# Oil and Gas News Briefs Compiled by Larry Persily October 17, 2022

#### Analysts say rising costs threaten U.S. shale oil output

(Bloomberg; Oct. 14) - Don't expect U.S. shale producers to ride to the rescue as the world clamors for more oil, according to analysts at Energy Aspects. Oil output from shale basins is at risk of peaking in just two years as drillers combat rising costs, analysts including Amrita Sen wrote in a note to clients Oct. 11. Rampant inflation is prompting at least five producers to consider the unusual step of cutting rigs at the start of the year, while none plan to boost oil activity substantially, according to the report.

That's bad news for the global market, which needs U.S. oil to help make up for OPEC's production cuts and supplies upended by Russia's invasion of Ukraine. It's also a blow to the Biden administration, which has pressured American drillers to raise output in its quest to tame pump prices and is urging refiners to stockpile more gasoline and diesel. Private-equity backed operators — the growth engine for the Permian Basin, the most prolific U.S. oil play — are the most likely to curb activity, Energy Aspects analysts said.

Forward prices for U.S. crude — currently hovering around \$78 a barrel for next year — would need to rise above \$80 for producers to ramp up, according to the report. In addition, prime drilling land is dwindling, with only a few areas in the Permian Basin still offering the so-called Tier 1 acreage that drives profits, the analysts said.

# IEA warns that OPEC+ production cut may tip world into recession

(CNN; Oct. 13) - Western governments are furious after OPEC+ decided last week to slash oil production by the largest amount since the start of the pandemic. They have good reason to be upset: The cartel's actions may tip the global economy over the edge, the International Energy Agency has warned. "With unrelenting inflationary pressures and interest rate hikes taking their toll, higher oil prices may prove the tipping point for a global economy already on the brink of recession," the agency said Oct. 13.

The IEA slashed its forecast for world oil demand growth next year by more than 20%, citing further downgrades to global growth expectations from major institutions. The International Monetary Fund said this week that for many people next year will "feel like a recession," as it cut its GDP growth forecast to 2.7% from an earlier prediction of 3.2%. Despite much weaker growth in demand for oil, the supply cuts by OPEC+ nations are expected to sharply reduce global oil stocks and keep prices elevated.

"The massive cut in OPEC+ oil supply increases energy security risks worldwide," the IEA said. The decision by the cartel to slash output by 2 million barrels a day, equal to

about 2% of global oil demand, has placed Saudi Arabia on a collision course with the White House, which has accused it of aligning with OPEC+ member Russia. According to the IEA, however, the actual cut will be closer to 1 million barrels a day, given that most OPEC+ members — including Russia — are not meeting previous targets.

### China steps in as U.S.-Saudi rift widens

(Bloomberg; Oct. 15) - The U.S. economic relationship with Saudi Arabia has been tight for the better part of a century. The origin of the name of the world's biggest oil company reveals as much: Saudi Aramco is derived from "Arabian American Oil Co." U.S.-Saudi tensions also go back a long ways, with the 1970s Saudi-led oil embargo a key example. But fundamentally, there was a strong basis for cooperation between the world's largest consumer of energy and a Mideast kingdom with giant reserves of oil.

However, it's becoming increasingly clear that a tectonic shift may be taking place. After undermining Saudi influence over the global oil market by ramping up investment in natural gas and shale oil reserves earlier in the 2000s, the U.S. is now embracing like never before a shift toward clean energy. This has undercut the original basis for the economic relationship. Layered on top is Riyadh's latest push for a huge cut to OPEC+ oil output, a move that's sparked a tense diplomatic spat with the White House.

And as the U.S.-Saudi rift widens, China has been deepening its own ties with not just the Saudis, but economies across the Persian Gulf region — raising the prospect of a major geostrategic recalibration. China has no ideological agenda that would bother Saudi Arabia. And while it's made enormous investments in renewable energy, Beijing isn't part of any crusade against fossil fuels, with China continuing to finance coal-fired power plants in the developing world. China is Saudi Arabia's biggest trading partner.

# U.S. consumers will pay 28% more to heat homes with gas this winter

(Reuters; Oct. 12) - U.S. consumers can expect to pay up to 28% more to heat their homes this winter than last year due to surging fuel costs and slightly colder weather, the U.S. Energy Information Administration projected in its winter outlook on Oct. 12. Nearly half of U.S. households rely on gas for heat, with the average winter heating cost expected to rise to \$931, up by 28% from last year, EIA said. The average cost to heat a home with gas last winter was \$724, far cheaper than other major sources of heat.

U.S. natural gas prices at the Henry Hub benchmark are up about 75% this year as soaring global prices feed demand for U.S. gas exports due to supply disruptions and sanctions linked to Russia's invasion of Ukraine. Electricity is the primary heating source for about 40% of homes. It is more expensive than gas at an estimated \$1,359 per household this winter — but that is just a 10% increase from last winter.

Less than 12 million homes rely on heating oil or propane — about 9% of the roughly 130 million U.S. households — but those fuels will remain the most expensive sources of heat this winter with cost increases of 27% to \$2,354 for heating oil and 5% to \$1,668 for propane. Homes that rely on heating oil are concentrated in the Northeast, while the biggest propane users are in the Midwest.

### U.S. LNG developers want faster approval of export applications

(Houston Chronicle; Oct. 12) - LNG developers along the U.S. Gulf Coast are rushing to sign long-term gas contracts in Europe, where natural gas prices are near record highs. But the length of time it takes for the U.S. Department of Energy to grant export approval to Europe and nations lacking a free-trade agreement with the United States is putting those deals at risk, LNG companies say. "Right now, people (in Europe) are interested, and we have this exceptional circumstance, but what happens a year from now," said Katie Ehly, senior policy adviser at the trade group Center for LNG.

