

LNG Unlimited

LNG JOURNAL PUBLICATION

25 October 2022

Kinder Morgan sees Gulf Coast market growing 'enormously'

Richard Kinder:
'Hyper growth scenario actually seems pretty reasonable to me'
LNG News Editor

Kinder Morgan Inc., the leading US pipeline feed-gas pipeline company for liquefied natural gas plants and a key energy infrastructure developer, reported third-quarter net income of \$576 million, up from \$495M in the prior-year quarter, as the executive team forecast a continuing and deepening LNG boom on the Gulf Coast.

"As we continue to witness the tragic consequences of the war in Ukraine, including global economic turbulence and volatility, our company and the US energy sector as a whole can take some measure of pride in continuing to provide both our citizens and those around the world with natural gas, refined products and crude oil," said KMI Executive Chairman Richard D. Kinder.

Forecasts

In an overview of third-quarter operations, KMI President Kim Dang said that volumes were affected by the pipeline outage at El Paso Natural Gas (EPNG), the Freeport LNG plant outage following the June fire and the continued decline in Rockies production.

"If you adjusted our volumes for the EPNG and Freeport outages, which are temporary in nature, we estimate volumes would have been up about 4 percent," said Dang.

"Sequentially, volumes are up 6 percent with big increases in the Bakken, up 14 percent, Haynesville Shale, up 8 percent and the Eagle Ford, up 7 percent," she explained.

"Overall, our natural gas gather-



Chairman Richard Kinder praised Texas and Louisiana policy

ing volumes were budgeted to increase about 10 percent for the full year and we're currently on track for about 13 percent," Dang added.

"Our fundamentals group estimates natural gas demand to grow from roughly 100 billion cubic feet per day market currently to approaching a 130 Bcf market by 2031," she stated.

Chairman Richard Kinder and the other executives joined a post-earnings conference call with analysts to speak mainly about natural gas infrastructure and the value of the company's existing assets.

"As we all know, it's become increasingly difficult to build new greenfield pipeline projects, particularly in the Northeast and other areas outside the US Gulf Coast," said the Chairman Kinder.

"While this situation is, in my opinion, unfortunate and poor public policy, it does make existing infrastructure even more valuable. I don't think that value is fully recognised by the equity markets," he stated.

"Having such an extensive network already in place affords great opportunity for a company like ours to extend and expand our as-

sets on an incremental basis without the Herculean task of permitting and building a new greenfield project," stated the Chairman.

He declared that KMI was fortunate that a large portion of its network was in Texas and Louisiana.

These are states that "understand and appreciate" the need for new energy infrastructure and where so much of the demand for additional throughput, particularly natural gas, is located.

"Let me be more specific. The demand for natural gas in those states is projected to grow enormously over the rest of this decade," he told analysts.

"That growth is driven by a number of end-users but let me just focus on LNG export facilities. Year-to-date, in 2022, LNG is consuming over 11 Bcf a day and that number incorporates the absence of roughly two Bcf a day of demand from the Freeport LNG facility," he explained.

"We project that after 2027, LNG demand will continue to grow and expected to be 28 Bcf a day by 2030," said Kinder.

UNLIMITED AGENDA

VENTURES



Canadian LNG and First Nations on shared trails towards CCUS joint ventures

2

EXPORTS

US LNG export data shows top destinations and costly cargoes

3

MARKETS

EU spot gas price drops as France supplies Germany amid mild weather

5

REGULATORS

LNG fuel supplier Flogas wins permit for link from Bristol port to LPG storage

6

SHIPPING

US in waiver of Jones Act to attract more LNG to Puerto Rico

7

EXPORTS

Glenfarne overhauls its business and is proceeding with US Gulf Coast LNG

9

UTILITIES

GAIL India has new Chairman to take LNG player to the next level

11

Canadian LNG feed-gas providers move with First Nations on shared trails to carbon capture

LNG News Editor

TC Energy and Pembina Pipeline, the North American energy infrastructure and LNG project companies, have entered into a carbon-sequestration evaluation agreement with the Canadian provincial government of Alberta to further evaluate one of the largest areas of interest for safely storing carbon from industrial emissions.

Both companies said the agreement would allow the Alberta Carbon Grid to move forward into the next phase of the province's Carbon Capture Utilization and Storage (CCUS) process to provide confidence to customers, Indigenous communities, stakeholders and Government in the project's carbon-storage capabilities.

Coastal GasLink

Among its main projects, Calgary, Alberta-based TC Energy is constructing the Coastal GasLink from northeast British Columbia to the Shell-led LNG Canada joint venture near Kitimat.



