

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **Oil production, wastewater injection moves the ground in the Permian**

(Wall Street Journal; April 28) - In a desolate stretch of desert spanning West Texas and New Mexico, drillers are pumping more crude than Kuwait. The oil production is so frenzied that huge swaths of land are literally sinking and heaving. The land has subsided by as much as 11 inches since 2015 in a prime portion of the Permian Basin, as drillers extract huge amounts of oil and water, according to a Wall Street Journal analysis of satellite data. In other areas where drillers dispose of wastewater in underground wells, the land has lifted by as much as 5 inches over the same period.

The constant extraction and injection of liquids has wrought complex geologic changes, raising concerns among locals long supportive of oil and gas. Earthquakes linked to water disposal have rattled residents and prompted state regulators to step in. Some researchers worry that wastewater might end up contaminating scarce drinking water.

The tumultuous landscape is a direct result of industrial-scale drilling in the Delaware portion of the Permian. Oil production has reached nearly three million barrels of oil a day there, cementing the U.S. as an energy power and fueling the region's economy. Alongside crude, companies are extracting gargantuan amounts of subterranean water — between five and six barrels of water are produced, on average, for every barrel of oil. To dispose of it, they inject billions of barrels of wastewater into underground wells.

Some scientists say the ground displacement, shown in data provided by Earth observation company SkyGeo, could impact infrastructure such as roads. But what frackers and researchers are most concerned about are the forces pushing the ground up. Environmental groups say Texas regulators' oversight of the industry is falling short and that it is time for the federal government to intervene. Oil executives, meanwhile, say the rising costs of water disposal are having an impact on their bottom line.

#### **Exxon, Chevron look to boost production with acquisitions**

(Bloomberg; April 27) - If you want to understand why the two largest U.S. oil companies are together spending in excess of \$100 billion on acquisitions right now, look no further than the amount of crude they are extracting from the two hottest oil fields on the planet. ExxonMobil and Chevron are both predicting their production in the Permian Basin — the U.S. region that already supplies more oil than Iraq — will rise by 10% this year.

Exxon also revealed that production from its massive oil development in Guyana in the first quarter surged 70% from a year earlier. That's enough to supply almost a fifth of the global demand growth this year that's forecast by the International Energy Agency. Guyana and the Permian stand out for relentless levels of production growth in an industry that has otherwise struggled to find new, low-cost resources in recent years.

Exxon is set to become the Permian's top producer once it closes its \$64 billion acquisition of Pioneer Natural Resources, while Chevron is spending \$52 billion on Hess to gain a 30% share of Guyana's prolific Stabroek Block. The Permian and Guyana "are big growth drivers at both companies," said Neal Dingmann, an analyst at Truist Securities. "There are definitely fears on U.S. inventory and shortages worldwide because of lack of investment in the group over several years now," he added. Targeting the Permian and Guyana will not just grow production but also lower their overall cost of supply. Both regions can produce oil at a profit for less than \$35 a barrel.

## **Venture Global moves toward start-up at second Louisiana LNG plant**

(Bloomberg; April 27) - Venture Global LNG expects to begin production at its second liquefied natural gas export facility in Louisiana in mid-2024, further cementing the U.S. as the world's biggest supplier of the fuel. The Arlington, Virginia-based company requested approval to receive an LNG shipment to cool down its equipment as part of its start-up process at the Plaquemines LNG terminal, according to a regulatory filing dated April 22. That's a key step before LNG exports can begin.

The shale revolution has unlocked vast reserves of natural gas across the U.S., pushing the country to overtake Qatar and Australia as the top LNG exporter last year. U.S. deliveries are slated to double by the end of the decade, as demand across Asia rapidly grows and Europe moves to replace Russian pipeline gas. Plaquemines, which is still under construction, this past week received gas supply through its Louisiana pipeline. Its total planned capacity is 20 million tonnes a year; the first phase is set for 10 million.

