# Oil and Gas News Briefs Compiled by Larry Persily August 15, 2024

#### New equipment could lead to billions of barrels in U.S. Gulf of Mexico

(Reuters; Aug. 14) - An oil production breakthrough that producers say can safely tap ultra-high-pressure fields could put up to 5 billion barrels of previously inaccessible crude into production, analysts said. Chevron on Aug. 12 disclosed it had pumped first oil from a field at 20,000 pounds per square inch pressure, a third greater than any prior well. Its \$5.7 billion Anchor project in the Gulf of Mexico employs specially designed equipment from NOV, Dril-Quip and drillships from Transocean.

The No. 2 U.S. oil firm began pumping from the first Anchor well on Aug. 11, with the second already drilled and close to being ready to turn on, said Bruce Niemeyer, head of Americas oil exploration and production. The industry is employing new drillships and equipment that has been created to cope with the extreme pressures that are a third greater than encountered in BP's Macondo failure that killed 11 workers in 2010.

The new gear promises Anchor and similar projects will deliver 300,000 barrels a day of new oil and put billions of barrels of previously unavailable oil within producers' reach, said Mfon Usoro, an analyst who focuses on Gulf of Mexico at research firm Wood Mackenzie. "These ultra-high-pressure fields are going to be a big driver for production growth in the Gulf of Mexico." The waters are producing below the 2019 record of 2 million barrels per day; the new oil could help a return to peak output. BP has its own high-pressure technology it hopes can tap 10 billion barrels.

# <u>Drilling efficiencies allow oil producers to raise Permian targets</u>

(Reuters; Aug. 13) - Greater operating efficiencies in the top U.S. shale patch are squeezing out more oil without higher spending, according to the latest output numbers, which will boost global oil supplies as OPEC also plans to unwind its output cuts later in the year. Permian producers are extending wells to as much as 3 miles, squeezing more wells onto a single drilling pad and fracking several wells at once, boosting output, according to industry experts and company executives on recent earnings calls.

Taken together, these efficiency gains have led several big producers to raise their full-year shale oil production targets. Chevron lifted its full-year Permian output target to a gain of about 15%, up from an earlier forecast of 10%. Diamondback, APA Corp., Devon Energy and Permian Resources, also forecast higher than expected Permian shale production in coming months. Devon pointed to a 12% drilling efficiency gain this year

and said it had improved feet per day of well completion by 6% year to date, pushing its full-year output up 3%. Permian Resources has raised its output target 1.5% this year.

"We do see a market that will end up oversupplied in the fourth quarter," said Walt Chancellor, energy strategist at banking and financial firm Macquarie Group. Macquarie estimates U.S. production will grow about 500,000 barrels per day by the end of 2024 from the end of 2023, exceeding U.S. government estimates of about 300,000. "For OPEC, what this means is, we see them ultimately not able to execute the current plan to bring production back over the course of 12 months," he said. Total U.S. Permian output rose to 6.2 million barrels per day in June, the second highest on record.

## Slowdown in China drags on global oil-demand growth

(Wall Street Journal; Aug. 13) - Global oil-demand growth is forecast to slow to under a million barrels a day this year and next, with a continued slowdown in Chinese consumption weighing on the outlook, the International Energy Agency said. The Parisbased organization estimates that global demand will grow by 970,000 barrels a day this year and by 953,000 barrels a day the next — marginally lower than previous estimates of 974,000 and 979,000 barrels a day.

Total demand is expected to average 103.1 million and 104 million barrels a day this year and next, respectively. While demand in advanced economies has shown signs of strength in recent months, in countries outside the Organization for Economic Cooperation and Development it grew at the slowest pace since 2020 in the second quarter, with China's consumption contracting by 110,000 barrels a day.

"A meaningful shift in drivers is becoming apparent," the IEA said. "Weak growth in China, following the post-Covid surge of 2023, now significantly drags on global gains." China's downturn is most apparent in naphtha and gasoil products closely associated with factory and construction activity — with demand for the latter under pressure due to an expanding share of natural gas and battery-powered trucks and vans. Meanwhile, recent data from China points to further weakness in July, with preliminary trade figures showing crude oil imports fell to their lowest levels since September 2022, the IEA said.

# OPEC slightly lowers forecast for oil-demand growth in 2024, 2025

(Wall Street Journal; Aug. 12) - The Organization of the Petroleum Exporting Countries has slightly lowered its forecast for oil-demand growth, citing softening expectations for China at a time when market concerns over the top crude importer's outlook have been weighing on prices. The cartel now forecasts demand to grow by 2.11 million barrels a day this year, reaching a total of 104.3 million barrels a day on average, from 2.25 million barrels previously. The revision also reflects data for the first and second quarter.

