LNG Unlimited

LNG JOURNAL PUBLICATION 23 November 2021

Germany may regret failure to give a 'willkommen' to LNG

TSOs are coping with Nord Stream II suspension as well as record prices and low gas storage levels

LNG News Editor

European pipeline natural gas and LNG prices are set to stay high into 2022 after Germany's energy regulator, the Bundesnetzagentur, suspended the procedure to certify the Gazprom-led Nord Stream II natural gas pipeline under the Baltic Sea from Russia to Germany.

"Following a thorough examination of the documentation, the Bundesnetzagentur concluded that it would only be possible to certify an operator of the Nord Stream II pipeline if that operator was organised in a legal form under German law," said a statement.

Outgoing Chancellor Merkel with Russian President Putin

Price backlash

The blocking of Nord Stream II has led to a renewed jump in European natural gas benchmark prices that govern the Atlantic Basin LNG market.

The Dutch Title Transfer Facility (TTF) price gained the equivalent of \$4.45 per MMBtu to increase to \$31.30 per MMBtu from \$26.75 per MMBtu the previous day.

The UK National Balancing Point rose even higher, gaining \$4.70 per MMBtu to hit the equivalent of \$32.20 per MMBtu, up from \$27.50 per MMBtu.

While the Nord Stream II project was set to proceed under Chancellor Angela Merkel, the new incoming German government coalition is less friendly to hydrocarbons and comprises the left-wing Social Democrats (SPD) and the more radical Green Party.

The German regulatory blockage centres on the fact that the Nord Stream AG operating company, which is based in Zug in Switzerland, has decided not to transform its existing legal form but instead to found a subsidiary under German law solely to govern the German part of the pipeline.

The Germans pointed out that if this subsidiary was to become the owner and operator of the German part of the pipeline some other measures were needed.

"The subsidiary must fulfil the requirements of an independent transmission operator as set out in the German Energy Industry Act," said the regulator, citing four different conditions that must be met.

The Bonn-based body declared that the certification procedure would remain suspended "until the main assets and human resources have been transferred to the subsidiary and the Bundesnetzagentur is able to check whether the documentation re-submitted by the subsidiary, as the new applicant, is complete" and correct.

"When these requirements have been fulfilled, the Bundesnetzagentur will be able to resume its examination in the remainder of the four-month period set out in law, to produce a draft decision and deliver it to the European Commission for an opinion, as provided for in the EU legislation on the internal market," added the regulator.

The German Association of Gas Transmission System Operators (FNB Gas) issued a statement to try and reassure concerned natural gas markets in the EU and customers in Germany.

The FNB, which groups a dozen companies overseeing 40,000 kilometres of natural gas pipeline flows and other infrastructure, has urged calm and believes there are adequate supplies for the winter.

The body is also a supporter of the Brunsbüttel-Hetlingen pipeline and other infrastructure to enable the success of the nation's one onshore LNG terminal making progress at Brunsbüttel on the Elbe River.

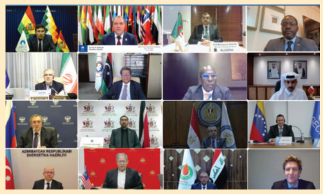
Analysts said that LNG is emerging as a must-have fallback guarantee for pipeline dependent countries like Germany, the EU's largest economy.

"We can understand why people are concerned about the unusually sharp rise in prices," said FNB Gas Chief Executive Thomas Goessmann.

"We have no influence on the prices, but at least we can tell you as transporters that the supply is secure," he stated.

Goessmann maintained that the reasons for the "extraordinary market situation" were diverse. ■

UNLIMITED AGENDA



Japanese LNG buyer JERA Co buys substantial stake in Freeport LNG export business in Texas

LNG News Editor

JERA Co. Inc., the largest Japanese liquefied natural gas buyer, has purchased a significant stake in Freeport LNG at Quintana Island in Texas and will invest in expansions as part of a plan to be able to direct cargoes to Japan even when global supplies are tight.

The Japanese company's US subsidiary JERA Americas Inc., has concluded a securities purchase agreement with infrastructure fund Global Infrastructure Partners to acquire around a 25.7 percent interest in Freeport for $2.5 billion.

