

Oil and Gas News Briefs

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China on track for record drop in LNG demand this year

(Bloomberg; July 19) - China is set to post a record drop in LNG imports this year, which will return Japan to the spot as the world's No. 1 buyer, according to Wood Mackenzie. The research firm expects cargoes to fall 14% to 69 million tonnes in 2022, only the second decline since China began imports in 2006. The reasons for LNG's fall are many: a subdued economy, rising international prices for the fuel, government support for clean coal, a warmer-than-usual winter and growth in renewable energy. Higher domestic gas output and more imports by pipelines have also reduced LNG imports.

But it's the economic slowdown and virus-related curbs on activity that are probably most telling, said London-based Capital Economics, even as it expects volumes to pick up somewhat in later months of the year. Those remain the key factors hobbling Chinese demand across an array of commodities, with crude oil, coal and iron ore all potentially joining natural gas in showing declines in imports this year.

Blast-furnace utilization rates in the steel hub of Tangshan have fallen to the lowest in four months. The slide comes amid warnings that production cutbacks are necessary to tackle pinched profit margins. Steel mills have built up stockpiles but have struggled to find takers as businesses were disrupted by lockdowns. The industry also needs to deal with the recent wave of consumer mortgage boycotts threatening demand prospects. The economic outlook for the second half of 2022 will be defined by the government's shaky control over COVID outbreaks and property markets. Early signs look negative.

PetroChina signs 25-year deal for U.S. LNG from Cheniere

(Bloomberg; July 20) - Cheniere Energy, the largest U.S. exporter of liquefied natural gas, has signed a deal with PetroChina that lays the groundwork for further expansion of Cheniere's Texas export terminal as global demand for the fuel surges. PetroChina has agreed to buy 1.8 million tonnes a year of the power-plant fuel from Cheniere's marketing arm from 2026 through 2050, according to a company statement.

Half of that volume depends on Cheniere deciding to move ahead with a new addition to its Corpus Christi terminal beyond the expansion it approved last month. Deliveries under the PetroChina agreement will be indexed to Henry Hub, the benchmark for U.S. natural gas prices, plus a fixed fee for liquefaction. The deal is the first Cheniere contract that crosses over into the second half of this century, CEO Jack Fusco said. Cheniere's deal with PetroChina represents nearly two dozen cargoes per year.

Cheniere is the largest LNG producer in the United States, with plants at Corpus Christi and Sabine Pass, Louisiana, with a combined production capacity of 35 million tonnes per year, about 12% of global demand in 2021.

U.S. headed toward record natural gas production at 100 bcf a day

(Houston Chronicle; July 19) - The U.S. is expected to continue its reign as the world's largest natural gas producer this year as European countries work to halt their reliance on Russia in retaliation for Moscow's war against Ukraine. Analysts at the Norwegian firm Rystad Energy predict U.S. production will climb past 100 billion cubic feet per day by the end of the year. Driving the growth are two major gas-producing basins, the Appalachian, from Alabama to New York, and the Haynesville, in Texas and Louisiana.

Associated gas that's pulled up during oil production is also expected to hit record amounts in the Permian Basin of West Texas and New Mexico. The Permian is the country's most productive oil field and is expected to produce a record 20.5 billion cubic feet per day of gas in August, with the Haynesville at a record 15.5 billion cubic feet per day, according to the U.S. Energy Information Administration.

The record output prediction comes as U.S. producers look to boost liquefied natural gas exports to Europe and other countries. U.S. regulators have approved expanding LNG export terminals, but construction can take years. "Already the top gas producer in the world, the U.S. stands ready to boost output further to meet the global demand, but takeaway constraints are a serious risk," said Kristine Vassbotn, senior analyst with Rystad. Investment in gas exploration and production has also been increasing, boosted by surging prices in the U.S. and abroad, according to Rystad.

Europe has a plan for gas rationing, switching to coal and nuclear

(The Wall Street Journal; July 20) - The European Union urged nations to prepare to ration natural gas amid rising concerns that Russia is about to tighten its squeeze on the continent's supply. The European Commission, the EU's executive body, released a plan July 20 that pushes governments to prepare for a winter without ample supplies of Russian gas. "We have to prepare for a potential full disruption of Russian gas," European Commission President Ursula von der Leyen told a news conference on. Although the EU doesn't know what Moscow will do, she said, "This is a likely scenario."

Russian President Vladimir Putin said July 19 his country would fulfill its commitments to supply natural gas to Europe but also warned of possible new shortfalls because of Western sanctions. The commission's plan calls for EU countries to voluntarily curb gas consumption by 15% over the next eight months and set priorities for which industrial

sectors would be most affected. Under the proposal, the EC said energy-reduction targets could become binding if voluntary actions aren't enough to prevent a shortage.

