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LNG

SUPPLIES - IMPORTS - EXPORTS

INDIA:

Indian Oil pens LNG supply deals with Adnoc, TotalEnergies.

India's top state oil refiner Indian Oil has reportedly signed long-term deals to buy liquefied natural gas from a unit of UAE's Adnoc and France's TotalEnergies.

According to reports by Reuters and Indian media, Indian Oil will buy in total 2 million mt per year starting in 2026 under the two deals which were signed during Prime Minister Narendra Modi's visit to France and UAE last week.

Media reports in India suggest that the firms signed HOAs.

TotalEnergies will supply 0.8 million mt of LNG to Indian Oil and these supplies will last for ten years, the reports said.

As part of the second deal, Adnoc LNG will deliver up to 1.2 million mt of LNG to the Indian firm for a period of 14 years, according to the reports.

Both of these contracts are the first LNG supply deals for Indian Oil with TotalEnergies and Adnoc LNG, the reports said.

Adnoc owns a 70 percent stake in Adnoc LNG that currently produces about 6 mtpa of LNG from its facilities on Das Island.

TotalEnergies also has a 5 percent stake in Adnoc LNG.

On the other hand, Indian Oil owns a 12.5 stake in the country's largest LNG importer, Petronet LNG, the owner of the Dahej plant but also the Kochi facility.

In addition, the firm also operates the Ennore LNG import facility on India's east coast.

According to its website, Indian Oil has capacity rights at the Dahej, Dhamra, Jafrabad, and Kochi LNG terminals,

Indian Oil previously said it plans to double its capacity booking at LNG import terminals as part of India's plans to shift to a gas-based economy. (July 17, 2023)

21/07/2023

POLAND:

GAZ-SYSTEM launches binding open season procedure for Gdańsk FSRU 2.

Poland's natural gas transmission system operator GAZ-SYSTEM has formally launched a new open season procedure aimed to increase the regasification capacity of the Gdańsk floating storage regasification unit terminal 2.

According to GAZ-SYSTEM, the FSRU 2 terminal project assumes locating a second FSRU in the Gdańsk area, that would be capable of LNG offloading, process storage and regasification at the level of 4.5 bcm/a of gaseous fuel per year.

The launch follows the results of the non-binding procedure to identify the demand for additional regasification capacity of the FSRU terminal in the Gulf of Gdańsk conducted by GAZ-SYSTEM in March 2023.

At the time, the company announced that the results showed significant interest of the market participants in increasing the regasification capacity of the FSRU terminal and gas exports in the region.

To remind, at first, pursuant to the assumptions set out in the open season procedure initiated in 2021, the terminal project envisaged the construction of the FSRU with a capacity to deliver approximately 6.1 bcm of regasified natural gas annually.

GAZ-SYSTEM said the objective of the FSRU 2 open season procedure is to confirm the demand for additional regasification capacity through the interested market participants' submission of binding, long-term offers for FSRU 2 regasification services, thus justifying its commencement of the implementation of the aforementioned project.

The company further stated that, in accordance with the applicable law, in the first phase of the FSRU 2 open season procedure for consultations with all the interested market participants, it has published documents regulating the procedure, informing that the second phase will consist in collecting from the participants binding offers for regasification service at the terminal within the scope covered by FSRU 2 open season, thus allowing it to make a positive final investment decision, i.e. the decision to implement the investment project. (July 17, 2023)

21/07/2023

MOROCCO:

Shell to supply Morocco with LNG in 12-year deal.

Shell will supply Morocco with an annual 0.5 billion cubic metres of liquefied natural gas under a 12-year deal, the North African country's energy ministry said on Friday.

The deal was signed by electricity and water utility ONEE and Shell, a ministry statement said without disclosing financial terms of the transaction.

The gas will be transported from Spanish ports initially, using a gas pipeline that links the two countries, until Morocco builds its own LNG terminals, the ministry said.

The LNG will help ONEE operate two power stations in northern and eastern Morocco that used to operate on Algerian gas sent through the same pipeline.

Algeria unilaterally decided in 2021 to halt gas flows to Spain via Morocco through the pipeline. Rabat said it would reverse the flow in 2021 by importing LNG from Spanish terminals.

ONEE is aiming to increase the share of gas in Morocco's electricity mix to meet low-carbon goals, the ministry said.

Renewables represented 18% of Morocco's total electricity production last year while gas accounted for only 1.6% and coal 72%, official figures show.

By March 2023 renewable energy represented 40% of the country's installed capacity, with Morocco planning to increase that to 52% by 2030. (July 14, 2023)

21/07/2023

WORLDWIDE:

Exxon to double LNG business by 2030 with eye on Asia: Executive.

ExxonMobil will significantly expand its liquefied natural gas business by doubling the annual amount it handles to more than 40 million tons by 2030, looking to tap demand from Asian and European importers that have become focused on energy security in the wake of the invasion of Ukraine.

"We're very bullish about the growth opportunities in natural gas and LNG. When you think about that in the portfolio with a corporation, investing in more LNG is certainly part of the strategy," Andrew Barry, vice president in charge of LNG marketing, told Nikkei.

An annual amount of 40 million tons would be equivalent to about 60% of current demand in Japan, the world's largest importer. Interest in natural gas has also grown because it emits less greenhouse gases when burned than other fossil fuels such as coal.

Exxon has participated in LNG projects around the world such as in Qatar and Papua New Guinea. The current volume of the U.S. oil major is around 22 million tons per year.

The company plans to heavily invest in fossil fuel businesses such as global LNG projects, U.S. shale, and offshore oil fields in Guyana, South America.

The company is partnering with state-owned Qatar Energy to build liquefaction plants in the U.S. state of Texas, as well as in Qatar. Exxon aims to make investment decisions on new projects in Mozambique and Papua New Guinea within the next few years, with each project's production expected to begin by the end of the decade.

In addition, the company has agreed to a long-term contract to purchase a total of 5 million tons per year from LNG plants in the U.S. and Mexico. Some plants are close to investment decisions, and all are expected to start operations in the 2020s. The LNG purchased by Exxon will be sold to utilities in Europe and Asia.

"We invested in other projects around the world. Bringing in that sort of diversity gives (Exxon) a global supply position," he said.

With China, the world's second-largest LNG importer, Exxon has a long-term contract to sell 6 million tons per year excluding projects in Qatar. While current LNG demand is sluggish due to the economy slowing down and higher spot prices, Barry said: "that demand is going to return shortly. When you look at the growth within China, it is still very significant. And the infrastructure that's been built in China for LNG is very significant."

Regarding Japanese companies, he said, "There are a number of long-term contracts that are ending over the next few years in Japan. We have a good amount of supply coming on and we're talking to many of the Japanese buyers about opportunities."

Japanese utilities have a number of long-term contracts that will expire this decade with Russia, Malaysia, and Indonesia, garnering attention among the LNG suppliers.

Investing in the LNG business is easier to sell to the shareholders while the super-chilled natural gas emits significantly less carbon dioxide than coal. As more and more Asian countries increase LNG consumption, big oil companies such as Shell and TotalEnergies also plan to expand their LNG portfolio.

Regarding supply and demand in the LNG markets, Barry said, last winter "was a mild winter, which really sort of helped from a supplier perspective. I think as we move through to the winter of this year, the supply and demand still can be quite variable and quite volatile. If we have a cold winter in Europe and in Asia Pacific, it can be a challenging time for the market."

He also added, "over the last couple of years, and particularly after the crisis that has happened in Europe, there has been a return to long-term contracting," indicating that buyers are preferring to commit more than 10 years to purchase gas rather than buying one cargo at a time in the spot market. (July 19, 2023)

20/07/2023

UNITED STATES:

Dynagas secures charter deals with Rio Grande LNG for two LNGCs.

Dynagas LNG Partners, an owner and operator of LNG carriers, has entered into time charter party agreements with Rio Grande LNG, a subsidiary of NextDecade Corporation, for two LNGCs, adding approximately \$270 million to its existing revenue backlog.

The 2007-built LNG carrier Clean Energy has been employed for a time charter period of about two years, commencing between March-May 2026, following the expiration of the existing time charter to SEFE Marketing & Trading, and the 2013-built LNG carrier Arctic Aurora has been employed for a time charter period of about seven years, commencing between September–November 2026, following the expiration of the existing time charter to Equinor ASA.

To note, according to Dynagas LNG Partners, its current fleet consists of six LNG carriers, with aggregate carrying capacity of approximately 914,000 cubic meters.

Tony Lauritzen, CEO of Dynagas LNG Partners, commented: “We are very pleased to enter into these new agreements and provide shipping for NextDecade’s final investment decision approved LNG export facility in Brownsville, Texas, U.S. We look forward to building on and developing our relationship with NextDecade for many years to come.”

Rio Grande LNG is a 27 MTPA export facility, and NextDecade has just made a positive FID to construct its first three liquefaction trains (Phase 1). Additionally, Rio Grande LNG issued the notice to proceed to Bechtel Energy to begin construction of Phase 1 under its engineering, procurement and construction contracts. (July 14, 2023)

20/07/2023

VIETNAM:

\$1.3B LNG terminal project approved in central Vietnam.

Binh Thuan Province has granted approval to U.S. energy firm AES and Petrovietnam Gas to build the US\$1.34-billion Son My LNG Terminal.

The country’s biggest facility for managing the import and export of liquefied natural gas when completed in 2027 will have a capacity of 450 trillion British thermal units.

In the first phase the terminal will be able to handle 3.6 million tons of LNG annually and in the second phase 6 million.

Joseph Uddo, president of AES Vietnam said: "The Investment Policy Approval for Son My LNG Terminal is a significant milestone that enables us to move forward with the development of this critical infrastructure project.

The Son My LNG terminal project, together with AES’ 2.2-gigawatt Son My 2 combined cycle gas turbine, represents a multibillion-dollar investment.

Son My 2 CCGT, which received investment policy approval earlier this year, will bring safe and reliable energy to power the growth of Vietnam while supporting the transition to cleaner and greener technologies, AES said.

U.S. Ambassador to Vietnam Marc E. Knapper said that the Son My project will bring energy security to Vietnam in the transition to cleaner sources of energy.

Under Vietnam’s latest energy development plan, LNG will account for 14.9% of total generation capacity by 2030.

By then Vietnam will have 13 LNG factories with a total capacity of 22,400 megawatts. (July 13, 2023)

19/07/2023

UNITED STATES:

Energy Transfer inks three non-binding Lake Charles LNG deals.

Texas-based Energy Transfer said it had entered into three non-binding deals related to long-term LNG offtake for its proposed Lake Charles LNG export facility in Louisiana.

According to a statement by Energy Transfer, the offtake volumes under the three HOAs total 3.6 mtpa of LNG.

One of the agreements specifies that a Japanese consortium would purchase 1.6 mtpa for a 20-year term, subject to an option to convert the offtake arrangement to an equity participation providing for the same volume of LNG, the firm said.

Chesapeake and Gunvor

Under the second deal, Chesapeake Energy Marketing would supply to Lake Charles LNG volumes of natural gas sufficient to produce 1 mtpa of LNG for a period of 15 years and, post liquefaction, Gunvor Singapore would purchase LNG from Chesapeake at a price indexed to the Japan Korea Marker (JKM) for a period of 15 years.

Earlier this year, US shale gas producer Chesapeake Energy signed a heads of agreement with Geneva-based trader Gunvor to supply the latter with up to 2 million tonnes of LNG per year.

Chesapeake and Gunvor said at the time they will jointly select the “most optimal liquefaction facility” in the US to liquefy the gas produced by Chesapeake and deliver LNG to Gunvor on a free-on-board basis with a targeted start date in 2027.

As per the third HOA, Energy Transfer said this deal is with a US customer and relates to a tolling arrangement for 1 mtpa for a 15-year term.

The firm did not provide any additional details.

“Important” deals

NextDecade said the HOAs remain subject to the negotiation and execution of definitive agreements.

“We are pleased with the continued confidence of our customers in the Lake Charles LNG project,” Tom Mason, president of Lake Charles LNG, said in the statement.

“These HOAs are important for the successful development of the project, along with the continuation of certain pre-FID work with one of our EPC contractors,” Mason said.

DOE decision

This announcement follows a recent decision by the US DOE to deny a rehearing request by Energy Transfer’s Lake Charles LNG.

A spokesperson for Energy Transfer told LNG Prime at the time that the company plans to continue to develop the project which may include the use of Lake Charles’ existing DOE export authorization.

In April this year, the department declined the request to extend the deadline to start exports by December 2028.

Lake Charles LNG said in the request it had made “substantial progress” in the commercial development of the development, as evidenced by fully-executed long-term LNG offtake contracts for 7.9 million tons of LNG per annum, about half of the FERC-approved LNG production capacity of the facility.

Energy Transfer announced six SPAs during last year and the customers include China Gas, Gunvor, ENN, SK Gas, and Shell.

The firm said it is in “active discussions” with customers related to the remaining capacity.

Energy Transfer also said that it obtained EPC bids from two contractors in May this year.

The company’s Lake Charles LNG project seeks to convert the company’s existing regasification terminal to an LNG export facility.

It has a proposed liquefaction capacity of 16.45 mtpa and includes three trains and also modifications to the Trunkline Gas pipeline. (July 13, 2023)

[*19/07/2023*](#)

HONG KONG:

Hong Kong's first LNG import terminal goes into service.

Hong Kong's first FSRU-based LNG import facility, owned by a joint venture of CLP Power and HK Electric, has started commercial operations following the arrival of the first cargo under a long-term deal with Shell.

CLP Power and HK Electric said in a statement on Thursday that LNG giant Shell has delivered a shipment of around 139,000 cubic meters of LNG to to MOL's 263,000-cbm FSRU Bauhinia Spirit, which serves the offshore terminal under a charter deal.