Texas asset

JERA said in a statement that the acquisition was expected to be completed after the necessary approval and authorization procedures.

For this transaction, JERA appointed US investment bank Goldman Sachs as its exclusive financial advisor and Sidley Austin as its legal advisor.

The Freeport plant is located in

Freeport is located in Brazoria County, south of Houston

Brazoria County, south of Houston, and is run by Chief Executive Michael Smith, an energy entrepreneur who developed the plant with almost 15 million tonnes per annum of LNG capacity.

It has use-or-pay liquefaction tolling agreements for most of the output from the three Trains with customers including JERA as well as Japanese utility Osaka Gas and European-based companies, UK major BP and German utility Uniper.

JERA noted that, together with Freeport LNG, the Japanese company has already contributed to the stable operation of Train 1 of the Freeport liquefaction project through its participation in that subsidiary.

"As a result of the transaction, JERA will not only be involved in the entire existing Freeport LNG project (three Trains with an annual production capacity of approximately 15.45 MTPA) but will also work with Freeport to advance new LNG projects including production capacity expansion and the development of Train 4," explained the Japanese company.

"By leveraging the knowledge and expertise it has accumulated through its global LNG value chain business and power plant operations, JERA will work together with Freeport on its various businesses," added the Tokyo-based company.

JERA as the largest Japanese LNG buyer has 35 MTPA of volumes and controls a fleet of 20 LNG carriers.

Additionally, it is Japan's biggest fossil-fuel generator being owned jointly by Tokyo Electric Power Co. and Chubu Electric, the two largest power companies.

The company currently operates and provides fuel for a total of 26 power plants in Japan and imports LNG into 11 of Japan's network of 37 terminals.

"In Asia, there is demand for both decarbonization and a stable energy supply to support economic growth," said JERA.

"As evidenced by the current gas price hikes around the world, securing a stable supply of competitive LNG is becoming increasingly important," stated the company.

Freeport LNG plans first active carbon-capture system on US Gulf Coast with two partners

The Freeport LNG export plant at Quintana Island in Texas has revealed plans for a carbon-capture and sequestration project a day after Japanese LNG importer and power asset holder JERA Co Inc. acquired a significant stake in the US liquefaction and export business.

Freeport LNG said a letter of intent was signed with New York Stock Exchange-listed Talos Energy for the CCS system to be adjacent to Freeport's natural gas pretreatment facilities.

The company added that the CCS project would utilize a Freeport LNG-owned geological sequestration site located less than half a mile from point of capture with an injection term of up to 30 years. Talos will be the project manager and operator and will be joined by another project partner, Storegga Geotechnologies Ltd, the lead developer of the Acorn CCS project in the United Kingdom.

"Freeport LNG is pleased to collaborate with Talos, a leading independent energy producer, and Storegga, on this important project," said Michael Smith, the founder as well as Chairman and Chief Executive of Freeport LNG.

"As the only all-electric drive facility of its kind in the US, our liquefaction plant produces 90 percent less emissions than other gas turbine-driven facilities," explained Smith.

"Embarking on carbon capture and sequestration will only further reduce the carbon intensity of our facilities. We look forward to our work with Talos on this innovative CCS project," he stated.

Freeport LNG emphasized that the CCS project was still subject to execution of definitive agreements.

Train 4

The Gulf Coast exporter is also in the process of adding a fourth liquefaction Train to the facility that will expand capacity to more than 20 million tonnes per annum of LNG.

Freeport LNG said Talos had been chosen as the project manager and operator of the CCS project due to its expertise with conventional oil and gas geology, engineering and project delivery.

Storegga said it was bringing its expertise in carbon management chains, specifically developing CCS storage projects.

"The entrepreneurial collaboration of our teams allowed for the development of a unique, standalone carbon sequestration solution, which provides proof of concept to our broader CCS portfolio and is complementary to our larger hub-based project in Jefferson County," explained Talos President and Chief Executive Timothy S. Duncan.

"It also illustrates the creative solutions that Talos and Storegga can offer to potential CCS project partners," he added.

