Oil and Gas News Briefs Compiled by Larry Persily February 20, 2023

China locking up a lot of world's future LNG supplies

(Bloomberg; Feb. 19) - A rush by China to sign new long-term liquefied natural gas deals promises to give the nation more control over the global market at a time when competition for cargoes is booming. Chinese companies are sealing the most LNG purchase deals of any nation and increasingly are becoming the sector's key import intermediary. The Chinese buyers are reselling many of the cargoes to the highest bidders in Europe and Asia, effectively taking charge over a hefty chunk of supply.

Firms based in China account for roughly 15% of all new contracts that will begin delivering LNG supply by 2027, according to an analysis of BloombergNEF data. That trend is set to increase as the companies seek to lock in more long-term agreements, which will effectively give their traders control over the fuel for decades. From copper to rare earths, China is expanding its influence over commodities that are vital to its own economy and the world's transition away from the dirtiest fossil fuels.

China has become one of the world's top LNG importers nearly overnight amid a push to ensure energy security. Which means China can provide itself stability during global shortages, but could withhold supply and drive up prices to meet its own needs. The country is estimated to have resold over 5.5 million tonnes of LNG last year, according to ENN Energy's monthly research report in January — equivalent to 6% of total spotmarket volume, making it a huge swing supplier. China has signed more contracts with U.S. export projects than any other nation since 2021, according to BloombergNEF.

Analysts expect at least 3 U.S. LNG projects to move ahead this year

(Reuters; Feb. 16) - At least three U.S. liquefied natural gas export plants among the more than dozen proposals have likely found enough customers to receive financial approvals this year, according to Reuters calculations. Developers have secured dozens of long-term contracts to finance the new multibillion-dollar plants. Many of these projects have been delayed several times, waiting for customers to sign up.

The U.S. was long an importer of LNG, but gas discoveries and production from the shale revolution flipped the country into an exporter in 2016 — and it's now one of the biggest. Projects best positioned to move this year ahead include Sempra Energy's Port Arthur plant in Texas, Energy Transfer's Lake Charles in Louisiana and NextDecade's Rio Grande in Texas. They have all or most of the long-term LNG sales agreements needed to convince banks that the projects are ready for debt financing, analysts said.

Sempra's buyers include Poland's PKN Orlen, ConocoPhillips and Germany's RWE. NextDecade has signed deals for about 64% of the first phase of Rio Grande and may soon push it to 87%, according to analysts at Morgan Stanley. Rio Grande's customers include ExxonMobil, Shell, Portugal's Galp Energia and Japan's Itochu. Energy Transfer has deals to sell LNG to Shell, China's ENN Group and commodity trader Gunvor.

It takes roughly four years to build the plants, so their LNG is not likely to reach markets before 2027. The next U.S. plants expected to open are the QatarEnergy-Exxon venture at Golden Pass in Texas in late 2024, Venture Global's Plaquemines LNG in Louisiana in 2024-2026, and Cheniere Energy's expansion at Corpus Christi in Texas in 2025.

Suriname hopes to develop its oil while world still needs it

(Bloomberg; Feb. 16) - Annand Jagesar, managing director of the state-owned oil company of Suriname, is racing against time, nature and Guyana, the neighboring country that enviably discovered a massive offshore oil field in 2015. Jagesar believes Suriname, the former Dutch colony on South America's northeastern coast (population about 620,000), could have the same bounty, though explorers so far have discovered nowhere near the gushers that have transformed Guyana's economy.

Frontier exploration in countries like Suriname is raising hopes of an economic windfall for some of the poorest nations on the planet. But if the efforts fall flat, not only will it set back Suriname and other developing economies, it will also leave the world more reliant on oil from Russia, the Mideast and U.S. shale. Jagesar worries that efforts to exploit his country's oil have been too slow. To fend off climate change, the world's biggest energy users are trying to cut their consumption of fossil fuels as they transition to renewables. That could turn Suriname's oil into stranded assets if they aren't developed fast enough.

When TotalEnergies and APA Corp. (Apache) discovered oil offshore Suriname in 2020, it looked like a continuation of the "Golden Lane," the area off Guyana now producing 360,000 barrels a day for a coalition of companies led by ExxonMobil. But it's taking the partners longer than expected to get Suriname's oil flowing, in part due to disappointing results from initial wells, causing a delay in the target date for production to 2027.

And there's another problem: Suriname's oil fields contain large amounts of natural gas and nobody to sell it to. The closest market is in Trinidad 600 miles away. The oil companies don't want the carbon emissions that flared gas produces, so the fuel will have to be piped to Trinidad, re-injected into the reservoirs or converted to liquefied natural gas for export. Each option would involve additional, and costly, investment.