Demand is still seen at healthy levels — well above the historical average of 1.4 million barrels a day seen before the pandemic, according to OPEC — boosted by strong air and highway travel, as well as healthy industrial, construction and agricultural activities in developing countries. Oil-demand estimates for next year were also slightly cut, with growth forecast at 1.78 million barrels a day from previous estimates of 1.85 million.

Oil prices continue to be under pressure due to persistent concerns over a slowing Chinese economy crimping demand and uncertainties around the timing of interest rate cuts in the U.S. Current oil prices seem far from what the two main leaders of the OPEC+ alliance — Saudi Arabia and Russia — need to balance their budgets, with some analysts now wondering whether the group will delay or stick to its plan to gradually put more oil into the market starting from October.

## Blue hydrogen is better than gray, and green is a long ways off

(Bloomberg columnist; Aug. 13) - In the race to clean up industry, clean energy is slipping behind fossil fuels. That's because we've pinned a lot of hopes on the prospects of hydrogen. In theory, the universe's most abundant element could be a sort of climate skeleton key, unlocking zero-emissions ways of producing fertilizer, steel, cement and petrochemicals. It would be profound. About a quarter of the world's carbon pollution comes not from power stations or vehicles, but from smokestacks of industrial plants.

But it's not going to work with hydrogen as we know it. At present, less than one metric ton in every thousand that we use is the "green hydrogen" produced by splitting water into hydrogen and oxygen using electricity. The vast majority is "gray hydrogen" made from gas, oil or coal, pumping out huge volumes of carbon dioxide in the process. The optimistic view has been that the cost of water-splitting electrolyzers and clean energy required to run them will decline as rapidly as we've seen with other green technologies.

Unfortunately, the reverse looks to be happening. Far from falling from around \$3 per kilogram to the U.S. government's target of \$1 — a price at which it might be able to undercut natural gas — green hydrogen costs in the U.S. have increased to nearly \$5 per kilogram, according to a study last year by the Hydrogen Council and McKinsey & Co. Even the generous incentives in President Joe Biden's Inflation Reduction Act aren't sufficient to make that competitive. We've seen a similar picture in the European Union.

An alternative to reducing hydrogen's climate footprint is to capture the carbon dioxide and pump it into depleted oil wells to drive more crude to the surface. The so-called "blue hydrogen" reduces gray hydrogen's emissions by 60% to 70% and is potentially attractive to consumers who want something without the cost of green. At present, blue hydrogen looks to be taking the lead, and blue is better than gray. The green variety at present looks like it's barely going to scratch the surface of demand, let alone fulfil its promise of decarbonizing a swath of additional sectors. Fixing that won't be easy.

#### Japan plays role in building up U.S. LNG export industry

(The Japan Times; Aug. 11) - Manning Rollerson turned down a \$20,000 offer in 2016 for the land he inherited from his grandmother in the East End, a historically Black neighborhood in Freeport, Texas. After Rollerson refused to sell, Port Freeport, the government body responsible for the town's Gulf Coast harbor, claimed eminent domain and took over his property and other people's land. This was in part to accommodate the Freeport LNG export terminal that opened nearby in 2019.

Now, empty plots lie where houses and businesses once stood in the East End. "The city's dead," as Rollerson puts it. Until 2016, the U.S. was sending virtually none of the fuel abroad, but a fracking bonanza, a price spike following Russia's full-scale invasion of Ukraine and growing demand in Asia are among the factors that have led to a surge in exports. Last year, the U.S. was the biggest supplier of LNG traded internationally.

Critical to the future of gas is a country that has very little of it. For over half a century, Japan has been a constant and sizable buyer of LNG, and its government, banks and energy companies have played a key role in investment in infrastructure, including along the U.S. Gulf Coast. That comes even as debate grows over just how big a role gas should play in the energy transition — both globally and in Japan — that is needed to avert far worse impacts of climate change than the world has already witnessed.

Meanwhile, residents near U.S. LNG facilities have complained of harm to their health, livelihoods and environment. That puts a significant responsibility on Japan's shoulders. "Japanese companies have signed contracts to buy from six massive U.S. LNG projects," including Freeport, said Sam Reynolds, LNG and gas research lead at the U.S.-based Institute for Energy Economics and Financial Analysis "This may not sound like a big number but they are really key players in getting this U.S. LNG off the ground."

