

Utility player Naturgy plans split and one unit will boost LNG aims

LNG portfolio includes cargoes delivered ex-ship from Yamal LNG plant and Sabine Pass volumes
LNG News Editor

Naturgy, the Spanish global utility company with LNG supplies from the US and Russia and natural gas and utility businesses in South America as well as renewables in the US and Australia, said after its fourth-quarter earnings that it would split into two separately listed companies, one focused on infrastructure and the other handling power generation.

The announcement came as the global utility company reported a more than 40 percent rise in annual net profits and an increase in gross earnings of over 7 percent.

Naturgy's earnings statement showed annual net income soared 41.2 percent to €1.231Bln (\$1.409Bln) from €872M in 2020. Gross earnings increased by 7.2 percent €3.983Bln (\$4.560Bln) versus €3.714Bln in 2020.

LNG fleet owner

Naturgy's LNG portfolio includes 2.5 million tonnes per annum of delivered ex-ship (DES) cargoes through to 2038 from the Yamal LNG plant, operated by Russia's Novatek.

Its regular long-term supplies also comes from 3.5 MTPA of free-on-board shipments from Cheniere Energy Sabine Pass plant in Louisiana.

The Madrid-based company additionally controls a fleet of 12 LNG carriers for deliveries which also come from countries like Trinidad and Nigeria.

"The year 2021 has been marked by the gradual recovery of energy



Chairman Francisco Reynés has led Naturgy since 2018

demand and the significant rise of commodity prices, impacting both gas and electricity," said Naturgy.

"This trend intensified during the second half of the year as we approached the winter season," added the company.

International LNG earnings jumped by 80.3 percent to €357 million compared with €198M in 2020.

"As of 31 December 2021, contracted sales for LNG for 2022 and 2023-24 stood at 80 percent and 76 percent respectively," it added.

Under Naturgy's spin-off plans, one of the two groups will manage the development of renewable energies, the portfolio of energy customers and associated services and the conventional generation business.

The other group will bring together all businesses dedicated to the management of regulated energy distribution and transmission infrastructures.

This comprises more than 155,000 kilometres of electricity networks and 135,000 km of natural gas pipelines and 16 million connection points in six countries.

"With this project, Naturgy is making decisive progress in its transformation and comes ahead of the disruptive sector changes," said Naturgy's Chairman Francisco

Reynés. After the earnings statement, Jon Ganuza, Head of Financial Planning and Control at Naturgy, gave more details of the company's LNG business during a conference call on the earnings.

"I think that what we're currently seeing in the LNG business actually shows that they're up and they're down," said Ganuza.

"But what we want to do is we want to remain as stable and with the highest level of visibility possible for the cash flow generation for the next few years," added the executive.

"So I think that increasing our level of exposure to the LNG business or trying to decrease the level of the position that we have closed, would go against our main aim that we have regarding Naturgy's overall cash flow generation," he explained.

Naturgy noted in its highlights that on the 10th of March 2021 the company, along with Italian energy major Eni and the government of Egypt, completed the agreement to amicably resolve the disputes affecting Union Fenosa Gas, the 50-50 partnership between Naturgy and ENI as majority owners of the Damietta LNG export plant located east of Alexandria in Egypt.

UNLIMITED AGENDA

EARNINGS

Petronet LNG posts quarterly record even as imports fall during period

2

ENGINEERING

Cedar FLNG awards engineering contract amid project optimism among executives

3

FORECASTS

US energy outlook expects LNG exports will rise 16 percent in 2022 on capacity

5

FUEL MARKET



Spanish filling station network firm Grupo HAM launches own mobile station concept

6

EXPORTS

Novatek gets DNV certification for carbon-capture plans at Arctic projects

7

INFRASTRUCTURE

Bulgaria and Serbia advance Balkan gas pipelines to support Greek LNG imports

8

India's Petronet LNG reports record earnings even as nation's imports fall for all of fiscal Q3

LNG News Editor

Petronet LNG, the owner of the largest Indian cargo import terminal at Dahej north of Mumbai, reported record earnings in the third quarter of the fiscal year as natural gas prices increased, though the nation's imports were down in December for a third month.

Petronet's net profits jumped by 31.4 percent to 1,159.46 crore rupees (\$154.5M) as an increase in prices boosted margins from the 882.05 crore rupees (\$117.8M) posted in the same three months of the previous fiscal year.

