

Oil and Gas News Briefs

Compiled by Larry Persily

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About half of U.S. oil exports go through Corpus Christi Bay, Texas

(Wall Street Journal; July 21) - The U.S. has transformed global markets by boosting crude oil exports more than 30-fold over the past decade. Much of the boom hinges on Corpus Christi Bay, Texas. In the first four months of 2023, about half of the country's 4.1 million barrels of daily shipments abroad were loaded onto skyscraper-size tankers from this coastline stretch, destined to become fuel for overseas travelers or factories.

That gusher of supply has helped blunt the increase in prices from recent production cuts by Saudi Arabia and Russia. Corpus Christi has become the dominant U.S. hub, siphoning crude from elsewhere thanks to unique terminals that make it cheaper than competitors. Ballooning trade from the port has put the U.S. on pace to pump out record oil exports this year, according to federal record-keepers.

"The market is totally focused on taking shale production from the U.S. into international markets," said Rusty Braziel, chief executive of consulting firm RBN Energy. Corpus Christi is the closest deep-draft port to the Permian Basin in West Texas and New Mexico, America's hottest oil field. Crude extracted from shale rock there, prized by overseas refineries for its light, sweet quality, trades at a premium to many other grades.

That oil was confined stateside as the shale boom unleashed unprecedented U.S. production growth. But after Washington nixed decades-old export restrictions in 2015, companies scrambled to build out pipelines to Corpus Christi. Companies have since constructed storage tanks in Corpus Christi to hold tens of millions more barrels of oil. Since 2020, dredges have been deepening the ship channel and inner harbor to 54 feet, an almost \$680 million operation that will allow many tankers to fill up close to capacity.

Oil transfer to start this week from abandoned tanker offshore Yemen

(Wall Street Journal; July 22) - For years, as Yemen was ravaged by civil war, another catastrophe has loomed off the country's Red Sea coast, where a rusting tanker is threatening to break apart and spill more than a million barrels of oil into the fragile ecosystem. International organizations and experts watched with alarm as the FSO Safer — left stranded 5 miles off the Yemeni shore since 2015 — began to fall apart.

If it ruptures or explodes, it could disgorge four times the amount of oil spilled in the 1989 Exxon Valdez disaster in Alaska, disrupting one of the world's busiest shipping lanes and closing off ports bringing humanitarian aid into the war-torn country. This

weekend, a U.N.-led team of international experts is scheduled to begin an operation to siphon out the entirety of the volatile cargo from the 1,200-foot-long, 47-year-old Safer.

The plan is fraught with danger. It involves lining up a U.N.-purchased very large crude carrier alongside the FSO Safer. The tanks on the two vessels will be connected by pipes and the oil will be shifted using hydraulic pumps. The Safer will then be cleaned of sludge, constituting an estimated 5% of the original cargo. The ships will need to be kept steady in open waters during the transfer, which could take two weeks.

The Safer, which had been used for oil storage, was abandoned eight years ago amid the civil war. The U.N. paid \$55 million to buy a tanker for the transfer operation, which will cost an estimated \$143 million in total. So far, the U.N. has raised \$121 million from more than 20 countries, chiefly Saudi Arabia, the Netherlands, Germany and the U.S., in addition to an oil industry association and private donors.

Asia has taken steps to reduce dependence on costly LNG

(S&P Global; July 20) - When signs emerged in early 2022 that Russian pipeline gas supply into Europe could disappear and force Asia's LNG importers to fight for every molecule, Asian governments and power utilities made a strategic move to ramp up every other alternative fuel source available. This included nuclear, renewables, coal and furnace oil, and prioritizing domestic production of coal and natural gas. The fuel supply was bolstered by reviving mothballed power plants, delaying decommissioning of old facilities and in some cases eliminating demand from non-critical sectors.

More than a year later, the collective outcome has been to blunt the dependence of Asian utilities on LNG, mainly in the power sector, and keeping spot LNG prices stable. More importantly, these moves are helping utilities maintain stable grids in the midst of sporadic heatwaves sweeping various parts of Asia. Cheaper, more viable fuel sources also reinforced emerging-market claims that LNG remains a costly energy in regions like South and Southeast Asia despite softer prices in 2023.