Chief Darlene Hunter of the Halfway River First Nation (left) and Chief Crystal Smith of the Haisla First Nation sign accord for Canadian carbon-reduction efforts

Pembina Pipeline, also headquartered in Calgary, is involved in another BC LNG export project called the Cedar Floating LNG venture on the Douglas Channel and with the local Haisla First Nation as a major shareholder and manager.

"The world is facing a huge challenge when it comes to energy security and transitioning to cleaner energy and we believe the Alberta Carbon Grid will play a critical role in helping achieve emissions reductions goals in Canada," said Lindsay Mackay, Vice-President

for Non-Regulated Commercial and Business Development Canadian Gas Pipelines at TC Energy.

The ACG has secured the rights to evaluate over 900,000 hectares of premiere land north of Fort Saskatchewan in Alberta that could potentially support a variety of customers throughout Alberta especially those in the Industrial Heartland region.

Canadian First Nations also have their own clean energy plans including carbon-reduction and other measures and involving the Haisla

First Nation, a main shareholder in the Cedar FLNG project and the Nisga'a people who are behind the Ksi Lisims project near Prince Rupert in BC, in partnership with Rockies LNG Ltd and Western LNG LLC.

The natural gas to feed these new LNG export projects is coming from gas-rich northeast BC.

The two LNG First Nations have partnered with a third First Nation whose land has been "negatively affected" by natural gas production. This partnership is aimed at give them a future stake in energy development.

Climate Initiative

The Halfway River First Nation, whose traditional lands are northwest of Fort St. John, is among the Treaty 8 First Nations whose territories have been producing gas for many years.

A memorandum of understanding has now been signed between all three First Nations as part of the First Nations Climate Initiative (FNCI) recently created.

Baker Hughes orders grow and spending surge is seen in LNG projects despite economy challenges

Baker Hughes, the US liquefied natural gas equipment-maker and energy services company, said in reporting third-quarter earnings that even amid economic challenges the outlook for oil, gas and LNG was supportive of a multi-year upturn in spending.

The Nasdaq-listed company with main offices in Houston and London reported orders of \$6.1 billion for the third quarter, a 13 percent increase year-on-year.

Positive

Revenues in the three months came to \$5.4Bln, up 5 percent compared with the same three months of 2021, while adjusted operating income rose to \$503M versus \$402M in the prior-year quarter.

Net losses for the quarter narrowed to \$17M compared with \$810M of losses in the same quarter of 2021.

Chairman and Chief Executive Lorenzo Simonelli spoke in a conference call after the earnings release saying he remained very positive for LNG and the energy business where his company has four divisions, oilfield services, oilfield equipment, turbo-machinery and process solutions and digital solutions.

He praised global operators for continuing to demonstrate a great deal of financial discipline, meaning a "more durable upstream spending cycle", even in the face of an unpredictable commodity price environment.

Simonelli noted in particular the elevated prices in the LNG market had been created by a "multitude of factors" and expected the "exceptionally tight global market" could become even tighter in 2023.

"This situation has resulted in record high LNG prices, but it's also slowed down switching from coal to gas in some developing countries," said Simonelli.

"We believe that significant investment is still required over the next five to 10 years to ensure natural gas is positioned as a key part of the energy transition," he declared.

"This is also a pivotal time for the industry, with price-related demand destruction occurring in some markets and LNG developers facing inflationary pressures and

a higher cost of capital for new projects," he explained.

"As a result, we believe the landscape may be shifting in favour of established LNG players with the scale, diversity and financial strength to navigate the risks and uncertainties," stated the Baker Hughes CEO.

Simonelli added that projects that utilize faster-to-market modular designs may be particularly advantageous in the coming years.

LNG orders

In the earnings report, Baker Hughes said LNG-related TPS orders came to \$1.81Bln in the quarter, a 5 percent increase year-on-year.

German firm details Lubmin LNG plan

Deutsche ReGas, a private company that has raised financing from Australian investment bank Macquarie Capital, said it aimed to import LNG in the next few months at the Baltic port of Lubmin and would use a mixture of vessels including small-scale shuttle carriers.

"From December 1, 2022, the terminal will feed at least 4.5 billion cubic metres of natural gas into the German gas network," said the company.

The port of Lubmin in the German state of Mecklenburg-Vorpommern is best known as the landfall for the shutdown Nord Stream gas pipelines under the Baltic Sea from Russia.

Lubmin has been chosen by the German Federal Government as one of four coastal hubs for LNG FSRU imports because of existing German gas grid links.

Deutsche ReGas said it planned to deploy its own floating storage and regasification unit (FSRU) near the port of Lubmin and emphasized it would not be using any of the five FSRUs being acquired by the German Government.

The company explained that to take account of the shallow depth of the water around the port of Lubmin, another tanker in the form of a Floating Storage Unit (FSU) would be stationed outside the shallower approaches to which LNG tankers of up to 170,000 cubic metres would be able to dock and make LNG transfers.