Revenues

The New Delhi-based company's net profits were 42 percent higher than the 817.61 crore rupees (\$109.27M) reported in the quarter to the end of September 2021.

The company's revenues in the fiscal third quarter amounted to 12,669.14 crore rupees (\$1.69 billion) compared with 7,427.90



Kochi LNG has a utilisation rate of around 22 percent

crore rupees (\$992.7 million) in the fiscal third quarter of 2020.

For the first nine months of the fiscal year April-to-December 2021, the company reported a net profit of 2,647.13 crore rupees (\$353.79M) versus 2,301.31 crore rupees (\$307.57M) in the same period of fiscal 2020.

Most of India's shipments are handled at Dahej followed by Hazira, owned by Shell India, and Dabhol, the terminal controlled by Gas Authority of India (GAIL).

Petronet's Dahej facility has

capacity to handle 17.5 million tonnes per annum of LNG and with six storage tanks and two more planned.

Petronet also owns the Kochi terminal in the southwest state of Kerala and is additionally planning a third terminal and its first on the East Coast at the Port of Gopalpur in the state of Odisha.

The Dahej utilisation rate for April through December was 90.2 percent while the Kochi facility's utilisation rate was 21.9 percent for its 5 MTPA of capacity.

The company said it booked "use or pay charges" of Rs 347.78 crore rupees (\$47.4M) for the calendar year 2021 versus 55.88 crore rupees (\$7.4M) for 2020 on account of lower capacity utilisation.

"The operations of the company were not materially interrupted during the lockdown due to outbreak of Covid-19 as natural gas is declared as one of the essential commodities by the Government of India," said Petronet.

Petronet also noted that in view of an expected increase in capacity utilisation at the Kochi terminal because of better pipeline links, customers have asked for lower regasification tariffs for Kochi.

Indian LNG imports dropped for a third month in December, though by a lesser amount than the previous two months as the costs of LNG shipments soared, though falling volumes were again offset by offshore domestic natural gas pipeline supplies on the East Coast.

Afreximbank joins effort to bring LNG to nations like Liberia, Sierra Leone and Burkina Faso

The African Export-Import Bank (Afreximbank) through its Fund for Export Development in Africa (FEDA) has invested in Eco-Gas BV, a Netherlands-based infrastructure development company with plans to build and operate a number of new LNG facilities in West Africa.

Eco-Gas is an affiliate of the Team LNG Terminal Company set up for supplying LNG imports to Ghana.

The Ghana terminal will act as a regional LNG hub, with shippers able to bring small-scale LNG into neighbouring countries such as Liberia and Sierra Leone by reloading from the Team facility.

Inland markets

In addition, inland markets such as the nation of Burkina Faso could

take LNG by truck given that the Ghana facility also has the ability to load LNG directly onto trucks.

The West African region also has a large extractive industry with an appetite for new power stations that are currently mainly served by distillate fuels.

"Due to limited power supply from the grid, the industrial sector in Africa suffers severe energy shortages with attendant high production costs, inefficient operations and reduced global competitiveness, amongst others," said FEDA.

"Off-grid solutions are required to address these challenges and put Africa firmly on the path to energy sustainability," it added.

FEDA said its investment in Eco-Gas, the amount of which was not disclosed, will support the

creation, in partnership with a leading international oil company, of the infrastructure to provide access to cheaper and cleaner fuels for underserved industrial customers across the region using LNG.

Cairo-based bank

Afreximbank is a Pan-African multilateral financial institution mandated to finance and promote intra-African and extra-African trade and is based in the Egyptian capital Cairo.

The bank has disbursed more than US\$42 billion in grants between 2016 and 2020.

"FEDA's investment in Eco-Gas is a testament to its mission of providing development equity capital to sectors critical to the growth and development of intra-

African trade, export development and industrialisation," said Professor Benedict Oromah, President and Chairman of the Board of Afreximbank.

"Through this investment, FEDA is seeking to unlock access to affordable and cleaner energy for industrialization purposes and to significantly impact intra-regional trade, especially in the West Africa region," he added.

Kwaku Boakye-Adjei, Chief Executive of H Investments and Eco-Gas, said he was excited to commence this project as LNG will meet the needs of large-scale Independent Power Producers in West Africa as well as small-scale industries making the transition from Heavy Fuel Oil, diesel and other distillates.