Opponents organize against Pacific Northwest gas line expansion

(Oregon Public Broadcasting; Feb. 14) - Climate activists hosted a "People's Hearing" in Phoenix, Oregon, on Feb. 13 to record video testimony opposing a proposed natural gas pipeline expansion in the Pacific Northwest. The event was hosted by Southern Oregon advocacy nonprofit Rogue Climate and is part of a plan to oppose the pipeline expansion that is under review by federal regulators.

The Gas Transmission Northwest Pipeline has been in operation since 1961, moving Canadian gas to Washington, Oregon and California via a system that is over 1,300 miles long and runs from British Columbia south to Malin, Oregon, near the California border. Its owner, Canadian company TC Energy, wants to upgrade the system to increase its capacity by 150 million cubic feet per day. These changes would include a software upgrade in Idaho, upgrading compressors in Washington and Oregon so they could handle a higher horsepower and installing a new compressor in Washington.

TC Energy said the expansion is necessary to meet a growing demand for gas. The Federal Energy Regulatory Commission accepted written comments on the project, but Maig Tinnin, with Rogue Climate, said the regulator didn't do any "meaningful outreach." Activists plan to send the recorded testimony to FERC to show opposition to the project. There were several attendees in person and over 100 attendees online. The attorneys general from Oregon, California and Washington have voiced opposition to the project, which they estimate will emit 3.47 million tonnes of CO2 per year for at least 30 years.

Appalachian gas pipeline an 8-year example of delays

(Yahoo Finance; Feb. 18) - As far as gas projects go, the Mountain Valley Pipeline will be but a small piece of a U.S. gas transmission system which spans roughly 300,000 miles. But the 303-mile project has encountered long delays and is in year eight of its effort to move gas out of Appalachia. The slowdown — amid regulatory, environmental, legal and political challenges — is emblematic of a complex approval process that hasn't gotten any easier in the past 12 months despite increased demand from Europe following Russia's invasion of Ukraine and the need for more U.S. exports of the fuel.

The divide is perhaps starkest around the Marcellus shale formation. It's there in Appalachia, with an estimated 262 trillion cubic feet of gas, that failed pipeline projects keep piling up. The stakes could get close to home with growing fears the chaotic U.S. energy system could lead to challenges to simply keep homes warm in New England and elsewhere in coming years unless there is increased access to Appalachian gas.

"All of those much-needed projects suffered years of regulatory delay and lawsuits, eventually leaving them with no choice but to abandon the projects," said Dustin Meyer, vice president of gas markets at the American Petroleum Institute. Environmentalists who aim to end projects like Mountain Valley charge that such projects are unnecessary and have been slowed not by regulations but by disregard for environmental concerns.

The Mountain Valley Pipeline still faces regulatory and legal issues as it tries to get over the finish line. Organizers say the line is currently 94% complete, with 270 miles of pipe installed, but still faces an uphill effort to meet its latest deadline of completion this year.

Canadian pipeline CEO says 'regulatory uncertainty' a problem

(The Canadian Press; Feb. 10) - The new CEO of pipeline giant Enbridge says regulatory uncertainty in Canada has resulted in a "lost decade" for the country's liquefied natural gas production. Greg Ebel, who took the reins last month, made the comments in an interview following release of the company's fourth-quarter financials.

Ebel said he was in Ottawa last week speaking to cabinet ministers about the need to accelerate energy infrastructure development in this country. He pointed out that the U.S. didn't begin exporting liquefied natural gas from the Gulf Coast until 2016. But just over eight years later, according to the U.S. Energy Information Administration, the United States now has more LNG export capacity than any other country. Canada's first LNG export terminal is not expected to come online until 2025.

"Goodness, that's an opportunity lost for Canada," Ebel said, adding Enbridge's pipelines currently supply natural gas to five operating LNG export facilities on the U.S. Gulf Coast. But concerns over climate change and the coming energy transition have created an uncertain energy investment environment in Canada. Energy infrastructure projects in this country have also been plagued by cost overruns, construction and permitting delays in recent years. "You need stability in permitting, and you need certainty in permitting," Ebel said. "We better figure this out."

North Dakota Legislature working on bills to cut oil taxes

(Inforum; Fargo, ND; Feb. 16) - North Dakota lawmakers have advanced a pair of bills that would financially favor the state's influential oil industry. Supporters of tax breaks and grant programs for oil companies say propping up the industry enriches the state and keeps western North Dakota's Bakken formation competitive with other oil fields. Opponents contend ceding state revenue to the energy sector inhibits public projects.