Venture Global would be the eighth U.S. LNG export facility. Venture Global's first facility — Calcasieu Pass — began production in 2022 but isn't expected to enter commercial operations until the end of this year, according to the company. That's delayed the start of supply to its contracted customers, including Shell, BP and Repsol, which have filed arbitration claims, arguing that their contracted deliveries should have started sooner. By asserting the plant is not yet in commercial operation, Venture Global has been able to sell its LNG production on the higher-price spot market, retaining the profits for itself.

## **Economics Institute sees extended period of LNG oversupply**

(Institute for Energy Economics and Financial Analysis; April 25) - Sluggish demand growth for LNG, combined with a record increase in global export capacity through 2028, will likely thrust markets into an extended period of oversupply, according to the latest outlook from the Institute for Energy Economics and Financial Analysis. As major importers — including Japan, South Korea, and Europe — aim to reduce LNG demand through 2030, suppliers and traders will increasingly depend on growth in emerging markets to compensate for falling imports elsewhere and absorb a flood of new supply.

However, such rapid LNG demand growth in emerging economies is not guaranteed, even in an oversupplied market. Countries in South and Southeast Asia, for example, will face distinct barriers to rising demand, including fiscal and credit challenges, extensive infrastructure delays, and contracting issues, among other obstacles. The global LNG crisis following Russia's full-scale invasion of Ukraine in 2022 brought these issues to the fore, spurring many markets to reduce the role of natural gas in their development plans and accelerate the development of alternative energy sources.

The IEEFA expects Europe's gas and LNG demand to fall through 2030; its gas demand has declined 20% since 2021, due to fuel switching, increased nuclear and renewables generation, and energy efficiencies. LNG imports to Japan and South Korea fell 8% and 5%, respectively, in 2023. National energy and climate plans envision steep reductions in the role for LNG in both countries, turning to nuclear and renewable energy. China reclaimed its position as the world's largest LNG importer in 2023. However, domestic gas production and additional pipeline gas imports may limit LNG demand growth.

## **Qatar orders 18 LNG carriers from Chinese shipbuilder**

(Bloomberg; April 29) - QatarEnergy has signed a \$6 billion agreement with China State Shipbuilding Corp. to build 18 liquefied natural gas carriers as it prepares to boost its output of the fuel. The shipbuilder will make the ultra-modern QC-Max size LNG vessels, each with a capacity of 271,000 cubic meters, at its Hudong-Zhonghua shipyard, QatarEnergy said in a statement on April 29. Eight ships will be delivered in 2028 and 2029, while 10 will be delivered in 2030 and 2031, according to the statement.

Qatar needs more LNG carriers as it's raising its annual production capacity from the North Field to 142 million tonnes by 2030 from 77 million currently. Each of the new QatarEnergy carriers will be almost 1,130 feet long and able to carry about 57% more LNG than regular carriers, or around 6 billion cubic feet of natural gas, enough to meet the gas consumption demand of 4.7 million households in Shanghai for one month, according to a statement issued by the Chinese shipbuilder. That would make it the largest LNG carrier in the world. Currently, the world's largest carriers are Qatar's Q-Max vessels, with capacities ranging from 263,000 to 266,000 cubic meters of LNG.

## **Turkey negotiating long-term deal to buy LNG from Exxon**

(Reuters; April 29) - Turkey is in talks with ExxonMobil over a multibillion-dollar deal to buy liquefied natural gas in an effort to curb its dependence on Russian energy, the Financial Times reported on April 28. The country is seeking to build a “new supply portfolio” that will make it less reliant on any single partner, Turkey’s Energy Minister Alparslan Bayraktar told the newspaper in an interview.

Turkey would buy up to 2.5 million tonnes of LNG a year through a long-term deal under discussion with Exxon, Bayraktar said, adding that the commercial terms of the Exxon deal are still under discussion. The reported deal with Exxon comes at a time when Russian gas exports to Europe are falling as Europe increases its LNG purchases from global producers to cut its imports of Russian pipeline gas in response to the war in Ukraine. Turkey, which has little oil and gas, is highly dependent on imports from Russia, Azerbaijan and Iran, as well as LNG from Algeria, Qatar, the U.S. and Nigeria.