Inpex hit by Prelude's woes offset by sales rise

Inpex Corp., the Japanese energy company with operatorship of the Ichthys LNG export plant in the Australian Northern Territory and a shareholding in Shell's Prelude FLNG plant, posted a jump in earnings as net sales of oil and gas soared by more than 60 per cent year-on-year.

Inpex's operating income jumped by 137 percent to 590.657Bln yen (\$5.11bln) from 248.47Bln yen (\$2.15bln) in 2020.

The Japanese company's net sales soared by 61.4 per cent to 1.244 trillion yen (\$10.77bln) for 2021 compared with 771.04Bln yen (\$6.67bln) in 2020.

Inpex, led by President Takayuki Ueda, said annual net income for 2021 came to 223.04 billion yen (\$1.93bln) versus 111.69Bln yen (\$967.5 million) of losses in 2020.

Inpex lost substantial production from shutdowns at the Shell-operated Prelude floating LNG production hull deployed offshore northwest Australia.

The Prelude joint venture is owned 67.5 percent by Shell and 17.5 percent by Inpex.

A further 10 percent of Prelude is held by LNG buyer Korea Gas Corp. and 5 percent by CPC Corp. of Taiwan.

Among its fourth-quarter highlights, the Tokyo-based company made an oil discovery in Onshore Block 4 in Abu Dhabi in the United Arab Emirates.

This marked the first oil discovery of the Murban UAE oil grade from this concession area as well as from a new geological formation.

Cedar FLNG awards engineering contract amid project optimism

LNG News Editor

The leader of the Haisla First Nation in British Columbia, Chief Councillor Crystal Smith, along with Pembina Pipeline Corp. Interim President and Chief Executive Scott Burrows and the Cedar LNG CEO Doug Arnell have spoken with optimism about the future development of the Cedar LNG project as it awarded an engineering contract.

Chief Councillor Smith and Pembina's Burrows said the 50-50 partnership's joint venture had reached critical points in developing the floating LNG export plant near Kitimat in BC.

Douglas Channel

The FLNG project will be located in the Douglas Channel and is expected have a liquefaction capacity of up to 4 million tonnes per annum of LNG.

Feed gas for Cedar FLNG will be sourced from the prolific Montney natural gas resource play in northeast BC.

Cedar LNG said it was pleased to announce an agreement with



Cedar LNG's site is near Shell's Canada LNG. It is located 8km southwest of Kitimat on the Douglas Channel shore

liquefaction technology firm Black & Veatch and South Korean ship-builder Samsung Heavy Industries (SHI) for the front-end engineering and design (FEED) of the project's proposed floating liquefaction, storage and offloading units.

"Cedar LNG is rooted in meaningfully creating a low-carbon, Indigenous-led business that respects local values and protects the environment," said Cedar's CEO Arnell.

"The project's low-carbon footprint, coupled with the use of Black & Veatch and Samsung's expertise and technology will result in a state-of-the-art facility the

Haisla Nation, British Columbia and Canada can be proud of," he stated.

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

Subject to additional factors, including regulatory and other approvals, the expected in-service date for the project is 2027.

Both Smith and Burrows said their venture was strategically positioned to leverage Canada's abundant natural gas supply and "provide a critical, Indigenous-partnered solution" to support the global clean energy transition.

Japanese LNG engineer JGC Holdings reports fall in profits

JGC Holdings Corp., the Japanese energy and LNG projects engineer, with LNG contracts in Canada and Mozambique and elsewhere, reported a fall in nine-month profits amid engineering slowdowns in some areas caused by Covid-19 while sales increased in the period.

Operating profits for the nine months dropped to 15.3 billion yen (\$132.5M) from 17.3Bln in the prior-year period.

The company reported a nine-months loss attributable to the parent company of 44.3 billion yen (\$383.6M) compared with 6.9Bln yen (\$59.7M) of profits in the same nine months of fiscal 2020.

Net sales amounted to 319.4Bln (\$2.76bln), up from 304.9Bln yen in the same period of the previous fiscal year.

JGC is forecasting increased ordinary profits by March 2022 to 19.8Bln yen (\$172M) versus 18.5 (\$160.3M) in the previous fiscal year.