Japanese cargoes drop as more coal is bought

Japanese liquefied natural gas imports plummeted by more than 22 percent as the nation opted for more than twice the amount of coal than LNG for thermal power generation and only imports from Australia and the US held up as cargo numbers from Asia, the Middle East and Russia dropped.

Imports of LNG continued their downward path with October shipments of 4.62 million tonnes, or 68 cargoes, down by 22.1 percent on the 5.94MT received in October 2020, according to the preliminary trade figures from Japan's Ministry of Finance.

LNG shipments in September 2021 had amounted to 5.41MT, or around 78 cargoes, down 16.8 percent on the 6.5MT of cargoes received in September 2020.

The October data shows that the Japanese directly replaced LNG as fuel for power with thermal coal as imports came to 10.10MT, more than double the amount of LNG received.

LNG competes mainly with thermal coal for power generation in Japan and the shipments of coal had also increased by 17.8 percent year-on-year in September 2021 to 9.97MT.

Thermal coal imports to Japan had jumped even higher in August 2021 when they surged 34.5 percent from the prior-year period to 10.60MT.

Over the previous couple of years there had been parity between imported volumes of LNG and thermal coal.

Japan's LNG inventories stood at 2.07MT, the highest October level for five years, though down from 2.46MT at the end of September, according to data from the Ministry of Economy, Trade and Industry.

South Koreans formally complete large Kuwait LNG import terminal

Terminal is located 90km southeast of Kuwait City

Kuwait Integrated Petroleum Industries Co. (KIPIC) said all construction has formally been completed at the onshore LNG import terminal at Al-Zour, the largest in the Middle East, and constructed to provide fuel and power to the refining and petrochemicals industries.

A South Korean consortium comprising Hyundai Engineering Co., Hyundai Engineering & Construction Co. and Korea Gas Corp, also confirmed that the project had been executed.

Consortium

The Hyundai-led consortium won the construction project valued at $2.9 billion back in 2016 from KIPIC, an affiliate of state-run Kuwait Petroleum Corp.

While the terminal was developed by KIPIC, it is owned by national oil and gas company KPC.

The Kuwait terminal is located about 90 kilometres southeast of Kuwait City and about 16km from Kuwait's border with Saudi Arabia.

It consists of a regasification facility capable of liquefying 130,000 cubic metres of gas per day and eight LNG storage tanks, with four in the first phase, and each with 225,000 cubic metres of capacity.

A statement noted that Hyundai Engineering was in charge of the overall management of the project including design, licensing and the construction of core facilities.

Hyundai E&C was responsible for the building of the LNG storage tanks and reclamation of 7 million cubic metres of land from the sea.

Kogas, the owner of four LNG import terminals in South Korea, conducted test runs through July 2021 when the first commissioning cargo was delivered and since then has run operational training.

World-class facility

The Korean consortium said they shortened the construction period by more than six months even under the restrictions of the Covid-19 pandemic.

"Through the successful completion of this project, we have proved our world-class LNG plant construction and technological capabilities," said a Hyundai Engineering statement.

Vopak takes hit for pulling out of Elbe LNG but proceeds in China

LNG News Editor

Royal Vopak, the Dutch global hydrocarbon storage company and project developer, has taken an earnings hit for pulling back from Germany's main LNG import terminal project near Hamburg, while preferring to proceed with a Hong Kong LNG terminal venture.

Germany's main onshore LNG terminal project is being develop at Brunsbüttel on the Elbe River.

The joint venture for building and operating the terminal is owned by Vopak, Dutch utility Gasunie as well as Oiltanking GmbH, a subsidiary of fuel company Marquard & Bahls AG, based in Hamburg.

Vopak and Gasunie are behind the main Dutch Gate LNG terminal at Rotterdam, while Vopak has stakes in other LNG import terminals at Altamira in Mexico and at Port Qasim in Pakistan.

"After a strategic review, Vopak decided to discontinue its active participation in the German LNG project leading to an exceptional loss of €11.1 million ($12.7M)," said Vopak in its third-quarter earnings.

