

LNG Unlimited

LNG JOURNAL PUBLICATION

19 January 2021

New Fortress CEO proves to be LNG winner with takeovers worth \$5Bln

CEO Wes Edens says purchase of Golar Partners and Hygo helps goal of having 15 to 20 terminals
LNG News Editor

New Fortress Energy Inc, the New York-based company with a growing LNG projects portfolio in Latin America and the Caribbean, has entered into two deals with a combined value of \$5 billion, one to acquire Golar LNG Partners and a second to take over Hygo Energy Transition, a Brazil-focused joint venture owned by Stonepeak Infrastructure Partners and shipping company Golar LNG Ltd.

Golar LNG Ltd and Stonepeak have entered into a definitive agreement and plan of merger to sell 100 percent of Hygo Energy to New Fortress, listed on the Nasdaq global exchange as is Golar LNG Partners.

Cash and shares

Under the terms of the merger agreement, New Fortress will acquire all of the outstanding shares of Hygo for 31.4 million shares of its own Class A common stock and \$580 million in cash.

"The transaction values Hygo at an enterprise value of \$3.1 billion and an equity value of \$2.18 billion," said a statement from New Fortress outlining the deals.

"The addition of Hygo will quickly expand our footprint in South America with three gas-to-power projects in Brazil's large and fast-growing market," said New Fortress Chairman and Chief Executive Wes Edens.

Edens is also a sports business entrepreneur. He has co-owned the English Premier League soccer team Aston Villa since July 2018. Edens is also a co-owner of the US



CEO Wes Edens cheering a victory by his English soccer team Aston Villa at Wembley stadium in London

basketball team, the Milwaukee Bucks.

He noted that New Fortress would become the leading gas-to-power company in Brazil with the Hygo deal and the earlier purchase of Golar provides world-class LNG shipping experience and assets.

Earlier on Jan 13, Golar LNG Partners, the owner of 10 LNG vessels and an affiliate of Golar LNG Ltd., said it planned to merge with New Fortress.

Under that deal, New Fortress has agreed to acquire all of the outstanding common units and general partner units of Golar Partners for \$3.55 per unit in cash for a total purchase price of \$251M in equity value.

The Partnership's fleet of vessels comprises four modern carriers, four floating storage and regasification units and two newbuilds.

Golar Partners generated third-quarter operating income of \$32.1 million compared with \$35.90M in the prior-year quarter.

Golar LNG Ltd, the operator of conventional carriers, floating import and export terminals and a power affiliate backed by its fleet of 27 ships, is not part of the deal

and will continue as normal while exiting the Hygo Energy venture, originally known as Golar Power.

In connection with the New Fortress-Golar Partners transaction, the incentive distribution rights of Golar Partners will be cancelled. The Series A preferred units of the Partnership will remain outstanding.

"The sale of Golar Partners comes after an extensive search for strategic alternatives, and is an attractive solution for GMLP that creates immediate additional value for GMLP stakeholders," said the Chairman of Golar Partners, Tor Olav Trøim.

New Fortress CEO Edens added that Tor Olav Trøim and his teams had been pioneers in the global shipping and energy industries.

"The addition of this great portfolio of assets enhances our fully integrated approach and we're excited for them to become part of NFE," said Edens.

"This is a great step towards our goal of finishing this year with 15 to 20 terminals that bring more clean and affordable energy to growing markets around the world," stated Edens.

UNLIMITED AGENDA

PROJECTS

LNG Canada in recovery mode from Covid-19 with start date back on track

2

IMPORTS

Taiwan receives first cargo under long-term deal with US Cheniere through to 2045

3

TRANSMISSION

German gas body issues deadlines for reporting projects on LNG and green gas

5

EXPORTERS

Exporter Qatargas in first ship-to-ship transfer of commercial LNG at Subic Bay

6

SHIPPING



ABS and Keppel of Singapore reveal smart bunkering aspects of newbuild

7

DERIVATIVES

CME launches four Japanese power futures contracts and two LNG derivatives

9

LNG Canada project in recovery mode from Covid-19 hold-ups with start seen in 2025

LNG News Editor

LNG Canada, the largest current global liquefaction and export joint venture under construction, is aiming to get back on schedule for a 2025 commercial start-up after work interruptions caused by the Covid-19 pandemic at the site near the town of Kitimat on the Pacific Coast of British Columbia.