"From there, three shuttle ships (small LNG carriers) will transport the LNG to the FSRU in the Lubmin industrial port," explained the company.

"The FSRU and all other ships involved will be chartered and paid for by Deutsche ReGas," the company said.

US LNG export data shows top destinations while Louisiana plant ships most costly cargoes

LNG News Editor

The US Department of Energy has published its latest LNG monthly export data showing the Netherlands, South Korea, France, Spain and the UK receiving the most cargoes and the most expensive shipments departing from a Louisiana plant at the highest price from the export point so far in 2022.

The DoE data just issued on October 17 and giving the prices, numbers and trends up to August 2022 showed that the total number of US cargoes delivered worldwide since March 2016 now amounted to 3,855 shipments, or 12,348.8 billion cubic feet of natural gas.

A further 1,126 ISO containers of LNG have been shipped to nations in the Caribbean and Latin America from ports in Florida.

The US shipped 98 LNG cargoes in August 2022 compared with 100 cargoes in July and 98 shipments in August 2021.

Prices

Shipments from the Cameron LNG plant in Louisiana, operated by the California-based utility Sempra and its LNG projects unit Sempra Infrastructure, cost the most for a fourth month through August 2022.

Cargoes lifted from the Cameron facility cost an average of \$18.92 per million British thermal units in August, which was the highest export-point price of 2022, the data showed.

Shipments from the Sempra plant were also the most costly in the previous month at \$15.15 per MMBtu.

The combined average price at the export point for the four other plants, with Freeport off stream since the June fire and Calcasieu Pass not yet in the full data stream, was \$14.88 per MMBtu for August versus \$12.29 per MMBtu for July 2022.

The year-to-date price from the export points for all six plants



Cameron LNG on the deep-water Calcasieu Ship Channel

combined was \$10.47 per MMBtu.

The average prices for each of the four other included plants (from the export point) from highest to lowest in August 2022 were: Corpus Christi in Texas \$14.70 per MMBtu (\$12.17 July, 2022); Sabine Pass (Louisiana) \$12.71 per MMBtu (\$10.50, July); Cove Point (Maryland) \$12.36 per MMBtu (\$11.28, July); and Elba Island (Georgia) \$11.58 per MMBtu (\$12.20, July).

The Sabine Pass plant remained the volume leader in August 2022 with six Trains on stream and supplying 40 cargoes followed by Cameron 29, Corpus Christi with 19, Cove Point 7 and Elba Island 3.

The Venture Global Calcasieu Pass plant on the Gulf Coast of Louisiana was still gradually ramping up as most modular Trains were on stream and shipping commissioning cargoes through August with no pricing data yet released.

However, of the 11 commissioning cargoes that departed from Calcasieu Pass in August, two went to Greece and one sole cargo was delivered to each of nine other countries.

They were Argentina, China, Croatia, France, Italy, Poland, the Netherlands, South Korea and the UK.

Leading recipients

The top five countries of destination, representing 55.9 percent of total US LNG exports in August 2022 were the Netherlands (50.4 Bcf - 14 cargoes), South Korea (36.0 Bcf

- 10 cargoes), France (33.9 Bcf - 11 cargoes), Spain (26.1 Bcf - 10 cargoes) and the United Kingdom (21.3 Bcf - 12 cargoes).

The list of the Top 10 countries of destination overall since 2016 through August 2022 showed two Asian nations, South Korea and Japan leading and with Spain consolidating its third position with a lead of 30 cargoes over China in fourth.

The top 10 recipients of US LNG by overall numbers of cargoes at the end of August 2022 were: 1) South Korea 467 cargoes. 2) Japan 342. 3) Spain 300. 4) China 270. 5) France 241; 6) UK 221; 7) Brazil 216 (includes split cargoes) 8) The Netherlands 185; 9) India 174; tied at 10) Mexico 163; and 10) Turkey 163.

Vessel-borne delivery price data also showed that imported shipments were interrupted in August by hurricane damage to the US territory of Puerto Rico.

Shipments to Puerto Rico in July had cost an average of \$12.50 per MMBtu, down from \$13.54 per MMBtu in June.

US LNG had been received in vessels by 42 different countries through August 2022. This includes ISO containers carried by cargo ships.

The US has sent ISO containers to Caribbean and Latin American nations such as Barbados, the Bahamas, Jamaica, Haiti, Antigua and Barbuda and to Nicaragua.



NEXUS OF CLEAN™

"Chart's vision is to be the global leader in the design, engineering and manufacturing of cryogenic process technologies and equipment for the Nexus of Clean™ — **clean power, clean water, clean food and clean industrials**, regardless of molecule."

A handwritten signature in black ink, likely belonging to Jill Evanko.