"However, we remain optimistic in other LNG growth projects, such as Hong Kong, which are progressing well," stated the company.

Vopak describes the Hong Kong venture as the world's largest FLNG project.

The company also reported on events at its other LNG terminals, including the 400th ship-to-ship transfer in Pakistan and the signing of a new supply deal at the Altamira facility on the coast of the Gulf of Mexico.

The German Brunsbüttel terminal project is still going ahead, offering loading and unloading of LNG carriers, the temporary storage of LNG, regasification and access to the German gas grid and distribution of LNG via tank trucks and LNG railcars.

Vopak posted increased revenues in the three months to the end of September of €309.5 million compared with €297.0M in the same quarter of 2020.

www.ChartIndustries.com
LNG@ChartIndustries.com

CHART®
Cooler By Design.®

NEWS BRIEFS

Flex LNG earnings

Flex LNG, the shipping company with a fleet of 13 vessels, reported higher third-quarter revenues of $81.8 million and increased quarterly net income to $32.8M. "In the fourth quarter, we will also be handsomely rewarded for maintaining a 30 percent exposure to the spot market as the spot market is currently at all-time highs," said Øystein Kalleklev, Chief Executive of Flex LNG Management AS. The Bermuda-based company's average time charter equivalent rates were $68,341 per day for the third quarter, up from $57,780 per day in the previous three months.

Pavilion methodology

Pavilion Energy of Singapore along with QatarEnergy and US major Chevron Corp. have jointly published a "quantification and reporting methodology" to produce a statement of greenhouse-gas emissions for delivered LNG cargoes. This is the first such published methodology that will be applied to sales and purchase agreements (SPAs), specifically the executed SPAs of Pavilion Energy with QatarEnergy and Chevron.

Mozambique naming

The "Coral-Sul FLNG" vessel, the floating LNG hull to be deployed in 2022 in the deep waters of Mozambique in southeast Africa, has been formally name at the Samsung Heavy Industries shipyard in Geoje in South Korea. The guests of honour were Mozambican President Filipe Jacinto Nyusia and South Korean President Moon Jae-In. Italian energy company Eni said it attended as delegated operator and on behalf of its Mozambique Rovuma Basin Area 4 licence partners.

Gas Exporting Countries Forum known as OPEC of gas warns against the 'hasty acceleration' of green energy plans

LNG News Editor

GECF virtual conference was viewed as big success

The Gas Exporting Countries Forum (GECF), the group of leading LNG exporting nations and gas producers based in Qatar and known as the OPEC of natural gas, has just held a virtual ministerial meeting and discussed the prices issue while warnings that over-green policies could lead to energy crises.

The gathering was held under the Chairmanship of Franklin Molina Ortiz, the Minister of Hydrocarbons and Energy of Bolivia.

LNG members

The GECF has 11 members, including seven LNG producers: Algeria, Egypt, Equatorial Guinea, Nigeria, Qatar, Russia, Trinidad and Tobago, along with pipeline producers Bolivia, Iran, Libya and Venezuela.

It also has eight observer-status countries, incuding five LNG nations: Angola, Malaysia, Norway, Peru and the United Arab Emirates, along with Azerbaijan, Iraq, and Kazakhstan.

"The meeting took into account the immediate and long-term outlook for natural gas, which, despite the recent upheavals in the energy markets, remains positive and on course to become the leading fossil fuel in the world by 2050, increasing its share from 23 percent today to 27 percent," said the GECF.

"Ministers noted, that as the global economy moves from under the shadow of the Covid-19 pandemic, the resulting shortage of gas from Europe to Asia demonstrates the need for further investments in natural gas as an abundant and flexible source of energy to achieve energy equality for all parts of the world," the statement added. As an Observer to the United Nations Framework Convention on Climate Change (UNFCCC), the GECF had urged the international community in the COP26 talks in Glasgow to look to gas as the solution to achieve the right balance between economic and social requirements and environmental constraints.

Furthermore, the GECF member countries acknowledged that decarbonisation of economies should be approached with "careful consideration of hasty acceleration of greening of economies lest the climate agenda turns into an energy crisis."