According to its AIS data provided by VesselsValue, the 173,400-cbm Maran Gas Amphipolis, owned by Greece's Maran Gas, deliver the LNG cargo during the weekend.

Regasified LNG is now being sent to CLP Power's Black Point power station and HK Electric's Lamma power station, raising the low-carbon generation capability and fuel supply security of the power companies in support of Hong Kong's energy transition, the statement said.

The power companies signed a long-term LNG supply agreement with Shell Eastern Trading, a unit of Shell, before construction of the terminal began.

According to the firms, the first LNG shipment is sufficient to meet the monthly electricity needs of around 1.5 million residential households in Hong Kong.

Hong Kong LNG Terminal is a joint venture consisting of HK Electric and Castle Peak Power, in which CLP Power Hong Kong holds 70 percent, while China Southern Power Grid International has 30 percent.

The LNG import terminal project forms part of Hong Kong's initiative to reduce emissions as the city and special administrative region of China is working to increase the use of natural gas to fuel its power plants.

The world's largest FSRU, Bauhinia Spirit, has a nominal capacity of 600 million cubic feet per day with a maximum capacity of 800 million cubic feet per day.

MOL's FSRU arrived in Hong Kong from Singapore on April 13 and after that it berthed at the new double berth jetty in Hong Kong waters.

PetroChina delivered the commissioning cargo to the offshore LNG terminal in May. (July 13, 2023)

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GREECE:

Svitzer to provide services for Greece's first offshore LNG terminal.

Svitzer, a global towage provider and part of A.P. Moller-Maersk, has signed a 15-year agreement to service Gastrade's Alexandroupolis Independent Natural Gas System (Alexandroupolis INGS) LNG terminal, the first offshore LNG project in Greece.

Specifically, Svitzer will set up towage services and support for advanced LNG operations at the new import terminal. This includes supporting the floating storage regasification unit with a pipeline system connecting the floating unit to the Greek national natural gas transmission system and onwards to final consumers in Greece and the Balkans.

Svitzer said it will provide four new ASD tugboats, fully manned by Greek crew, to assist the FSRU and the carriers delivering LNG. The tugboats will provide berthing, unberthing, navigation assistance and other terminal services including firefighting, pollution control, pilot and boarding party transfer. Additionally, Svitzer will provide support and station-keeping services to the FSRU during the initial installation.

Commenting on the agreement, Lise Demant, Managing Director, Svitzer Europe, said: "The long-term agreement will allow Svitzer to grow within its core business, expand geographically and deliver safe and efficient marine services to a new customer. This includes providing a truly customized solution for Gastrade, with the delivery of four brand new tugs."

Konstantinos Sifnaios, Managing Director, Gastrade, noted: "High-quality towage and marine services will be critical to the success of the Alexandroupolis LNG terminal project. We are convinced that Svitzer is the right partner to deliver this... We look forward to working together with Svitzer to build jobs in the local market and ensure energy security for the region and beyond."

To note, the Alexandroupolis LNG project comprises an FSRU for the reception, temporary storage and regasification of LNG, a spread mooring system and a system of subsea and onshore gas transmission pipelines. It is set to become operational at the beginning of 2024. (July 13, 2023)

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QATAR:

40% of all new LNG will come from Qatar by 2029, energy minister says.

QatarEnergy will contribute 40% of all new LNG to the market by 2029, the country's energy minister and CEO of QatarEnergy, Saad Sherida Al-Kaabi, said during the 20th International Conference & Exhibition on Liquefied Natural Gas in Vancouver on Tuesday.

Speaking during a "Leadership Dialogue" at the conference, Al-Kaabi said that as part of global growth, "gas will always be needed as the cleanest fossil fuel for the baseload required for electricity production and for powering industrial and manufacturing factories".

Qatar has approved expansion projects that would boost its LNG output by 64%, up to 126 million tonnes per year by 2027. Its North Field South Project involves the construction of six LNG mega trains, creating opportunities for US energy companies to introduce clean, green and smart technologies to these new facilities.

Al-Kaabi spoke about QatarEnergy's efforts to address energy security and transition towards renewables. "In Qatar, we are increasing production to 126 million tons per annum, and we have another 16-18 mtpa out of the US next year. We are doing it in the most responsible way as far as emissions are concerned with [carbon dioxide] CO₂ sequestration," he added.

However, the International Trade Administration reported that in the past four decades, CO₂ emissions "increased dramatically" due to growth in the LNG sector. In August 2021, QatarEnergy announced its plans to reduce greenhouse gas emissions by 25% by 2030 and allocated funding of \$170m (QR618.8m). In October, Qatar Petroleum was renamed as QatarEnergy to focus on sustainability and climate change issues.

"Qatar has the largest sequestration site in the MENA region today," Al-Kaabi added. "We are injecting more than 2mtpa of sequestered CO₂ today, and we are going to go to 11mtpa in a few years. We are using solar power to power some of our new LNG production. Qatar's LNG carbon intensity is probably the lowest in the world. So we are doing it in a very responsible fashion, and we are reducing emissions." (July 12, 2023)

18/07/2023

UNITED STATES:

NextDecade will move ahead with \$18.4 billion Texas LNG project.

NextDecade Corp. is pushing forward with its Texas liquefied natural gas export project, which the company has said will supply customers in Asia and Europe starting in 2027.

The Houston-based company closed on an agreement to move ahead with phase one of the project after lining up \$18.4 billion in financing. That includes \$5.9 billion in commitments from Global Infrastructure Partners, GIC, Mubadala Investment Co. and TotalEnergies SE, according to a statement Wednesday.

The project's final cost for engineering, procurement and construction was about \$12 billion for the first phase, which covers the first three trains of the five-train plant, according to NextDecade.

It's the third US LNG proposal to reach a final investment decision this year, after Venture Global LNG Inc.'s Plaquemines project in Louisiana and Sempra Energy's Port Arthur in Texas. Global buyers have looked to secure supplies of North American LNG in the wake of Russia's invasion of Ukraine last year.

The company's customers include Shell Plc, Exxon Mobil Corp. and Total, along with China Gas Holdings Ltd., Guangdong Energy Group Co., Engie SA, Galp Energia SGPS SA and Itochu Corp.

NextDecade's first contract with Shell was signed in 2019, with deal activity speeding up following the invasion of Ukraine. (July 12, 2023)

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MOZAMBIQUE:

Exxon Mobil expects Mozambique LNG investment decision in 2025.

The Exxon Mobil Corp.-led Rovuma liquefied natural gas-export project in Mozambique is on track to gain final approval in 2025, according to a company executive.

"A lot depends on the security situation, which has been very well managed," said Peter Clarke, senior vice president of upstream oil and gas, at a conference in Vancouver Tuesday. "The government is doing a good job and hopefully we'll see more positive news in that respect as we go through the end of the year," Clarke said.

This is the first time Exxon has laid out a clear timeline for the project since reviving plans to build the onshore plant, which was stalled in 2020 as an Islamic State-linked insurgency heightened security concerns. An approval by 2025 would put the project on track to start up by the end of the decade. Originally conceived as a plant producing 15.2 million tons a year, Exxon now envisions the plant producing as much as 18 million tons.

Exxon is looking to nearly double its LNG portfolio, which currently stands at 24 million tons a year globally, by 2030, either through new projects, joint ventures or third-party offtake agreements, said Clarke.

The Papua LNG project in Papua New Guinea has advanced into the front-end engineering and design phase, according to Clarke. A final investment decision could be made for the 6 million tons a year plant by early 2024, with start up by 2028, he said.

Clarke said that the major would be "selectively looking" at further US LNG projects for potential expansion of its LNG supply portfolio. (July 12, 2023)

18/07/2023

RUSSIA - EUROPE:

Yamal LNG sent over 70% of its gas to Europe in 2022 - Rosatom.

The Yamal LNG project sent over 16 million tonnes of liquefied natural gas to Europe last year, Anna Lenskaya, director of the Rosatom office in the Urals Federal District, said.

"Russian liquefied gas is in demand; the lion's share of supplies continues to flow to Europe. By the end of 2022, Yamal LNG produced 21 million tonnes of liquefied gas, more than 16 million of which went to Europe," she said at the intersectoral Development of International Transport Corridors event, which was part of the Innoprom-2023 international exhibition on Wednesday in Yekaterinburg.

Therefore, over 76% of LNG produced by Yamal LNG was sent to Europe.

Gas from Yamal LNG is sometimes transshipped via European terminals, mostly Belgium and France, where it is loaded onto conventional ships and sent to other countries.

This year, tankers carrying Yamal LNG have traditionally "opened navigation along the Northern Sea Route, on their way to Chinese terminals," Lenskaya said.

"This year, the first ships went to Japan and Taiwan," she said. (July 12, 2023)

18/07/2023

UNITED STATES:

Shell, BP pursue arbitration claims against Venture Global LNG.

Top LNG traders Shell and BP have separately filed for arbitration against U.S. exporter Venture Global LNG for failing to supply contracted cargoes, even as it sold to non-contract customers as prices soared, four people familiar with the matter said.

A Venture Global LNG spokesperson did not comment on the Shell and BP claims. Last month, the company said it was in full compliance with terms of its long-term contracts and cited a need for extensive commissioning of its modular facility.

Shell and BP missed out on billions of dollars in sales that went to Venture Global LNG because they were unable to get their contracted fuel, one of the people familiar with the arbitration filings said. Prices for liquefied natural gas soared last year on Russia's gas-supply cuts to Europe.

The companies filed their cases at the London Court of International Arbitration. A similar case was brought by Italian utility Edison SpA in May. Another Venture Global LNG contract customer, Spanish energy firm Repsol SA, has asked U.S. regulators to release confidential records that would shed light on the plant's startup.

Shell and BP declined to comment.

Founded by a former energy lawyer and investment banker, Venture Global LNG has emerged as a market force with its ability to obtain financing and rapidly build export plants. It has pledged to produce 70 million tons of LNG per year once the projects are completed.

The contracts were tied to Calcasieu Pass LNG, the first of Venture Global LNG's three planned facilities. It stitched together 18 liquefaction units to produce up to 12 million tons per year of the supercooled gas.

However, the plant's on-site power supply facility required extensive repairs that will prevent contract deliveries from the first phase until early 2024, Venture Global LNG has said.

Still, the facility has shipped six pre-commercial LNG cargoes so far this month, and 166 since its exports began in March 2022, Refinitiv vessel tracking data showed.

"The whole point in signing a contract is there is certainty you're going to have this supply and, in this case, that certainly has not emerged," said Ira Joseph, an LNG expert and fellow at Columbia University's Center on Global Energy Policy.

The dispute will cause buyers to strictly define commissioning in future purchase and sales agreements, he said.

The contracted customers believe they lost enormous profits as LNG prices in Europe jumped last August to a peak of \$89 per million British thermal units, from about \$6 to \$10 per mmBtu in 2018. Prices earlier this month were about \$11 per mmBtu. (July 12, 2023)

18/07/2023

RUSSIA:

Novatek ups gas output 0.5% to 20.35 bcm, liquids 6% to 3 mln tonnes in Q2.

Novatek raised gas output 0.5% year-on-year to 20.35 billion cubic meters and liquid hydrocarbons output 6% to 3 million tonnes in Q2 2023, the company said.

Total gas sales, including LNG, rose 7.7% year-on-year to 18.31 bcm, with 15.06 bcm sold in Russia, up 1.8%. LNG sales on international markets soared 47.3% to 3.24 bcm.

Gas output rose 0.8% year-on-year in H1 2023 to 41.23 bcm and liquids output grew 4.1% to 6.1 million tonnes.

The company processed 3.3 million tonnes of unstable gas condensate at the Purovsky Processing Plant in Q2 2023 and 6.8 million tonnes in H1 2023, up 5.5% and 3.8%, respectively. Novatek processed 1.7 million tonnes of stable gas condensate at the Ust-Luga Complex in Q2 and 3.4 million tonnes in H1, up 1.5% and 0.6%, respectively.

Preliminary petroleum product sales volumes of the Ust-Luga Complex were 1.8 million tonnes, including 1.1 million tonnes of naphtha, 0.3 million tonnes of jet fuel and 0.4 million tonnes of fuel oil and gasoil. Novatek sold 0.6 million tonnes of crude oil and 0.7 million tonnes of stable gas condensate.

Novatek had 0.8 bcm of natural gas, including LNG, and 1.4 million tonnes of stable gas condensate and petroleum products in storage or transit and recognized as inventory as of June 30, 2023. (July 12, 2023)

17/07/2023

BELGIUM:

Fluxys offers Zeebrugge regas slots.

Belgian LNG terminal operator Fluxys is offering three regasification slots for October at its LNG import facility in the port of Zeebrugge.

Fluxys LNG, a unit of Fuxys, is offering slots to unload, store, and regasify a cargo in the Zeebrugge LNG terminal, starting on October 3, 13, and 16, it said in a statement.

For these cargoes, Fluxys LNG has upgraded the standard slot size and commercializes as a bundle the firm rights to unload, store and regasify up to 165,000 cbm of LNG over 10 days.

The firm said it will hold auctions for these three slots on its website on August 1, 2, and 3.

Also, the starting price is the regulated tariff of 645,618,24 euros for the slots, Fluxys said, adding that the major price step is 250,000 euros and the minor price step is 25,000 euros.

The Zeebrugge terminal currently consists of five tanks with a storage capacity of 566,000 cbm and a regasification capacity of about 6.6 mtpa.

However, Fluxys is expanding the facility to almost double the regasification capacity and to add four more truck loading bays.

Fluxys previously said it aims to offer 4.7 mtpa of additional regasification capacity at the Zeebrugge LNG facility as of early 2024 and the full 6 mtpa as of early 2026. (July 11, 2023)

17/07/2023

PHILIPPINES:

Shell to supply commissioning cargo to First Gen's Batangas LNG terminal.