In North Asia, mainly Japan, Taiwan and South Korea, LNG is not unaffordable, and buyers like Japan have been willing to pay exorbitant prices for fuel during national emergencies like the Fukushima crisis to keep the lights on. However, Japan and South Korea have embarked on a significant ramp-up of renewables and nuclear. Japan's share of power generation from renewables has doubled to about 12% from 6% in 2017, according to data from S&P Global Commodity Insights, and is expected to grow.

But for new LNG importers like Vietnam and the Philippines, prices are a decisive factor. And in China, thermal coal imports have doubled, according to S&P Global. "With lackluster economic performance in China this year, it is more economical to use coal for power generation in order to keep costs lower," a China-based analyst said.

Asian nations pushing for more LNG storage capacity

(Reuters; July 20) - Governments across Asia are formulating strategic natural gas reserve policies, building new terminals and storage tanks as buffers against supply disruptions following last year's energy crisis that sent global prices soaring to a record. The push to develop storage illustrates that Asian gas-consuming nations are taking steps to avoid repeating the pitfalls that arose from last year's crisis, which left buyers flatfooted in their response to the surging prices.

LNG in Asia climbed to a record \$70 per million Btu last August as Russian cuts in pipeline gas to Europe after its Ukraine invasion caused a spike in European LNG imports. As a result, Asian countries turned to coal and oil to generate power instead of gas. With the pain still fresh even as prices have fallen to \$10, countries including Japan and India indicated this week they will build strategic gas reserves for energy security.

Japanese Industry Minister Yasutoshi Nishimura said on July 20 the world's biggest LNG importer will launch a reserve system to prepare for "unexpected situations." The reserve would be similar to Japan's Strategic Petroleum Reserve, which is among the world's largest. Japan's Ministry of Economy, Trade and Industry is selecting companies which would buy and store LNG — equivalent to at least one tanker a month — from December to February, a ministry official told Reuters. In a supply disruption, the ministry would direct the companies to sell the stored gas to local utilities, he added.

China's state planner announced in March last year a target to more than double its gas and LNG storage capacity by 2025, equaling 13% of total annual gas consumption. South Korea and Taiwan, respectively the world's No. 3 and 4 LNG importers, also are building new terminals and storage facilities to boost stockpiles.

Novatek plans to start work on third LNG project in 2024

(Reuters; July 21) – Novatek plans to start construction of its Murmansk liquefied natural gas plant in August 2024, TASS news agency quoted CEO Leonid Mikhelson on July 21. Russia's largest LNG producer aims to produce 20.4 million tonnes of LNG per year at the site in the northern Murmansk region which borders on Finland. The plant will consist of three production lines with a capacity of 6.8 million tonnes per year each. The first two lines are expected to start production by the end of 2027, while the third is scheduled to start operations in 2029, the news agency reported.

Meanwhile, Novatek is nearing start-up of the first production unit at its Arctic LNG-2 export terminal. The \$21 billion, three-train plant is planned for almost 20 million tonnes annual capacity. Novatek's first Arctic LNG development, Yamal, started up in 2017, with 16.5 million tonnes annual capacity.

Novatek says it will start Arctic LNG-2 production before end of year

(Upstream; July 21) - Novatek, Russia's largest independent gas producer, is on track to produce liquefied natural gas from its Arctic LNG-2 project by the end of the year, said Executive Chairman Leonid Mikhelson. The project's first train has left its assembling yard in Belokamenka, near Murmansk in the north of Russia, to arrive at the Gydan Peninsula in West Siberia in August. Speaking at the yard after the official tow-out ceremony this week, Mikhelson said production will start before the end of this year.

The concrete gravity-based structure, with the liquefaction facilities installed on top, was pulled out of the yard by 14 tugs under the watchful eye of President Vladimir Putin, underscoring the importance the project and widescale support the government extended to Novatek in its first project, Yamal LNG, and now Arctic LNG-2. The dock in Belokamenka will be prepared to begin casting concrete for another GBS that will host the third train of Arctic LNG-2. Novatek said installation of assembled modules on a GBS for the second train of Arctic LNG-2 in a neighboring dock is continuing.

Novatek still plans to install the second and third production lines of Arctic LNG-2 before the end of 2026 despite a need to reconfigure the project's power supply after international sanctions made it impossible to use gas-fired turbines and other equipment supplied by the West. The reconfiguration has led to a decision to build a 1.5-gigawatt power plant onshore the Gydan Peninsula to supply electricity to drive the compressors and pumps of the \$21 billion gas project.