JILL EVANKO / CEO / CHART INDUSTRIES

CLEAN CLEAN CLEAN CLEAN

 CHART DELIVERS CLEAN SOLUTIONS FOR



Power



Water



Food



Industrials



Learn more at chartindustries.com

NEWS BRIEFS

Fortress contracts

Sembcorp Marine Ltd of Singapore said it entered into a master service agreements with US LNG developer New Fortress Energy Inc. for the engineering and conversion of two Sevan cylindrical drilling vessels to floating LNG liquefaction facilities, including the fabrication and integration of LNG topside modules. "The hull conversion and fabrication of topsides for the first FLNG liquefaction facility is scheduled for delivery in the first half of 2024 through the work engagement contract awarded by NFE," said Sembmarine.

Santos is boosted

Australian LNG operator Santos said it delivered record year-to-date sales revenue of US\$5.9 billion, up 86 percent, and record free cash flow of US\$2.7Bln, up 194 percent. The Adelaide-based company with LNG assets in Australia and Papua New Guinea said free cash flow of over US\$1Bln in the third quarter reduced debt relative to equity to 20.8 percent at the end of September.

Beach outlook

Beach Energy, the Australian exploration and production company, said its work programme was progressing on the Waitsia gas field in the onshore Perth Basin of Western Australia towards first LNG sales in the second half of 2023 to BP of the UK for five years. The Waitsia gas project is a joint venture with Mitsui of Japan. "On the West Coast, we will soon be the newest entrant to the global LNG market. This revenue stream will be transformational for Beach and provide fast pay-back of the project's capital outlay," said the company in a quarterly activities report.

European spot pipeline prices drop as France starts Germany supply amid high storage and warm weather

LNG News Editor

GRTgaz, the French gas grid company with three liquefied natural gas import terminals under its control, began transporting pipeline gas to Germany after reversing the normal flow on the only link between the two nations and since then European Union day-ahead spot gas prices have dropped, though other influences have been at play.

The first deliveries of pipeline gas to Germany began at 6 am on the morning of October 13 at the flow rate of 31 gigawatt hours per day (GWh/d).

Route

The pipeline route passes through the border towns of Obergailbach, the interconnection point in the Moselle Department of Lorraine in eastern France, to Medelsheim in Germany's Saarland.

The gas from Obergailbach is also having to be transferred according to French rules which require adding an odour to the gas for safety reasons, something the Germans do not require.

The project will eventually allow GRTgaz to sell 100 gigawatt hours per day (GWh/d) to Germany, with the possibility of marketing unsold gas the day after.

GRTgaz Chief Executive Thierry Trouvé said in a presentation that the quantity of gas capability sent to Germany amounted to what about four nuclear reactors could produce in a day.

The main effect on European day-ahead pipeline gas prices in Germany and France is that they are now almost aligned since October 13.

The French PEG price is quoted on the European Energy Exchange as being at the equivalent of \$18.30 per million British thermal units compared with the Trading Hub Europe (THE) price, Germany's virtual gas point, quoted



Building that saved Germany: Obergailbach interconnect

at the equivalent of \$18.70 per MMBtu.

Before the Obergailbach-Medelsheim interconnect opened to French gas deliveries, the French PEG was at \$19.10 per MMBtu and the German THE was at \$30.15 per MMBtu.

However, rather than principally re-aligning because of the arrival of French gas, the western European prices have also dropped more because of prevailing very mild seasonal weather of 21 degrees centigrade (70 Fahrenheit) and forecast to last until the end of October.

In addition, the EU's strict gas storage policy ahead of winter means that French and German storage sites are almost full over a month early.

Futures still high

The day-ahead benchmark spot Dutch Title Transfer price has also dropped since October 12 from \$28.90 per MMBtu to \$18.45 per MMBtu on high storage and warm weather.

These spot prices are much lower than the November and December wholesale futures prices in EU gas markets which were last at \$40.45 per MMBtu and \$45.25 per MMBtu respectively.

"In an unprecedented energy context linked to the war in Ukraine, France is in solidarity with its German neighbour by sending gas directly to it," said GRTgaz

after the launch of the service.

"After a sharp drop in Russian gas deliveries to Europe and in the context of European solidarity on energy security, GRTgaz has mobilized to adapt its network and formalize a proposal to market gas transport capacity from France to Germany," it added.

In September, GRTgaz's proposal had been the subject of a consultation of market players, organized by the Energy Regulation Commission.

The only existing interconnection point between France and Germany at Obergailbach was originally designed to operate in the Germany to France direction.

LNG flows

"GRTgaz, in collaboration with the German carriers (OGE and GRTgaz Deutschland), made the necessary technical adaptations in order to be able to reverse the direction of operations of the interconnection," explained GRTgaz.