Power producer First Gen has awarded a contract to a unit of LNG giant Shell to supply the first liquefied natural gas cargo to its FSRU-based terminal in Batangas, Philippines.

The award of the commissioning cargo follows an international tender issued by First Gen.

According to a statement by First Gen issued on Monday, Shell Eastern LNG will supply one LNG cargo of about 154,500 cbm within the required delivery window of August 1 to September 30, on a DES basis to FGEN's unit, First Gen Singapore.

First Gen said the shipment will be loaded into the 162,000-cbm FSRU BW Batangas after facilitating its gassing-up and cooling down utilizing the delivered LNG cargo.

The FSRU will then return to the FGEN LNG terminal in Batangas, to complete commissioning activities, it said.

Subsequently, FGEN's existing gas-fired power plants in its energy complex in Batangas City will receive these supplies.

FSRU arrives at FGEN's terminal

In 2021, First Gen awarded the five-year FSRU contract to BW LNG, as it looks to replace declining volumes from the Malampaya gas field.

Last month, BW Batangas arrived in the Philippines to start serving First Gen's LNG import terminal developed by its unit FGEN Ing.

Prior to arriving in Batangas, the FSRU underwent modifications at the MMHE Shipyard in Johor, Malaysia.

First Gen said in the statement that the FSRU arrived at the LNG terminal's jetty in Batangas on July 8.

The vessel will remain in Batangas until it is required to depart for Subic Bay to collect the first LNG cargo from Shell, it said.

First Gen also noted that its unit FGEN LNG previously announced the signing of a memorandum of understanding with Prime Infrastructure Capital, for the proposed lease and operation of the FGEN LNG terminal.

No definitive agreements have been signed, but FGEN LNG and Prime Infra continue to develop a gas aggregator framework of which the LNG terminal is a primary element, it said.

The deal is intended to make it possible to blend currently declining volumes of indigenous Malampaya gas with imported LNG.

This is to ensure a "least-cost solution for consumers, enhance energy security, and provide a competitive power generation market, while exploration activities leading to the commercial development of new indigenous natural gas fields are undertaken," First Gen said.

This will be the second LNG import facility in the Philippines as Singapore's LNG firm AG&P kicked off commissioning activities in April at the country's first import terminal following the arrival of the 137,500-cbm FSU Ish at the terminal's jetty in Batangas Bay. (July 11, 2023)

17/07/2023

UNITED STATES:

Golden Pass LNG construction moving forward.

QatarEnergy and ExxonMobil continue to make progress in building their giant Golden Pass LNG export plant on the US Gulf Coast near Sabine Pass, Texas.

State-owned QatarEnergy owns a 70 percent stake in the Golden Pass project with a capacity of more than 18 mpta and will offtake 70 percent of the capacity, while US energy firm ExxonMobil has a 30 percent share.

A joint venture of Chiyoda, McDermott, and Zachry is building the three Golden Pass trains next to the existing LNG import terminal.

Golden Pass LNG Terminal and Golden Pass Pipeline said in the newest construction report filed with the US FERC that Golden Pass is continuing to carry out Phase I and Phase II activities, such as storm water protection, levee construction, stockpiling of material, and piling.

First LNG supplies in 2024

Golden Pass and its contractors progressed installation of piping and steel in process areas, continued walls and piping installation for the ground flares, while concrete foundation pours continued in Train 2 and Train 3.

In addition, Golden Pass progressed setting various vessels on respective foundations and progressed brownfield tie-ins.

The firm also continued LNG tank tops modifications and progressed cable tray installations and cable pulling activities.

As per the pipeline expansion project, Golden Pass continued civil and construction activities supporting milepost (MP)01 Compressor Station, Sabine Spur, Natural Gas Pipeline (NGPL) Interconnect improvements, and associated facilities.

FERC said in an inspection report last month that the anticipated in-service timing for the first train is the second half of 2024, with the second and the third train following after.

The regulator said in inspections reports earlier this year that the anticipated in-service timing for the first train was the first quarter of 2024.

QatarEnergy's CEO Saad Sherida Al-Kaabi said this week in Vancouver during LNG 2023 that 40 percent of all the new LNG supplies that will come to the market by 2029, will be from QatarEnergy's projects.

He said that QatarEnergy is increasing production to 126 million tons per annum in Qatar and "we have another 16-18 MTPA out of the US coming online next year." (July 12, 2023)

17/07/2023

UNITED STATES - ASIA:

Cheniere shunning Panama Canal for longer LNG routes to Asia.

Top U.S. LNG exporter Cheniere Energy is shunning the Panama Canal to transport liquefied natural gas to Asia because the market is not supporting use of the waterway, said Chief Operating Officer Corey Grindal on Monday.

The Panama Canal historically has been used by U.S Gulf Coast LNG exporters to send LNG to Asian customers via the Pacific Ocean. But a months-long drought has led to delays and depth restrictions for the largest ships accessing the canal.

"We use the canal when it is economical to do so, right now it is not. Right now the market in the Far East is not supporting it, and the waiting time, with us not being a priority customer, is just not worth us using it right now," Grindal said in a media briefing at an LNG conference.

Other routes to Asia include sailing through the Suez Canal or a month-long journey around South Africa's Cape of Good Hope.

Cheniere continues to be buoyed by the possibility of a growing Asian market and expects there will be increased demand from countries in South and Southeast Asia, said Chief Commercial Officer Anatol Feygin.

However, some countries with large gas-reliant economies but poor credit ratings have had a difficult time figuring out how to enter into long-term agreements with purely commercial exporters like Cheniere, Feygin said.

"They tend to rely more on state-to-state agreements. Obviously that is not something we can participate in. We see Thailand, Philippines as very attractive markets," he said.

Feygin expects China to import 100 million metric tons per year in the future, up from about 64 million metric tons last year, he said.

"China will be the largest LNG buyer this year." (July 11, 2023)

17/07/2023

UNITED KINGDOM:

UK's Centrica and Delfin Midstream sign 15-year US LNG supply deal.

British Gas parent firm Centrica has signed a 15-year liquefied natural gas (LNG) supply agreement with U.S.-based Delfin Midstream, the companies said on Tuesday.

Britain and other European countries have turned to the United States for LNG to help reduce their reliance on Russian gas following Moscow's invasion of Ukraine in February 2022.

More than 70% of U.S. LNG exports went to Europe last year.

The long-term supply deal for 1 million tonnes of LNG a year from Delfin's planned Deepwater Port off the coast of Louisiana has a market value of \$8 billion.

Centrica expects to take delivery of about 14 LNG cargoes a year, providing enough energy to heat about 5% of UK homes, it said.

Pending Delfin's final investment decision on the port project, operations and first LNG are expected in 2027.

Developers typically agree long-term supply agreements before making a final investment decision.

In December, the United States and Britain announced on an energy partnership aimed at sustaining a higher level of LNG exports to Britain and collaborating on ways to increase energy efficiency.

The U.S. became the world's largest LNG producer by installed capacity in 2022 and is planning to expand capacity further. (July 11, 2023)

14/07/2023

EUROPE:

Uniper chief says flexible duration LNG contracts key for Europe.

Shorter-duration contracts for LNG purchases will be important for Europe's diversifying supply given uncertainty about long-term gas demand, the new chief executive of German utility Uniper said on Monday.

LNG developers prefer 20- to 25-year contracts to help secure financing for the multi-billion-dollar projects. But European nations committed to moving to renewable fuels within the next 20 years have been reluctant to sign deals, creating a stalemate.

Uniper CEO Michael Lewis argued for more flexible terms at the LNG 2023 conference in Vancouver. The role of liquefied natural gas in Europe's energy mix is reasonably secure until 2030, but after that it is "very, very, challenging" to predict gas demand as countries ramp up decarbonization efforts, he said.

"We want to continue to diversify geographically but also in terms of the duration of contracts," said Lewis, who took over as CEO last month. "The key challenge will be getting the right pricing and the right flexibility so that you can move that gas around easily, as demand starts to fall in Europe."

European countries including Germany are seeking to secure new energy supplies after Russia cut pipeline gas shipments to the continent. Germany's response to the cuts included conservation and launching several LNG import terminals.

If European LNG demand is uncertain, Asia's emerging markets continue to grow as they move away from coal, said Sarah Bairstow, president of Mexico Pacific Ltd, speaking on the same panel.

Trading houses that can aggregate demand from a number of established and emerging markets will become more important to advancing LNG export terminal projects.

"Those markets are a little more difficult for project developers," Bairstow said. "It's really caused an emergence again of the role of aggregators and traders as we see emerging markets coming back into play." (July 11, 2023)

14/07/2023

UNITED STATES:

Dominion sells Maryland gas plant stake to Berkshire Hathaway unit for \$3.3 billion cash.

Dominion Energy agreed to sell its 50% stake in the Cove Point liquefied natural gas facility in Maryland's Chesapeake Bay to a unit of Warren Buffett's Berkshire Hathaway for \$3.3 billion in cash, the companies said on Monday.

Berkshire Hathaway Energy already operates the facility, and would upon closing have a 75% ownership stake. A unit of Brookfield Infrastructure Partners owns the remaining 25%.

Cove Point is located in Lusby, Maryland, about 60 miles (97 km) southeast of Washington, D.C.

Berkshire Hathaway Energy said the facility has a storage capacity of 14.6 billion cubic feet, and provides liquefied natural gas to supplant coal-burning power plants and support energy needs in 28 countries.

Robert Blue, Dominion's chief executive, in a statement said Dominion considers Cove Point a "non-core" business, and selling it would free the Richmond, Virginia-based company to focus on state-regulated utility operations.

Dominion also expects to receive about \$200 million from the termination of interest-rate derivatives. It plans to use sale proceeds to repay debt.

The transaction is subject to federal regulatory approval, and expected to close by the end of 2023. If it failed to close under specified circumstances, Berkshire would owe Dominion a \$150 million termination fee.

Berkshire Hathaway, based in Omaha, Nebraska, has held a controlling stake in Berkshire Hathaway Energy since 2000, and now has a 92% stake in the Des Moines, Iowa-based company.

Buffett's company also owns dozens of other businesses such as the BNSF railroad and Geico car insurance, as well as stocks such as Apple. (July 10, 2023)

14/07/2023

CANADA:

Black & Veatch chosen for FEED work on proposed Ksi Lisims LNG floating natural gas project in Canada.

Black & Veatch, a global leader in liquefied natural gas infrastructure solutions - in collaboration with Samsung Heavy Industries of South Korea - announced today it has been awarded a front-end engineering design contract for the Ksi Lisims LNG nearshore floating production facility in northwest Canada.

The Ksi Lisims LNG project represents the next generation of LNG export design, re-inventing the industry for environmentally sensitive and greenhouse-gas constrained development situations.

Developed jointly by Western LNG, the Nisga'a Nation and Rockies LNG, the project will be one of the most significant Indigenous-led infrastructure projects in Canadian history. Ksi Lisims (pronounced "s'lisims") will be hosted by the Nisga'a Nation on their wholly-owned treaty land.

The project will use a floating LNG design that improves the project economics, minimizes land impacts and reduces construction-related risk. With commercial operations anticipated to begin in 2028, Ksi Lisims LNG will be designed to produce up to 12 million metric tons of LNG per year for export to overseas markets.

Once completed, Ksi Lisims LNG will have among the world's lowest unit carbon emissions rates of any large-scale LNG export projects globally, providing global energy markets with low-carbon, reliable LNG that will help meet growing energy needs and reduce the need for base-load coal plant construction. Through connection with British Columbia's renewable hydroelectric grid and use of innovative design features, the project's greenhouse gas emissions will be 90 percent lower than conventional LNG facilities. Combined with a credible offset management plan, the project expects to be net zero by 2030.

"The Ksi Lisims LNG project team is delighted to be working with the world's pre-eminent experts in floating LNG engineering and design," said Davis Thames, president and CEO of Western LNG. "As global leaders in FLNG engineering and construction, we understand that Black & Veatch and Samsung Heavy Industries undertake extensive analysis and carefully choose each project they work with. This agreement demonstrates their confidence in the fundamentals of our project and our prospects for success. We couldn't be more pleased to be working with them both."

"We are excited and look forward to further developing our relationship with the Ksi Lisims LNG owners team," added Javid Talib, vice president and managing director in Black & Veatch's energy resources industries business. "We see this FEED award as an important step as we move towards working together on the engineering and construction of this world-class project."

Eva Clayton, president of the Nisga'a Lisims government, said the Ksi Lisims LNG project "will be the heartbeat of our Nation's economy. It's our best chance to build prosperity and a positive future for our people. After nearly 10 years of planning work, we're thrilled to see the project advance into FEED."

"The opportunity to work on this game-changing LNG facility is attracting the best and brightest team in the LNG field," added Charlotte Raggett, president and CEO of Rockies LNG. "Canada is stepping up to offer the world's most reliable, low-risk and low-emission natural gas. We're happy to have Black & Veatch and SHI join us in getting this important clean energy resource to the markets that need it most." (July 10, 2023)

14/07/2023

GERMANY:

German Parliament votes for Mukran LNG project go-head on Rügen island using ‘FSRU Transgas Power’.

The German Parliament has voted to allow the development before the winter of a liquefied natural gas import facility in the port of Mukran on the island of Rügen and involving the “FSRU Transgas Power” vessel.

“The Bundestag and Bundesrat both voted on July 7 to allow the construction of an LNG terminal in the port of Mukran on the island of Rügen. Both voted for an amendment to the LNG Acceleration Act,” said a statement.

“The terminal in the port of Mukran should be available for this winter in about six months’ time,” added the Government statement.

Analysts note that the LNG import issue has become a key policy for Chancellor Olaf Stolz’s coalition Government and has caused a partial split with the Greens within the coalition.