The House voted 72-21 on Feb. 16 to approve a bill that would abolish a requirement that producers pay a heftier tax rate when oil reaches high prices. The bill will head to the Senate next month. The proposal makes an exception for wells that touch the Fort Berthold Reservation. Mandan, Hidatsa and Arikara Nation Chairman Mark Fox had told lawmakers the oil-price tax trigger presents positive opportunities for his tribe.

The Legislature approved the trigger in 2015 as part of larger tax reforms that cut the extraction tax rate from 6.5% to 5%. As a compromise with the industry, policymakers

agreed that sustained high oil prices would trigger a 6% tax. Soaring prices last summer activated the higher tax rate, and the state took in an extra \$117 million in revenue between June and October. The additional cash flowed to the voter-approved Legacy Fund, local governments and trusts that bankroll K-12 education and water projects.

The House is due to vote on another proposal in the coming days that would give oil producers tax breaks for "refracking" old wells. The bill would reduce the oil tax to 2% on older, lower-producing wells that have been "restimulated" via hydraulic fracturing.

Barclays will stop financing oil sands production and pipelines

(Reuters; Feb. 15) – Barclays on Feb. 15 said it was tightening lending criteria for coal power and would stop financing Canadian oil sands exploration and production, but did not announce new restrictions on oil and gas lending as some rivals have. The British bank extended a previously announced plan to phase out financing for clients involved in coal-fired power plants by 2030 from just the U.K. and European Union to now include other countries in the Organization for Economic Cooperation and Development.

Banks globally have been detailing their plans to cut emissions and keep a lid on the rise in global temperatures, but environmental campaigners accuse them of moving too slowly and have called on them to stop financing new oil and gas drilling. Announcing results for 2022, Barclays said it will stop financing all oil sands companies, as well as new oil sands pipelines, whereas previously it had said it would work with those firms undertaking efforts to reduce their emissions.

Some environmental activists, however, had hoped the bank would announce a new policy on financing for all oil and gas activities, after HSBC said in December it would stop direct funding new oil and gas fields. NatWest and Lloyds have also said they will stop some direct financing for new oil and gas. Campaign groups said they were disappointed Barclays had not made further commitments to curtail financing fossil fuel expansion and that it had failed to match the ambition of its peers.

India's state-owned LNG buyer looks to take stake in U.S. project

(The Indian Express; Feb. 17) - State-owned GAIL (India) wants to pick up a stake in an existing or upcoming liquefied natural gas liquefaction and export facility in the U.S. as a part of its effort to secure stable supplies amid disruptions in a global market. GAIL has issued an expression of interest, seeking to acquire up to a 26% stake in an existing or proposed liquefaction facility in the U.S. In case of a proposed plant, GAIL wants offers from developers of only those projects expected to be commissioned by 2027.

Apart from a stake, GAIL also wants to import 1 million tonnes per year of LNG from the facility for 15 years. GAIL is open to extending the supply contract by another five to 10 years. The deadline to submit the expression of interest is March 10. The company already has long-term deals to take 5.8 million tonnes per year of LNG from U.S. projects, but it does not hold equity in any of the terminals.

GAIL has faced disruption in LNG supplies from a former unit of Russia's Gazprom due to Western sanctions on Russia. Apart from making up for the lost LNG volumes, the Indian gas major is also looking to expand its LNG portfolio given that gas consumption in India is expected to rise significantly over the next few years.

China will largely determine oil market balance, says IEA chief

(CNBC; Feb. 17) - The International Energy Agency's executive director said Feb. 17 that the biggest uncertainty facing global energy markets is the extent to which China rebounds from its extended closure. Currently, markets are "balanced," Fatih Birol told CNBC at the Munich Security Conference. But producers are awaiting signals on demand from the world's second-largest economy and largest oil importer. "For me, the biggest answer to the energy markets in the next months to come is (from) China."

In its latest monthly market report published Feb. 15, the agency said it anticipates global oil demand will pick up in 2023, with China accounting for a substantial portion of the increase. Oil deliveries are expected to rise, with total demand reaching a record 101.9 million barrels a day, the IEA noted. "China's economy is rebounding now," Birol noted. "How strong this ... will be will decide the oil and gas market dynamics."

He added, "If it's a very strong rebound, there may be a need that oil producers will increase their production." The IEA chief said that OPEC+ countries, as well as other major oil-producing nations such as the U.S., Brazil and Guyana, were poised to ramp up output to meet demand, if needed. Birol also said the energy crisis prompted by Russia's war on Ukraine was "supercharging" the transition to clean energies. He expects more countries will soon unveil additional clean-energy investment packages.