## Court ruling creates uncertainty for U.S. LNG projects

(Construction Dive; Aug. 12) - Highlighting the risks inherent to multibillion-dollar construction projects, a federal court ruling has cast questions over a contract for a liquefied natural gas export facility in Brownsville, Texas. Houston-based energy firm NextDecade announced the \$4.3 billion engineering, procurement and construction contract with Bechtel for Train 4 of its Rio Grande LNG project on Aug. 5. In 2023, Bechtel started work on Phase 1 of the project, under a contract valued at \$12 billion.

But one day after the Train 4 contract news broke, the U.S. Court of Appeals for the District of Columbia Circuit overturned the Federal Energy Regulatory Commission's authorization for Rio Grande, saying the agency should have issued a supplemental environmental impact statement before approving the project. NextDecade said it was assessing its options and that construction on Trains 1, 2 and 3 is continuing. The first phase of the project is designed for 17.6 million tonnes annual production of LNG.

It said it would need to evaluate "the impact of the court's decision on the timing of a positive final investment decision on Train 4." That final decision, which would give Bechtel the green light to proceed on the next train, was originally slated for the second half of 2024. NextDecade said the deal's price validity extends only through Dec. 31 of this year. The court ruling casts uncertainty over that timeline. The start-and-stop succession of announcements at Rio Grande illustrates how complexity, legal issues and regulatory unknowns on megaprojects can lead to heightened risk for contractors.

#### **UAE** oil and gas company confident of global LNG demand growth

(Bloomberg; Aug. 12) - Global liquefied natural gas demand is expected to increase further as more countries turn to imports for the first time, Peter Van Driel, chief financial officer of ADNOC Gas, said. To tap some of these new consumers, parent company Abu Dhabi National Oil Co. is building a new plant at Ruwais that will more than double the UAE's LNG export capacity when it starts operating in 2028. Oman and Qatar are also expanding their LNG production facilities, as are U.S. Gulf Coast project developers.

"We see growth in the United Arab Emirates economy but, equally if we look in particular at LNG, we see huge demand," Van Driel said in an interview with Bloomberg Television on Aug. 12. "There are many markets that are upcoming and really starting to convert to LNG import markets," he said, without naming individual countries.

The UAE firm expects global gas demand to grow 14% in the next decade, according to the company's second-quarter financial results. That's more bullish than other forecasts. For example, the International Energy Agency sees usage peaking by the end of this decade. "When we took our decision to build Ruwais LNG, we were confident of three things: We were confident that we had enough gas, we understood how much it would cost to build and we had to know we could sell all of the LNG," Van Driel said.

# Construction underway at LNG project north of Vancouver, B.C.

(Gasworld; Aug. 13) – Work is well underway at Woodfibre LNG export facility in Squamish, British Columbia, including concrete pouring for pipe rack foundations and blasting the slope and rock wall for construction of the liquefied natural gas production and marine terminal. The project developer in a recent update confirmed plans to start LNG production and shipments in 2027. The facility, about 30 miles north of Vancouver, is planned for 2.1 million tonnes per year of production capacity.

BP has agreed to purchase 1.95 million tonnes of LNG annually through three signed long-term LNG contracts. Singapore-investor-owned Pacific Energy holds a 70% stake in Woodfibre LNG, with Canadian gas producer Enbridge holding 30%. The project cost

was last estimated at US\$5.1 billion. Before it was acquired for the LNG project, the site was occupied by a pulp and paper mill which closed in 2006.

China's Qingdao McDermott Wuchuan fabrication yard, a joint venture of McDermott and China State Shipbuilding Corp., in 2023 started building the first of 18 production modules for the project. The delivery of all modules is slated for the third quarter of 2025. Woodfibre expects a peak workforce of more than 800 during construction.

#### Shell, PetroChina agree to expand gas production in Australia

(Financial Review; Australia; Aug. 12) - Shell and PetroChina will expand the huge Surat coal-seam gas project in Queensland, a decision that will be met with dismay from environmental activists but which should provide supply for an increasingly stretched energy market. Gas from the project extension will supply both domestic and export customers through the Queensland Curtis LNG plant near Gladstone. The project, the second phase of the Arrow Energy joint venture, is expected to supply 130 million cubic feet a day of gas at peak production, enough to power almost 1 million homes.

