December, 2024.

The debt facility also consists two tranches guaranteed by export credit agencies, which remain unchanged, save for a reduction of their respective funding margins. Consequently, the blended amortisation profile is lengthened and the funding cost has been significantly reduced, to an estimated blended average interest rate of about 4% for the full facility, Höegh claimed.

In addition, a Höegh LNG subsidiary has entered into an interim LNGC timecharter with an Asian-based trading house, for around seven months from mid-2020, at a rate reflecting the current term market for large size DFDE LNGCs.

Either 'Höegh Gannet' or 'Höegh Gallant' will be used. This charter and other short-term charters concluded, increase the group's contract coverage for 2020 to around 92%.

Virus update

Höegh LNG also provided an update on how the company is dealing with COVID-19 challenges.

The company has implemented a number of mitigating measures to secure the health and safety of its employees and ensuring safe and continued operations for its customers.

There are no known cases of corona virus infection for any employees in HLNG's offices or on any of its assets, the company claimed.

All Höegh FSRUs and LNGCs are fully operational and manned according to relevant safety requirements. In addition, all charterparties remain in force and the revenues from the contracts are maintained as per their contractual terms.

President and CEO, Sveinung Støhle, said: "Höegh LNG is managing this unprecedented crisis in an efficient manner first and foremost thanks to the tremendous efforts by all the people working in our organisation, but also because the company has a robust crisis management system in place supported by modern IT solutions.

"All our assets are operating according to contracts and we are in close dialogue with all our customers to make sure any issues are addressed in a co-ordinated manner.

"Despite the Covid-19 crisis, the LNG markets are functioning more or less as normal and commercial activities are making progress. Even with major populations being quarantined, countries around the world need energy and electricity to function, where low priced LNG and flexible LNG is an attractive solution," he concluded. ■

EXMAR receives 'Tango' cash

In its 2019 annual report, gas carrier owner EXMAR said its liquidity position had improved.

This was due to the Bank of China finally releasing $40 mill from the debt service reserve account to finance the 'Tango' FLNG, on 26th February.

EXMAR reported steady operational results from the FLNG since September, 2019, under the 10-year charter to Argentinian energy concern YPF SA.

The $40 mill was partially allocated to the repayment of the bridge loans and to cover EXMAR's capital commitments. The company has obtained and drawn under a pre-delivery financing of $20 mill with Maritime Asset Partners in December, 2019, which partially covers the instalments paid during the construction of two VLGCs.

EXMAR said that, taking into account its available cash and cash equivalents, its undrawn committed facilities available on the date of establishing the consolidated financial statements, its project cash flows based on approved budgets and liquidity, it has sufficient funds to meet its current obligations and to cover its working capital needs for at least 12 months.

Several operational measures onshore and on board ships have been taken by EXMAR to ensure the safety and wellbeing of its personnel and the continuity of business operations in light of COVID-19.

EXMAR claimed its has met all its financial covenants as at 31st December, 2019 and the next test date with respect to the financial position is the end of June, 2020, due in September, 2020.

The company said it believed that based on forecasts for the remaining of the year, and more in particular thanks to the revenue to be generated by the FLNG and the FSRU barge, all covenants will be met later this year. ■

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GasLog opts for Nippon Paints hull coating

GasLog Ltd is to apply Nippon Paint Marine's A-LF Sea hull coating in its current drydocking programme.

Claimed to be an ultra-low friction coating system, A-LF Sea employs a patented copper silyl acrylate copolymer technology with a high volume of solids to provide excellent antifouling performance over long periods.

The coating is stable in self-polishing and is effective in whatever marine environment the ship sails. It has now been successfully applied to almost 3,000 ships worldwide, the company said.

"At GasLog we are constantly seeking ways to reduce our environmental impact through innovative products and processes that span our entire operating cycle," said Kostas Karathanos, GasLog's Innovation and Technology manager. "Antifouling paints are no exception and so we had our first trial with A-LF Sea back in 2013 when it was applied on one of our TFDE ships. The excellent results of this trial gave us the confidence to expand the application of A-LF Sea to our vessels being drydocked in 2020/2021.