GRTgaz has as its subsidiary Elengy, the operator of three LNG import terminals in Western and Southern France at Montoir-de-Bretagne, Fos Tonkin and Fos Cavaou.

France's fourth LNG import terminal is at the Channel port of Dunkirk under the ownership of Belgian utility Fluxys and partners and a fifth will be operational at Le Havre from the next winter season in 2023-2024.

LNG fuel supplier Flogas wins permit for link from Bristol port to Avonmouth LPG storage

LNG News Editor

Flogas Britain, a leading UK supplier of LNG by truck, is also continuing to be a top shipper of liquefied petroleum gas (LPG) and has just been granted planning permission to construct a gas pipeline from Bristol Port in south-west England into the nation's largest above-ground LPG storage terminal at nearby Avonmouth.

Despite LPG not being as clean a fuel as LNG, the global annual LPG market is still growing on a global basis.

LPG trade growth

Trade statistics show that LPG's global market revenue was valued at around \$134 billion in 2021 and is forecast to grow and to be worth over \$177Bln a year through 2028 with a compound annual growth rate of 4.8 percent.

The largest UK LNG import destination is Milford Haven in Wales and it also imports LPG in smaller vessels than the huge LNG carriers arriving at the South Hook and Dragon terminals.

The next scheduled LPG delivery at Milford Haven is on October 19 on board the 38,950 cubic metres capacity LPG tanker, the



Avonmouth storage site is being converted from storing LNG

"Hourai Maru", and sourced from the Norwegian refinery at Mongstad, according to shipping data.

The Flogas Avonmouth Storage facility is the largest of its kind in the UK, with the capacity to store 34,564 tonnes of LPG.

Formerly owned by National Grid Plc, operator of the Grain LNG terminal near London, the Avonmouth facility was previously only able to store LNG. However, work is currently underway to convert it to an LPG facility.

"Running safely underground and out of site, the twin-pipeline will vastly increase the availability of LPG, enabling up to 20,000

tonnes of commodity to be safely and securely discharged from a ship in 24 hours," explained Flogas.

Flogas said that once complete, the LPG pipeline would link the UK to a diverse, global supply of off-grid gas, providing security of supply and enhancing affordability for off-grid commercial and residential customers.

Flogas, a subsidiary of DCC Plc, said that with the planning permission now in place, the company was talking to potential partners from across the entire supply chain who want to join Flogas in creating a dependable off-grid fuel supply for the UK.

Flogas notes that LPG was still

the cleanest, most efficient conventional off-grid fuel available, and those transitioning from oil will benefit from significant carbon savings and improved air quality, as it emits far fewer pollutant emissions.

Well placed

"The granting of planning permission is the final piece in the jigsaw for this ground-breaking project, as we already have the Avonmouth storage facility and agreement in principle from Bristol Port and landowners for the pipeline route," said Flogas Managing Director Lee Gannon.

"This means we're now perfectly placed to start talking to prospective partners from across the supply chain who want to join us in this venture," added Gannon.

"Avonmouth offers an excellent collaborative opportunity, one that will provide important access to the global market and enhance security of supply to our off-grid customers," he stated.

Gannon added that the next phase of design was currently underway and with completion of construction potentially seen as early as 2025.

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	Monthly Online + optional print magazine
LNG UNLIMITED	Online every Tuesday + PDF
GAS TO POWER JOURNAL	Online every Friday + PDF
LNG MARKET TRACKER	Online every Wednesday + PDF
LNG SHIPPING NEWS	Online every second Thursday + PDF
LNG MONTHLY MARKETS	Online Monthly + PDF
LNG CHINA	Online every second month + PDF
LNG NORTH AMERICA	Online every second month + PDF
LNG FUELLING	Online every quarter + PDF
DAILY UPDATES and Newsletters	

Subscription Contacts

For new subscriptions or general subscription queries please contact:

Stephan Venter | venter@lngjournal.com
+44 207 017 3407

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

Oldest Italian terminal reviving

The oldest Italian LNG import terminal, the onshore Panigaglia facility near the port of Genoa, is set to receive more cargoes for the 2022-2023 winter season as the nation fully mobilises its regasification assets to help the European Union emerge from the supply crisis.

Panigaglia was Italy's first ever LNG terminal and has been operational since 1969.

The Italian gas grid operator SNAM, whose name comes from Società Nazionale Metanodotti (National Pipeline Company), runs the Panigaglia terminal as well as having a 49 percent stake in the LNG facility, the "FSRU Toscana", moored off the Italian coast off the port of Livorno.

Italy currently has three full-scale LNG import terminals, the third being the Adriatic terminal co-owned by units of ExxonMobil Corp, and QatarEnergy.

Adriatic LNG is located 15 kilometres (9.3 miles) off the Veneto coastline and is a gravity-based structure.