Time limitation

The SPD in the Baltic Coast area of Mecklenburg-Western Pomerania, where the “FSRU Transgas Power” is to be deployed, are calling for a limitation on the duration of the FLNG project in Mukran.

Mecklenburg-Western Pomerania's state Environment Minister Till Backhaus, a member of the SPD, said that the applications for the planned LNG terminal have still to be thoroughly examined and were far from complete.

According to Backhaus, the responsible authorities in Mecklenburg-Western Pomerania will take a very close look at the applications and may seek amendments.

“From my point of view, the last word has not yet been spoken on the length of the project. We will not accept operating the LNG terminal for the current time span of 20 years,” stated Backhaus.

The Mukran terminal will be part of the operations of Deutsche ReGas GmbH, which has other vessels at the nearby Baltic port of Lubmin and signed an agreement in June 2023 with the Federal Government on deploying the “FSRU Transgas Power”.

Conditions

“The company will be the sub-charterer of the regasification ship to be used together with the ‘Neptune’ in Phase II of the LNG terminal ‘Deutsche Ostsee’ in the port of Mukran,” stated Deutsche ReGas.

It added that as agreed, Deutsche ReGas will assume the rights and obligations of the head charterer in the contract between the Federal Government and Greek shipowner Dynagas.

The Maltese-flagged vessel has 174,000 cubic metres of capacity. It was delivered to Dynagas in 2021 and has a regasification capacity of up to 7.5 billion cubic metres of natural gas per annum.

The Bundesnetzagentur (Federal Network Agency) allowed Deutsche ReGas, a private company, to set up LNG import facilities on the basis that a minimum amount of gas was imported.

Deutsche ReGas said that when the Mukran Port operation starts the total injection capacity of the Baltic LNG operations will total 13.5 Bcm per annum, which would be in accordance with the Bundesnetzagentur requirements. (July 10, 2023)

13/07/2023

SPAIN:

Spanish LNG imports, reloads drop in June.

Spanish liquefied natural gas imports and reloads declined in June when compared to the same month last year, according to Enagas.

LNG imports dropped by 22.5 percent to about 21.3 TWh in June and accounted for 74.6 percent of the total gas imports. In May, LNG imports reached some 24.7 TWh.

Including pipeline imports from Algeria, France, and Portugal, gas imports to Spain reached about 28.6 TWh last month, a drop from some 35.8 TWh in June last year, Enagas said in its monthly report.

Moreover, national gas demand in June dropped by 10.3 percent year-on-year to 26.1 TWh.

Demand for power generation declined by 27.6 percent year-on-year to about 9.5 TWh last month, while conventional demand rose by 4 percent to 16.6 TWh, the LNG terminal operator said.

Enagas operates a large network of gas pipelines and has four LNG import plants in Barcelona, Huelva, Cartagena, and Gijon.

It also owns 50 percent of the BBG regasification plant in Bilbao and 72.5 percent of the Sagunto plant, while Reganosa operates the Mugardos plant.

Enagas recently received the first tanker at its El Musel terminal in Gijon.

Russia biggest LNG supplier, US volumes dip

The six operational Spanish LNG regasification terminals unloaded 23 cargoes last month, 6 cargoes less when compared to June 2022, according to Enagas.

Russia was again the biggest supplier of LNG to Spain in June with 7.67 TWh, a drop from 8.75 TWh last year. Russian volumes accounted for 26.8 percent of all of the Spanish gas imports in June, the data shows.

US LNG volumes to Spain halved from about 10.6 TWh in June 2022 to 5.29 TWh last month.

The Bonny LNG plant in Nigeria supplied some 2.87 TWh to Spain last month, down from 3.84 TWh in June 2022, while the Peru LNG plant supplied some 2.78 TWh to Spain.

Other LNG sources in June include Algeria, Egypt, and Qatar, the data shows.

LNG reloads down

Spanish LNG terminals loaded about 0.39 TWh in June, down 46 percent compared to some 0.73 TWh in June 2022, and also down when compared to 2.16 TWh in May.

The Cartagena LNG terminal reloaded about 0.18 TWh of LNG, followed by Bilbao with about 0.12 TWh.

On the other hand, the number of truck loads at the LNG terminals rose by 16.1 percent year-on-year to 937, the data shows.

The Barcelona and Huelva LNG terminals each completed 200 truck loads in June, followed by Sagunto with 163 truck loads and Cartagena with 149 truck loads. (July 10, 2023)

13/07/2023

VIETNAM:

PetroVietnam Gas welcomes Vietnam's first LNG cargo.

PetroVietnam Gas, a unit of state-owned PetroVietnam, said that its Thi Vai LNG import terminal, the country's first such facility, has received the first cargo from Shell.

According to a statement by PetroVietnam Gas issued on Monday, the 2016-built 174,000-cbm, Maran Gas Achilles, owned by a joint venture of Greece's Maran Gas and Qatar's Nakilat, delivered the LNG cargo to the Thi Vai terminal.

Shell supplied about 70,000 tons of LNG from Indonesia's Bontang LNG terminal, it said.

PetroVietnam Gas announced in May that its Thi Vai LNG terminal will receive the first cargo as part of the commissioning phase from Shell.

The firm said it will supply natural gas via a pipeline or deliver LNG by trucks to customers that are not connected to the pipeline system.

The Thi Vai LNG import facility consists of one 180,000-cbm LNG tank, a jetty, and regas area.

The terminal will have a capacity of 1 mtpa in its first phase, but the company plans to boost the capacity to 3 to 6 mtpa in the next stage.

Also, it will be an important link in supplying gas to consumers, including the Nhon Trach 3 and 4 power plants.

Together with the Son My LNG import terminal with a total expected capacity of up to 10 million tons of LNG per year, in which PetroVietnam Gas is the co-owner with the majority capital contribution ratio, these facilities will basically meet the energy demand for the southern region in the country the future, PetroVietnam Gas previously said.

PetroVietnam Gas also recently held talks regarding LNG supplies with US energy giant ExxonMobil and Russian LNG producer Novatek. (July 10, 2023)

13/07/2023

GERMANY:

KN becomes commercial operator of German LNG terminal.

The energy terminal operator, KN (AB Klaipėdos nafta), is starting its commercial operation of the Elbehafen LNG terminal in Brunsbüttel, northern Germany. This marks KN's second involvement in a German LNG terminal, following its role as the commercial operator of the Wilhelmshaven LNG terminal on the North Sea coast since autumn 2022.

The Elbehafen LNG terminal, situated in the port city of Brunsbüttel at the Elbe River's mouth, was developed by Elbehafen LNG GmbH - a subsidiary of the German energy group RWE, on behalf of the German government.

According to the signed contract, commercial terminal management services include managing logistics operations, gas dispatching operations, gas accounting and reporting, and other terminal operational services adapted to the customer's needs.

The Elbehafen LNG terminal is based on the FSRU technology. The terminal receives gas from LNG carriers via the FSRU Höegh Gannet, which was built in 2018 and has a storage capacity of 170 000 m³. After expansion of the natural gas grid network the terminal will have a designed annual capacity of 7.5 billion m³ of natural gas.

The Elbehafen LNG terminal is the third LNG terminal built in Germany over the last year, following the country's rush to develop new LNG terminals in the aftermath of Russia's war in Ukraine to avoid an energy deficit.

Darius Šilenskis, CEO of KN, points out that yet another successful bid for the commercial operation of the German LNG terminal confirms that the decision taken more than five years ago to focus on the development of the LNG business on international markets was the right one.

"The growth of LNG terminal construction projects since the start of the Russian war in Ukraine has created an additional market for our services. However, we have been planning an ambitious expansion in the global LNG market long before the war. To date, we have contributed to more than 10 different LNG projects around the world. We are delighted to be able to add another new commercial operation contract in Germany to our solid portfolio of international projects," said Šilenskis.

Šilenskis notes that KN's new long-term strategy for 2023 - 2050, approved in mid-June, also focuses on the development of the international LNG business. Leveraging their knowledge and expertise, the company is poised to extend LNG terminal development activities in growing markets and to actively seek additional new LNG projects in which KN would be selected as a consultant, an operator and, if successful, even a shareholder or investor. (July 7, 2023)

[11/07/2023](#)

THAILAND:

Exclusive: Thailand's PTT in advanced talks with Qatar for LNG deal.

Thailand's largest energy company, state-controlled PTT, is in advanced talks with Qatar for a 15-year liquefied natural gas (LNG) supply deal, four trading sources told Reuters.

The oil and gas conglomerate is negotiating a supply of 1 or 2 million tonnes per annum, according to different figures cited by the sources, in what would be the latest in a spate of deals by Asian buyers to lock in long term supplies.

A fifth industry source said that both companies are in "serious negotiations" but added that a deal isn't expected before the end of summer.

QatarEnergy and PTT did not immediately respond to a request for comment.

Qatar is the world's top LNG exporter and competition for LNG has ramped up since the beginning of the war last year in Ukraine, with Europe in particular needing vast amounts to help replace piped gas from Russia that previously made up almost 40% of the continent's imports.

Asian companies, with an appetite for long-term sales and purchase agreements, have outpaced Europe in locking in supply from Qatar's two-phase expansion plan that will raise its liquefaction capacity to 126 million metric tons a year by 2027 from 77 million.

The Gulf energy giant has been in negotiations with several other Asian buyers this year and has so far signed three LNG supply deals with Asian buyers, with more expected later this year.

PTT has been seeking spot LNG cargoes this year, traders have said, along with other companies in emerging Asian markets, after prices of the super-chilled fuel eased from last year's record highs.

PTT also signed a nine-year deal with Oman LNG at the start of the year, which will see it receive 800,000 tons of LNG per year beginning 2026.

Thailand, a net oil and gas importer, needs to increase imports of LNG to offset a steep production fall at its gas fields. So far, the country has imported around 6 million tons of LNG this year versus 8.7 million tons in 2022, according to data firm Kpler. (July 7, 2023)

[11/07/2023](#)

VIETNAM:

PV GAS to receive first imported LNG shipment.

Petrovietnam Gas Joint Stock Corporation is expected to receive the first imported liquefied natural gas shipment from supplier Shell on July 10.

Specially, the Greece-flagged Maran Gas Achilles ship will transport 70,000 tonnes of LNG from Bontang port in Indonesia to Thi Vai LNG warehouse in southern Ba Ria - Vung Tau province.

Deputy General Director of PV GAS Tran Nhat Huy said that the company has completed the construction of the infrastructure of the Thi Vai LNG warehouse and it is ready for LNG import and export.

PV GAS said that LNG infrastructure will basically meet the energy demand for the Southern region in the future.

The Thi Vai LNG warehouse will be the first and largest LNG warehouse in Vietnam with a capacity of 1 million tonnes per year in its first phase. PV GAS has a plan to expand the warehouse's capacity to 3 million tonnes per year in the second phase. (July 7, 2023)

11/07/2023

CANADA:

LNG Canada to begin start-up activities within next year.

LNG Canada will begin some start-up activity within the next year, with the first cargoes of liquefied natural gas scheduled to be shipped by the middle of the decade, the project's chief executive officer said in a phone interview.

The project to build a 14 million metric ton a year liquefaction plant in Kitimat, on the British Columbia Coast, is 85 per cent finished, said Jason Klein, chief executive officer of LNG Canada Development Inc., the global consortium led by Shell Plc that's behind the project.

Since the invasion of Ukraine, which disrupted Russian gas pipeline supply to Europe and accelerated the rush to buy North American LNG, Canada's West Coast has been appealing to Asian buyers not wanting to compete with Europe. The shorter shipping distance to Asia and ample gas supply from massive basins such as the Montney and Duvernay in British Columbia and Alberta have been touted for decades to develop LNG exports.

The last of the major liquefaction modules for LNG Canada are scheduled to arrive by month end, Klein said. A total of 6,500 people are currently working at the site finishing up construction.

A planned second phase for the project is still under evaluation by the partners, which include Shell, Petroliam Nasional Bhd, PetroChina Company Ltd., Mitsubishi Corp. and Korea Gas Corp. Plans for an all-electric second phase to slash emissions will have to wait until more power can be supplied by British Columbia Hydro and Power Authority. The company initially may use gas turbines to power phase two of the plant, but could switch to electric at a later date, Klein said. LNG Canada is in discussions with both the utility and government about increasing power delivery to the site.

One of the largest private-sector construction projects in Canada's history, LNG Canada is estimated to cost \$40 billion (US\$30 billion) including the cost of the liquefaction plant, pipeline and gas drilling. (July 6, 2023)

11/07/2023

ITALY:

Snam's Piombino FSRU to get second LNG cargo.

Snam's FSRU-based LNG import terminal in the Italian port of Piombino is expected to receive its second liquefied natural gas cargo on Friday.

The 2017-built, Ougarta, owned by Sonatrach's Hyproc Shipping, was on Friday at 13:00h local time anchored offshore the port and not far from the 170,000-cbm Golar Tundra, according to its AIS data provided by VesselsValue.

Also, Ougarta is loaded with a cargo from the Sonatrach-operated Arzew LNG export plant in Algeria, the data shows.

This shipment from Algeria should be the first commercial LNG cargo for the FSRU-based facility.

Snam did not respond to LNG Prime's request to comment on the matter.

As part of the commissioning phase, Snam's Golar Tundra received its first cargo in May onboard the 2021-built, Maran Gas Kalymnos, owned by Greece's Maran Gas and chartered by Italy's Eni.

Eni booked regasification capacity at the FSRU-based facility as part of its strategy to diversify LNG supplies to Italy through its internationally produced equity gas.

Snam purchased Golar Tundra with a regasification capacity of 5 bcm from Golar LNG last year for \$350 million, and the unit arrived in Piombino from Singapore in March.

FSRU Italia, a unit of Snam, has already allocated more than 86 percent of the offered regasification capacity following the first allocation procedure and in April it offered the remaining quantities as well.