"There was solid progress in EPC project execution in general, but the pace of progress growth slowed in some areas due to the impact of the spread of Covid-19," said JGC, whose headquarters are in Yokohama.

"There was also a steady accumulation of domestic orders, and active moves to win large-scale

overseas projects," added the company.

JGC said that in the third quarter its outstanding energy sector contract income from overseas related to LNG Canada, the project in British Columbia led by Shell with Asian partners.

The company's engineering income is also coming from the Coral South floating LNG project offshore Mozambique which is likely to come on stream later in 2022.

Overall LNG contracts amounted to 390.3Bln yen (\$3.38bln) and other outstanding oil and gas sector contracts were valued at 448.8Bln yen (\$3.88bln).



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NEWS BRIEFS

Air Products profits rise

Air Products, the LNG equipment-maker now branching out with mega-projects in the Middle East and with a growing gasification business in China, reported fiscal first-quarter sales of \$3 billion and higher net income. Air Products posted quarterly net income of \$550.0 million, up 13 percent over the prior-year quarter when it was \$486.7M as higher volumes, pricing and equity affiliate income more than offset higher costs. Fiscal first-quarter sales of \$2.99 billion increased 26 percent over the prior year when they had amounted \$2.37Bln for the three months.

Charter for Arctic LNG

Mitsui OSK Lines of Japan has agreed to participate in cargo transport for the Arctic LNG II project being developed by Novatek of Russia and Japanese and Chinese partners as well as France's TotalEnergies on the Gydan Peninsula in northern Siberia. MOL has signed a charter contract for a newbuild, ice-breaking LNG carrier with the Arctic LNG II project company. The vessel will be constructed at the Guangzhou Shipyard in China, a subsidiary of China State Shipbuilding Corp., and will be delivered in 2024.

LNG cargoes for Greece

Sonatrach, the Algerian oil and gas company and Public Gas Corp. of Greece AE (DEPA) have confirmed the extension of an LNG supply contract relating to the sale and purchase of LNG for delivery to Greece from the North African nation's Skikda LNG plant. The existing contract was for cost, insurance, and freight (CIF) shipments to Greece's on-shore Revithoussa terminal.

US energy outlook forecasts LNG exports will rise 16 percent in 2022 with demand and new capacity

LNG News Editor

The United States Government expects high levels of US LNG exports to continue into 2022, averaging 11.3 billion cubic feet per day for the year, a 16 percent increase from 2021 as new production comes on stream.

The forecast reflected the assumptions that global natural gas demand remained strong and with additions to US LNG export capacity.

Differentials

"LNG exports averaged 11.2 Bcf per day in January 2022, up from 10.4 Bcf per day in the fourth quarter, supported by large price differences between the Henry Hub price in the US and spot prices in Europe and Asia," said the short-term outlook of the Energy Information Administration.

"In particular, inventories in Europe remain much lower than their five-year averages and are contributing to strong demand for LNG imports," explained the report.

Colder-than-normal temperatures in January also resulted in US natural gas inventories falling below the five-year average to end the month at 2.3 trillion cubic feet (Tcf).

"We expect natural gas inventories to fall by about 730 Bcf for the rest of the withdrawal season, ending March just below 1.6 Tcf, which would be 8 percent less than the 2017-2021 average for that time of year," said the EIA.

The Energy Outlook noted that temperatures have continued to be cold in parts of the country into February, which the EIA expects will contribute to Henry Hub prices



Another LNG plant being built is Golden Pass in Texas

averaging \$4.70 per million British thermal units for the month.

Volatile prices

"The winter weather forecasts are highly variable and create a significant amount of uncertainty in our price forecast. In addition, global demand for US LNG has remained high, limiting some of the downward pressure on natural gas prices," said the report.

"We expect natural gas prices could remain volatile over the coming months, and the way that temperatures affect natural gas demand in February and March will be a key driver of how inventories end the withdrawal season," it said.

The agency expects US consumption of natural gas will average 105.2 Bcf per day in February 2022, which is 3 percent lower than in February 2021.

"Consumption in our forecast declines the most in the residential and commercial sectors, where consumption will average a combined 43.8 Bcf per day, down 10 percent from last February," said the EIA.

"We forecast electric power sector consumption will be 27.8 Bcf per day in February, down 1 per-

cent. The changes are partly offset by industrial sector consumption, which grows by 4 percent from February 2021 in the forecast to average 24.8 Bcf per day for the month," added the report.