"Our experience so far indicates that A-LF-SEA is outperforming the competition as the rate of power increase is notably less," he added.

"Nippon Paint is proud to have been chosen as a supplier to GasLog Ltd, one of the world's leading gas carrier operators," said Nippon Paint Marine Europe General Manager, Theodosis Dimopoulos. "This demonstrates Nippon's capabilities in coatings' technology, technical service and logistics."

According to Nippon Paint, A-LF Sea is simple to apply, using standard application techniques, can be applied over existing coatings or as a newbuilding application. With a fresh layer of A-LF Sea applied at each drydocking, the fouling resistance and water trapping function can be maintained throughout the vessel's service life.

"Reduction of CO2 emissions is a global concern," Dimopoulos added. "We, as a paint manufacturer, can contribute to a shipowners' carbon footprint reduction programmes by reducing drag on the underwater hull surfaces.

"Following the sulfur cap regulations that kicked in on 1st January, 2020, ships that are not fitted with exhaust gas cleaning systems have been forced to use very low sulfur fuels, which carry a high cost premium. A-LF Sea can help those owners, by cutting the amount of high-cost bunker fuels required," he said.

A-LF Sea was developed under a project undertaken by Nippon Paint with the Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in conjunction with class society ClassNK and Mitsui OSK Lines (MOL). It complies with IMO-AFS2001 as a tin-free anti-fouling system and is certified by the major class societies. ■

GasLog has chosen Nippon Paints for its hull coatings

Brunsbüttel creating strong interest

"We are already experiencing a strong interest in a terminal for liquefied natural gas in Brunsbüttel," claimed Katja Freitag, spokesperson for German LNG Terminal GmbH, in an interview with the business journal 'Nord Wirtschaft' and posted on German LNG's website, "so we could already sign a number of Heads of Agreement."

German LNG Terminal is a joint venture between Dutch companies Gasunie LNG Holding, Vopak LNG Holding and Oiltanking GmbH, a subsidiary of Marquard & Bahls based in Hamburg.

The Brunsbüttel terminal will provide a wide range of services, including the loading and unloading of LNGCs, the temporary storage of LNG, regasification, feeding natural gas into the German network, and distribution of LNG via tank trucks, ships or rail cars.

"Brunsbüttel is in the ideal geographical location," Freitag added. "The port is easily accessible for the Q-Max carriers that bring the LNG. From there it is only about three hours by ship to the port of Hamburg where the LNG is required as fuel for shipping. The port is based at the entrance to the Kiel Canal and enables access to the Baltic and Scandinavian markets."

She also pointed out that the three shareholders have a wealth of experience in the sector. Two of the companies have been successfully operating a terminal in Rotterdam for many years.

Europe has 36 LNG terminals. The average occupancy rate of existing terminals continued to increase last year. Germany has no LNG terminal of its own and therefore has to resort to Rotterdam or Zeebrugge, despite the fact that Germany is the largest natural gas market in Europe, she said. ■

NEWS NUDGE

Jordan Cove gets FERC nod

On 19th March, the US Federal Energy Regulatory Commission (FERC) finally approved the Jordan Cove energy project.

This is the 12th LNG export project that FERC has approved since Chairman Neil Chatterjee took office, he said in a statement.

To be located at Coos Bay, Oregon, Jordan Cove is also the first export terminal the Commission has certificated on the US West Coast in the lower 48.