The GECF noted that high natural gas prices were not in the interest of buyers nor the sellers.

The ministers reiterated their belief in the fundamental role of long-term gas contracts and gas pricing based on oil and gas indexation to ensure stable investments in the development of natural gas resources.

Yury Sentyurin, Secretary General of the GECF, presented the Management Report of the Secretariat, which included the activities undertaken in the past 12 months.

The ministers also received a preview of the 2021 edition of the GECF's flagship publication, the "Global Gas Outlook 2050", which will be unveiled at the 6th GECF Summit of Heads of State and Government in Doha, Qatar, in February 2022.

Techology arm

"Given technology's pivotal role in transforming the gas industry, the meeting acknowledged the important work that the newly-established Gas Research Institute is set to play in unearthing innovative technologies and other solutions for the benefit of GECF Members and the larger industry," added the statement.

The ministers appointed Tarek El Molla, Minister of Petroleum and Mineral Resources of Egypt as President of the GECF Ministerial Meetings in 2022, and Nikolai Shulginov, Minister of Energy of Russia, as the Alternate President.

Additionally, the ministerial meeting appointed Ms Penelope Bradshaw-Niles from Trinidad and Tobago as the GECF Executive Board Chair.

> "...As the global economy moves from under the shadow of the Covid-19 pandemic, the resulting shortage of gas from Europe to Asia demonstrates the need for further investments in natural gas"
>
> *- GECF statement*

US LNG data shows price trends as China is again top buyer and Spain overtakes Mexico

LNG News Editor

The US Department of Energy has just published its latest liquefied natural gas monthly export data showing rising prices for the six plants and with China again being the top monthly destination, while Spain overtook Mexico into fourth place for overall total shipments received.

The DoE data showed 94 US cargoes were delivered in September 2021 versus 98 in the previous month and 45 shipments in September 2020.

Carrier 'Maran Gas Pericles' delivered US cargo to Turkey

Average prices

The average price at the export points of the six US plants came to $8.03 per million British thermal units in September versus $7.46 per MMBtu in the previous month, according to the DoE November 2021 LNG report.

The Sabine Pass plant remained the volume leader in September 2021 with five Trains on stream and supplying 31 cargoes, followed by Corpus Christi 22, Cameron 18, Freeport 16, Cove Point five and Elba Island two.

Shipments from the Cheniere Energy's Corpus Christi plant in Texas cost the most for September 2021, averaging $8.38 per MMBtu versus $7.45 per MMBtu in August 2021 and for the year-to-date the Corpus Christi shipments fetched an average of $6.41 per MMBtu from the point of export.

The average prices for each of the five other plants (from the export point) from highest to lowest in September 2021 were: Cove Point (Maryland) $8.23 per MMBtu ($7.96, August); Freeport LNG (Texas) $8.09 per MMBtu ($7.47, August); Cameron LNG (Louisiana) $7.99 per MMBtu ($8.07, August); Sabine Pass (Louisiana) $7.77 ($7.07, August); and Elba Island in Georgia $7.64 per MMBtu ($7.54 August).

Liftings

Notable cargoes shipped from the facilities on the Gulf Coast included four delivered to Turkey by Cheniere Energy's Sabine Pass plant.

The delivering vessels to the East Med included the 174,000 cubic metres capacity carrier "Maran Gas Pericles" and the 174,260 cubic metres capacity vessel "GasLog Galveston".

The Cove Point facility in Maryland shipped three cargoes to India during the month on the 180,000 cubic metres capacity vessel "Celsius Copenhagen", the 164,700 cubic metres capacity carrier "LNG Fukurokuju" and the 176,520 cubic metres capacity "Gail Bhuwan" .

Cheniere's Corpus Christi plant sent a large proportion of September cargoes to Spain and Brazil.

Some of the vessel involved included the 159,700 cubic metres capacity carrier "Energy Atlantic" and the 170,000 cubic metres capacity vessel "Hoegh Galleon" for deliveriies to Spain.

Several of the cargoes for Brazil were lifted by the 135,420 cubic metres capacity carrier "Catalunya Spirit" and the 173,400 cubic metres capacity vessel "BW Pavilion Aranda".