## **TotalEnergies sees big potential for offshore oil in Namibia**

(Bloomberg; April 26) - Namibia’s oil potential could one day match Guyana, where large discoveries have sparked an economic transformation and set the world’s biggest companies jostling for position. There’s a “big chunk of oil” in waters off the southern Africa nation of Namibia, said Patrick Pouyanne, CEO of TotalEnergies, which alongside several other companies has made significant discoveries in the African country.

“Shell has some oil, we have some oil, (Portugal’s) Galp has some oil,” Pouyanne said on April 24. A scenario “like you have today in Guyana is very possible.” In the past two years, TotalEnergies, Shell and Galp Energia have made finds that turned sparsely populated Namibia into a hotspot for exploration. While no field has yet been given the green light for development, hopes are high in the country that an economic boom similar to that seen in South America’s Guyana could be in the cards.

Guyana became the world’s fastest-growing economy after ExxonMobil tapped large offshore fields. Earlier this month, Exxon approved its sixth oil development in Guyana, which now produces almost 650,000 barrels per day. Pouyanne cautioned it might be more complex to optimize projects led by various operators in Namibia, rather than the one company that’s leading development in Guyana. By the end of 2025, TotalEnergies aims to approve its first project in Namibia, which could involve a floating production, storage and offtake vessel with a capacity of 180,000 barrels per day, Pouyanne said.

## [U.S. shale drillers work to lower fracking costs and boost yield](#)

(Reuters; April 24) - Technology advances are making it possible for U.S. shale oil and gas companies to reverse years of productivity declines, but the related requirement to frontload costs by drilling many more wells is deterring some companies from doing so. While overall output is at record levels, the amount of oil recovered per foot drilled in the Permian Basin of Texas, the main U.S. shale formation, fell 15% from 2020 to 2023, putting it on par with a decade ago, according to energy researcher Enverus.

That is because fracking, which emerged in the mid-2000s, has become less efficient there. In the technique, water, sand and chemicals are injected at high pressure underground to release the trapped resources. Two decades of drilling wells relatively close together, resulting in hundreds of thousands of wells, has interfered with underground pressure and made getting oil out of the ground more difficult.

But innovations, which began being implemented more widely last year, have made it possible for fracking to be faster, less expensive and higher yielding. The advances in the past few years include the ability to double the length of lateral wells to three miles and equipment that can simultaneously frack two or three wells. Electric pumps can replace high-cost, high-maintenance diesel equipment. "Companies now can complete (frack) wells faster and cheaper," said Betty Jiang, an oil analyst with Barclays.

A drawback to the new simultaneous technology, called simul-frac, is that companies need to have lots of wells drilled and ready to move to fracking in unison before they proceed. "Instead of drilling the wells and getting production in a few months, you have got to drill eight wells or 10 wells," said Mike Oestmann, CEO of Tall City Exploration.

## [Oil and gas industry finances ballot measure in Colorado](#)

(Colorado Public Radio; April 24) - A political group financed by Colorado's largest oil and gas companies has successfully submitted enough signatures to earn a spot on the November ballot for a measure backers say would boost economic transparency. If approved, the initiative would require all future ballot measures to appear below an extensive economic impact statement, which must include the estimated affect on jobs, state and local tax revenue and the overall state gross domestic product.

The Colorado Secretary of State's Office on April 22 announced the backers had collected enough signatures to qualify for the ballot. The development marks the latest example of the fossil fuel industry turning to Colorado's ballot process to advance its policy goals. Campaign finance records show the main group backing the measure, Protect Colorado, is leading a committee funded with millions from Chevron, Occidental Petroleum and other, smaller oil and gas companies operating in Colorado.

The initiative could pack future ballot measures with statistics the oil and gas industry often wield in fights against environmental groups and climate-minded lawmakers. The measure would require the legislature's chief economists to review potential economic impact statements submitted by "any interested party." Within five days, the economist must write a summary with a range of all the statements. That language would appear with future ballot measures unless another group mounts a successful court challenge.