Royal Dutch Shell and its four partners, Mitsubishi Corp. of Japan, Malaysian energy company Petronas, Chinese major PetroChina and Korea Gas Corp., moved ahead with construction in 2019 at the brownfield site, a former energy products terminal before being acquired by Shell in 2011.

Engineering

The Shell-led project, which proposes to export around 20 million tonnes per annum of LNG to Asian nations, is working closely with the Haisla First Nation whose traditional lands are in the Kitimat coastal region.

LNG Canada and the engineering, procurement and construction venture, comprising JGC Corp. of



Kitimat site had to implement updated health directives

Japan and Fluor Corp. of the US, said they were managing “a careful and gradual return” to construction activities following a considerable holiday workforce reduction in December 2020.

“Our approach towards this measured resumption of activities is informed by the Office of the Provincial Health Officer and other government authorities,” said LNG Canada.

“Provincial Health Officer Bonnie Henry introduced the Industrial Projects Restart Order, which applies to five major industrial projects in BC, including LNG Canada,” added the company.

“The order prescribes a staged

return to work and an incremental increase to the workforce, which each project must adopt in January 2021, noting that the current seasonal slow-down in large-scale industrial operations provides an opportunity to help break the cycle of transmission of Covid-19 associated with them,” stated LNG Canada.

The Kitimat site had to implement all of the directives prescribed in the order, including the submission of a formal restart plan.

The plan detailed how it would manage a staged increase of workers so as not to raise the risk of transmission of Covid-19, both on-site and in the surrounding com-

munities. LNG Canada was allowed to return 400 workers by the 6th of January 2021, bringing the total to 850 workers. It is then able to add another 250 workers by January 20.

The company and JGC-Fluor had reduced on-site workers from 1,800 to 590 in March 2020 when Covid-19 first appeared.

By August, worker levels had returned to normal levels, with the of previous of reaching 2,500 by the end of 2020.

The Northern Health Authority confirmed an outbreak in mid-November 2020, triggering a return to remote working.

“As work at site progresses, our focus will be on environmentally sensitive, regulatory required, and time-sensitive work scopes,” said LNG Canada.

“We remain committed to delivering first cargo by the middle of this decade,” added the company.

“Phase 1 of the screening program will involve all project workers travelling to Kitimat on charter flights from Calgary and Edmonton,” explained the company.

LNG engineering firm Technip Energies to split from parent TechnipFMC by end of first quarter

TechnipFMC, the Franco-US energy engineering business, has re-started the process of spinning off Technip Energies, one of the world’s leading LNG project engineers, and has already put several financial transactions in place to complete the operation in the next couple of months.

Technip Energies is one of the leading engineering, procurement and construction companies and its current project portfolio includes Russia’s Arctic LNG II proposed for the Gydan Peninsula in Siberia and the Mozambique LNG venture in southeast Africa.

Parent company TechnipFMC first said in August 2019 that it

had decided to spin off its European-based engineering and construction operations into a separate business, leaving the Houston-based half of the firm as a technology-focused equipment supplier to the oil and gas and subsea sectors.

The strategy was to reverse the 2017 merger of Technip of France and FMC Technologies of the US, a transaction valued at the time at \$20Bln as it created TechnipFMC as a fully-integrated subsea and onshore provider.

TechnipFMC has now said that the separation would occur by means of a spin-off of 50.1 percent of the outstanding shares of Tech-

nip Energies common stock “pro rata” to TechnipFMC shareholders.

French export credit agency Bpifrance intends to invest \$200 million in Technip Energies by acquiring shares from TechnipFMC to become a long-term reference shareholder in the spin-off.

TechnipFMC explained that Technip Energies would then be listed on the Euronext Paris stock exchange with American depositary receipts (ADRs).

“Separation is expected to be completed in the first quarter of 2021,” stated TechnipFMC.

The parent company added that it intended to conduct “an orderly sale of its stake”

in Technip Energies. “We are very excited to announce the resumption of activities related to the separation and the creation of two industry-leading diversified pure-play companies poised to capitalize on the energy transition,” said Doug Pferdehirt, Chairman and Chief Executive of TechnipFMC.