Oil market

In the oil market, the EIA forecasts that North Sea Brent crude prices will average \$90 a barrel in February as continuing draws in global oil inventories keep crude prices near current levels in the coming months.

"However, we expect downward price pressures will emerge in the middle of the year as growth in oil production from OPEC+, the United States and other non-OPEC countries outpaces slowing growth in global oil consumption," said the EIA.

The Outlook forecasts that this dynamic leads to rising global oil inventories from the second quarter of 2022 through the end of 2023, and expects the Brent spot price will fall to an average of \$87 a barrel in the second quarter and \$75 a barrel in the fourth quarter.

"We expect the Brent price will average \$68/b for all of 2023. However, low inventory levels create an environment for potentially heightened crude oil price volatility and potential risk for prices to rise significantly if supply growth does not keep pace with demand growth," the report declared.

“The winter weather forecasts are highly variable and create a significant amount of uncertainty in our price forecast”

- EIA

Spanish-based LNG filling station network firm Grupo HAM launches mobile station concept

LNG News Editor

Grupo HAM, the Spanish company that has opened more than 100 filling stations and now operates around 25 percent of existing facilities in Europe for LNG-powered trucks and other vehicles, has launched a new concept of mobile and transportable service stations.

The group's new mobile unit, which is called EDUX, has been developed by its subsidiary HAM Criogénica, together with HAM's research and development team who have been in charge of the design and construction.

Brands and models

The EDUX service station allows owners and operators to store and supply LNG for all types of trucks and heavy vehicles, keeping the liquid subcooled and adapting to the optimal temperature of the different brands.

The mobile units offer fast re-fuelling for Volvo, Scania or Iveco LNG-powered trucks. At the same time, the units allow fuel filling



The mobile station was developed by HAM unit Criogénica

for compressed natural gas in cars, light vehicles and trucks.

HAM's own network of LNG and CNG facilities is expanding in a growing number of countries with more than 30 in Spain and the others spread around the EU in France, Belgium, Italy and the Netherlands.

The group has also expanded its network by opening several natural gas stations in the South American nations of Chile and Peru.

The new mobile unit LNG filling station concept has 60,000 litres (60 cubic metres) of LNG capacity and works at low pressures (2-3 bar), has a submerged pump and can supply up to 12,000 kg/h of LNG and 300 Kg/h of CNG, with a capacity storage of 7,000Kg of CNG.

"The gas station has two 'on the fly' conditioning systems and has two LNG dispensers and two CNG dispensers, with an innovative nozzle, designed by HAM,

with a 'no frost' system and a double anchoring system and closing, avoiding leaks or losses of liquid, in addition to facilitating disconnection without emissions of gas into the air," explained HAM in a statement.

The selection of fuel and payments can be made independently at each of the dispensers, using any debit or credit card or the HAM Card for professional users.

"EDUX is a modern mobile service station, which is monitored remotely, by registering different parameters, always guaranteeing its perfect operation and allowing to quickly solve any incident," added HAM

"At Grupo HAM, we continue to work and innovate, in direct contact with our customers, to develop high-quality and reliable advances in the improvement of CNG-LNG logistics infrastructures and services, taking respect for the environment as a starting point," stated the company.

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Santos sees 80 percent reserves rise in 2021

Australian LNG plant operator Santos, which has plant and project stakes in Queensland and in the Northern Territory as well as in Papua New Guinea, said new proved plus probable reserves increased by 80 percent in the year due to the merger with Oil Search and the final investment decision on the Barossa gas field.

In its annual statement on reserves, Santos said 2P reserves additions in 2021 from the Oil Search merger amounted to 416 million barrels of oil equivalent and from the Barossa FID, a further 373 mmboe were added.

There were 149 percent 2P reserves replacement in 2021 for the Gladstone LNG plant in Queensland and 2C contingent resources increased by 41 percent to 3,219 mmboe.

The 2P reserves increased by 835 mmboe before production in 2021.

The annual 2P reserves replacement was 907 percent and the three-year replacement 355 percent.

"The statement is the result of Santos's disciplined annual reserves process, which includes external audit of approximately 94 percent of total 2P reserves," said Chief Executive Kevin Gallagher.