The plan also promotes switching from gas to alternative energy sources including nuclear and coal, setting up auctions that could compensate companies for using less gas, and setting mandatory limits on heating and air conditions in public buildings. The plan establishes criteria governments can use to determine which industries to give priority to if there isn't enough gas to go around. If Russia continues to restrict gas supplies — or cuts them off entirely — countries would struggle to fill their storage tanks before the winter, adding to the risk of shortfalls during the winter heating season.

IEA warns Europe of critical need to bolster natural gas stockpiles

(S&P Global; July 18) - The next few months will be "critical" for Europe to build up sufficient gas stocks to make it through the winter given uncertainty over Russian gas supplies, the head of the International Energy Agency said July 18. IEA Executive Director Fatih Birol said an additional 700 billion cubic feet of gas needs to be saved in the next three months across the European Union to bolster stockpiles.

EU gas storage sites are currently 64% full, but Birol warned that the EU would need to reach a level of more than 90% should Russia cut supplies to Europe from the start of the heating season in October. "And even then, it could still face supply disruptions in the latter part of the heating season," Birol said. "Achieving that 90% storage level is still possible, but Europe needs to act now and make every remaining day count," he said.

Under new EU storage rules, member states must ensure their gas storage sites are filled to an average 80% of capacity by Nov. 1, 2022, and to 90% by Nov. 1 in later years. However, the European Commission has said in a draft winter preparedness communication that without demand-reduction measures, EU stocks could be filled to just 65% to 71% of capacity in the event of a complete Russian supply halt. Birol said the first immediate step toward filling gas storage to adequate levels before winter is to reduce Europe's current gas consumption and to put the saved gas into storage.

Germany will review decision to shut down nuclear power plants

(Reuters; July 18) - Germany may extend the life of its three remaining nuclear power plants, the economy ministry said on July 18, as public support rises in the face of a possible cut-off of Russian gas. Germany's remaining nuclear plants are scheduled to be shut down by year-end after former Chancellor Angela Merkel pledged to phase out nuclear power following the meltdown at the Fukushima nuclear plant in Japan in 2011.

The three plants supplied 6% of Germany's power production in the first quarter of 2022. A first assessment by the environment and economy ministries in March did not recommend extending the plants' lifetime, citing legal, licensing and insurance challenges, the need for extensive and possibly costly safety checks, and a lack of fuel rods to keep the plants running.

But falling Russian gas supplies to Germany through the Nord Stream 1 pipeline have emboldened pro-nuclear voices in Germany and Europe ahead of a feared electricity crunch this winter. The ministry said power grid operators had requested a second assessment of the viability of nuclear power. "We will now calculate again and then make a decision on the basis of clear facts," a ministry spokesperson said, adding the results of the new evaluation were expected in a few weeks.

Green hydrogen costs fall below natural gas in much of Europe

(The Wall Street Journal; July 20) - Green hydrogen now costs less than natural gas in eight European countries. Liquefied natural gas prices will come down, but not without leaving a lasting impact. High LNG prices mean that green hydrogen — produced by a renewable-powered electrolyzer splitting water — is cheaper to burn than natural gas in France, Germany, Italy, Poland, Spain, Sweden, Turkey and the U.K., according to research by BloombergNEF.

The current price situation won't last. New LNG facilities coming online in the next few years should ease today's tight supply and bring down prices. Still, Europe's energy crisis is giving policy makers and companies reasons to move ahead on hydrogen.

There are now 990 hydrogen projects at various stages of development in the International Energy Agency's database. Last week the European Union approved its first "project of common European interest" in the sector: The Hy2Tech plan, covering 41 projects, will receive 5.4 billion euros in funding (\$5.4 billion). Green hydrogen can be made anywhere with water as well as wind or sun for cheap renewable power. That opens up the possibility of European production or imports from other regions.

A second advantage of hydrogen: Its future costs appear relatively stable when compared with this year's volatile LNG spot markets. Green hydrogen costs depend largely on two inputs: electrolyzers and renewable electricity. For both, capital costs will likely continue to fall as the technologies mature. This relatively predictable and declining cost outlook for green hydrogen strengthens the business case for projects.

Steelmaker pays highest price ever for LNG imported into Japan

(Reuters; July 19) - Japan's Nippon Steel Corp., the world's second-largest steelmaker, has recently purchased a liquefied natural gas shipment at the highest price ever paid in the country amid growing fears of disruptions to LNG supplies from Russia. Nippon bought an LNG cargo for delivery in September at a price of \$41 per million Btu, most likely supplied by a major trading house, two trading sources told Reuters, without giving further details.