The first additional cargo for Panigaglia was delivered on October 9 from Angola in south-west Africa after having been reloaded onto smaller ships at Spanish terminals for them to be compatible with the onshore terminal in Italy's Liguria region, the crescent shaped coastal area also known as the Italian Riviera.

"Further LNG deliveries from Egypt and Algeria are also expected in October at onshore Panigaglia," said a statement from the supplier, Italian oil and gas company Eni.

"The overall contribution of additional LNG volumes to Italy, thanks to the availability of regasification terminals currently under development (FSRUs), will exceed 2 billion cubic metres between 2022 and 2023," explained Eni.

US issues waiver of Jones Act to attract more LNG to Puerto Rico

LNG News Editor

The US Government has issued a waiver of Jones Act shipping rules to help the US territory of Puerto Rico attract LNG shipments amid a tight market and high prices after the recent hurricane damage affected power supplies and energy stocks.

The Department of Homeland Security issued a waiver of the Jones Act, which is legislation passed back in 1920 that requires goods moved between US ports to be carried by US-flagged ships.

Capacity

The Caribbean island territory last year received 1.52 million tonnes of LNG, the equivalent of 23 cargoes.

US vessel-borne delivery price data shows that imported shipments to Puerto Rico are priced the same as the highest US export point free-on-board price, which in the summer months of 2022 was around \$12.15-\$13.54 per million British thermal units.

The main Peñuelas LNG terminal in Puerto Rico is operated by local utility EcoEléctrica and has been taking measures in the past year to increase its send-out



Peñuelas terminal in Puerto Rico operated by EcoEléctrica

capacity. The terminal shareholders are the European utilities, Naturgy of Spain and France's Engie, as well as Japan's Mitsui & Co.

US LNG project developer New Fortress Energy also has a facility in Puerto Rico focused on fuel for truck-loading.

"In support of the Puerto Rican people as they continue to recover from Hurricane Fiona, I have approved a temporary and targeted Jones Act waiver to address the unique and urgent need for liquefied natural gas in Puerto Rico," said Secretary of Homeland Security Alejandro N. Mayorkas.

In September 2022, Homeland Security approved a Jones Act waiver to ensure Puerto Rico had "sufficient diesel to run generators needed for electricity and the functioning of critical facilities" in the territory.

"As with the previous waiver, the decision to approve was made in consultation with the Departments of Transportation and Energy to assess the justification for the waiver request and based on input from the Governor of Puerto Rico and others on the ground supporting recovery efforts," explained Mayorkas.

LNG-powered ship named after late Israeli magnate Sammy Ofer

Seaspan Corp, the Hong Kong-based owner and operator of container vessels, has launched the first in a series of 10 containerships of 15,000 twenty-foot-units liquefied natural gas (LNG) dual-fuel containerships ordered back in 2021.

The Haifa, Israel-based company has sign a deal to charter the 10 vessels for its ZIM Container Service Pacific (ZCP) business covering the Asia-to-US East Coast trade route.

The first Seaspan vessel was named "ZIM Sammy Ofer" as the ship was launched at the Samsung Heavy Industries shipyard at

Geoje in South Korea. Sammy Ofer is the late Israeli shipping magnate who helped develop Zim Shipping as well as a global fleet of other vessels.

The construction of the vessels at SMI began at the end of 2021 while the deliveries of the remaining nine containerships are expected in the first half of 2023.

"We are extremely pleased to partner with ZIM Integrated Shipping Services on this industry-leading environmental initiative," said Seaspan.

ZIM chartered the Seaspan vessels after noting that about 23 per-

cent of total shipping emissions are from the container segment alone.

The Israeli company, which is listed on the New York Stock Exchange, has signed a LNG bunkering accord valued at \$1 billion with UK-based energy major Shell.

These 10 vessels will be transporting goods from China and South Korea to the US East Coast and the Caribbean.

While ZIM's headquarters are in the Israeli port of Haifa it also has a North American base at Norfolk in Virginia.



Atlas Copco



In LNG, experience matters

The LNG industry is constantly evolving, and we can help you lead the way. We provide custom-engineered compression and expansion technology that boosts your productivity throughout the LNG value chain. For over 40 years we have engineered advanced process equipment that delivers maximum efficiency in modular, compact packaging. We offer end-to-end centrifugal compressors, screw compressors, turboexpanders, Compander™ and centrifugal fluid pumps customized for every LNG application, from small scale to large scale, onshore and off.

Learn more at www.atlascopco-gap.com

Developer Glenfarne overhauls business and is proceeding with Texas and Louisiana LNG plans

LNG News Editor

Glenfarne Group, the US developer and operator of global energy and infrastructure assets and of the Texas LNG Brownsville and Magnolia LNG projects in Texas and Louisiana, has overhauled the business and formed Glenfarne Energy Transition (GET) for its energy assets while giving estimates for LNG final investment decisions.