This facility will be capable of liquefying up to 1.04 bill cu ft of natural gas per day for export to global markets. The Pembina operated project includes a pipeline, plus marine loading facilities. ■

LNG rate assessments

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

Region	This week	Change*
East of Suez	$41,000	+$2,000
West of Suez	$50,000	+$3,000
12 mos T/C	$49,000	-$2,000

*Since last report (19/03/20) Source: Fearnleys (01/04/20)

WORLD LNG CARRIER ORDERBOOK

Name	Containment system	Yard	Propulsion	Capacity	Delivery date	Primary Owner
Amberjack Lng	GTT Mark III Flex	Hyundai	XDF	174000	01/04/2020	Cardiff Marine
Gaslog Wales	GTT Mark III Flex	Samsung	XDF	180000	01/04/2020	GasLog
Qogir	GTT Mark III Flex	Samsung	XDF	174000	01/04/2020	Cardiff Marine
Elisa Larus	GTT Mark III Flex	Hyundai	XDF	174000	01/04/2020	NYK
Bonito Lng	GTT Mark III Flex	Hyundai	XDF	174000	01/04/2020	Cardiff Marine
Maran Gas Psara	GT NO 96	DSME	MEGI	173400	01/04/2020	Maran Gas Maritime
Gaslog Windsor	GTT Mark III Flex	Samsung	XDF	180000	15/04/2020	GasLog
Global Energy	GT NO 96	DSME	MEGI	173400	01/05/2020	Nakilat
Traiano Knutsen	GTT Mark III Flex	Hyundai	MEGI	180000	01/06/2020	Knutsen
Flex Aurora	GTT Mark III Flex	Hyundai	XDF	174000	01/06/2020	Flex LNG
Bw Pavilion Aramhera	GT NO 96	DSME	MEGI	173400	01/06/2020	BWGas
Flex Amber	GTT Mark III Flex	Hyundai	XDF	174000	01/07/2020	Flex LNG
Lng Phecda	GT NO 96	Hudong-Zhonghua	MEGI	174000	01/07/2020	MOL
SHI Gaslog #2	GTT Mark III Flex	Samsung	XDF	180000	15/07/2020	GasLog
SHI #1	GTT Mark III Flex	Samsung	XDF	174000	15/07/2020	Cardiff Marine
Scf Barents	GTT Mark III Flex	Hyundai	XDF	174000	01/08/2020	Sovcomflot
Energy Pacific	GT NO 96	DSME	MEGI	173400	01/08/2020	Alpha Gas
Flex Artemis	GT NO 96	DSME	MEGI	173400	01/08/2020	Flex LNG
Flex Resolute	GT NO 96	DSME	MEGI	173400	01/08/2020	Flex LNG
Vivit Americas Lng	GTT Mark III Flex	Hyundai	XDF	174000	01/09/2020	Cardiff Marine
Diamond Gas Metropolis	GTT Mark III Flex	Hyundai	XDF	174000	01/09/2020	NYK
Flex Freedom	GT NO 96	DSME	MEGI	173400	01/09/2020	Flex LNG
Cool Discoverer	GTT Mark III Flex	Hyundai	XDF	174000	01/09/2020	Thenamaris
Samsung 2297	GTT Mark III Flex	Samsung	XDF	180000	01/10/2020	Celcius Shipping
Samsung 2300	GTT Mark III Flex	Samsung	XDF	174000	01/10/2020	GasLog
Aristos I	GTT Mark III Flex	Hyundai	XDF	174000	01/10/2020	Capital Gas
Yiannis	GT NO 96	DSME	MEGI	173400	01/10/2020	Maran Gas Maritime
Samsung 2276	GTT Mark III Flex	Samsung	XDF	174000	01/10/2020	Cardiff Marine
LNG Megnez	GT NO 96	Hudong-Zhonghua	MEGI	174000	01/10/2020	MOL
Aristidis I	GTT Mark III Flex	Hyundai	XDF	174000	01/11/2020	Capital Gas
Global Star	GT NO 96	DSME	MEGI	173400	01/11/2020	Nakilat
Flex Volunteer	GTT Mark III Flex	Hyundai	XDF	174000	01/11/2020	Flex LNG
Daewoo 2498	GT NO 96	DSME	MEGI	180000	01/12/2020	MOL
Hyundai Samho 8008	GTT Mark III Flex	Hyundai	XDF	174000	01/12/2020	Sovcomflot
Samsung 2301	GTT Mark III Flex	Samsung	XDF	174000	01/12/2020	GasLog
Energy Endeavour	GT NO 96	DSME	MEGI	173400	01/12/2020	Alpha Gas
Daewoo 2481	GT NO 96	DSME	MEGI	173400	01/12/2020	Minerva Marine
Celcius #2	GTT Mark III Flex	Samsung	XDF	180000	15/12/2020	Celcius Shipping
Lngships Athena	GTT Mark III Flex	Hyundai	XDF	174000	01/01/2021	Cardiff Marine
Cool Racer	GTT Mark III Flex	Hyundai	XDF	174000	01/01/2021	Thenamaris
Samsung 2304	GTT Mark III Flex	Samsung	XDF	174000	01/01/2021	Minerva Marine
Samsung 2313	GTT Mark III Flex	Samsung	XDF	180000	01/02/2021	Celcius Shipping