This is Italy's fourth large LNG terminal and also the second FSRU-based facility.

Last year, Snam also bought one FSRU from BW and signed a deal to convert LNG carrier Golar Arctic into an FSRU.

Snam plans to employ the 2015-built FSRU BW Singapore to serve the facility off Ravenna.

The company owns the Panigaglia facility and has stakes in the FSRU Toscana and the Adriatic LNG import terminal. (July 7, 2023)

[10/07/2023](#)

ITALY:

Adriatic LNG launches open season 2023.

Adriatic LNG, the company that operates the largest LNG regasification terminal in Italy and among the first in the Mediterranean area, has launched the accreditation phase for open season 2023, aimed at operators of the natural gas market interested in acquiring regasification capacity.

With the open season 2023, Adriatic LNG offers the market regasification capacity available in the period between January 2029 – December 2048 and a new possible incremental capacity subject to conditions from 1Q26 and up to 20 years.

Operators can apply by 14 July 2023, to accredit themselves to participate in the binding phase of the 2023 open season, which will begin on 19 July 2023 and end on 2 August 2023. To accredit, operators will need to follow the directions provided in the notice of initiation of the annual subscription procedure and the auction application rules, which have been made available on Adriatic LNG's website.

The incremental capacity is subject to technical and financial/economic conditions and subject to obtaining authorisation permits. In order to proceed with the possible realisation of the incremental capacity, this decision will be made by the end of August 2023 or, at the latest, within two months from the date of signing the relevant capacity agreements in relation to the incremental capacity.

Detailed action information on the available LNG regasification capacity offered and the incremental capacity subject to conditions is contained in the 2023 offered capacity catalogue.

The open season 2023 provides an opportunity to increase LNG imports and, at the same time, diversify sources of supply, thereby fostering greater resilience of the energy system. To date, the Adriatic LNG terminal has received LNG from several geographic areas, including Qatar, the US, Egypt, Norway, Angola, Trinidad and Tobago, and Mozambique, confirming it as a reliable and strategic infrastructure for Italy and Europe. (July 6, 2023)

[10/07/2023](#)

UNITED STATES:

Baker Hughes to supply 3 liquefaction trains for NextDecade's Rio Grande LNG project.

Baker Hughes, an energy technology company, announced Thursday it has been awarded an order by Bechtel Energy Inc. - to be booked in the second quarter of 2023 - to supply three Main Refrigerant Compressors for NextDecade's Rio Grande LNG project in the Port of Brownsville, Texas.

In total, Baker Hughes will supply six Frame 7 gas turbines paired with 18 centrifugal compressors across Rio Grande's first three LNG trains in a parallel configuration arrangement, providing more operational flexibility - for a nameplate capacity of 17.61 MTPA.

"This order builds on our longstanding relationship with Bechtel and is a significant milestone in our partnership with NextDecade, supporting them on this key LNG project," said Ganesh Ramaswamy, executive vice president of Industrial & Energy Technology at Baker Hughes. "We are delighted that our proven and reliable technology solution will support the production of LNG in the U.S., which is crucial in balancing energy affordability, security and sustainability globally."

The Baker Hughes gas technology solution chosen for Rio Grande LNG provides NextDecade with the highest production levels for the plant's design, as well as operational flexibility and high availability. The Frame 7 gas turbine is well-proven for its energy efficiency, availability, reliability and maintainability.

Packaging of the turbine/compressor train, a unique Baker Hughes offering, as well as assembly of the compressors and testing of the trains, will take place at Baker Hughes' facilities in Italy.

Building on almost 40 years of experience in the LNG space, Baker Hughes continues to help meet global energy demand by providing advanced, efficient and reliable solutions for the U.S. natural gas export sector. The announcement follows another recent contract awarded by Bechtel to Baker Hughes to supply two liquefaction trains for another LNG project in Texas, announced in March 2023. (July 6, 2023)

10/07/2023

WORLDWIDE:

New record set in 2022 for global LNG trade volumes.

In 2022, global trade in LNG set a record high, averaging 51.7 billion ft3/d, a 5% increase compared with 2021, according to data by CEDIGAZ.

The US Energy Information Administration, reports that liquefaction capacity additions, primarily in the US, drove growth in global LNG trade. At the same time, increased LNG demand in Europe also contributed to trade growth as LNG continued to displace pipeline natural gas imports from Russia.

US LNG exports in 2022 increased by 16% (1.4 billion ft3/d) to 10.2 billion ft3/d compared with 2021, the largest increase of all LNG-exporting countries. In the first half of 2022, after the new Calcasieu Pass LNG export facility was commissioned, the US became the world's top LNG exporter for the first time. However, because the Freeport LNG export terminal shut down, US LNG exports declined in the second half of the year. In 2022, Qatar and Australia remained the top two global LNG exporters; Qatar's exports averaged 10.5 billion ft3/d, and Australia's exports averaged 10.4 billion ft3/d.

LNG exports increased by a combined 1.3 billion ft3/d from Malaysia, Norway (after Hammerfest LNG returned to service in May), Trinidad and Tobago, Russia, Oman, and Equatorial Guinea. LNG exports from Algeria and Nigeria decreased by a combined 0.5 billion ft3/d as both countries continued to experience issues with domestic natural gas production, which is used as a feedstock at LNG export facilities.

Among LNG-importing regions, Europe had the largest increase in LNG imports globally, increasing by 65% (6.5 billion ft3/d) compared with 2021. LNG imports declined by 9% (3.2 billion ft3/d) in Asia and by 34% (0.8 billion ft3/d) in Latin America compared with 2021.

LNG imports into EU-27 countries and the UK increased substantially in 2022 by 73% (6.3 billion ft3/d) compared with 2021, replacing imports by pipeline from Russia. Five countries: France, the UK, Spain, the Netherlands, and Belgium, increased LNG imports by a combined 5.4 billion ft3/d, accounting for 85% of the total increase.

Japan was the top LNG importer for 50 years, until China surpassed Japan in 2021. The following year, in 2022, Japan resumed its position as top LNG importer. The decline in China was due, in part, to its zero-COVID policies, increased imports by pipeline from Russia, and higher use of coal. Other Asian countries, particularly those that rely more on global LNG spot markets, reduced spot purchases because of record-high LNG prices last year. LNG imports into India, Pakistan, and Bangladesh declined by a combined 18% (0.9 billion ft3/d) in 2022 compared with 2021.

In Latin America, Brazil had the largest decrease in LNG imports at 70% (0.6 billion ft3/d). This was mainly because the higher availability of electricity from hydropower generation reduced demand for natural gas-fired electricity generation in 2022 compared with 2021. (July 6, 2023)

10/07/2023

EUROPE:

Molgas expanding European LNG bunkering business.

European small-scale LNG player Molgas is working to further expand its liquefied natural gas bunkering business as the demand for the fuel continues to grow.

Molgas, owned by French private equity firm InfraVia Capital Partners, has significantly expanded its operations in the last two years, including the industrial sector, truck filling stations, and bunkering.

In 2021, the Madrid-based firm completed a deal with LNG giant Shell to buy Norway's LNG supplier Gasnor and in the year after it acquired a controlling stake in Greece's small-scale LNG firm, Blue Grid.

Now Molgas is working to "expand the existing footprint of the group (terminal-to-ship, multi-truck-to-ship, and ship-to-ship), opening new ports, and enabling the clients LNG supply across strategic locations in Europe," COO Juan Menchero told LNG Prime on Friday.

The LNG bunkering business in Europe was hit last year due to surging prices. However, prices dropped significantly this year and owners such as Spain's Balearia are now supplying only LNG to their dual-fuel vessels.

In addition, orders for LNG-powered vessels were at similar levels last month when compared to some months during the record last year, according to DNV.

DNV's data shows that there are now 411 LNG-powered ships in operation around the globe, while owners placed orders for 526 LNG-fueled vessels.

Algericas LNG bunkering op

As part of its plans to further grow its LNG bunkering business, Menchero said that Molgas recently completed the first multi-truck-to-ship delivery at the Port of Algeciras.

The operation took place on July 5 and 6 and Molgas supplied about 110 tons of the fuel to an LNG-powered chemical tanker.

Molgas loaded LNG at the Enagas-operated terminals in Huelva and Cartagena.

Prior to the unloading of three LNG trucks, a cooldown and gas up process took place.

Working in close coordination with the Port of Algeciras, the group managed the unloading of three LNG trucks simultaneously, followed by an additional three trucks.

Menchero added that Molgas can complete such operation with up to four trucks simultaneously. (July 14, 2023)

20/07/2023

WORLDWIDE:

Shell expands LNG bunkering network.

LNG giant Shell has added two more locations to its global LNG bunkering network as the number of LNG-powered vessels continues to grow.

The new LNG bunkering locations include Flushing and Antwerp and they joined Shell's global's LNG bunkering network in June, according to a social media post by Shell's head of downstream LNG, Tahir Faruqi.

Faruqi said that Shell completed the first operations in Flushing with its customer Van Oord.

Dutch marine contractor Van Oord recently took delivery of its third and final LNG-powered trailing suction hopper dredger, Vox Alexia, in Singapore.

With these two locations, Shell expanded its network to 19 locations across 12 countries, Faruqi said.

He also said in a separate post that Shell completed in June the first LNG bunkering of the 2023-built 15,000-teu MSC Kayley containership in Rotterdam.

Singapore's Eastern Pacific Shipping ordered this LNG-powered vessel in 2019 at Hyundai Heavy and chartered it to MSC, VesselsValue data shows.

MSC is building a huge fleet of LNG-powered vessels in order to slash emissions and to comply with new IMO rules.

According to the latest data by classification society DNV, there are now 411 LNG-powered ships in operation, while owners placed orders for 526 LNG-fueled vessels.

LNG-powered crude oil tankers and containerships lead the way with 62 and 53 in operation, respectively, while LNG-powered containerships account for a big part of the ordered vessels with 198 units.

More than 1,000 ops

Up to date, Shell completed more than 1,000 ship-to-ship LNG bunkering operations across 12 countries.

In March, Shell and Israel's shipping firm Zim completed the first LNG bunkering operation in Jamaica as part of their 10-year bunkering deal.

In addition, Singapore's FueLNG, a joint venture consisting of Shell and Seatrium Offshore & Marine, announced last month that its second bunkering vessel finalized its first LNG bunkering operation.

Korea Line LNG, a unit of SM Group's Korea Line, chartered this ship to FueLNG, which already owns Singapore's first LNG bunkering ship, FueLNG Bellina.

Besides these two ships, Shell's fleet consists of ten more bunkering vessels, including vessels on order, its website shows. (July 10, 2023)

13/07/2023

GENERAL INFORMATION

FRANCE - GERMANY:

Germany progresses policy on 2043 LNG terminal conversions for hydrogen imports.

The German Federal Government said 7 July that it passed a draft law that would enable modifications on the LNG Acceleration Act that would accelerate the use of import terminals for the processing of hydrogen.

The main changes to the act focus the climate-neutrality readiness of future land-based LNG infrastructure as well as the final decision on the relocation of the floating LNG terminal at Lubmin to the port of Mukran.

After review, the law concludes that the port of Mukran would be the choice of location for the currently operational Lubmin LNG import facility, despite local opposition.

Prior to this, the German parliament had approved a law which stipulated that floating storage and regasification units should withdraw where permanent LNG terminals on land begin to operate.

HYDROGEN-READY

Key to the adaptation of the act was a focus on hydrogen readiness for LNG terminals. The act had previously noted a need for LNG terminals to support climate-neutral hydrogen from the beginning of 2044. However, the amendment advanced the policy by noting that fixed LNG terminals would need to evidence an ability to handle hydrogen or hydrogen derivatives (such as ammonia) at the terminal by the end of 2043 as early as the approval process.

This means that the consideration to switch to a terminal that can handle hydrogen is embedded within the planning process, rather than an obligation to be met ahead of 2043.

According to a press release from the German government, “[LNG] plant components that cannot be retrofitted later or can only be retrofitted at disproportionately high costs must be set up from the outset in such a way that operation with hydrogen or derivatives is possible.”

Some market participants have previously shown concern around the ability to retrofit an LNG terminal for hydrogen, suggesting that technological differences would result in plant operators needing to invest in new infrastructure.

The amendment to the act was proposed on a basis of avoiding stranded assets, meaning that new projects aiming to import fossil fuels have a future in a net zero energy environment even if the plant is years from decommissioning.

Imports of hydrogen and hydrogen derivatives have a key role to play in overall European hydrogen security of supply, ICIS data shows. However, the share of shipped hydrogen and hydrogen derivatives is expected to be smaller than imports via pipeline from North Africa.

Overall, ICIS data shows ammonia-to-hydrogen imports of 83TWh by 2050, while North Africa pipeline volumes are expected to reach nearly 400TWh and Ukrainian imports via pipeline potentially reaching 90TWh.

Specifically in the case of Germany, total hydrogen demand in 2043 is expected to reach 165TWh, while domestic supply is only forecast at 121TWh under ICIS Base Case scenarios. The gap implies a need for potential imports, such as pipeline or ship.

Hydrogen derivatives into Europe could prove profitable into the future, based on ICIS ammonia-to-hydrogen assessment data. The ICIS NW Europe Ammonia-to-Hydrogen assessment indicates the cost of importing ammonia into the ports of Rotterdam and Antwerp based on spot ammonia prices and then decomposing the ammonia into hydrogen.

Current assessment data shows the ammonia-to-hydrogen route being cost competitive with electrolytic hydrogen and around €1/kg more expensive than Dutch low-carbon hydrogen from natural gas with carbon capture and storage technology. (July 7, 2023)

11/07/2023

NATURAL GAS

PRODUCTION

IRAN:

SP Gas Field Phase 11 to go on stream soon: Iran's oil minister.

An oil and gas project will be inaugurated in the country every month, Iran's oil minister said, adding that Phase 11 of the South Pars Gas Field will be inaugurated in the near future.