"Based on a standard LNGC (liquefied natural gas carrier) sized vessel, the cargo would cost between \$132 million and \$135 million depending on load tolerance," one of the sources said. This would mark it as the most expensive LNG cargo ever purchased by Japan. Resource-poor Japan faces a historic energy security risk as tensions with Moscow intensify, heightening the threat of gas supply disruptions at a time when global supply is tight and spot prices are sky-high.

Competition to secure LNG cargoes has intensified since Russia's invasion of Ukraine. Europe is buying massive amounts of LNG, further increasing market tightness and elevating prices. Japan, a top LNG importer, relies mainly on long-term LNG contracts, which are usually much cheaper, but utilities have been forced into the spot market over the past few months to meet summer cooling demand amid above-average summer temperatures and concerns over Russian supply.

Offshore LNG operation in Mozambique starts receiving feed gas

(The Herald; Zimbabwe; July 18) - Mozambique's Ministry of Mineral Resources and Energy has announced that the Eni-operated Coral South project has begun pumping natural gas into its floating production facility off the coast of the northern province of Cabo Delgado, paving the way for the first liquefied natural gas exports later this year. The production and storage facility was built in a South Korean shipyard and towed to Mozambique in March. Six undersea gas wells were connected to the platform in May.

It is expected that the first shipment of LNG will be loaded in the second half of 2022. The operation has the capacity to liquefy 3.4 million tonnes of natural gas a year. BP has signed a contract to purchase the entire output. The gas comes from the Coral reservoir, where there are estimated reserves of 16 trillion cubic feet of gas. The platform is 1,417 feet long and 216 feet wide. It weighs about 220 000 tonnes and has the capacity to accommodate up to 350 people in its eight-story living-quarters module.

The platform is moored in a water depth of around 6,500 feet and is kept in position by 20 mooring lines that in total weigh 9,000 tonnes. It is the first floating LNG facility ever deployed in Africa. With Italy's Eni in the lead, Coral South partners include ExxonMobil, the Chinese National Petroleum Co., the Portuguese company Galp, Korea Gas, and Mozambique's own National Hydrocarbons Co. (ENH).

Total works toward FID in 2023 for Papua New Guinea LNG project

(Reuters; July 20) - French company TotalEnergies announced on July 20 progress on its plans for a liquefied natural gas project in Papua New Guinea. It said its Papua LNG joint venture had decided to launch the first phase of front-end engineering and design studies for the project's upstream production facilities. Studies for the downstream liquefaction facilities are also progressing in line with the overall project schedule, with an objective of launching the integrated FEED in the fourth quarter of 2022. The export project partnership is targeting a final investment decision around the end of 2023, and a production start-up at the end of 2027, TotalEnergies said.

Offshore Louisiana LNG project developer asks FERC for more time

(S&P Global; July 18) - Developer Delfin LNG asked federal regulators for a one-year extension to build onshore facilities in Louisiana that would connect to a proposed floating LNG export terminal, citing a recent long-term off-take deal as evidence of the project's viability after a long struggle to secure sufficient commercial support. Delfin's July 15 filing with the Federal Energy Regulatory Commission marked the fourth time the developer has asked the commission for more time to build the onshore facilities.

Delfin has attributed the project delays to a variety of factors, including difficult market conditions in recent years, U.S.-China trade tensions and the pandemic. If FERC grants the Delfin request, the developer would have until Sept. 28, 2023, to place the onshore component into service. Delfin on July 13 announced a 15-year deal with Vitol Group that called for the global commodities trader to take 500,000 tonnes of LNG per year from the Delfin project. The supply agreement is indexed to the Henry Hub, with total proceeds for Delfin estimated at about \$3 billion over the deal's 15-year term.

Delfin told FERC it is finalizing agreements with other customers in pursuit of the 2 million to 2.5 million tonnes per year in long-term deals that it needs to reach a final investment decision on the project, which the company plans to make by the end of 2022. Delfin has all major federal permits but has had difficulty securing the long-term deals needed to finance construction. The deepwater port could ultimately support four floating LNG producing vessels with capacity to turn out 13 million tonnes per year. The onshore pieces would include compression and piping to move the gas offshore.

Gazprom and Iran sign oil and gas development agreement

(Reuters; July 19) - The National Iranian Oil Co. (NIOC) and Russian gas producer Gazprom on July 19 signed a memorandum of understanding worth around \$40 billion, Iran's oil ministry's news agency SHANA said. The deal was signed during an online

ceremony by the CEOs of both companies on the day that Russian President Vladimir Putin arrived in Tehran for a summit with his Iranian and Turkish counterparts.