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 = 1st April 2020

Fearnley LNG

Name	Containment system	Yard	Propulsion	Capacity	Delivery date	Primary Owner
Bw Lesmes	GT NO 96	DSME	MEGI	174000	01/02/2021	BWGas
Daewoo 2499	GT NO 96	DSME	MEGI	180000	01/02/2021	MOL
Cobia Lng	GTT Mark III Flex	Hyundai	XDF	174000	15/02/2021	Cardiff Marine
DSME Minerva #2	GT NO 96	DSME	MEGI	173400	15/02/2021	Minerva Marine
Marvel Swan	GTT Mark III Flex	Samsung	XDF	173400	01/03/2021	Navigare
Bw Helios	GT NO 96	DSME	MEGI	174000	01/03/2021	BWGas
Hyundai Samho 8039	GTT Mark III Flex	Hyundai	XDF	174000	01/03/2021	Latsco Shipping
Hyundai Ulsan 3039	GTT Mark III Flex	Hyundai	XDF	174000	01/03/2021	Cardiff Marine
Flex Vigilant	GTT Mark III Flex	Hyundai	XDF	174000	01/03/2021	Flex LNG
SHI #18	GTT Mark III Flex	Samsung	XDF	174000	15/03/2021	Cardiff Marine
Aristarchos	GTT Mark III Flex	Hyundai	XDF	174000	15/03/2021	Capital Gas
Samsung 2302	GTT Mark III Flex	Samsung	XDF	174000	01/04/2021	NYK
Celcius #4	GTT Mark III Flex	Samsung	XDF	180000	15/04/2021	Celcius Shipping
DSME 2485	GT NO 96	DSME	MEGI	173400	15/04/2021	Alpha Gas
Hyundai Samho S971	GTT Mark III Flex	Hyundai	XDF	174000	01/05/2021	NYK
Diamond Gas Crystal	GTT Mark III Flex	Hyundai	XDF	174000	01/05/2021	NYK
Daewoo 2501	GTT Mark III Flex	DSME	MEGI	174000	01/06/2021	Maran Gas Maritime
Hudong-zhonghua H1827a	GT NO 96	Hudong-Zhonghua	XDF	174000	01/06/2021	CSSC
Daewoo 2495	GT NO 96	DSME	XDF	174000	01/06/2021	Maran Gas Maritime
Daewoo 2500	GT NO 96	DSME	MEGI	174000	01/06/2021	Alpha Gas
SHI Gaslog CE #1	GTT Mark III Flex	Samsung	XDF	180000	15/06/2021	GasLog
Attalos	GTT Mark III Flex	Hyundai	XDF	174000	15/06/2021	Capital Gas
Adamastos	GTT Mark III Flex	Hyundai	XDF	174000	01/07/2021	Capital Gas
DSME MOL #3	GT NO 96	DSME	MEGI	173400	15/07/2021	MOL
Asterix 1	GTT Mark III Flex	Hyundai	XDF	174000	01/08/2021	Capital Gas
SHI Gaslog CE #2	GTT Mark III Flex	Samsung	XDF	180000	15/08/2021	GasLog
Hyundai Ulsan 2939	GTT Mark III Flex	Hyundai	XDF	180000	01/09/2021	SK Shipping
Daewoo 2504	GT NO 96	DSME	XDF	174000	01/09/2021	Maran Gas Maritime
Daewoo 2502	GTT Mark III Flex	DSME	XDF	173400	01/09/2021	Nakilat
Samsung 2305	GTT Mark III Flex	Samsung	XDF	174000	01/09/2021	Minerva Marine
Diamond Gas Victoria	GTT Mark III Flex	Hyundai	XDF	174000	01/09/2021	NYK
Hyundai Samho 8040	GTT Mark III Flex	Hyundai	XDF	174000	01/09/2021	Latsco Shipping
Samsung 2355	GTT Mark III Flex	Samsung	XDF	174000	01/10/2021	NYK
Daewoo 2507	GT NO 96	DSME	XDF	174000	01/10/2021	Maran Gas Maritime
Hyundai Ulsan 3111	GTT Mark III Flex	Hyundai	XDF	174000	01/10/2021	Capital Gas
Samsung 2306	GTT Mark III Flex	Samsung	XDF	174000	01/10/2021	NYK
Hyundai Ulsan 3157	GTT Mark III Flex	Hyundai	XDF	174000	01/11/2021	Tsakos Energy Navigation
Samsung 2315		Samsung	XDF	174000	01/12/2021	
Hyundai Samho 8025	GTT Mark III Flex	Hyundai	XDF	174000	01/12/2021	Hanjin Shipping
Daewoo 2503	GTT Mark III Flex	DSME	XDF	173400	01/12/2021	Nakilat
Samsung 2307	GTT Mark III Flex	Samsung	XDF	174000	01/12/2021	NYK
Daewoo 2508	GT NO 96	DSME	XDF	174000	01/01/2022	Maran Gas Maritime
Hyundai Samho 8032	GTT Mark III Flex	Hyundai	XDF	174000	01/01/2022	NYK