### **Japan will run test voyages of liquefied carbon dioxide tanker**

(S&P Global; April 26) - Within six months, Japan is set to start what will be the world's first transport of carbon dioxide on a low-temperature, low-pressure liquefied CO<sub>2</sub> carrier traveling more than 600 miles in a series of trial voyages which are expected to play a key role in the country achieving its carbon-neutrality goal. The trial voyages of the EXCOOL, operated by Nippon Gas Line, are slated to start in early October between Kansai Electric's Maizuru coal-fired power plant in Kyoto prefecture and the Tomakomai receiving terminal in Hokkaido. The trial is expected to last 30 months.

It's part of a pilot project under the state-owned New Energy and Industrial Technology Development Organization. The project involves several Japanese companies and will demonstrate capturing CO<sub>2</sub> from the Maizuru power plant and liquefying it and transporting it on the new carrier. Transport on the 276-foot-long EXCOOL, with a cargo tank capacity of almost 2,000 cubic yards, will be a moment of truth for Japan to test low-temperature, low-pressure liquefied CO<sub>2</sub> transport technology.

If this technology can be proven, it could improve the economics of carbon capture and storage projects, allowing larger volumes. Like other industrialized countries, Japan sees CCS as among key decarbonization solutions for industries to trim greenhouse gas emissions. Japan aims to store 13 million tonnes per year of CO<sub>2</sub> at home and abroad by 2030 under its first seven CCS projects selected by the government.

Lowering CO<sub>2</sub> temperatures would require careful handling, as CO<sub>2</sub> can become dry ice and changes in its content from mingling with impurities. During trial voyages, the project will examine sloshing of CO<sub>2</sub>, and whether CO<sub>2</sub> will become dry ice from sailing in different seas due to the difference in wave behaviors, said Iwagami of Japan CCS.

### **Shippers wary of paying tolls before Canadian oil line in full operation**

(Reuters; April 24) - Some shippers on Canada's Trans Mountain expansion project are raising concerns that the long-delayed oil pipeline will not be fully in service by its projected start date of May 1, according to a letter to the Canada Energy Regulator on April 23. In a letter to the Canada Energy Regulator, shipper Suncor Energy said reasonable questions remain over whether Trans Mountain will be able to deliver

contracted crude volumes from May 1 given some sections of the pipeline are still awaiting authorization to open from regulators.

As a result, shippers are concerned about their obligation to pay tolls from the start of next month, said the letter filed by Suncor's legal counsel on behalf of other shippers including BP and Marathon Petroleum. "While it is possible that Trans Mountain might be able to complete the physical construction of expansion facilities by May 1, 2024, there appears to be a real likelihood that those facilities will not be capable of providing firm service at that time," said the letter posted on the regulatory agency website.

The C\$34 billion (US\$24.81 billion) project, bought by the Canadian government in 2018 to ensure it went ahead, will carry an additional 600,000 barrels per day of oil from Alberta to Canada's Pacific coast. It has struggled with years of regulatory delays and cost overruns and Canadian oil producers are keenly anticipating its start-up, which will open up access to export markets on the U.S. West Coast and Asia. However, a number of contracted shippers are locked in dispute with Trans Mountain over tolls on the expanded system, citing concerns about significant cost increases.

### **[QatarEnergy reserves capacity at U.K. LNG import terminal to 2050](#)**

(Bloomberg; April 26) - A project that will expand U.K. natural gas storage next year has been touted as a boon for Europe's energy security. It's also a substantial win for the small Gulf nation of Qatar. Some 37 miles east of London on the Isle of Grain, a giant cylinder is being constructed at Europe's largest liquefied natural gas terminal and will be ready to handle imports starting mid-2025. More capacity to stockpile fuel is welcome news for a region that is once again struggling with gas price volatility.

Qatar, meanwhile, has rushed to meet Europe's booming demand for LNG, set in motion by curbed pipeline gas flows from Russia. The Middle Eastern nation is setting itself up to control about a quarter of the world's LNG supply by the end of the decade and needs reliable avenues to sell its large volumes at a time when many of its trade partners are looking to decarbonize. "For the Qataris, having easy, guaranteed access to the European market is important," said Jason Feer, global head of business intelligence at consulting firm Poten & Partners.