“The increased clarity we now have in the market outlook coupled with our demonstrated ability to successfully execute projects in this most challenging period give us confidence to move forward with the separation,” added the CEO.

Japanese spot LNG prices jump by \$2.20

Japanese spot LNG prices for contracted and delivered cargoes increased in December jumped by \$2.20 per million British thermal amid growing demand for cargoes in North Asia.

The Asian spot market continued its recovery with December 2020 contracted shipments to Japan priced at an average \$8.60 per MMBtu versus \$6.40 per MMBtu in December 2019.

December 2020 delivered spot cargo prices also rose to \$6.80 per MMBtu compared with \$6.70 per MMBtu in December 2019 and were also higher than the November 2020 delivered price of \$6.50 per MMBtu, according to the data from the Japanese Ministry of Economy, Trade and Industry (METI).

The monthly spot cargo numbers come from the Ministry's commerce division and are only issued if a minimum number of two trades are recorded.

Most Japanese LNG cargoes are delivered on a long-term contract basis linked to crude oil and this price is increasing rapidly in the past week and is currently at around \$8.50 per MMBtu.

"Delivery conditions of prices (prior to averaging) are all converted into the equivalent delivery ex-ship (DES) basis," said the METI division.

For overall Japanese imports, Japan was holding its ground against surging Chinese monthly LNG imports, which amounted to a record amount of just over 9 million tonnes in December.

According to shipping data, Chinese imports were 9.05MT after December 31 volumes are counted and Japan also imported a record monthly amount, given as 8.1MT.

Taiwan receives first cargo under long-term deal with US Cheniere

LNG News Editor

Taiwan has just received its first shipment from an expected annual total of 30 cargoes from US exporter Cheniere Energy under a long-term deal signed with the Houston, Texas-based firm in 2018 and starting in 2021.

The accord with Taiwanese energy company CPC Corp. runs for 25 years through 2045.

Arrival

CPC said the first shipment arrived on the 10th of January 2021 from the Cheniere-owned Corpus Christi export plant in Texas.

It was delivered by the 147,895 cubic metres capacity carrier "Fuji LNG" and was unloaded at Taiwan's Tai-Chung import facility.

Cheniere is supplying 2 million tonnes per annum of LNG to Taiwan with the purchase price linked to the US benchmark Henry Hub.

"Taiwan and US energy companies have launched a long-term cooperation, which has also cre-



'Fuji LNG' lifted the cargo from the Corpus Christi plant

ated a new source for Taiwan's expansion of LNG imports," said CPC in a statement.

CPC noted that the Corpus Christi plant and Cheniere's Sabine Pass facility in Louisiana make it the largest LNG exporter in the US.

Taiwan is still Asia's fifth-largest LNG importer with volumes increasing to almost 17 million tonnes per annum.

Taiwan began LNG imports in 1990 and its first facility was the Yung-An regasification plant,

which now has six storage tanks.

The Taiwanese led China as an LNG importer then the mainland rapidly increased shipments and gained the lead in 2017.

Although Taiwan had been overtaken, it has also had to increase its volumes for its own energy needs and economic growth.

The Tai-Chung terminal completed the second phase of its expansion programme in 2019 as imports start to rise again.

Ghana to be LNG importer after March 2021 with floating terminal

The Ghana LNG import project in West Africa is expecting to complete the venture by around March 2021 with work now focused on the onshore portion after the floating regasification unit arrived off the Ghanaian coast from a Chinese shipyard.

Jiangnan Shipbuilding, a subsidiary of China State Shipbuilding Corp., built the FRU and the vessel left the Chinese yard at the end of November 2020 for the voyage to African waters for deployment.

A venture called Access LNG comprising Helios Investment Partners, a leading Africa focused private investment firm, and Gasfin Development, an LNG infrastructure company, is developing the facility.

Helios established Tema LNG Terminal Co. (TLTC) to develop, construct and operate sub-Saharan Africa's first LNG import terminal.

The companies involved now say that the Tema LNG terminal venture is expected to achieve mechanical completion by around March 2021 and thereafter plans would be made for the first cargo delivery.