The total number of US cargoes delivered worldwide to 42 nations since February 2016 now amounts to 2,721 shipments, or 8,784.4 billion cubic feet of natural gas.

The top five countries of destination, representing 61.4 percent of total US LNG exports, in September 2021, were: China (48.6 Bcf - 14 cargoes), Brazil (38.3 Bcf - 12 cargoes), South Korea (31.4 Bcf - nine cargoes), Spain (31.3 Bcf - 10 cargoes) and Turkey (24.2 Bcf - eight cargoes).

The list of the Top 10 countries of destination overall since 2016 through September 2021 showed three Asian nations, South Korea, Japan and China filling the top three spots, while Spain was shown to overtake Mexico into fourth place.

The Top 10 recipients of US LNG by overall numbers of cargoes at the end of September 2021 were: 1) South Korea 381 cargoes. 2) Japan 271. 3) China 224; 4) Spain 169. 5) Mexico 161. 6) India 141. 7) UK 130. 8) Brazil 167 (includes split cargoes) 9). Chile 119 and 10) France 103.

Other vessel-borne delivery price data showed that imported shipments to the US territory of Puerto Rico cost an average of $9.11 per MMBtu in September versus $9.13 per MMBtu in the previous month.

US LNG had been received in vessels by 42 different countries through September 2021, with Antigua and Barbuda in the Caribbean now being added to the ISO containers list.

ISO buyers

The US also sends regular ISO containers by cargo ship to the Caribbean nations of Barbados, the Bahamas and Haiti.

In September 2021, a total of 27 containers were delivered versus 28 in the previous month. The recipients were the Bahamas 16, Barbados five, Haiti three and Antigua and Barbuda three.

The main Caribbean volumes were in containers shipped by American LNG Marketing from Fort Lauderdale in Florida.

However, Antigua and Barbuda received ISO deliveries from Eagle LNG Partners and on ships that departed from Florida's Port Everglades port. ■

Clean Energy firm and BP to monetize cow manure

Clean Energy Fuels Corp. of the US has joined with UK major BP to add cow manure to the global efforts to curb carbon-dioxide emissions in the form of liquefied natural gas made from waste.

Clean Energy and BP are working within an existing joint venture to build on previously announced plans to finance and develop new projects at dairy farms, starting in the US Midwest.

Located in the US states of South Dakota and Iowa, the various project will use dairy farms with more than 30,000 head of cattle, to convert the methane produced from cow manure into more than 7 million gallons of what they call Renewable Natural Gas (RNG).

They said in their statement that agriculture accounts for nearly 10 percent of US greenhouse-gas (GHG) emissions, citing the US Environmental Protection Agency.

Clean Energy, the Nasdaq-listed company whose headquarters are in Newport Beach, California, already supplies transportation fuel to truckling fleets, airport shuttles, city buses and refuse trucks. Its Redeem brand of LNG or compressed natural gas (CNG) fuel is made from waste.

The company also owns liquefication plants in California and Texas and transports bulk LNG and CNG to filling stations and off-grid customers around the US.

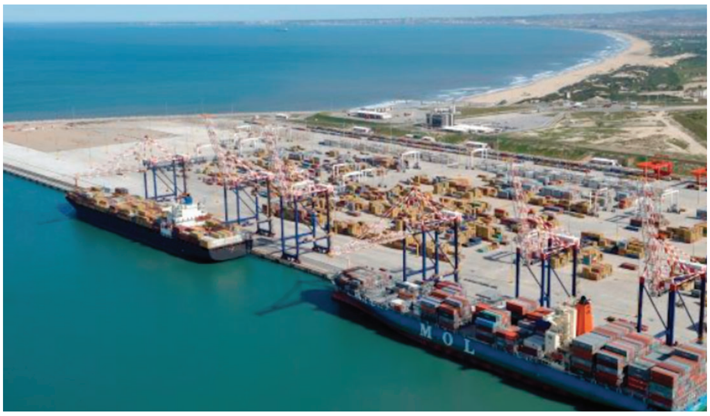
"The demand for RNG is rapidly growing, highlighted by our recent announcement to fuel a new fleet of Amazon heavy-duty trucks deploying across the country," said Clay Corbus, the co-head of renewable fuels at Clean Energy.