OPEC+ inclined to 'wait and see' before adding production

(Bloomberg; Feb. 14) - The OPEC+ cartel has a plan for 2023 — and, for now at least, it involves doing absolutely nothing. Having spoken to multiple officials during a Middle East trip last week, the words I heard most often were "stay put," followed by "wait and see." The group, led by Saudi Arabia and Russia, feels vindicated about its cautious approach to production. But OPEC+ is taking a gamble: If the group gets its supply and demand calculations wrong, it risks higher energy prices for a world fighting inflation.

Already, Brent prices have recovered from the December lows. After Russia last week announced it was cutting oil production by 5% — or about 500,000 barrels a day — in response to Western sanctions, prices rose to just above \$85. Still, OPEC+ would rather err on adding too few barrels than too many, at least for the first half of 2023 and likely all of the year. As an immediate step, it has decided against backfilling the Russian cut.

If the consequence of the cautious approach is that oil prices rise further later this year, perhaps toward \$90 or \$100 a barrel, that's an outcome the group appears to be happy with. The priority, particularly in Saudi Arabia, is to protect revenues. That means putting the kingdom first, and everything else second. The guarded strategy matters beyond the oil market. If OPEC+ falls behind the demand curve, it could mean higher energy prices. That, in turn, could mean higher interest rates, spilling over everything from bonds to equities to real estate. The next OPEC+ ministerial meeting is scheduled for early June.

Egypt wants to boost LNG exports 40% by 2025

(Bloomberg; Feb. 15) - Egypt aims to boost its exports of liquefied natural gas by about 40% from 2025, with the bulk of the extra fuel shipments going to Europe. The continent is rushing to secure more LNG from the Middle East, the U.S. and other regions as it plans for a future with virtually no gas from Russia, by far its biggest supplier before Moscow's invasion of Ukraine. Egypt's exports this year will probably remain flat at around 7.5 million tonnes, according to Energy Minister Tarek el-Molla.

Its two LNG export terminals on the Mediterranean coast are designed to ship a combined 12 million tons annually, but reaching that level will depend on Egypt pumping more of its own gas and receiving more flows from Israel, he said. "I would expect to reach full capacity by 2025," el-Molla said in an interview in Cairo on Feb. 14. While that will help bolster Europe's energy security in the longer-term, it's this year and 2024 when LNG global supplies will be particularly tight. Like Egypt, Qatar and the U.S. are also expected to increased exports significantly from the middle of the decade.

Egypt and Israel are in talks to boost Israeli flows of piped gas to the North Africa country, el-Molla said. Much of that Israeli gas is re-exported as LNG from the ports of Damietta and Idku. Egypt's current flows make it a relatively small LNG exporter. But boosting them to 12 million tonnes annually would make it one of the world's 10-biggest suppliers, based on last year's figures. El-Molla said Egypt won't consider building new LNG terminals or expanding either of the existing ones until it has more gas to ship.

Oil industry pours capital into clean-energy initiatives

(S&P Global Platts; Feb. 16) - High oil prices in 2022 allowed legacy energy companies to stockpile incredible amounts of capital that is now being absorbed into the clean-tech

sector. Green hydrogen is expected to be a primary beneficiary of this financial glut in the coming years, S&P Global Commodity Insights clean-tech analysts said Feb. 16.

Fortunes for oil and gas companies rebounded last year after years of cost-cutting necessitated by the pandemic. Between 2020 and 2022, free cash flows among North American companies rose more than 600%, from \$32.8 billion to \$236 billion, according to S&P Global Market Intelligence data. It was auspicious timing for this capital buildup. In August 2022, the U.S. Inflation Reduction Act put on tap massive amounts of money for clean-tech incentives, prompting corporations to deploy rapidly increasing amounts to clean-tech in 2022 — from \$12.6 billion in September to \$122.4 billion in November.

Combine these two trends, and there is a significant amount of money in the financial system available for clean-tech advancements, said Peter Gardett, executive director of climate and clean tech at S&P Global Commodity Insights. "To be able to see this spike in deployment up to \$120 billion in November, that's remarkable," Gardett said during an early CERAWeek 2023 event. Green hydrogen is poised to draw a flood of investment, mostly thanks to the generous federal tax incentives. But the nascent hydrogen market has many uncertainties to wrestle with before it can reach a commercial scale.

China embarks on green hydrogen project in Inner Mongolia

(China Daily; Feb. 17) – Promoted as the world's biggest project using solar and wind power to produce hydrogen, the project started construction Feb. 15 in Ordos, Inner Mongolia autonomous region. It is being built by Sinopec Star Co., a wholly owned subsidiary of China Petrochemical Corp., or Sinopec, the world's largest refiner by volume and the country's biggest geothermal developer. The project is Sinopec's first green hydrogen demonstration project in Inner Mongolia.