Gasfin has led the design of the project and the fabrication of the floating infrastructure with capacity to deliver 2 million tonnes per annum of LNG.

The Tema project is designed around the FRU working in conjunction with an upgraded 127,500 cubic metres capacity LNG carrier, which will act as floating storage,

to deliver 250 million standard cubic feet per day of gas.

The Tema project will also have bunkering, reloading and break-bulk capabilities.

The terminal will receive some LNG from Royal Dutch Shell under an agreement with Ghana National Petroleum Corp.

The TLTC project company said the other current priority was the mechanical completion of the onshore works, including an 8-kilometres pipeline and a gas conditioning station.

"We forecast mechanical completion for March and then we've got a commissioning period with more performance testing," said the statement.



BRIGHTER FUTURE

COOLER BY DESIGN™

Did you know Chart's LNG power generation solutions provide natural gas to hundreds of thousands of homes? This is one way Chart facilitates LNG as a safe, clean-burning fuel for energy, transportation and industry.

Learn more at www.ChartLNG.com
LNG@ChartIndustries.com



NEWS NUDGES

LNG hub changes

Petronas, the Malaysian energy company, has seen one of its subsidiaries, Petronas Carigali Sdn Bhd (PCSB), take over the operatorship of the E11 natural gas hub, located 130 kilometres offshore Bintulu in Sarawak, the Malaysian state on the island of Borneo. Petronas noted that the E11 hub, which has been producing since 1982 under the Malaysia LNG production sharing contract, had been operated by Royal Dutch Shell unit Sarawak Shell Bhd (SSB) for the past 38 years.

Korean LNG fuel move

South Korea, the largest builder of LNG carriers to transport the fuel worldwide, is increasing its own domestic fleet of LNG-powered ships and is offering grants of up to 20 percent for ship owners to convert. The Ministry of Oceans and Fisheries said that 39 small ships fuelled by LNG are expected to be completed at local shipyards in 2021, including 23 vessels to be used by Korean government agencies.

Charter rates increase

Shipping charter rates for LNG carriers in the spot market increased as Northern Hemisphere winter market demand surged. Rates were quoted at an average of between \$168,000 per day and \$172,000 per day West of Suez. Spot rates of \$158,000 to 162,000 were heard for the East of Suez charter market for vessels of between 155,000-165,000 cubic metres capacity, according to various brokers. One-year time charters also increased for the most modern vessels and ships were available for around \$49,000 per day.

German Gas Transmission System body gives deadlines for listing of projects from LNG to green gases

LNG News Editor

The German Association of Gas Transmission System Operators (FNB Gas), which groups a dozen companies overseeing 40,000 kilometres of natural gas pipeline and other infrastructure, has launched its annual survey of development plans for gas, storage and LNG and for a second year including hydrogen and green gases.

German gas transmission system operators (TSOs) under the association, have launched a survey on the production of and demand for hydrogen and green gases, in the form of synthetic methane and on capacity reservations or expansions to be included in Germany's Gas Network Development Plan.

Included

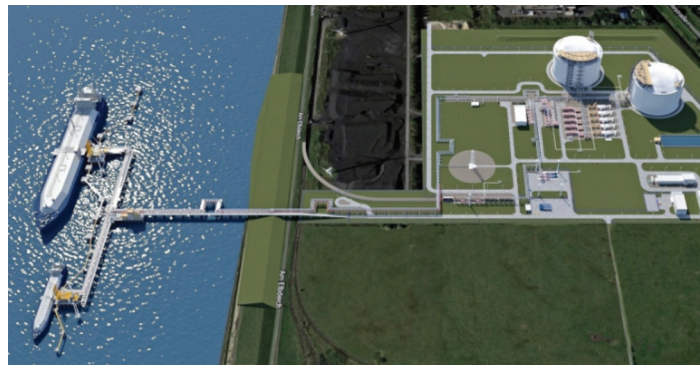
In the previous Gas NDP for 2020 hydrogen and green gases were included for the first time.

Market participants are also asked to report capacity reservations and capacity expansion claims pursuant for storage, LNG and production facilities as well as gas-fired power plants to the responsible gas TSOs with a deadline of 31st March 2021.