The first phase of the project, some 90 billion cubic feet a year, began in 2020 and is now in production. It cost about \$2 billion. Shell didn't give a cost for the second phase, but it is expected to reach into the billions of dollars. The decision to proceed with the second phase of the Arrow project follows increasingly urgent warnings from the Australian Energy Market Operator about the need for investment in new gas supply to head off shortages expected later this decade on peak-demand winter days.

Still, the drilling of up to 450 new wells will only maintain existing supplies rather than increase production, and does not address shortfalls looming because of declines in supplies in the southern states, said Rick Wilkinson, CEO of consultancy EnergyQuest. Arrow, jointly owned by Shell and its Chinese state-owned partner, holds the largest reserve of undeveloped gas on Australia's East Coast, where elevated contract prices and a limited choice of supply have been sources of constant complaint among manufacturers that need natural gas for their operations.

## Austria still dependent on Russian natural gas

(Bloomberg; Aug. 13) - Austria sees a "massive risk" from a sudden stoppage of Russian natural gas flows, which continue to feed the central European nation's export-oriented heavy industries. European fuel prices have soared after an incursion by Ukrainian troops near a key cross-border transit point in Russia, prompting energy officials and traders to reassess the probability of a supply interruption.

"As long as there is a dependency on Russian gas supplies, there is a massive risk of a corresponding supply failure with far-reaching consequences," Austria's Energy Ministry wrote Aug. 12 in response to questions. "We must end Austria's dependency on Russian gas supplies as soon as possible." Austria's ruling coalition has pledged to end Russian gas imports by 2027 as part of a transformation of the country's energy system. The government is expected to present a detailed plan ahead of elections on Sept. 29.

Even without Russia gas, Austria has enough pipeline capacity from Italy and Germany, which import gas from multiple sources, to cover more than double its annual demand, according to a government report in June. Austrian fuel consumption was down about 23% in the first half of this year compared with average demand before Russia invaded Ukraine in February 2022. Austria has maintained one of Europe's oldest and deepest connections to Russian energy, and in 2018 extended a long-term gas contract to 2040.

### Dry weather, low water levels push Brazil to import LNG for power

(Bloomberg; Aug. 13) - Brazil has emerged as the latest contender for global liquefied natural gas supplies as dry weather threatens its vast hydropower production. South America's most populous nation typically depends on hydroelectricity for the majority of its power needs but turns to gas when water levels plunge. An expected influx of imported LNG in coming months would further tighten the global market for the fuel just as demand grows from Asia to North Africa.

Energy suppliers in Brazil, including state-owned Petroleo Brasileiro, are seeking six LNG cargoes for delivery in September, according to traders with direct knowledge of the information. While the situation isn't as critical as in 2021, when a severe drought forced Brazil to buy record volumes of LNG, the purchases would coincide with strong demand in Asia amid a hot summer. Elsewhere, Egypt has started to import the fuel.

Increased gas-fueled generation in Brazil will have a direct impact on consumers and industries, driving up bills to account for heavier use of the country's thermoelectric plants. "Due to worse hydrology, we see a need for higher gas-fired generation in Brazil in the following months," said Javier Toro, a senior research manager at Wood Mackenzie. "The north is facing a drought, and hydro reservoir levels are decreasing throughout the country."

# New Nigeria refinery says it is not getting enough domestic oil

(Reuters; Aug. 10) - The Dangote Refinery has called on Nigeria's upstream oil regulator to force producers to abide by a law that stipulates they supply local refineries, saying that lax enforcement was raising its operational costs. The 650,000-barrel-perday capacity refinery, built by Africa's richest man, Aliko Dangote, on the outskirts of

Lagos for \$20 billion, has struggled to get sufficient crude supplies from Nigeria, where vandalism and low investment impede oil production.

In a statement issued on Aug. 9, Dangote Refinery accused the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) of failing to enforce the Domestic Crude Supply Obligation, a provision that requires oil producers to supply domestic refiners with a portion of their production. "Our concern has always been that the NUPRC is pushing, but the international oil companies are not following the instructions," Anthony Chiejina, a Dangote Refinery spokesperson, said in the statement.

"Consequently, we often purchase the same Nigerian crude from international traders at an additional \$3 to \$4 premium per barrel, which translates to \$3 million to \$4 million per cargo," he said. In a statement, the NUPRC said some producers were experiencing operational challenges while others had pledged most of their output to oil traders that financed drilling. It also said forcing them to raise their supply would violate their contracts. Dangote Refinery requires at least 325,000 barrels per day of supply, but since it started operating in January it has received nearly half of that amount.