DNG Energy arranges South Africa's first ISO container LNG volumes

LNG News Editor

DNG Energy, a Johannesburg-headquartered company, said it arranged the importation of South Africa's first ever consignment of liquefied natural gas in an ISO container.

The company said the ISO shipment was sourced from the Dutch port of Rotterdam and has just been delivered on the Portuguese-flagged container ship "MSC Brittany".



Container was unloaded at East Coast port of Ngqura

Deepwater port

The LNG container was unloaded at Ngqura, a deepwater port on the East Coast of South Africa, 20 kilometres northeast of Port Elizabeth.

The vessel with 9,162 twenty-foot units (TEU) of capacity unloaded the LNG and other containers before proceeding on November 17 to the Port of Durban.

"The development is a precursor to the commissioning of DNG's first floating storage unit delivery in the first quarter of 2022, setting the stage for a new era of growth, competition and sustainability in the energy market," said the company, which also has offices in London, Lagos in Nigeria and Maputo in Mozambique.

The shipping of ISO containers is a part of a growing market for small-scale LNG distribution in Asia, Latin America and the Caribbean.

DNG said it was aiming to push forward with the development of a gas economy in South Africa.

"The arrival of the LNG consignment is an inflection point for South Africa's energy market, marking a key moment in our shift from coal-fired and oil-fired power-generation to cleaner alternatives," said DNG Chief Executive Aldworth Mbalati.

"Along with renewables like wind and solar, the new generation of gas technology brings low-cost power production capabilities to the market on a massive scale," added Mbalati.

"In the context of South Africa's just energy transition, LNG represents an excellent alternative that will help cut greenhouse-gas emissions, reduce air pollution and help combat global warming," he stated.

Pilot LNG awards Galveston port bunkering infrastructure contract

US company Pilot LNG, the developer of the Galveston LNG Bunker Port (GLBP) project in Texas, awarded the front-end engineering and design contract for marine infrastructure to W.F. Baird Associates.

"It was imperative that the company selected to carry out the FEED works for the Galveston LNG Bunker Port has an excellent track record of successfully executing marine terminal projects," said Pilot Chief Executive Jonathan Cook.

"Our selection of Baird is in recognition of their unparalleled expertise and commitment to engineering and designing safe, reliable and efficient projects and we are happy to continue to work with Baird as a preferred partner in GLBP," added Cook.

Pilot has already filed regulatory applications with the US Army Corps of Engineers (USACE) and other relevant regulatory agencies, possibly paving the way for a final investment decision in 2022.

According to the company, the main LNG storage facilities are expected to be located on Pelican Island in Galveston County in Texas.

As international regulators tighten emissions standards, the maritime industry is increasingly turning towards LNG as the marine fuel of choice due to its significantly lower emissions profile and cost competitiveness.

Analysts said the Galveston Bay area was an ideal location to add LNG bunkering infrastructure.

It has more than 10,500 deepwater vessel visits per annum and over 133,000 tug/tow movements on the Houston Ship Channel, as well as being the nation's fourth busiest cruise terminal.

"To further mitigate operational impacts, Pilot has chosen to utilize electric drives powered by electricity sourced 100 percent from Texas renewable energy, eliminating virtually all operating emissions related to the facility and likely making the GLBP project one of the greenest facilities of its type anywhere in the world," explained Pilot LNG.

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

Royal Dutch Shell to vote on moving HQ to London and will drop 'Royal Dutch' from name

Royal Dutch Shell, the leading liquefied natural gas trader with nine-month cargo sales in 2021 of around 48 million tonnes, plans to move its corporate headquarters to London from the Netherlands capital The Hague and will drop the words "Royal Dutch" from its name while escaping the European Union.

Shell will change its name to Shell Plc to show its corporate identity as a UK company.

Vote to quit The Hague will be held on December 10

Designation

"However, the company anticipates it will no longer meet the conditions for using the designation following the proposed change," explained the company.