“GET will operate through three core businesses: Global LNG Solutions, Renewables, and Grid Stability,” said New York-based Glenfarne.

‘Sensible’

“Responsibly sourced and environmentally sensible US LNG is one of the most financially and logistically flexible fuels to help fill global energy needs while countries bring modern power grids and other renewable infrastructure online,” added Glenfarne.

GET’s existing assets include 12 grid stability power plants, 5,000 miles of gas pipelines, 13 gas pro-



Model of the proposed Texas Brownsville LNG export plant

cessing plants, 27 renewable assets and the two LNG export projects, Texas LNG and Magnolia LNG, which have been approved for a combined 12.8 million tonnes per annum of LNG production.

Glenfarne in May 2022 signed a contract for its Texas LNG project to be built by a joint venture comprising European engineers Technip Energies and South Korea’s Samsung Engineering.

The Texas LNG plant will have 4 MTPA of output and be constructed in the Port of Brownsville in Texas.

The project involves LNG liquefaction modules fabricated and

then brought to Brownsville for installation.

Texas LNG, which has yet to take a final investment decision, is seeking to complete the project and ship its first cargo by 2026.

US regulators had also previously approved construction of the Magnolia LNG plant proposed for a 115-acre site near the Calcasieu Ship Channel with 8.8 MTPA of output from four Trains.

The Magnolia development had previously been owned by an Australian-listed company LNG Ltd that ceased trading amid financial difficulties and the assets

were acquired by Glenfarne.

“We look forward to making final investment decisions for Texas LNG later this year and Magnolia LNG in 2023,” stated Brendan Duval, Chief Executive and Founder of Glenfarne Group and the new GET unit.

“Together with our LNG import terminal developments and projected renewables and grid stability expansion, our business model is even more attractive and offers multiple growth vectors,” Duval added.

GET aims

“We are proud to introduce Glenfarne Energy Transition during such a critical moment in the global decarbonization movement and the various efforts to achieve energy security,” he added.

Duval said grid stability was an enabler of deep penetration of renewables, and the group was continuing to invest in and develop infrastructure assets that provide sustainable and economically sensible solutions.

Italian project engineer Saipem wins largest ever contract at \$4.5Bln to enable Qatar expansions

Italian LNG and energy engineering company Saipem has been awarded a contract valued at around \$4.5 billion by Qatargas for the North Field Production Sustainability (NFPS) offshore compression project to enable the Arabian Gulf nation’s two forthcoming expansions.

“This prestigious award represents the largest single offshore contract by total value in the company’s history,” stated Saipem.

This NFPS project will help maintain gas output from the Qatari North Field as Qatar prepares for its first major gas expansions since Ras Laffan was constructed.

State-owned QatarEnergy is the largest shareholder in Qatargas and operates the North Field.

“The scope of work encompasses the engineering, procurement, fabrication and installation of two offshore natural gas compression complexes aimed at sustaining the production of the North Field,” explained Saipem.

It includes two of the largest fixed steel jacket compression platforms ever built, flare platforms, interconnecting bridges, living quarters and interface modules.

“To execute this project, Saipem will leverage on its own assets, know-how and competences on offshore engineering,

installation and fabrication, as well as its capability to maximize local content,” said the Milan-based company.

Extraction

The Qatargas contract follows the award in early 2021 related to offshore facilities for extraction and transportation of natural gas for the same field and demonstrates the “continuity and the quality” of Saipem’s performance in Qatar.

“With this contract, Saipem accelerates its strategic repositioning in the offshore segments (E&C and drilling) which represent the large majority of the announced order intake year-to-date, further supporting the delivery of its

strategic plan,” said the company.

QatarEnergy is carrying out two expansion projects in the North Field to boost its current nameplate capacity of 77 million tonnes per annum.

The Gulf state is adding 33 MTPA in the North Field East (NFE) project and a further 16 MTPA in the North Field South (NFS) liquefaction venture to increase production to 126 MTPA by 2028.

Natural gas offshore the north-east coast of Qatar was discovered in 1971 and the gas field covers more than 6,000 square kilometres and with an estimated 900 trillion standard cubic feet of recoverable reserves.

Fast Solution for all your LNG Storage & Transport needs.



Factory-built 1,200+ m³ LNG Tanks



40' & 53' ISO Tank Containers



1,228 m³



Railroad Tank Wagons



Marine LNG Tanks

On-site / Factory-Built Storage Tanks, Intermodal ISO Tank-Containers, Tank Trailers, Ship / Barge Cargo Tanks, Railroad Tank Wagons, & more..