Semi-finished oil and gas projects will be completed and inaugurated by the end of the current Persian calendar year (March 20, 2024), Javad Owji stated.

Speaking at a ceremony held to launch the Gachsaran Petrochemical Complex, the oil minister announced the inauguration of 68 semi-finished oil and gas projects by the yearend.

Once these projects are launched, the oil and gas output volumes will increase to 130,000 barrels per day (bpd) and 40 million cubic meters respectively, Owji continued.

All stages for the construction operations of Phase 11 of the South Pars Gas Field have been implemented by expert domestic engineers and would become operational in the near future. (July 17, 2023)

21/07/2023

ALGERIA - EUROPE:

TotalEnergies, Sonatrach strengthen gas partnership.

A number of agreements were signed to strengthen the partnership between Sonatrach and TotalEnergies in the production of natural gas, the delivery of liquefied natural gas to Europe, and the advancement of renewable energy in Algeria during a meeting held on July 10, in Algiers.

Under a first agreement, which remains subject to the approval of the Algerian authorities, Sonatrach and TotalEnergies have agreed to convert the production contracts for the Tin Fouyé Tabankort II and Tin Fouyé Tabankort Sud fields in southern Algeria (Sonatrach 51 per cent, TotalEnergies 49 per cent) to the framework established by the new Algerian Petroleum Law enacted on December 11, 2019.

These are the first conversions of contracts in Algeria under the regime of the new Petroleum Law.

In this context, Sonatrach and TotalEnergies will pursue the investment program already launched to increase the gas production of TFTII and TFT South, which includes the upgrade of existing facilities and the drilling of additional wells.

The combined production of the two fields is expected to exceed 100,000 boe per day by 2026, versus a level of around 60,000 boe per day in 2022, thus increasing the potential export of Algerian gas to the European market.

Under a second agreement, Sonatrach and TotalEnergies have extended for the year 2024 deliveries of 2 million tons per year of LNG to TotalEnergies at the port of Fos-Cavaou, near Marseille, France. These deliveries of Algerian natural gas by sea contribute directly to energy security in France and Europe.

TotalEnergies and Sonatrach have also signed a third deal to examine the development of projects to produce renewable energy in Algeria, specifically renewables projects to solarise exploration and production sites for oil and gas, and to power seawater desalination plants, a project to produce renewable, low carbon hydrogen for the export market, and an R&D program in low carbon energies and the energy transition.

The agreements were signed by Patrick Pouyanné, Chairman and CEO of TotalEnergies, and Toufik Hakkar, Chief Executive Officer of Sonatrach.

Patrick Pouyanné, Chairman and CEO of TotalEnergies, said: "I am delighted to sign these new agreements with our strategic partner Sonatrach. They testify to TotalEnergies' close ties to Algeria, whose resources contribute directly to Europe's energy supply and security. We are also happy to support Algeria in the energy transition, by examining and developing its huge potential for renewables production." (July 10, 2023)

12/07/2023

AZERBAIJAN:

TotalEnergies starts gas production in Absheron field in Azerbaijan.

TotalEnergies and its partner SOCAR announce the start of production of the first phase of development of the Absheron gas and condensate field in the Caspian Sea, around 100 km south-east of Baku.

This first phase connects a subsea production well to a new gas processing platform, itself linked to SOCAR's existing facilities in Oil Rocks. It has production capacity of 4 million cubic meters of gas per day and 12,000 barrels a day of condensate. The gas will be sold on the domestic market in Azerbaijan.

The development of the Absheron field provides an additional gas supply to meet growing demand, at a competitive technical cost and low greenhouse gas emissions intensity, in line with TotalEnergies' strategy.

TotalEnergies and SOCAR both hold a 50% interest in the project, which is operated by the joint company JOCAP.

"We are very pleased to announce the start-up of the Absheron gas field, the result of our exploration team's success. This project is in line with the Company's strategy of meeting the growing demand for gas and reinforces our partnership with the national company SOCAR"said Nicolas Terraz, President, Exploration & Production at TotalEnergies. (July 10, 2023)

12/07/2023

NORWAY:

Norway's 800 km Barents Sea gas pipeline back on agenda.

A proposed US\$5 billion export route linking gas fields in the Barents Sea in Northern Norway to European markets could help alleviate the continent's dependence on LNG imports, according to a new report by Wood Mackenzie.

The report 'Can the Norwegian Barents Sea help solve Europe's gas crisis?' concludes that after spending years in the doldrums, Russia's invasion of Ukraine brought a potential Barents Sea gas export route back onto the agenda in Norway. However, the report added there are several hurdles the 800 km, 15 million m³/d would have to overcome before it was green lit by Oslo.

"The Barents Sea basin has enough existing resources to fill the pipeline, but the costs involved would make developing the gas more expensive than alternative imports from new LNG developments," Daniel Rogers, Senior Analyst at Wood Mackenzie says. "However, gas from the area offers a cleaner alternative to LNG, and any proposed development would be carried out under strict Norwegian environmental controls."

The report adds that state-funding of the pipeline, or the introduction of a Carbon Border Adjustment Mechanism (a tool designed by the EU to encourage cleaner industrial production in non-EU countries) on gas imports to Europe would increase cost competitiveness.

"The carbon and socioeconomic argument for a pipeline – and further development of the basin – is strong, but it won't happen without government support," Rogers says. "However, if long-term European gas demand and prices fall faster than expected, this would put further pressure on the viability of the project."

The report also states that while Barents Sea gas would help alleviate Norwegian production decline, it won't be a gamechanger. A bigger pipe would be required to incentivise high-impact exploration and realise the basin's full potential. Currently, gas in the Barents Sea is produced from the Snøhvit Area subsea fields and is sent via pipeline to the Hammerfest LNG facility. The facility is expected to be at full capacity until the 2040s. There is currently no direct pipeline route connecting Barents Sea gas resources to the main Norwegian pipeline network. (July 11, 2023)

[14/07/2023](#)

SURINAME - TRINIDAD & TOBAGO:

Suriname signs MoU with Trinidad and Tobago to boost energy cooperation.

South American nation Suriname has signed an agreement with Trinidad and Tobago to boost energy cooperation, reported Reuters.

According to sources, the memorandum of understanding could pave the way for the transportation of natural gas from Suriname to Trinidad and Tobago via pipeline.

Trinidad and Tobago have been looking for ways to increase its natural gas supplies.

Government figures show that the Caribbean nation can process around 4.2 billion cubic feet of gas per day into liquefied natural gas and petrochemicals, but its present output is less than 2.7bcfd.

The countries signed the MoU when Suriname President Chandrikapersad Santokhi met with Trinidad Prime Minister Keith Rowley in Port of Spain, according to the Suriname authorities.

The prime minister's office of Trinidad and Tobago said that the two nations will now seek to establish technical teams to conduct feasibility studies to decide the next step.

In addition, the government of Suriname announced that it would shortly hold a meeting with Guyana and Trinidad to discuss future strategic collaboration between the three nations.

The preliminary deal will involve researching the viability of laying a pipeline hundreds of miles beneath the ocean to connect Trinidad to the gas fields of the South American country, the sources said.

Recently, sizeable oil and gas have been discovered by Suriname and Guyana.

Trinidad and Tobago have been attempting to gain access to fresh gas supplies in the hope of restarting an inactive LNG processing unit and operate its petrochemical factories at full capacity.

The Caribbean country has also urged the US to amend the terms of the license for the Dragon gas project, which is said to contain up to 4.2 trillion cubic feet of gas. (July 7, 2023)

[12/07/2023](#)

ISRAEL - GREECE - CYPRUS:

Edison CEO says EastMed pipeline still possible.

The prospective 2,000km EastMed natural gas pipeline could still be built despite doubts, according to Italian Energy group Edison's CEO.

Speaking at an energy lobby meeting, Nicola Monti told Reuters that the company is in conversation with the governments of Cyprus and Israel about the project's continuation. The Eastmed pipeline would transport natural gas under the east end of the Mediterranean Sea from Israel to Greece via Cyprus.

Monti said: "A link between Israel and Cyprus can be a first portion of the pipeline we are promoting, because from Cyprus we could then connect with Crete and Greece."

In June, Cyprus stated that instead of one 2,000km pipeline all the way to Greece, it would be more beneficial to have only the Israel-Cyprus stretch. In this case, Cyprus would instead construct a liquefaction plant and transport liquified natural gas to Europe via shipping.

At the time, Cypriot Energy Minister George Papanastasiou stated that Cyprus had not dropped out of the EastMed pipeline project, but that it required discussion. "It is a very cost-intensive project, but there are technical issues such as the depth of sea where the pipeline needs to be laid," Papanastasiou explained. A link between Cyprus and Israel would only cover 300km, as opposed to the prospective 2,000km of EastMed.

Monti, however, said this week he believed that the cost of the Cypriot liquefaction plant, overseas LNG shipping and the shorter 300km pipeline would be more costly than the original EastMed plan.

Edison Group is the sole owner of IGI Poseidon, the operator of the project, as well as the Poseidon pipeline that will link the EastMed pipeline to both Italy and Turkey.

In May, a professor at the University of Patras in Greece argued that the pipeline could aid the Greek people by easing continuing price rises in the country. Professor Avraam Zelilidis stated that because continued fuel price hikes were making many Greeks poorer, the pipeline could "save" them from extreme poverty. (July 7, 2023)

12/07/2023

AZERBAIJAN - HUNGARY:

Azerbaijan to start gas supplies to Hungary by end of year.

Azerbaijan's Energy Minister Parviz Shahbazov has met with Hungarian Minister of Foreign Affairs and Trade Peter Szijjarto.

The sides expressed satisfaction with the development of energy partnership between Azerbaijan and Hungary on a bilateral and multilateral basis and the current level of cooperation covering all areas within the Working Group on Energy. They exchanged views on the supply of natural gas and green energy. They reviewed strategic partnership agreement on the development and transmission of green energy between Azerbaijan, Georgia, Romania and Hungary, memorandum of understanding on cooperation among transmission system operators in Bulgaria, Romania, Hungary and Slovakia, and SOCAR, as well as the implementation status of the Contract for the sale of natural gas in the amount of 100 million cubic meters between MVM CEEnergy Zrt. and SOCAR.

It was stated that gas supplies to Hungary will start by the end of the year. The importance of accelerating the processes associated with the development of infrastructures to increase gas supplies from Azerbaijan to Europe was underlined. During the conversation, the pair exchanged views on the feasibility study of the Green Energy Corridor project covering the production of green energy in the Caspian Sea, the laying of various lines for the transmission of this energy, and cable through the bottom of the Black Sea, and its delivery to markets, including the other necessary measures. (July 10, 2023)

14/07/2023

BELGIUM:

Fluxys Belgium to merge gas trading services and to have a single Belgian reference price from October.

Fluxys Belgium, the natural gas grid company and operator of the Zeebrugge LNG import terminal, has agreed to merge gas trading services and to have a single Belgian reference price from October, a move that was welcomed by gas markets.

“The question of which price index to choose for a natural gas contract is set to get simpler,” said Fluxys.

“From 1 October 2023, a single index, the Zeebrugge Trading Point, will be used for the Belgian reference price,” the company explained.

Fluxys noted that the ZTP index was on average 14 percent lower than the Dutch Title Transfer Facility index in 2022 because of the Belgian grid's good connections to all sources for the Northwest European market.

Merger

The move to a single index is the result of Fluxys Belgium's decision to merge the two existing gas trading services “ZTP notional” and “ZTP physical” on 1 October 2023.

“For a long time, the two gas trading services met the various preferences of wholesale market players,” Fluxys said.

“However, in recent years a shift towards the ZTP notional trading services has been observed,” the company explained.

The Belgian gas regulator, the Commission de Régulation de l'Electricité et du Gaz, has approved the merger of the two trading services and welcomed the increased transparency for the end consumer when choosing a natural gas product.

“To reflect the changed dynamics on the wholesale market, and to simplify and increase liquidity, Fluxys Belgium proposed early this year, in accordance with the sustained willingness of the CREG, to switch to a simpler system bringing together all trading volumes in the Benelux market zone at a single point, the ZTP,” Fluxys added.

“Price reporting agency ICIS will assist the market as it did with the merger of gas trading zones in France and Germany,” stated Fluxys.

Fluxys Belgium is a Euronext-listed subsidiary of infrastructure group Fluxys and headquartered in Belgium.

In addition to the Zeebrugge LNG terminal, which has an annual regasification capacity of 104 terawatt hours, Fluxys operates 4,000 kilometres of pipelines and some underground storage. (July 14, 2023)

20/07/2023

IRAN:

Iran to meet 25% of gas demand from storage by 2026.

Iran plans to significantly increase the country's natural gas storage capacity so that it can rely on underground storage for 25% of the total domestic demand by 2026.

Iran's Oil Ministry has planned to increase gas storage capacity in the country to a level in 2026 which can respond to 114 million cubic meters per day of gas usage.

The plans include expansion of current underground storage facilities in Shurjeh, in northeast Iran, by drilling 28 new wells that could boost storage at the site to 4.5 billion cubic meters per year, Press TV reported.

A large gas storage facility is planned to be built in Mokhtar gas field, in southern Iranian region of Yasuj, with 15 bcm per year of capacity while smaller storages are planned for Kashan in central Iran, Gorgan in northeast and Ilam in west of the country.

Unlike many countries in the world, Iran mostly relies on gas directly piped from production sites in the south to meet its massive gas demand.

The country also receives relatively large volumes of gas from Turkmenistan in its northeast under a swap arrangement which requires gas delivery of the same amount to Azerbaijan in the northwest.

However, experts say that direct consumption can cause resilience problems in the Iranian gas grid in the future, especially during cold snaps and peak demands.