Novatek LNG close to overtaking Gazprom as top Russian supplier

(Reuters; July 20) - Increased supplies of liquefied natural gas from Russia's Novatek mean the company is close to overtaking Kremlin-controlled Gazprom as the country's leading fuel supplier to Europe, Reuters calculations show. Novatek's rise toward the coveted top spot underlines how much the Ukraine conflict has disrupted Russia's and the world's energy industry as Europe turns to seaborne LNG and away from Gazprom's network of gas pipelines that dominated European supply for decades.

Russia's gas, in contrast to its oil, is not subject to Western sanctions, although Brussels is considering extending its embargo. The European Union has sought to cut its reliance on Russian gas and aspires to replace it with renewable energy as it strives to curb its emissions. In the immediate term, however, it has increased its LNG imports. Novatek, founded almost 29 years ago, secured Russian state support to expand into the export market following the launch of Yamal LNG in northwest Siberia in 2017. Its second export plant, Arctic LNG-2, is scheduled to start production by the end of the year.

Reuters calculations, based on figures from Refinitiv Eikon, showed that Gazprom's total exports of LNG and pipeline gas supplies to Europe were about 487 billion cubic feet between Jan. 1 and July 15. Novatek's exports to the region in the same period

amounted to 436 bcf. "Gazprom has likely forever lost 65% to 75% of its historical share of the European market," Ronald Smith of Moscow-based brokerage BCS said. However, it would be "very difficult" for Novatek to completely replace Gazprom in Europe, as Gazprom's remaining customers have limited infrastructure to import LNG.

Argentina company rejects Russian LNG cargo over payment issue

(Bloomberg; July 20) - Argentina's state-run energy company Enarsa said a \$38 million cargo of Russian liquefied natural gas was rejected over a payment issue, raising questions about the viability of similar shipments amid tightening scrutiny over their origin. There was some confusion over the reason the cargo was refused. Enarsa President Agustin Gerez said July 20 that Banco de la Nacion Argentina would not accept payment for the fuel because of sanctions related to Russia's war in Ukraine. The gas was purchased from global commodity trader Gunvor.

The bank's Madrid branch, which handled the transaction, "doesn't pay for operations with Russian intermediaries," Gerez said. The Madrid office is subject to European Union sanctions laws. Argentina's economy minister this week said officials blocked the delivery because of sanctions, though the nation doesn't have any sanctions against Russia. The ship is now sailing northeast, with an unannounced destination.

The incident highlights the complexity and controversy surrounding purchases of LNG from Russia, which many countries continue to import even as they ban other energy products from the nation. Across the globe, countries are vying for the fuel to bolster their energy security, but paying for it is an increasingly thorny issue. Sanctions by the U.S. and its allies have cut off some of Russia's top banks from the global financial system, and many companies and countries have independently shunned Russian transactions to avoid the risk of running into penalties.

U.S. natural gas prices 60% below a year ago

(Wall Street Journal; July 20) - Americans are burning more gas than ever to stay cool this summer. Unlike the past two summers, when sweltering weather sent gas surging, the continuing heat wave has hardly moved prices for the power-generation fuel. Benchmark gas prices have stayed in a tight range that is roughly 60% below a year ago, when prices exploded to shale-era highs. Prices are 30% less than in July 2021.

Consumers payers can thank the unusually warm weather this past winter for leaving a lot of gas in storage. As well, strong renewable-electricity generation has taken pressure off gas-fired power plants in some of the hottest parts of the country, including California and Texas. Gas futures for August delivery ended July 19 at \$2.603 per million Btu, down 67% from a year earlier. Futures have shed 7% in July, when they usually rise.

Spot prices in some big markets, including Chicago and New York, have been even cheaper than the national benchmark, which is set at the Gulf Coast hub near export terminals and gas-consuming chemical plants. The big difference between now and the past couple of summers is that there is much more gas available. The volume in U.S. storage caverns last week was 14% above the five-year average, according to the Energy Information Administration. In addition, despite the grid's greater dependency on gas, analysts say added wind and solar production have helped hold down gas prices.

U.S. doesn't plan to adopt low-emissions certified gas standards

(S&P Global; July 21) - The U.S. Department of Energy does not plan to develop a standard for natural gas certified as low in greenhouse gas emissions and is focused instead on working with other nations to form a common approach toward tracking emissions across the natural gas supply chain, an agency spokesperson told S&P Global Commodity Insights on July 21. "DOE ... is working with natural gas importing and exporting countries to develop an agreed approach to MMRV (measurement, monitoring, reporting and verification) that provides consistency and accountability in the marketplace," a DOE spokesperson said in an email responding to questions.