The deadline is two weeks later for reporting hydrogen and green gas projects.

For this purpose, Berlin-based FNB Gas has published criteria on its Web site for selecting projects to be included.

FNB Gas was founded in 2012 by the German TSOs, the network companies operating the major supra-regional and cross-border



One LNG import project is moving forward at an onshore location at Brunsbüttel on the Elbe near port of Hamburg

gas transportation pipelines.

German natural gas supplies mostly come from Russia's Gazprom and offshore fields in Norway, though one LNG import project is moving forward at an onshore location at Brunsbüttel on the Elbe River near the port of Hamburg.

The TSO association's role is also to act as a central point of contact for policymakers, the media and the general public on behalf of its members.

In the upcoming Gas NDP 2022 there will be another survey and the TSOs will ask companies, project managers, distribution system operators and adjacent projects in neighbouring countries with an impact on Germany to report their hydrogen and green gas projects by the 16th of April, 2021.

"This market survey will provide us with an overview of ongoing hydrogen and green gas projects in Germany and adjacent projects in neighbouring countries that have an impact on Germany," said Inga Posch, Managing Director of FNB Gas, whose name

in German is Vereinigung der FernleitungsnetzbetreiberGas.

"The Gas NDP 2022 will thus be the German transparency platform for the hydrogen market ramp-up," explained Posch.

The TSOs have published a form on the FNB Gas website for reporting projects related to the production and demand of hydrogen and green gases.

"The completed form must be sent to a gas TSO operating in the area where the project will be implemented," the FNB explained.

In addition, the TSOs have published criteria as well as further information for green gas projects.

The members of the association are: bayernets GmbH, Ferngas Netzgesellschaft mbH, Fluxys TENP GmbH, GASCADE Gastransport GmbH, Gastransport Nord GmbH, Gasunie Deutschland Transport Services GmbH, GRTgaz Deutschland GmbH, Nowega GmbH, ONTRAS Gastransport GmbH, Open Grid Europe GmbH, terranets bw GmbH and Thyssen-gas GmbH.

“ This market survey will provide us with an overview of ongoing hydrogen and green gas projects in Germany and adjacent projects in neighbouring countries that have an impact on Germany ”

- Inga Posch, Managing Director of FNB Gas

Exporter Qatargas in first ship-to-ship transfer of commercial LNG at Subic Bay in the Philippines

LNG News Editor

Qatargas has completed another LNG shipping feat with the first ever commercial ship-to-ship transfer of a cargo involving a Q-Flex LNG vessel at Subic Bay in Philippines.

A full cargo of 212,000 cubic metres aboard the Qatargas-chartered Q-Flex vessel "Mesaimeer" was loaded at Ras Laffan Port on the 18th December 2020 and delivered as two separate parcel discharges.

Two parcels

One parcel was delivered as the ship-to-ship transfer in Subic Bay on the 6th of January 2021 and the second parcel as a delivery at the Jiangsu LNG terminal in China.

Qatargas said that both sales were made to PetroChina as the customer.

"We are delighted to announce this shipping breakthrough as it is for the first time that one of the largest LNG vessels, a Q-Flex, is involved in a commercial STS operation," said Khalid bin Khalifa Al Thani, the Chief Executive of Qatargas.



The 'Mesaimeer' in ship-to-ship transfer of part of a cargo

"This achievement will enable us to transport considerable volumes as efficiently as possible into key markets," added Al-Thani.

"Moreover, this will be an attractive option for our potential customers with limited shipping capacity and for those who are looking for smaller or irregular sized cargo parcels," he explained.

Qatargas intends to continue to optimise its shipping capabilities by using the most efficient LNG vessels to shift volumes into key high-value markets.

"I would like to thank PetroChina, who are one of our

long-term partners in the LNG industry, for their support and cooperation," stated the Qatargas CEO.

The vessel "Mesaimeer" is on a long-term charter to Qatargas and is operated by Nakilat Shipping (Qatar) Limited.

Another landmark shipping feat to demonstrate the company's customer-focused service was carried out in June 2019 by the 266,000 cubic metres capacity Q-Max carrier "Mekaines".