Iran is currently the third largest producer of natural gas in the world with just over 1 bcm per day of output of which more than 90% is consumed domestically. (July 10, 2023)

13/07/2023

SHALE GAS

PRODUCTION

ARGENTINA:

Argentina inaugurates the Néstor Kirchner gas pipeline for the production of Vaca Muerta shale gas.

Argentina's government officially opened the first section of the Néstor Kirchner Gas Pipeline on Sunday.

The pipeline will transport shale gas and oil from the Vaca Muerta field in the south to the province of Buenos Aires in the country's center, covering a distance of 573 km.

The inauguration ceremony is to take place at the "Saturno" gas plant in Salliqueló, located 520 km southwest of Buenos Aires.

The pipeline will transport shale gas from the town of Tratayén in the heart of the Vaca Muerta field, in the Neuquén province.

The construction of the pipeline, costing US\$2.5 billion, was funded without external financing.

According to Flavia Royón, the Secretary of Energy, the pipeline will save US\$2 billion in imports this year and is projected to reach US\$4.2 billion in savings by 2024.

The second section of the GNK, measuring 467 km, has not yet been tendered but will extend to the town of San Jerónimo in the province of Santa Fe, bordering the north of Buenos Aires province.

Once the pipeline project is completed, Argentina aims to achieve self-sufficiency in gas production and plans to export a significant volume to neighboring countries such as Chile, Brazil, and Uruguay, according to Royón.

The pipeline's first section was completed in just nine months, which was faster than anticipated, with over 47,700 pipes installed.

The financing for the project's second stage is being negotiated with Power China.

The development of the Vaca Muerta field is crucial for Argentina to improve its energy trade balance.

In 2022 the country had a negative balance of US\$6.6 billion due to diesel oil and Liquefied Natural Gas imports.

Royón expects the energy balance to shift from negative to balanced and eventually become positive.

Currently, one-third of the gas produced is used for residential consumption, another for industrial purposes, and the remaining for power generation.

The production of unconventional gas in May 2023 witnessed a year-on-year increase of 10.7%, reaching 57.3 billion cubic meters.

Unconventional oil production also grew 26.2% compared to the previous year.

Vaca Muerta is one of the world's largest shale gas reserves, accounting for 42% of Argentina's total gas production, and it also holds significant unconventional oil reserves. (July 9, 2023)

12/07/2023

GREENH2

PRODUCTION

SAUDI ARABIA:

Engie, PIF to co-develop green hydrogen projects in Saudi Arabia.

French energy utility group Engie SA and Saudi Arabia's Public Investment Fund have signed a pact to partner on the development of green hydrogen projects in the kingdom.

The sovereign wealth fund and its partner will explore opportunities to jointly work on projects for the production of green hydrogen and its derivatives for export, according to a press statement from Thursday.

A memorandum of understanding was signed by Engie's managing director of Flexible Generation and Retail in AMEA Frederic Claux and Yazeed Alhumied, deputy governor and head of MENA Investments at PIF.

As a next step, the feasibility of co-developing such projects will be assessed and a strategy will be devised to best approach the international market and secure offtake arrangements.

"Our partnership with PIF will contribute to laying robust foundations for the green hydrogen industry, enabling the Kingdom to be one of the top exporters of green hydrogen worldwide," Claux said. (July 14, 2023)

20/07/2023

AUSTRALIA:

Origin Energy bags govt funding for 55-MW green hydrogen hub in NSW.

Australia's Origin Energy Ltd has secured AUD 70 million (USD 47.9m/EUR 42.9m) in government funding to install a 55-MW electrolyser to produce green hydrogen in New South Wales together with compatriot Orica Ltd.

The financing will be extended under the federal government's Regional Hydrogen Hubs programme, Origin said on Thursday. The company will seek to launch production from 2026.

The Hunter Valley Hydrogen Hub is planned to produce 5,500 tonnes of hydrogen annually from a grid-connected 55-MW electrolyser supported by grid-connected electricity and large-scale renewable certificates. The complex will be installed at a site in proximity to Orica's Kooragang Island ammonia manufacturing facility.

Most of the hydrogen output will be supplied to explosives and chemicals group Orica, while some of the production will be delivered to customers in the transport sector through onsite and satellite refuelling stations. By design, the project is scalable, providing for future expansion and export potential. It is currently progressing through the environmental approval process.

"There are challenges that still need to be overcome for Australia to deliver hydrogen at scale, and strong collaboration across industry, governments and communities will be a critical factor to success," commented Origin's CEO Frank Calabria. (July 13, 2023)

20/07/2023

GERMANY:

Lhyfe to develop 70-MW green hydrogen project in Perl, Germany.

French green hydrogen developer Lhyfe on Tuesday said it is partnering with the city of Perl in Saarland, Germany to develop a 70-MW green hydrogen plant.

Subject to securing permits and to financial investment decisions, the project is planned to start construction in the first half of 2027.

The facility is expected to supply up to 30 tonnes of green hydrogen per day into the mosaHYc hydrogen island network in the Grande Region, encompassing Saarland, Lorraine in France and Luxemburg. The mosaHYc project involves the use of existing pipelines and the construction of new ones, and could supply green hydrogen to local industrial customers.

"The Saarland has officially been part of the HyExpert hydrogen model region since August 2020. The planned Lhyfe plant is a significant milestone in the expansion of the regional hydrogen economy," said Perl's mayor Ralf Uhlenbruch.

"This project is a prime example of the industrial transformation initiated by the EU to supply established industries with green hydrogen, emission-free and across borders," the mayor added.

The news is the latest in a string of announcements by Lhyfe recently. Last week, it unveiled a project to build a green hydrogen production site in Epinal, France. (July 11, 2023)

17/07/2023

INDIA:

India issues GW-scale tenders for electrolyzers, green H2 production.

The Indian government has opened a Request for Selection to pick manufacturers for 1.5 GW of hydrogen electrolyzers and a tender targeting the production of 450,000 tonnes of green hydrogen annually.

The two rounds were launched by the government's agency Solar Energy Corporation of India. Both of them are part of the first tranche of the national Strategic Interventions for Green Hydrogen Transition programme under the National Green Hydrogen Mission, tender documents show.

buckets based on the proposed stack technology. A category open for any stack technology will award 1,200 MW of capacity, while the rest is reserved for indigenously developed stack technology. A single bidder can participate with up to 300 MW.

Winning projects will receive incentives for five years, starting from INR 4,400 (USD 53.5/EUR 49.13) per kW in the first year and gradually reaching INR 1,480/kW in the fifth one.

The second tender will seek to provide incentives enabling the production of 450,000 tonnes of green hydrogen per year, also in two categories. A bucket for agnostic technologies will back projects for the production of 410,000 tonnes of green fuel annually, while schemes based on biomass will get funding for 40,000 tonnes annually.

Bidding in the production tender will be open until September 7.

India will disburse INR 197.44 billion in total funding under its National Green Hydrogen Mission, which was adopted in January to facilitate the deployment of at least five million tonnes of the green fuel annually. An outlay of INR 174.9 billion will be available under the SIGHT programme. The scheme will offer two financial incentive mechanisms, one that targets the domestic production of electrolyzers and another for the production of green hydrogen. (July 10, 2023)

14/07/2023

GERMANY:

Foresight invests in 100-MW German green hydrogen project of HH2E.

British infrastructure and private equity investment manager Foresight Group has made an unspecified investment in a 100-MW green hydrogen project in Germany proposed by local firm HH2E AG.

The investment was announced by the Hamburg-based developer on Monday, saying the fresh capital has enabled it to complete funding for the development phase of the project. It expects to take a final investment decision later this year.

To be installed in the state of Mecklenburg-Vorpommern, on the German Baltic coast, the HH2E Lubmin plant will be able to produce around 6,000 tonnes of green hydrogen annually via electrolysis. The facility will be the first stage of a larger complex and is expected to become operational by the middle of 2025. The site will later be expanded to over 1 GW of capacity by 2030 to reach an output of more than 60,000 tonnes per year, HH2E said.

Large-scale energy and industrial consumers in the chemical industry, as well as commercial air and road transport operators will offtake the produced hydrogen. Sales of the green fuel will be facilitated by MET Group.

HH2E Werk Lubmin GmbH, a subsidiary of HH2E will be tasked with building and operating the plant. The parent company noted the project supports its goal of having 4 GW of green hydrogen assets in Germany by 2030. (July 10, 2023)

13/07/2023

UNITED KINGDOM:

RWE, Mitsui to study green hydrogen at UK's Port of Tilbury.

RWE AG, the German energy group and a large power generator in the UK, Japanese trader Mitsui & Co and the Port of Tilbury near London, are partnering on green hydrogen to support the port's decarbonisation, according to an announcement today.

Under a memorandum of understanding, the parties will develop a small scale "proof of concept" demonstrator project, as well as work on an initial study into a 10-MW green hydrogen plant to be located on Port of Tilbury land that previously hosted a coal-fired power station. The companies will also explore opportunities to scale up the project to above 100 MW over 10 years. The hydrogen would be used for port infrastructure and operations, as well as supplying the nearby industry.

"As part of Thames Freeport, our MoU with RWE and Mitsui to develop a new hydrogen plant at the Port of Tilbury will help accelerate the UK's path to a decarbonised economy and support our vision for low carbon logistics," remarked Peter Ward, commercial director at the Port of Tilbury and Thames Freeport lead.

"This collaboration with Mitsui and the Port of Tilbury is for an innovative project combining production and industrial customer use with potential fuel switching of port equipment," commented Steve Boughton, director hydrogen development at RWE, which aims to develop 2 GW of hydrogen capacity by 2030. (July 7, 2023)

12/07/2023

UNITED ARAB EMIRATES:

UAE aims to produce 15 million tonnes of green hydrogen by 2050.

The UAE is reaffirming its ambition to secure a significant portion of the global hydrogen market, targeting to produce about 15 million tonnes annually by 2050.

Under its National Hydrogen Strategy, the Arab country plans to establish two "oases" to build an electrolysis capacity for the production of 1.4 million tonnes of hydrogen by 2031. Three more oases are planned to be added by 2050 to ensure the ambitious goal will be reached.

The details about the National Hydrogen Strategy and the updated National Energy Strategy, that were approved by the UAE government this week, were unveiled by energy minister Suhail Al Mazrouei.

The national hydrogen strategy represents a long-term plan to make the UAE a leading producer of low-carbon hydrogen, Al Mazrouei said on the sidelines of an event, as local newspapers Albayan and Alkhaleej reported.

The goal is to strengthen local production capabilities, accelerate the global hydrogen economy, stimulate the domestic market, develop regulatory frameworks and supportive policies for hydrogen as a fuel of the future.

In addition to enhancing the UAE's position as a producer and global source of clean energy, the main pillars of the hydrogen strategy focus on economic growth and reducing emissions in emission-intensive sectors by up to 25% by 2031.

The updated energy strategy aims to achieve savings of over AED 250 billion which includes reducing the capital required for future energy projects, as well as lowering the cost of energy generation in the country by 2030, according to Al Mazrouei.

Under the plan, between AED 150 billion and AED 200 billion will be invested by 2030 to meet energy demand and sustain the growth of the UAE's economy, while also creating 50,000 new green jobs by that year.

Al Mazrouei emphasised that the completion of the ongoing solar projects will raise the country's solar capacity to 15 GW at the end of this decade, from 4 GW. The most significant projects include the Mohammed bin Rashid solar park, which will provide around 5 GW when fully completed, while solar plants in Abu Dhabi will account for some 9 GW, the minister said. (July 7, 2023)

11/07/2023

CHINA:

Sinopec brings live solar-to-hydrogen pilot project in China.

China Petroleum and Chemical Corp, or Sinopec, today announced the start of operation of its green hydrogen pilot project in Kuqa City in China's Xinjiang Uygur Autonomous Region.

Described by the company as the world's largest solar-to-hydrogen project, the installation is capable of producing 20,000 tonnes of green hydrogen per year.

Besides a photovoltaic power complex and electrolysis facilities, the pilot project features facilities for hydrogen storage and transportation, with capacities of 210,000 cubic metres and 28,000 cubic metres per hour, respectively.

The project supplies hydrogen to Sinopec's Tahe Refining and Chemical.

Sinopec started construction of the CNY-3-billion (USD 414m/EUR 380m) pilot initiative in November 2021.

Earlier this year, the company launched the Inner Mongolia Erdos Wind-Solar Green Hydrogen Project. (July 3, 2023)

10/07/2023

EUROPE - ARGENTINA:

EU strikes gas, hydrogen deal with Argentina.

The European Commission has signed a non-binding agreement with Argentina to facilitate a stable supply of liquefied fossil gas to Europe in exchange for cooperation on green energy and Buenos Aires reigning in gas leakage.

Europe's economic relations with Argentina, a country of more than 45 million people, are strong. Despite the geographical distance, EU investment in the country accounts for half of foreign investment.

Similarly, the bloc is Argentina's third-largest trading partner, behind Brazil and China, as European Commission President Ursula von der Leyen stressed in June when visiting the country.

While the more comprehensive trade agreement between the EU and its Latin American counterpart, Mercosur, flounders, von der Leyen agreed on a bilateral agreement with Buenos Aires on Monday. It follows a similar agreement on materials agreed in June.

"Europe and Argentina are partnering for a more secure, sustainable and prosperous world," she said.

The non-binding agreement hinges on four key aspects: hydrogen and its derivatives, renewables, energy efficiency, and liquefied natural gas.

With Russian gas flows into Europe at an all-time low, the two partners committed to "enabling a stable delivery of liquefied natural gas from the Argentine Republic to the European Union."

The 45 million-strong country, which heavily relies on natural gas for its own energy consumption, is a serious player in the gas industry – bolstered by the rich shale gas stemming from Vaca Muerta in the South-West.

To export its fracked riches, Buenos Aires is working on a law to boost its LNG industry – with an eye to begin exporting at scale as early as 2027.