Certified gas, also known as differentiated gas or responsibly sourced gas, is natural gas production that has undergone third-party certification of its performance against certain environmental, social and governance metrics, with a heavy emphasis on having lower methane emissions. The U.S. has yet to coalesce around a single standard, and industry players have questioned whether the DOE would look to develop one.

The DOE comments came just days after the U.S. issued a joint statement with Korea, Japan, Australia and the European Commission pledging to clean up methane leaks from the LNG supply chain. The DOE spokesperson said the agency's MMRV work "focuses on bringing minimum performance criteria, independent verification and transparency to the multitude of related industry, NGO and international government initiatives directed at quantifying emissions throughout the natural gas supply chain."

Oil prices predicted to rise amid tight supplies in second half of year

(CNBC; July 22) - Oil prices are set to rise in the second half of the year as supply struggles to meet demand, according to the Secretary General of the International Energy Forum. Oil demand bounced back to pre-COVID levels quickly, "but supply is having a tougher time in catching up," said Joseph McMonigle, secretary general of the International Energy Forum, adding that the only factor moderating prices right now is the fear of a looming recession.

“For the second half of this year we’re going to have serious problems with supply keeping up, and as a result, you’re going to see prices respond,” McMonigle told CNBC on the sidelines of a meeting of energy ministers from the group of the 20 leading industrial economies in Goa, India, on July 22. McMonigle attributes the push in oil prices to increasing demand from China — the world’s largest importer of crude — and India. “India and China combined will make up 2 million barrels a day of demand pick-up in the second half of this year,” he said.

However, McMonigle is confident that the Organization of the Petroleum Exporting Countries and its allies — collectively known as OPEC+ — will take action and increase supply, if the world eventually succumbs to a supply-demand imbalance. “They’re being very careful on demand. They want to see evidence that demand is picking up, and will be responsive to changes in the market.”

Truck makers drive latest push to hydrogen combustion engines

(Bloomberg; July 20) - Daimler Truck is pushing a fringe technology as an alternative to batteries and fuel cells in the shift to zero-emission rigs. The advantage? It combusts hydrogen and would be based on the truck maker’s well-honed diesel engines. The world’s biggest commercial-vehicle maker is working on a potential partnership to develop hydrogen combustion engines — a technology long targeting only niche vehicles with heavy payloads in mining, construction or agriculture.

Last week, the German company said it’s ready to apply it to heavy-duty trucks once authorities classify it as zero-emission. The move, essentially prolonging the lifespan of a technology headed for the exit, comes as incumbent truck makers face the daunting task of developing battery trucks that require (as of yet non-existent) fast-charging points with energy needs akin to small towns, and complex fuel-cell technology.

Suppliers are also jumping in. Germany’s Robert Bosch, the world’s biggest vehicle supplier and diesel technology leader, is working on a hydrogen-fueled engine. Cummins last year showed off a hydrogen combustion concept truck at a transportation show in Germany. Because hydrogen combustion is similar to the gasoline engine, a shift could happen “much faster than anything else we have to do with electrification,” Michael Brecht, deputy chair of Daimler Truck’s supervisory board and the company’s top employee representative, said in an interview with Bloomberg Television.

State-owned Chinese oil company starts on 33,000-foot-deep well

(Bloomberg; July 20) - China has begun drilling a hole almost 33,000 feet down for the second time this year as it seeks ultra-deep reserves of natural gas. China National Petroleum Corp. on July 20 began drilling the Shendi Chuanke 1 well in Sichuan

province, with a designed depth of 34,300 feet, Xinhua News Agency reported. The project follows a similar-sized well that state-owned CNPC began drilling in Xinjiang in May, described at the time as the deepest ever undertaken in China.

While the earlier well was described as experimental in nature, with the project designed to test drilling technologies and provide data on the Earth's internal structure, the Sichuan undertaking is seeking to find ultra-deep gas reserves, according to Xinhua. Sichuan province is home to some of China's largest shale gas reserves. The nation's state-owned oil giants have had only limited success tapping their potential because of difficult terrain and complicated underground geology. China's government has put pressure on energy companies to enhance fuel security by boosting domestic output.