"Therefore, subject to shareholder approval of the resolution, the Board expects to change the company's name from Royal Dutch Shell plc to Shell plc," it added.

Proposals will also align Shell's tax residence with the UK, where it will hold Board and Executive Committee meetings, and locate its Chief Executive and Chief Financial Officer.

Shell has been incorporated in the UK with Dutch tax residence and a dual share structure since the 2005 unification of Koninklijke Nederlandsche Petroleum Maatschappij and The Shell Transport and Trading Co. under a single parent company.

"At a time of unprecedented change for the industry, a simpler structure will enable Shell to speed up the delivery of its Powering Progress strategy, while creating value for our shareholders, customers and wider society," said Shell's Chairman, Sir Andrew Mackenzie.

"Shell intends to change its share structure to establish a single line of shares, which is simpler for investors to understand and value. The company will also align its tax residence with its country of incorporation in the UK," stated Mackenzie.

Following the overhaul, shareholders will continue to hold the same legal, ownership, voting and capital distribution rights in Shell.

Shares will continue to be listed in Amsterdam, London and New York (through the American Depository Shares programme), with FTSE UK index inclusion.

It is fully expected AEX index inclusion will be maintained. Shell's corporate governance structure will remain unchanged.

"Shell is proud of its Anglo-Dutch heritage and will continue to be a significant employer with a major presence in the Netherlands," said the company.

"The Projects and Technology division, global Upstream and Integrated Gas businesses and renewable energies (the windmills division) remain located in The Hague," added Shell.

Shell has scheduled a meeting for December 10 to vote on the overhaul and move to London. The package will require the assent of three-quarters of the company's shareholders.

In the most recent earnings, Shell's LNG sales for the first nine months of 2021 dropped to 47.48 million tonnes versus 54.73MT in the prior-year period.

Shell's LNG sales in the third quarter declined by 5 percent to 15.18MT compared with 17.63MT in the same quarter of 2020.

Taiwan to vote on Dec 18 on whether to proceed with redesigned LNG terminal or move location

Taiwan will vote in a referendum on December 18 on whether to move the nation's third liquefied natural gas terminal, currently under construction at Taoyuan, to another location or to accept a government plan to extend the LNG carrier jetty slightly further out to sea away from a sensitive reef area.

Taiwan's Minister of Economic Affairs Wang Mei-hua said a balanced approach was required for energy and LNG imports to advance the economy.

Wang urged voters to reject the relocation, and said that the present plans for the terminal, one-third of which has already been built, would not affect an algae reef near the coast.

Wang made her defence of the project in a televised forum on November 13 when the cases for and against were put forward.

Taiwan is still Asia's fifth-largest LNG importer after North Asia's top three of Japan, China and South Korea and with India in fourth place.

The Taiwanese are constructing the third LNG terminal to meet increasing demand after imports rose 6 percent last year to 17.75 million tonnes.

Taiwan in July 2021 signed a new LNG supply agreement with QatarEnergy for 1.25 million tonnes per annum of cargoes as the Taiwanese prepare to use more of the fuel. It is additionally increasing LNG shipments from the US.

Under the Taiwan expansion plans, the national energy company, CPC Corp., is developing the Taoyuan terminal in the district of Datan Borough for local needs and a gas-fired power plant there.

Completion

The first phase of the Taoyuan terminal construction should be completed by 2023. A second expansion phase is also proposed.

The first expansion of Taiwan's existing Tai-Chung LNG terminal was also completed at the end of 2019.

Further work is planned, including the addition of another berth and associated tanks, to be carried out in two phases.

The 1.8 MTPA expansion project at Taiwan's second existing terminal, the Yung-An facility, including three new storage tanks and related regasification facilities, is expected to be completed by the end of 2026.

Minister Wang said that the LNG project was an important part of the country's power supply infrastructure, which can achieve the goals of protecting the algae reef in the area, ensuring stable power supply and cutting air pollution.

"The government's revised project is to push the LNG terminal 450 metres away to 1.2 kilometres from the coast may not be perfect, but it is the best solution for protecting the environment," stated Wang.