The new LNG storage tank is part of the terminal expansion to accommodate a 25-year contract with state-owned QatarEnergy. The company in 2020 reserved capacity for as much as 7.2 million tonnes of LNG per year at the terminal from 2025 to 2050. It will become the facility's seventh customer next year. Reserving capacity means Qatar will be able to send large volumes to the U.K., store them and deliver to customers. The tank near London will be the terminal's fifth of that size and will allow the terminal to store and deliver enough gas to meet up to a third of current British demand.

## **Second-largest U.S. LNG export plant still running below capacity**

(Reuters; April 26) - The second-largest U.S. liquefied natural gas export facility has been running below 80% of its capacity due to technical problems, data from financial firm LSEG showed, denting U.S. exports. Since Jan. 15, Freeport LNG's Quintana, Texas, liquefaction plant has been operating without at least one of its three gas-processing trains. In the past two weeks, it has taken barely enough gas for one of its trains to fully operate. On April 25, it took in 61 million cubic feet of gas, compared to its capacity for 2.2 billion cubic feet per day, LSEG data showed.

The company has blamed a January freeze for damage to its Train 3 motors, and in March said it had taken proactive steps to inspect and would take its two other trains offline for servicing. "Future LNG projects will want to study what went wrong with Freeport's design," Ira Joseph, a senior research associate at Columbia University's Center on Global Energy Policy, said on social media site X. The plant's "lack of reliability is really sending Henry Hub (U.S. gas futures) for a wild ride," wrote Joseph.

With the weaker demand for gas, Henry Hub prices have fallen from \$2.90 per thousand cubic feet on Jan. 16 to \$1.63 on April 25. Freeport's operating woes were evident even before a 2022 fire knocked it offline for months and appear to have worsened after the plant returned to service last year, according to the LSEG data. In the 365 days up to the fire, Freeport's average utilization rate was 1.82 bcf a day, 80% of its maximum 2.2 bcf capacity. In the past 12 months that rate has fallen to an average 72% flow rate.

## **Final stream of Russian pipeline gas to Europe could shut down**

(Bloomberg; April 26) - One of the biggest risks for Europe's natural gas supplies next winter is whether they will keep flowing through Ukraine. At the end of 2024, a five-year agreement expires, governing the transit of Russian gas through its neighbor. While the war between the two nations has put a diplomatic accord on its renewal out of reach, there were some hopes that commercial deals might be possible.

Those expectations took a blow at the Flame conference in Amsterdam earlier this week, when an executive from Ukraine's transmission system operator ruled out that traders would be able to negotiate for Russian supplies arriving at the border. He said there will be no auction of pipeline capacity. Supplies that come through Ukraine aren't huge — only about 530 billion cubic feet of Russian gas transit the country each year after Moscow curbed the bulk of its deliveries in 2022. But in the words of a local trader, that's enough to power the Netherlands during the six coldest months of the year.

And it's not all about sourcing new fuel: Gas traders are looking for storage options if European inventories, now at record levels for this time of year, hit tank tops during the summer. While Ukraine has more storage capacity than any other country on the continent west of Russia, continuous attacks on its energy infrastructure increase the

possibility that fuel gets stranded there. The case of Ukraine illustrates how almost two years after the crisis, traders are still on high alert for signs of disruptions while waiting for new liquefied natural gas export projects in the U.S. and Qatar to come online.

## **EU continues discussions of sanctions on Russian LNG**

(Bloomberg; April 25) - The European Union is discussing with member states proposals to sanction key Russian liquefied natural gas projects and a ban on using EU ports to re-export supplies destined for other countries, as part of an effort to limit Moscow's ability to generate revenues from the fossil fuel. The potential measures are being explored as part of the latest round of sanctions on Russia. The goal would be to further hit future revenues at projects like Arctic LNG 2, the UST Luga LNG terminal on the Baltic Sea and the Murmansk plant on the Barents Sea, according to sources.