It loaded a cargo at Ras Laffan in Qatar and delivered two cargo "parcels", one to the Barcelona terminal in northeast Spain and a

second to the Cartagena regasification facility in southeast Spain.

The Q-Max vessels are the largest class of LNG vessels in the world, allowing the Qataris to deliver two full conventional-sized cargoes on one vessel.

In the same year, the 210,100 cubic metres capacity Q-Flex carrier "Al Safliyah" became the largest LNG carrier to transit the Panama Canal at the time when it sailed from the Pacific to the Atlantic side and then proceeded to the US export plant at Sabine Pass to break new ground in trading activities by lifting another cargo.

The "Al Safliyah" had left Ras Laffan in the Gulf with a cargo on April 5, 2019, and then unloaded the shipment at the Korea Gas Corp.-owned import terminal at Tong-Yeong in South Korea.

It then headed across the Pacific to complete the 80-kilometres Panama Canal passage to lift another cargo.

The successful transit of "Al Safliyah" through the Canal created future triangulation Pacific-Atlantic opportunities for the Q-Flex fleet.

LNG Journal Subscription Package

LNG Journal is a ten-in-one subscription product with end-to-end insight into liquefied natural gas. The LNG Journal platform includes:

LNG JOURNAL

LNG UNLIMITED

GAS TO POWER JOURNAL

LNG MARKET TRACKER

LNG SHIPPING NEWS

LNG MONTHLY MARKETS

LNG CHINA

LNG NORTH AMERICA

LNG FUELLING

DAILY UPDATES and Newsletters

Monthly Online + optional print magazine

Online every Tuesday + PDF

Online every Friday + PDF

Online every Wednesday + PDF

Online every second Thursday + PDF

Online Monthly + PDF

Online every second month + PDF

Online every second month + PDF

Online every quarter + PDF

Subscription Contacts

For new subscriptions or general subscription queries please contact:
Stephan Venter
+44 207 017 3407
venter@lngjournal.com

To renew an existing subscription or to upgrade your package, please contact:
Gabi Weck
gabi@lngjournal.com



Sign up now for an Online Subscription from only US\$1095; €835 or £755

Discount options are available for multi-users

Contact us for more information or to arrange a free trial

FortisBC gives contract for expansion to Clough

Clough, the Australian energy engineering company, was awarded the engineering, procurement, construction and commissioning (EPCC) contract for the FortisBC Energy truck-loading expansion at the Tilbury LNG facility at Delta in the Pacific Coast Canadian province of British Columbia.

Clough said it had been part of the project from the front-end engineering and design phase and would now take it to commissioning and start-up.

"We are extremely proud to be part of this project and excited to be trusted as the EPCC partner for FortisBC," said Peter Bennett, Clough Chief Executive and Managing Director.

"This award is a continuation of a successful relationship that was established between FortisBC and Clough approximately three years ago and aligns with our principle of making a positive impact for those in the communities in which we work and live," he explained.

The delivery of the project will generate multiple jobs and economic opportunities for Clough's Indigenous affiliation with Musqueam Capital Corp. and local companies across BC and will be led by Clough's office in Calgary in the province of Alberta.

"Our team of engineering, project management, construction and commissioning professionals bring innovative project delivery solutions to the energy sector, backed by over 100-years of global history that reinforces our ability to deliver safe and sustainable operations while maximizing project value," said Martin Siddle, executive vice president for Clough North America.

ABS and Singapore's Keppel reveal smart bunkering side of newbuild

LNG News Editor

The American Bureau of Shipping, the US maritime classification society, and Singapore-based Keppel Offshore and Marine said they were currently completing key features of the world's first smart LNG bunkering vessel.

ABS and Keppel said the vessel, the "FuelNG Bellina", would be equipped with Keppel's proprietary AssetCare Digital Solution.

Shell Eastern

The 7,500-cubic-meter LNG bunkering vessel is owned and operated by FuelNG Pte Ltd, a joint venture between Keppel and Shell Eastern Petroleum, an Asian subsidiary of Royal Dutch Shell.

The "FuelNG Bellina" was named at a ceremony in the Asian city state in October 2020 and is scheduled to be operational by the end of 2021.