Santos said it had booked Barossa reserves at a 50 percent interest following the execution of a binding Sale and Purchase Agreement to sell a 12.5 percent stake in Barossa to Japanese LNG buyer and power company JERA Co, Inc., the completion of which is expected in the first half of 2022.

"Consistent application of Santos' disciplined operating model also delivered reserves increases in the onshore assets in 2021," said Santos.

Novatek gets European certification for carbon-capture at Arctic LNG

LNG News Editor

Novatek, the operator of the Yamal LNG plant and developer of the Arctic LNG II project, said the first three stages of international certification have been obtained for long-term carbon-dioxide underground storage sites on the Yamal and Gydan peninsulas in northern Siberia.

"The site feasibility certificates have been issued for further study of the sites and subsequent certification stages," said Novatek.

DNV-approved

European classification society DNV has issued the certificates of conformity with international standards for CO2 geological storage and certification of the sites and projects planned close to the Yamal LNG plant and the Arctic LNG II project.

"Having certified CO2 geological storage sites is an important element of the company's strategy to decarbonize production clusters for LNG and low-carbon gas chemicals," stated Novatek Chief Executive Leonid Mikhelson.

"The large potential of the cer-



Arctic LNG II's gravity-based plant is being built at Novatek's yard at Belokamenka in Murmansk Region

tified CO2 storage sites allows both capturing and storing CO2 generated at our own production facilities and will offer CO2 underground storage services to third parties," explained the CEO.

"The project will allow reducing the carbon footprint of the company's existing and prospective projects, including LNG plants and gas chemical production facilities," he added.

Novatek said that the certificates are for the geological formations within the Obskiy (Yamal) and Tadebyayakhinskiy (Gydan) licence

areas where there is capacity to store at least 600 million tons of CO2 each, which is supported by calculations.

"The calculations were made by Novatek's Scientific and Technical Center with the involvement of international service companies, and verified by DNV," the company stated.

Arctic LNG II is being developed on the Gydan Peninsula by Novatek and partners from China and Japan as well as French major TotalEnergies, a shareholder in Novatek.

Gazprom and CNPC sign accord for additional Far East pipeline gas

Russian pipeline natural gas giant Gazprom and the Chinese energy major, China National Petroleum Corp. (CNPC), have signed a new long-term Sales and Purchase Agreement for additional gas to be supplied in the Far East via Mongolia.

"The signing of this document is an important step towards further strengthening the mutually beneficial cooperation between Russia and China in the gas sector," said Gazprom.

"As soon as the project reaches its full capacity, the amount of Russian pipeline gas supplies to China is going to grow by 10 billion cubic metres, totalling 48 Bcm per year," added the company.

Gazprom, based in Saint Petersburg, said these deliveries to China include those via the existing "Power of Siberia" gas trunkline.

"This is the second contract to be signed for Russian gas supplies to China, and it is indicative of the exceptionally strong mutual trust and partnership between our countries and companies," said Gazprom Chief Executive Alexey Miller.

"Our Chinese partners from CNPC have already seen for themselves that Gazprom is a reliable gas supplier," stated Miller.

Gazprom stated that CNPC, a state-owned oil and gas company, had emerged as Gazprom's main partner in China.

Gazprom and CNPC signed their 30-year Sales and Purchase Agreement for 38 Bcm per annum in 2014 via the "Power of Siberia" gas pipeline.

The actual start of deliveries to the Chinese was on the 2nd of December 2019 when a ceremony was held to mark the event.

Gazprom explained that in January 2022, a feasibility study was completed for the Soyuz Vostok gas trunkline construction project.

The Soyuz Vostok pipeline will stretch for 963 kilometres (598 miles) on Mongolian territory and will also include five compressor stations.

Bulgaria and Serbia advance Balkan gas pipelines to support LNG imports from Greek terminals

Bulgaria said that work had begun on the construction of a new Bulgaria-Serbia Balkan natural gas interconnector with plans for the pipeline to become operational in October 2023 and to enable supplies to come from two Greek LNG import terminals.

These links to the expanding Balkan natural gas market will come from the existing Greek LNG import terminal at Revithoussa operated by the Hellenic Gas Transmission System Operator (DESFA) near Athens, and the proposed new floating LNG project at Alexandroupolis in eastern Greece.