Under the plan, ports in EU member states would be prohibited from importing Russian supplies that are then re-exported. But there wouldn't be a ban on purchasing the fuel for use within the bloc. The discussions are still at an early stage and some member states are skeptical of the proposals, according to the sources, who declined to be named. EU sanctions need the backing of all member states to be adopted.

Other measures under discussion, in what would be the bloc's 14th package of restrictions, are sanctions on more than a dozen companies that have continued to buy restricted goods from the EU bloc and supply them to Russia, according to a document seen by Bloomberg, as well as more restrictions on the shadow fleet of tankers carrying Russian crude, intended as part of efforts to enforce the price cap on Russian oil.

## **Tokyo Gas doesn't buy any LNG from Middle East**

(Reuters; April 26) - Tokyo Gas, Japan's top city gas supplier, does not buy any liquefied natural gas from the Middle East, so its procurement volumes will not be affected if Israel's war with Hamas widens, a company executive said on April 25. "We anticipate no impact on LNG procurement volumes even if the situation in the Middle East worsens, as we buy no LNG from the region," Tokyo Gas Chief Financial Officer Taku Minami told reporters. The company buys only a small amount of liquefied petroleum gas from the Mideast, which is used to adjust the calorific value of natural gas.

"If the situation in the Middle East gets worse, crude oil prices will naturally jump, which could boost LNG prices," Minami said, noting some of the company's long-term LNG contracts are linked to oil prices.

## [Companies join forces on renewable gas projects in U.S.](#)

(Business and Industry Connection magazine; April 25) – French energy major TotalEnergies and Vanguard Renewables, a farm-based organics-to-renewable natural gas production company, have signed an agreement to create an equally owned joint venture to develop, build and operate farm-powered renewable gas projects in the U.S.

TotalEnergies and Vanguard Renewables will advance 10 RNG projects to construction over the next 12 months, with a total annual RNG capacity of 2.5 billion cubic feet. The three initial projects in this agreement are under construction in Wisconsin and Virginia, each with a unit capacity of nearly 0.25 bcf of RNG per year. Beyond these first 10 projects, the partners will consider investing in a potential pipeline of about 60 projects across the country for a total capacity of 15 bcf per year.

"TotalEnergies is pleased to partner with BlackRock and its portfolio company Vanguard Renewables to accelerate the development of food biowaste processing into renewable natural gas in the U.S. By expanding into this fast-growing market, our joint venture will create value for both companies while benefiting the food and farming sectors as well as providing a ready-to-use solution to industrial companies willing to decarbonize their energy supply," said Olivier Guerrini, vice president for biogas at TotalEnergies.

## [Texas wildcatter part of company looking to work in Venezuela](#)

(Associated Press; April 24) - A company started by a Texas billionaire oilman announced a deal April 24 with Venezuela's state-owned oil company to rehabilitate five aging oil fields, days after the Biden administration put a brake on sanctions relief over concerns about the fairness of the country's upcoming presidential election. LNG Energy Group is a publicly traded company listed in Canada that produces natural gas in Colombia. It was created last year from a merger with a company owned by Rod Lewis, a legendary Texas wildcatter. It will need a U.S. license to work in Venezuela.

LNG was awarded contracts by state-run PDVSA to take over production and develop two fields in eastern Venezuela that currently produce about 3,000 barrels of crude per day. LNG said the deal was executed within the structure of sanctions relief announced by the U.S. government last year. Last week, however, the U.S. reimposed sanctions as hopes for a democratic opening in Venezuela fade. But the White House left open the possibility for companies to apply for licenses exempting them from the restrictions.

Other than Chevron, which has operated in Venezuela for a century and was awarded its own license in 2022, few American companies have been looking to make major capital investments in the high-risk South American country in recent years because of concerns about government seizure, U.S. sanctions and corruption. "This will be a test of U.S. sanctions whether they (LNG) get a license or not," said Francisco Monaldi, an expert on Latin American energy policy at Rice University's Baker Institute.