Corban Energy Group (CEG), based in New Jersey, USA, has been creating highly engineered products for the natural gas supply chain in the Americas, Europe, and Africa. With its global network of engineers and its manufacturing facilities optimized for building large tanks, CEG has provided unmatched quality and value in LNG equipment for producers, suppliers, and end-users.

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

Singapore yard expertise boosts Brazil business

Sembcorp Marine, the Singapore-headquartered global offshore, marine and energy platforms providers, is continuing to build its Brazilian shipyard business by completing its second floating, production, storage and offloading (FPSO) vessel for Brazil's oil and natural gas rich offshore Santos Basin.

Semmarine's yard is called the Estaleiro Jurong Aracruz (EJA) facility and has been located since 2014 in the Espírito Santo state of southeast Brazil in the municipality of Aracruz.

The yard employs up to 4,500 workers during peak periods of production and in addition to tapping into the revived Brazilian offshore oil and gas industry, the EJA yard is offering field developments services for the in the Atlantic, Gulf of Mexico and West African regions.

The Sembmarine-owned yards "Petrobras P-71" FPSO is the second completed for the Tupi B.V. joint venture, majority-owned by state energy company Petróleo Brasileiro, known as Petrobras.

"The FPSO vessel, P-71, has just sailed away from EJA's shipyard and will be deployed to the ultra-deepwater Itapu field," said EJA.

Atapu is an oil and natural gas field with a shared deposit, located at a water depth of over 2,000 metres in the Santos Basin pre-salt.

Analysts note that for several years BG Group of the UK had spoken about an LNG production project in Brazil's Santos Basin before being taken over by Shell in 2016. However, EJA's the new FPSO is oil focused.

GAIL India has new Chairman to take nation's grid operator and major LNG importer to next level

LNG News Editor

Gas Authority of India, the grid and natural gas pipelines operator and the second-largest importer of LNG after Petronet, has just brought in a new Managing Director and Chairman at a time when Indian energy strategies are expected to be revised with a more urgent focus on natural gas.

Sandeep Kumar Gupta took over the reins at GAIL at the start of October from Manoj Jain, who retired having been in charge since August 2019.

Selection

Gupta, 56, was chosen by India's Public Enterprises Selection Board from a list of 10 candidates.

He is a Chartered Accountant by education and with 30 years of experience in the energy industry at Indian Oil Corp. (IOC), the nation's largest oil refining and fuel marketing company.

He had been Finance Director of IOC for three years before being selected to head GAIL under a contract that will run until February 2026.

GAIL is India's largest gas transmission and gas marketing company with pipeline capacity of 206 million standard cubic metres a day and a network covering 21 states.

GAIL currently has a 70 percent share of the gas-transmission network and more than 50 percent of the country's domestic natural gas sales.

It additionally has a founding stake in Petronet LNG and operates over a dozen other joint ventures and associated business.

GAIL has six subsidiaries includ-



Sandeep Kumar Gupta moved from Indian Oil to gas major

ing GAIL Global USA Inc., which looks after its Cove Point LNG interests in the state of Maryland.

The company also runs an LNG trading business based in Singapore.

Other assets include a majority stake in Konkan LNG, the ownership company of India's Dabhol LNG import terminal, located south of Mumbai, and with 5 million tonnes per annum of capacity.

A statement was issued to the Bombay Stock Exchange (BSE) containing Gupta's first address to the company's employees.

He praised and recognised the "balanced business portfolio" built over time and the overall contribution made by many people to the development of the natural gas sector in the country.

"The contributions of my predecessors and the support of stakeholders including the Ministry of Petroleum and Natural Gas and employees have played a key role in the growth witnessed by GAIL over the years," said Gupta.

He mentioned that the company is firmly aligned with government's vision of having a gas-based economy wherein the share of

natural gas in the energy mix is to be taken to 15 percent by 2030.

Growth path

"GAIL is set on the growth path in the natural gas value chain," said Gupta.

"The company which had started with a single pipeline project in the year 1984, now owns and operates a truly diversified business portfolio including over 14,500 kilometres of natural gas pipelines and an LNG sourcing portfolio of around 14 million tonnes per annum," explained Gupta.

"We will create a future energy landscape including small-scale LNG liquefaction, more gas and LNG storage and bunkering," said Gupta.

He added that the company had carved out a "robust petrochemical expansion" to further strengthen its business.

Gupta also stated that the company would continue to operating Gas Processing Units and liquefied petroleum gas (LPG) transmission networks, producing LPG and other liquid hydrocarbon products.

The new Chairman also declared that GAIL would at the same time remain committed to its "considerable presence" in the Indian renewable energy sector with holdings in solar and wind projects.

“We will create a future energy landscape including small-scale LNG liquefaction, more gas and LNG storage and bunkering”
- Sandeep Kumar Gupta, Managing Director & Chairman, GAIL