The vessel will enable the FuelNG company to be the first to provide regular ship-to-ship LNG bunkering services within the Singapore port.

ABS was selected by FuelNG Ltd to class the ship, which will



'FuelNG Bellina' will be digital operator in Singapore port

feature notations for Smart Infrastructure (Smart INF) and Crew Assistance and Augmentation (Smart CAA).

"Obtaining these notations form an integral part of the digital tools tailored by AssetCare to support FuelNG in enabling remote monitoring and real-time support of vessel operations, as well as predictive maintenance, which increases the vessel performance and efficiency," explained ABS.

ABS added that digital innovation was extended to the construction and commissioning process for this vessel.

One example is the use of Smart glasses for remote inspection, which increase yard efficiency while improving workforce

safety throughout the inspection process especially during the Covid-19 pandemic.

"Already a landmark project due to its importance to Singapore's future as a global LNG bunkering hub, the addition of smart technology to the vessel makes it a milestone in the technological development of the industry as well," said Patrick Ryan, ABS Senior Vice President of Global Engineering and Technology.

"The smart functionality builds on the work we have previously done in this area with Keppel in the development of the industry's first two newbuild drilling rigs with smart notations," added Ryan.

Avenir LNG says new bunkering vessel launched at Chinese yard

Avenir LNG, a company owned by Norwegian shipping and infrastructure companies, said its newest 7,500 cubic metres capacity LNG bunkering vessel has been launched in China and it would be delivered later in 2021.

Avenir LNG is a joint venture owned by London-based Norwegian shipping and storage company Stolt-Nielsen and its peer fleet owners and project companies, Høegh LNG and Golar LNG.

The company said the latest ship delivered was dual-purpose bunkering and supply vessel, the "Avenir Aspiration".

A Chinese shipyard in Nantong,

CIMC Sinopacific Offshore & Engineering, constructed the bunkering ship.

"We are delighted with the successful launching of our third vessel," said Peter Mackey, Chief Executive of Avenir LNG.

"Our fleet is the backbone of Avenir's asset-enabled LNG supply strategy, and we look forward to taking delivery of the 'Avenir Aspiration' later in the year," he added.

Avenir is building up a fleet of six LBVs of between 7,500 cubic metres capacity and 20,000 cubic metres capacity.

Two orders went to Keppel

Singmarine and two to the CIMC Sinopacific yard in Nantong.

The two 20,000 cubic metres capacity bunkering vessels would be constructed at CIMC Sinopacific.

Another of the LBVs, the "Avenir Advantage", was delivered in November 2020 to the Future Horizon joint venture comprising Malaysia's MISC Group and Avenir.

Additionally, Malaysian energy company Petronas has chartered the "Avenir Advantage" from Future Horizon for a period of three years.

For ALL your LNG Transport & Storage needs.

Factory built, fast delivered
1,200+ m3 LNG Tanks.



Railroad Tank Wagons

On-site or Factory Built Storage Tanks, Intermodal ISO Tank-Containers, Railroad Tank Wagons, & more..

Corban Energy Group (CEG) has been creating highly engineered products required by the natural gas supply chain, from upstream to downstream. CEG has established natural gas terminals throughout the world, provided quality LNG/CNG equipment for the American market, and built storage tanks as large as 200,000 CM in capacity, with its worldwide network of engineering & manufacturing partners.

Call or e-mail us to find out how your company can benefit from our comprehensive natural gas products and services today.

www.CorbanEnergyGroup.com

CORBAN ENERGY GROUP
Your Solution for LNG/LPG



T. 201.509.8555 info@corbanenergygroup.com
418 Falmouth Avenue, Elmwood Park, NJ 07407, USA

Trading platform CME launches four Japanese power futures contracts and two LNG derivatives

LNG News Editor

CME Group, the world's leading derivatives marketplace, has launched four new Japanese electricity futures contracts and two new LNG futures contracts will be available for trading on February 8, 2021, pending regulatory review.

The four new electricity futures contracts expand CME's already robust suite of global power futures and options and fill a gap in the Japanese electricity futures market, providing traders a robust platform for block-trade submission to CME Clearing.