Gazprom will help NIOC in the development of the Kish and North Pars gas fields and also six oil fields, according to SHANA. Gazprom will also be involved in the completion of liquefied natural gas projects and construction of gas export pipelines. Iran sits on the world's second-largest gas reserves after Russia, but U.S. sanctions have hindered access to technology and slowed development of gas exports.

Greek-owned tankers help move more Russian crude

(The Wall Street Journal; July 17) - Tanker owners in Europe are shipping as much Russian crude as possible before energy sanctions against Moscow take effect in December. Since Russia's invasion of Ukraine, Western nations have pledged to wean themselves off oil from Moscow, and looming sanctions have raised fears among European processors and shipowners of being blacklisted for handling the fuel.

Shipments to Asia, meanwhile, have soared. China nearly doubled its Russian oil intake to an average of 1.13 million barrels a day in June, from 670,000 a day in February, according to energy data provider Vortexa. India brought in roughly one million barrels a day last month, from essentially zero in the first two months of this year. "Based on that trend it looks feasible that Russia could export all the available crude without American or European Union buyers," said David Wech, Vortexa's chief economist.

Greek tanker owners, which control nearly a third of the global fleet, moved about half of Russian crude volumes in May and June, according to brokers. Lloyd's List Intelligence estimates that over those two months, Greek-operated vessels made 151 calls at Russian ports in the Black and Baltic seas, compared with 89 calls in the year-earlier period. Greek tankers are also sailing as far as Siberia, a traditional preserve of Chinese and Russian shipowners. The EU sanctions will come into effect on Dec. 5.

Canada considers two options to limit oil and gas emissions

(Bloomberg; July 18) - The Canadian government has released potential designs for an emissions cap on the oil and gas industry, the next step in Prime Minister Justin Trudeau's plan to cut emissions in the sector by 42% by 2030. Environment Minister Steven Guilbeault published a paper on July 18 that outlined two regulatory options.

The first is a cap-and-trade system that would see a set number of allowances distributed to all oil and gas facilities. Lower-emitting facilities would then be allowed to trade allowances with higher-emitting ones. The total allowances would decline over time in line with the emissions cap for the sector. The other option would impose a

steeper carbon price on the sector to drive down emissions, and require provincial governments with their own carbon-pricing systems to make the same changes.

“Both options could include some time-limited flexibilities to reflect the timelines of major emission reduction projects,” the government said in a background document to the discussion paper. “The cap will focus on emissions and will not be a cap on oil and gas production,” Guilbeault’s department said in the document. “It will maximize opportunities to invest in decarbonizing the sector while accounting for evolving energy security considerations.” The industry can submit feedback on the proposals until Sept. 21, and the government intends to unveil the final design in early 2023.

LNG-fueled power barges may be answer for Papua New Guinea

(Natural Gas Intelligence; July 18) - Singapore-based equipment and systems provider Twenty20 Energy plans to roll out an offshore natural gas power solution across 12 locations in Papua New Guinea as the nation seeks to electrify communities that lack access to power. The Power Island Floating Storage Regasification and Power (FSRP) plan includes barge-mounted power generators and regasification equipment, fuel barges and liquefied natural gas storage tanks for 30 days of supply.

“Our Power Island FSRP design leverages the abundance of domestically produced LNG in Papua New Guinea, delivering a cost-effective, environmentally friendly solution to power generation for coastal communities,” said Geoff Lawrence, CEO of Twenty20 Energy. “The Power Island FSRP should be an attractive solution to similar coastal and island communities across the Asia-Pacific region and around the world.”

Papua New Guinea is a gas-rich nation, with an LNG export plant that has been producing since 2014. It’s estimated that only 13% of the population has access to power, concentrated mostly in major cities. The government’s goal is 70% electrification by 2030. The project would provide a total of 283 megawatts from LNG and heat recovery-based generation. The power barges and fuel barges would be moored at floating piers. When in need of more LNG, the fuel barges would be towed to one of the three bulk storage hubs for refilling, and moved back to the power generation site.

North Dakota oil production recovers from spring blizzards

(Minneapolis Star Tribune; July 19) - North Dakota oil production bounced back in May after getting hammered the previous month by ugly weather. The state pumped out 1.06 million barrels of oil a day, up 17% from April when back-to-back blizzards hit North Dakota. “We have almost recovered what we lost in April,” Lynn Helms, North Dakota’s minerals director, told reporters on July 19. In May, North Dakota still was running below its March output of 1.12 million barrels per day.

The 20% production decline from March to April was one of the worst month-to-month drops in state history. North Dakota still is short of the drilling activity it would need to grow production at a 2% annual rate. At that level, about 25 fracking crews — who pump oil from the ground after wells have been drilled — would be needed. Currently, there are 18 crews, and oil companies are struggling to find more workers, Helms said.