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 = 1st April 2020

Name	Containment system	Yard	Propulsion	Capacity	Delivery date	Primary Owner
Samsung 2336	GTT Mark III Flex	Samsung	XDF	174000	01/01/2022	JP Morgan
Hyundai Ulsan 3137	GTT Mark III Flex	Hyundai	XDF	200000	01/01/2022	Dynagas
Hudong-zhonghua H1828a	GT NO 96	Hudong-Zhonghua	XDF	174000	01/01/2022	CSSC
Samsung 2332	GTT Mark III Flex	Samsung	XDF	174000	01/01/2022	Minerva Marine
Hyundai Samho 8026	GTT Mark III Flex	Hyundai	XDF	174000	01/02/2022	Hanjin Shipping
Hyundai Samho 8033		Hyundai	XDF	173000	01/03/2022	NYK
Samsung 2316		Samsung	XDF	174000	01/03/2022	
Samsung 2319	GTT Mark III Flex	Samsung	XDF	174000	01/03/2022	Nisshin Shipping
Hudong-zhonghua #1	GT NO 96	Hudong-Zhonghua	XDF	80000	01/04/2022	K-Line
Hyundai Ulsan 3138	GTT Mark III Flex	Hyundai	XDF	200000	01/04/2022	Dynagas
DSME May19	GT NO 96	DSME	MEGI	174000	15/05/2022	Maran Gas Maritime
Hudong-zhonghua #2	GT NO 96	Hudong-Zhonghua	XDF	80000	01/06/2022	K-Line
Samsung 2317		Samsung	XDF	174000	01/06/2022	
Hyundai Ulsan 3145	GTT Mark III Flex	Hyundai	XDF	180000	01/07/2022	SK Shipping
Samsung 2337	GTT Mark III Flex	Samsung	XDF	174000	01/07/2022	JP Morgan
Hyundai Samho 8091	GTT Mark III Flex	Hyundai	XDF	174000	01/08/2022	Knutsen
Hyundai Ulsan 3185	GTT Mark III Flex	Hyundai	XDF	174000	01/08/2022	Korea Line
Daewoo 2509	GT NO 96	DSME	MEGI	174000	01/08/2022	BWGas
Samsung 2318		Samsung	XDF	174000	01/09/2022	
Daewoo 2510	GT NO 96	DSME	MEGI	174000	01/09/2022	BWGas
Hyundai Ulsan 3187	GTT Mark III Flex	Hyundai	XDF	174000	01/10/2022	JP Morgan
Hyundai Samho 8092	GTT Mark III Flex	Hyundai	XDF	174000	01/10/2022	Knutsen
Hyundai Ulsan 3186	GTT Mark III Flex	Hyundai	XDF	174000	01/10/2022	Korea Line
Hyundai Ulsan 3188	GTT Mark III Flex	Hyundai	XDF	174000	01/11/2022	JP Morgan
Hyundai Samho 8093	GTT Mark III Flex	Hyundai	XDF	174000	01/11/2022	Knutsen
Hyundai Samho 8094	GTT Mark III Flex	Hyundai	XDF	174000	01/12/2022	Knutsen
Samsung 2364	GTT Mark III Flex	Samsung	XDF	174000	01/01/2023	MISC
Samsung 2365	GTT Mark III Flex	Samsung	XDF	174000	01/02/2023	MISC