Interconnector

The 170 kilometres (105.6 miles) Bulgaria-Serbia interconnector is separate from the TurkStream link of Russian natural gas supplier Gazprom and will run from the Bulgarian capital Sofia via Dimitrovgrad in Serbia to the city of Nis in southern Serbia, giving the Serbs a non-Russian supply option for the first time.



EU delegation in Serbia for energy progress meeting

It will enable Serbia to import natural gas via Greece and Bulgaria from the Southern Gas Corridor bringing gas from Azerbaijan on the Trans-Adriatic Pipeline (TAP) to southern Europe and as regasified LNG from the two Greek LNG terminals.

The Bulgaria-Serbia interconnector is supported by the European Union as a Project of Common Interest and has secured a €49.5 million (\$56.5M) grant from the EU.

The EU grant comes from the EU Instrument for Pre-accession Assistance as Serbia is not an EU mem-

ber is simply in the “waiting room.”

The Bulgaria-Serbia pipeline has also secured €25M from the European Investment Bank loan of €25M.

The pipeline will have a capacity of 1.8 billion cubic metres per annum in the direction Bulgaria-Serbia with the possibility also of reverse flow.

There are additional plans for a new interconnector to link the gas grids of Greece and the former Yugoslav nation of North Macedonia.

The gas grid operators of the two countries in September 2021

signed a new gas cooperation agreement, a key step ahead of construction of the new link.

The 123 km pipeline will have an initial capacity of 1.5 Bcm per annum with possible doubling of capacity. A final investment decision is expected before the end of the second quarter of 2022.

The Balkans have been historically dependent on Russian gas imports, though can also receive gas from Azerbaijan on the TAP pipeline and regasified LNG from the Revithoussa terminal.

Greece's Gastrade at the end of January 2022 took the final investment decision for the planned 5.5 Bcm per annum floating LNG import terminal at Alexandroupolis in northern Greece, paving the way for the project to begin operations by the end of 2023.

Gastrade SA, the Greek company developing an FLNG facility, took the FID with joint venture partners, including Bulgaria's transmission company Bulgartransgaz.

French gas grid operator gives annual overview including LNG cargoes as well as prices, storage

GRTgaz, the French natural gas transmission company, said LNG terminal subsidiary Elengy received 176 cargoes in 2021 at the three terminals in Western and Southern France as it gave an overview of last year's gas transportation and storage activities.

Three of France's LNG terminals, Fos Tonkin, Fos Cavaou and Montoir-de-Bretagne, are operated by Elengy within the Engie Group and as subsidiaries of GRTgaz.

LNG trucks

The terminals also handled six cargo re-loadings, 10 trans-shipments and 14,715 tanker truck LNG loadings during the year.

The company said that the LNG shipments to the three facilities

ensured 130.3 terawatt hours injected into the network.

GRTgaz ensures the pipeline transportation of gas throughout France, though in the southwest the grid is run by regional network company Téréga.

“On the storage front, GRTgaz sites were 95 percent full, a more favourable situation than in neighbouring countries,” said GRTgaz.

“Withdrawals were sustained until the end of January 2022, but reinjections were carried out during the end-of-year holidays,” the company added.

“As of January 31, 2022, storage was 33 percent full, a level slightly lower than the historical level,” stated GRTgaz.

GRTgaz said it would remain vigilant for the end of winter but

did not envisage issuing any energy supply alerts.

The year 2021 was the second full year of operations of France's unified natural gas market, formerly divided into the PEG Nord and PEG Sud, and now a single trading zone.

GRTgaz said natural gas consumption in France increased by 6 percent to 474 TWh in 2021.

“Gas demand in the industrial sector has remained stable since the decline observed in the refining and petrochemicals erased the rise in most other sectors due to the economic recovery,” said GRTgaz.

“Gas-fired power plants saw their consumption decrease by 10 percent in 2021, despite an increased contribution during winter

periods to support the electricity system,” the report added.

The GRTgaz report said that the sustained global economic recovery, particularly in China, led to strong demand worldwide for natural gas, especially LNG.

“This, combined with lower volumes delivered from Russia, led to a sharp rise in prices on the wholesale markets. On average, the price of gas in France rose from €9 per megawatt hour in 2020 to €46 per MWh in 2021,” stated the company.

“In this context, the French market (PEG France) nevertheless posted an average price 1.1 percent lower in 2021 (-0.45 €/MWh) than that of the reference market in Europe (Dutch TTF),” the report added.