The project consists mainly of five areas: wind and solar power generation, power transmissions and transformations, hydrogen production by electrolysis of water, hydrogen storage and hydrogen transmission, according to the company. The installed design capacity for wind and solar power generation will be 450 megawatts and 270 megawatts, respectively. The hydrogen production capacity through electrolyzed water is 30,000 tonnes per year. Total investment is about 5.7 billion yuan (\$848.21 million).

The hydrogen and oxygen produced by the project will be transported by pipelines to the nearby Ordos coal demonstration project run by ZTHC Energy, to replace part of the coal-to-hydrogen production. It is expected to promote the integrated development of the traditional synthetic materials chemicals industry and the new hydrogen energy industry, as well as help expedite the clean and efficient use of coal, Sinopec Star said.

German utility says it will overcome gas supply issues by 2024

(Bloomberg; Feb. 17) - Germany utility Uniper said it will overcome the problems generated by cutbacks in Russian natural gas supply by 2024 at the latest. The company — which was rescued by the German government last year after the energy crisis put it on the brink of financial collapse — said it may continue to face high gas replacement costs in the next years. The firm also took a €4.4 billion (\$4.7 billion) hit from deconsolidating its Russian business, according to its earnings report.

"We must be aware that in future quarters, too, Uniper's earnings will depend to a significant extent on the amount of gas replacement procurement costs. These costs, in turn, depend largely on the price of gas," said Chief Financial Officer Tiina Tuomela, without offering details on the company's strategy to handle legacy contracts with Russia's Gazprom.

Once Germany's largest importer of Russian gas, Uniper was among the companies hardest hit by the war in Ukraine, requiring a mammoth rescue package from the government that led to its nationalization late last year. Yet a mostly mild winter and strong inflows from other countries lowered gas prices by more than 80% from their peaks last summer. That has helped Uniper reduce the cost of replacing curtailed Russian supplies, and more than halved its expected losses.

European gas futures retreat to lowest price in 17 months

(Bloomberg; Feb. 17) - European natural gas futures slumped below €50 a megawatt-hour for the first time in 17 months as the region's worst energy crisis in decades recedes — but with signs that further price declines are unlikely. Prices have plunged by more than 80% from their August peak when Russia's gas cuts hit Europe with about \$1 trillion in costs, hammering the economy and pushing inflation to the highest in decades. Now, the continent is seeing a sharp turnaround as relatively mild weather, efforts to reduce consumption and strong inflows of liquefied natural gas take the edge off.

However, analysts question whether the price decline will persist much further. With the end of winter approaching and heating demand receding, lower prices could make gas more economical for power generation in Europe than alternatives such as coal, driving up gas demand. "Gas prices have fallen into the fuel-switching range, suggesting that it is now more profitable to run the highest-efficiency gas plants in comparison to the lowest-efficiency coal plants," said Stefan Ulrich, an analyst at BloombergNEF.

Demand is also picking up from India to China. Prices could rise if there's extended cold weather before the end of winter or if there are supply disruptions. "We're getting to a level where the downside is probably more limited whereas still there's clearly upside (to prices), particularly if you get the strong economic growth in China," said Steve Hill, executive vice president for energy marketing at Shell, in a presentation on Feb. 16.

Eastern Washington county building green hydrogen plant

(KPQ News Radio; Wenatchee, Washington; Feb. 15) - The Douglas County Public Improvement District in Eastern Washington is making progress in the construction of its first hydrogen plant. District commissioners have approved the purchase of a second 5-megawatt electrolyzer to produce hydrogen from water. District spokesperson Meaghan Vibbert said hydrogen production leaves a carbon-free footprint from start to finish.

"So, we'll use green renewable power, whether that be Wells (hydroelectric dam) power ... or other renewables to make this hydrogen," said Vibbert. "And then when people burn it in their vehicle or other processes, the exhaust is just water and vapor." The district purchased its first electrolyzer for \$9.5 million. The price of the second unit is uncertain. The hydrogen plant is a \$25 million project that's being built behind the Shell station in the Baker Flats area north of East Wenatchee.

The district has a contract with IMCO General Construction to build the hydrogen plant, which will also have a retail fueling station for the public. Vibbert said site preparation, underground utilities and storage tank installation are all complete. "We have the first electrolyzer in our hands, but it has not been installed yet," Vibbert said. "That building needs to be constructed. Then all the piping and installation of equipment will happen." The hydrogen plant will have the capacity to fill up 6,400 hydrogen-powered cars a day.