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 = 1st April 2020

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	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Coral Furcata	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Coral Fungia	10,000	LNG/LPG/Ethylene	Worldwide	No	Anthony Veder
2011	Vision Spirit	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Unikum Spirit	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos 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	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2017	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
2017	ENGIE Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	Cardissa	6,500	LNG	Northwest Europe	Yes	Shell

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 = 10th February 2020

Small-LNG.com

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	JS Ineos Invention	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	JS Ineos Intuition	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	Coral Encanto	30,000	LNG	China	Yes	Anthony Veder
2018	HUA XIANG 8	13,720	LNG	China	Yes	Zhejiang Huaxiang
2018	LNG London	3,000	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2018	Kairos	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	Qi Yuan	28,000	LNG	China	Yes	Dalian Inteh Group
2018	Bunker Breeze	0	LNG	Barcelona	Yes	Suardiaz Energy Shipping
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2019	Gas Agility	18,600	LNG	NWE	Yes	MOL
2019	Flexfueller 001	1,480	LNG	Amsterdam	Yes	Titan LNG
2020	Q-LNG 4000	4,000	LNG	US Coast	Yes	Q-LNG Transport/Harvey Gulf
2020	Stolt TBN (option) **	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	FuelLNG TBN	7,500	LNG	Singapore	Yes	FuelLNG
2020	CLS TBN	3,500	LNG	Japan	Yes	CLS
2020	Elenger TBN	6,000	LNG	NWE	Yes	Elenger
2020	ENN TBN	8,500	LNG	China	Yes	ENN
2020	Flexfueller 002	1,480	LNG	Antwerp	Yes	Titan LNG
2021	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2021	Knutsen TBN	30,000	LNG	Mediterranean	Yes	Knutsen OAS
2021	Gazprom Neft TBN	5,800	LNG	Russia	Yes	Gazprom Neft
2021	PE TBN	12,000	LNG	Singapore	Yes	MOL
2021	JMU TBN	2,500	LNG	Japan	Yes	JMU
2022	Stolt TBN	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2022	Stolt TBN	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2022	PNE TBN	5,400	LNG	USG	Yes	PNE
2024	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2024	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2026	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas
2026	Stolt TBN (option)	20,000	LNG	Worldwide	Yes	Stolt-Nielsen Gas

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 = 10th February 2020

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