The agreement insists that supplying LNG will be "consistent with [the EU's and Argentina's] respective long-term decarbonisation objectives and consistent with the goals of the Paris Agreement."

Likely as a concession to Brussels, the agreement also insists that Argentina tackles its leaky gas wells. In 2022, at least one new gas well was drilled in Vaca Muerta per month.

Meanwhile, the formerly Argentina-based NGO Center for Human Rights and Environment warned in 2018 that at least 5% of produced gas was entering the atmosphere, often due to operators venting surpluses to maintain operational security.

"The Participants endeavour to reduce methane leakages in the fossil gas supply chain to the maximum technically feasible level," the EU-Argentina agreement stresses, adding that new technologies should help tackle "venting and flaring."

Both venting and flaring are commonplace methods of ensuring production equipment does not get damaged by too much fossil gas. Given methane's extreme climate impact, it is 28 times worse than CO2 on a 100-year basis, uncontrolled venting is among the most climate-damaging by-products of producing fossil gas.

The agreement also points to integrating "recovered methane into the supply chain." Methane that would otherwise leak into the atmosphere can be captured and used regularly. One key source may be landfills, like Norte III in Buenos Aires, which account for about half of the city's methane emissions.

Coordination on green technologies

"In large parts of your beautiful country, in the large plateau of the South, you can only hear one sound: this is the sound of the wind, running undisturbed," explained von der Leyen in June when speaking to business executives.

Argentina has all it takes to become a "renewable energy powerhouse," she said, adding that "the extraordinary Patagonian winds are a blessing of nature."

In practice, the EU-Argentina agreement is sparse on the details – aside from a commitment to "facilitate investments necessary to increase energy trade between the Participants."

EURACTIV asked the Argentinian embassy whether Buenos Aires was looking to get a slice of funding through the European Hydrogen Bank or German H2Global initiative, but no response was forthcoming by the time of publication. This story will be updated as and when a response comes.

European investments are largely expected to come through the European Gateway Initiative, which has a "Team Europe" approach, meaning that EU countries invest under the banner of the bloc.

For example, France and the EU have supported upgrading and bringing the country's electricity grid up to speed. Other projects include waste and water management support and aid in exploiting the country's rich mineral resources.

Whether similar initiatives will help fund the country's nascent LNG infrastructure is unclear. (July 17, 2023)

[21/07/2023](#)

UNITED KINGDOM:

Carlton Power and Superglass strike green hydrogen partnership.

Superglass, a major UK manufacturer of glass mineral wool insulation, has entered into a strategic partnership with Carlton Power to supply it with green hydrogen for its manufacturing facility at Stirling, Scotland. The partnership agreement will support the development of Carlton Power's proposed Stirling Green Hydrogen scheme and reduce Superglass' reliance on natural gas.

Superglass, a major UK manufacturer of glass mineral wool insulation, has entered into a strategic partnership with Carlton Power to supply it with green hydrogen for its manufacturing facility at Stirling, Scotland. The partnership agreement will support the development of Carlton Power's proposed Stirling Green Hydrogen scheme and reduce Superglass' reliance on natural gas.

The Stirling Green Hydrogen scheme is Carlton Power's first scheme in Scotland. Subject to planning and final designs, it will be similar to Carlton's three other hydrogen projects that were shortlisted by the UK Government (March 30th) to receive financial support through the government's Hydrogen Business Model/Net Zero Hydrogen Fund. The UK Government is using these multi-million-pound programmes to encourage the growth of the hydrogen economy in Scotland and across the UK.

Carlton Power's Stirling Green Hydrogen scheme will provide Superglass and potentially other energy-intensive users in the area (for example, those with transport fleets) with hydrogen to fuel their operations.

Secured demand for hydrogen at Stirling will underpin the initial development of a 10 MW electrolyser, expected to produce approximately 1000 tpy of green hydrogen - reducing 7000 t of greenhouse gas (GHG) emissions (which is equivalent to taking approximately trucks off Scotland's roads every year). Carlton Power anticipates hydrogen demand in the area to increase significantly in the near term and will develop the project in such a way that additional capacity can be added. The hydrogen will be produced by an electrolyser using electricity that is generated from sources of renewable energy, primarily wind and solar power.

The scheme is to be located at Polmaise, close to Superglass' manufacturing plant on the Thistle Industrial Estate in Stirling. The Superglass plant, which completed a £37 million upgrade in 2019, produces around 60 000 t of glass wool insulation annually and employs 200 people.

The scheme, subject to planning and financing, will see sustainable hydrogen fuel being produced at scale, creating opportunities for businesses in Stirling and the surrounding area to make Net Zero plans with hydrogen in mind. The hydrogen hub facility will support the growth of renewable electricity generation by utilising it to produce and store hydrogen at times when renewable output is high, but demand is low.

"We're delighted to be working with Superglass to bring forward our Stirling Green Hydrogen hub; it will help Superglass achieve its sustainability goals and support Scotland's decarbonisation strategy. It is critical that projects such as this are brought forward to support investment by local companies in their operations that can reduce their carbon emissions," said Eric Adams, Hydrogen Projects Director at Carlton Power.

"Carlton Power's experience in hydrogen and wider energy project development in the UK is first-class, and so we are very pleased to be working with them to develop the Stirling scheme," added Theresa Mclean, Chief Executive of Superglass.

Over the next 12 - 18 months, Superglass and Carlton Power will work together on the various economic, technical, and engineering aspects of the scheme, as well as consultations with local and national stakeholders, including the Scottish Government. (July 12, 2023)

19/07/2023

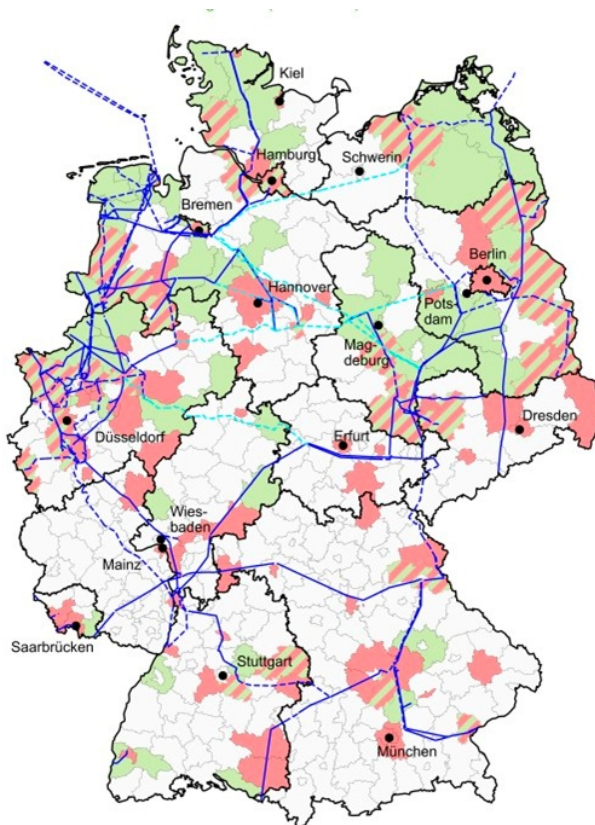
SUPPLIES - IMPORTS - EXPORTS

GERMANY:

German gas TSOs map out plan for core hydrogen network.

Germany's gas transmission system operators have published the plan for the development of a nationwide core hydrogen network by 2032.

The presented route options span around 11,200 km (6,959 miles) and include 309 projects with a total capacity of 101 GW for hydrogen input.



In addition to this, imports through ship terminals, where hydrogen in alternative forms is converted into gas, contribute to the network. The core grid can provide 87 GW of power output for hydrogen supply.

The current planning status of the hydrogen core network is still subject to further refinement and optimisation as the unveiled route options will be evaluated and improved based on feedback from potential hydrogen network operators.

The final design is expected to be smaller than the initial proposal.

The core hydrogen network will connect clusters of demand such as large industrial centres, storage facilities, production plants and import corridors. It will include important hydrogen infrastructure, which is scheduled to be operational by 2032.

Hydrogen network operators and operators of other pipeline infrastructures have until July 28 to submit comments on the plan or report further hydrogen infrastructures for the hydrogen core network with FNB Gas, the association of supra-regional gas transmission companies in Germany.

Input from federal states, associations and other stakeholders can be filed with Germany's economy ministry.

The core network will form the basic infrastructure which will be further expanded in stages. In the second stage, which is already being prepared, a comprehensive hydrogen network will be planned as part of an integrated network development plan for natural gas and hydrogen for the years 2025-2037. (July 14, 2023)

21/07/2023

PRODUCTION

JAPAN:**Inpex moves forward with its clean hydrogen/ammonia project in Japan.**

Japan's energy company Inpex Corporation has announced the beginning of construction of surface plant facilities of the Kashiwazaki clean hydrogen/ammonia project to be implemented at its Higashi-Kashiwazaki gas field in the Hirai district of Kashiwazaki City, Niigata Prefecture, Japan.

According to Inpex, the project is the first in Japan to build an integrated hydrogen and ammonia value chain from production to usage.

The company informed that the natural gas produced in Niigata Prefecture will be used as a raw material to produce hydrogen and ammonia, and the CO2 generated during the production process will be separated, pressurized and injected in the Higashi-Kashiwazaki gas field reservoir.

Blue hydrogen produced in this demonstration test will be converted into electricity through a hydrogen power generation system and supplied to end users in Niigata Prefecture, Inpex further said, noting that some of the blue hydrogen will be used to produce blue ammonia with the aim of supplying it for fertilizer use to consumers also in Niigata Prefecture.

The surface plant facilities are expected to have an annual production scale of 700 tons, infrastructure to separate and capture CO2 generated during hydrogen production, CO2 subsurface injection infrastructure and facilities to produce, store and ship ammonia.

The hydrogen production facility will use Air Liquide Global E&C Solutions' ATR (autothermal reforming) technology, said to be able to reduce the energy required to separate CO2 during hydrogen production, and the CO2 separation/capture facility will adopt a high-pressure regenerative CO2 capture technology HiPACT by JGC Global/BASF. The ammonia production facility is set to adopt the technology of Tsubame BHB, which is expected to synthesize ammonia at low temperature and low pressure by adopting a unique catalyst.

Daiichi Jitsugyo will handle the design, equipment procurement, construction work (EPC), and commissioning services related to these facilities, while JGC Corporation will construct hydrogen production equipment, CO2 separation/recovery equipment, underground injection equipment and other equipment.

Inpex said that the commissioning of the surface plant facilities will begin in March 2025, with the aim of completing construction in August 2025.

The project's hydrogen and ammonia production and CO2 recovery will be subsidized by the New Energy and Industrial Technology Development Organization as an initiative for "Technology development for the utilization and production of ammonia as fuel / Technology development for blue ammonia production."

In addition, Inpex informed it will conduct joint research with Japan Organization for Metals and Energy Security on the evaluation and implementation of subsurface storage of CO2 as part of the "Demonstration test on identifying possible CO2 storage solutions utilizing domestic depleted oil and gas fields."

Through the project, Inpex said it will contribute to enhancing Japan's energy security by realizing clean energy production from domestic gas, and in addition, it will use its findings from the project to build a blue hydrogen production plant in Niigata Prefecture utilizing its natural gas field and existing infrastructure, aiming for commercialization by around 2030.

The company also noted it will continue to study opportunities for blue hydrogen/ammonia and CCS/CCUS projects internationally, leveraging the knowledge and experience gained from this project. (July 13, 2023)

19/07/2023

BULGARIA:

Exmar's LPG carrier brings 1st full cargo of blue ammonia to Europe.

Belgium-based shipowner Exmar has revealed that its liquified petroleum gas midsize carrier Kallo has delivered Europe's first full cargo of blue ammonia.

On 27 June, the LPG tanker Kallo owned by the Belgian company Exmar docked at the Port of Varna West with the first commercial shipment of blue ammonia to Europe.

The material was produced by the Saudi company Ma'aden and was destined for the Agropolychim fertilizer plant located in the town of Devnya.

The LPG carrier measures 181.7 meters in length, with a breadth of 29,4 meters. Exmar welcomed the 38,500 cbm ship into its fleet in 2017. It is classed by classification society Lloyd's Register.

Agropolychim plans to launch to market one of the most demanded nitrogen fertilizers by farmers – ammonium nitrate with reduced carbon dioxide content.

"Thanks to the collaboration with our partners from Saudi Arabia, we are the first in Europe to start producing ammonium nitrate with reduced CO2 content... Agropolychim has the ambition to be at the forefront of the successful companies, which will drive this green transition," Philippe Rombaut, co-owner and CEO at Agropolychim AD noted.

Meanwhile, Exmar is also working with Canadian fertilizer company Nutrien to develop and build a low-carbon, ammonia-fueled vessel to reduce maritime emissions. The collaboration aims to significantly reduce maritime transportation emissions and enable the commercial development of an ammonia-fueled vessel as early as 2025. (July 6, 2023)

10/07/2023

PRODUCTION

UNITED STATES:

Casella Waste Systems taps Waga Energy for RNG projects in US.

US Casella Waste Systems Inc has entered into an agreement with French renewable natural gas expert Waga Energy SA to develop RNG facilities at three of its landfills in the US.

The initial production across the sites, which are scheduled to be commissioned in about 24 months, is expected to total around 1,300,000 million British thermal units per year of RNG.

The two companies have signed a commercial agreement under which Waga will deploy the capital needed to fund the construction of the projects and will also own and operate the infrastructure. Casella and Waga will share in the revenue generated from the sites once operational.

Under the agreement, Casella will receive from Waga a royalty stream to supply landfill gas to the RNG facilities and the projects may be entitled to investment tax credits as part of the Inflation Reduction Act, the company said in the statement. (July 11, 2023)

18/07/2023