Chicago offerings

CME, whose headquarters are in Chicago and which emerged from mergers of the main Chicago commodities and trading platforms, competes in the market with Atlantic, Georgia-based Intercontinental Exchange.

The two new LNG contracts provide Japanese power producers with a more efficient tool to



CME emerged from Chicago commodity exchange mergers

manage their price risk. "The Japanese wholesale electricity market is now fully liberalized with hundreds of retail firms and producers, creating an opportunity for a more robust derivatives market alongside it," said Izumi Kazuhara, CME Group Head in Japan.

"We are pleased to launch these new futures contracts that offer participants an efficient risk management tool," stated Kazuhara.

"At the same time, the launch of the two new yen-denominated

LNG contracts will be relevant for market participants who want to trade the spread between LNG and electricity futures," he explained.

The new electricity contracts include: Japanese power (Day-Ahead) Tokyo base-load futures, Japanese power (Day-Ahead) Tokyo peak-load futures, Japanese power (Day-Ahead) Kansai base-load futures, and Japanese power (Day-Ahead) Kansai peak-load futures.

They are financially-settled in Japanese yen using the arithmetic average of the 30-minute Spot

Market (Day-Ahead) prices published by the Japan Wholesale Power Exchange (JEPX) for the relevant region (Tokyo or Kansai) based on base/peak loads over the period defined by the contract.

The new LNG contracts will be denominated in Japanese yen and include the Japan-Korea Market (Platts) futures and the Japan Crude Cocktail (Detailed) futures.

"The former is a financially-settled contract based on the DES Japan-Korea daily LNG marker (JKM) by Platts, while the latter is a financially settled contract based on the average price of nine custom-cleared crude oils reported by the Japan Ministry of Finance and Customs," CME explained.

CME said the Japanese electricity and LNG futures contracts would be available on CME Globex, for submission for clearing through CME ClearPort, and would be listed with and subject to the rules and regulations of the New York Mercantile Exchange.

Intercontinental Exchange posts record trading in Dutch TTF and Japan-Korea spot derivatives

Intercontinental Exchange, the US operator of global trading platforms and clearing houses, released its fourth-quarter and full-year 2020 trading volumes showing record usage of products like the Dutch Title Transfer facility (TTF) gas pricing for continental Europe and the Japan-Korea Marker spot LNG cargo price derivative.

"Throughout 2020 our customers once again navigated a range of uncertainties and risks across global markets," said Ben Jackson, President of Intercontinental Exchange.

"By staying close to our customers and combining our world-class technology with mission critical data and seamless connectivity, we enable our customers to

capture gains in efficiency and this advances the networks we operate and the value proposition we bring to our customers," added Jackson.

Overall energy open interest contracts increase by 7 percent and daily volumes rose 3 percent in the fourth quarter year-on-year and 15 percent in 2020.

Open Interest is the total number of outstanding derivative contracts, such as options or futures that have not been settled for an asset.

Daily trading volumes in Brent Crude Oil increased by 4 percent in 2020 compared with the previous year.

North American natural gas open interest products rose by 16 percent year-on-year with the Henry Hub benchmark volumes

up 29 percent.

Henry Hub daily volumes were 16 percent higher in December 2020 compared with the same month in 2019. The HH trading also increased 3 percent in the fourth quarter and 28 percent year-on-year in 2020.

European natural gas open interest holdings increased by 12 percent and daily volumes in December were 28 percent higher and were up 33 percent for 2020 versus 2019.

"The Dutch TTF open interest increased 18 percent, including record futures open interest of 1.8 million contracts on 12/16/2020," stated the ICE.

That was the day the Dutch TTF moved over the equivalent of \$6.00 per million British thermal units for

the first time in the winter season while the UK National Balancing Point contract traded at the equivalent of \$6.55 per MMBtu.

Dutch TTF daily volumes jumped by 32 percent in December and were up 36 percent in the fourth quarter and were 52 percent higher in terms of volume for 2020.

ICE said there were also record Japan-Korea Marker open interest volumes, which rose 68 percent year-on-year.

"Record JKM daily volumes in December surged 139 percent," stated ICE.

Record fourth-quarter daily volumes of derivatives based on the Asia spot LNG price rose 46 percent and increased 59 percent in 2020 versus 2019.