"Waiting for approval costs money," she said. More than 10 projects before the Department of Energy are awaiting a decision on export permits to non-free trade countries, like Germany and Italy, but have been approved for export to countries with which the U.S. has free-trade agreements, like Mexico and South Korea. The holdup comes at a time the Biden administration is under increasing pressure to put a halt to expanding LNG exports from large industrial companies worried about rising domestic gas prices and environmentalists campaigning to reduce greenhouse gas emissions.

Among the projects awaiting approval for export to non-free trade countries is the second phase of Sempra Energy's Port Arthur LNG in Texas, which filed an application in 2020. Also awaiting approval is Venture Global's Calcasieu Pass facility in Louisiana, which submitted an application last year to export additional gas volumes. The administration has moved in recent months to speed approvals, to match President Joe Biden's pledge earlier this year to increase LNG exports to Europe, Ehly said.

# Lack of pipeline capacity constrains gas production in Appalachia

(Hart Energy; Oct. 12) - Infrastructure constraints in the Marcellus and Utica shale plays are not just keeping the gas in, they are keeping capital out, Kevin Little, senior vice president for gas at Macquarie Energy, said at America's Natural Gas conference. "The regulatory burdens are creating a dislocation in the markets," he said. "The Marcellus and Utica led in the terms of growth through 2019, (but) now we're expecting this to shift down to Texas-Louisiana — specifically, in the immediate term, Haynesville."

Good for the Gulf Coast in terms of its gas industry expansion, but not so good for Appalachia. U.S. LNG export capacity is primed to ramp up, though the largest, most

economic gas basin is left out of the action, unable to increase production to meet demand due to a lack of pipeline capacity. The result will be higher prices domestically and internationally, adding to the pressure on struggling European economies.

The Haynesville is showing strong production growth, as is the Permian Basin from associated gas, with an uptick in drilling in the Eagle Ford and even a small resurgence in the Barnett in Texas. But more production can't come online in the Marcellus and Utica until more takeaway comes online, and that is stymied because Northeast states simply won't allow it. "If you have to get an act of Congress to get your permits to build a pipeline, if you've got to go to the Supreme Court and you still can't build a pipeline, this is not a great environment to build midstream infrastructure," Little said.

#### Demand for ice-class tankers to move Russian oil boosts their value

(Bloomberg; Oct. 13) - The cost of oil tankers that can navigate icy waters has surged ahead of looming European Union sanctions on the export of Russian crude. Some ice-class Aframax vessels have recently been sold at between \$31 million and \$34 million, double the price compared with a year earlier, said shipbrokers. The bids for tankers have been aggressive, and most buyers are preferring to keep their identities secret.

The EU will ban seaborne imports of Russian crude to member countries starting Dec. 5 and restrict its companies from shipping, insuring and financing shipments, which could hurt Moscow's access to large vessel fleets held by Greek owners. The smaller Aframax-size tankers are most sought after because they can call at the Russian port of Primorsk, where the bulk of its flagship Urals crude is exported from.

About 15 ice-class Aframaxes and Long Range-2 tankers have been sold since the start of the year, with most ships acquired by undisclosed buyers, shipbroking firm Braemar wrote in a report last month. Close to 130 ice-class Aframaxes are available across the world, with about 18% owned by Russian shipowner Sovcomflot, according to shipbrokers. The rest are held by others including Greek companies, although their willingness to handle Russian oil following EU sanctions remains uncertain.

# Novatek changes Arctic gas project from ammonia to LNG

(Upstream; Oct. 14) - Russia's largest independent gas producer Novatek has decided to change the focus of its first blue ammonia and hydrogen project to liquefied natural gas. Speaking on the sidelines of the Russian Energy Week conference in Moscow earlier this week, Novatek executive chairman Leonid Mikhelson said the Obsky Gas Chemistry Complex development on western Siberia's Yamal Peninsula will aim to produce 5 million tonnes per year of LNG.

The volumes are expected to be exported to international markets via the port of Sabetta on the Yamal Peninsula, which also serves the country's largest LNG project, Yamal LNG, in which Novatek holds a controlling stake. Mikhelson told reporters on Oct. 13 that the investment decision on the Obsky LNG project is expected in the first half of 2023. He added that the project will be based on a Russian liquefaction process and use Russian-manufactured equipment and machinery.

He said the current proposals include two liquefaction trains at 2.5 million tonnes annual capacity each. Novatek is understood to have almost finished pre-front-end engineering and design on the Obsky gas chemistry project, which called for gas to be converted into blue ammonia and hydrogen. The ammonia and hydrogen would be exported, while the carbon dioxide would be stored underground. However, analysts have warned that international sanctions against Russia could curtail Novatek's ability to get production equipment and hire specialized Western contractors needed for such a project.

#### **Next couple of winters could be harder on Europe**

(S&P Global; Oct. 13) - Europe will likely manage a drop in Russian natural gas supplies this winter as the war in Ukraine grinds on, but upcoming heating seasons will stress the continent's ability to meet energy demand, experts said during the Columbia Global Energy Summit in New York. Increased U.S. LNG deliveries and Norwegian gas production will help offset the shortfall, but Europe will have to reduce gas demand by roughly 10% through efficiency and conservation initiatives, said Anne-Sophie Corbeau, global research scholar at Columbia University's Center on Global Energy Policy.

A mild 2021-2022 winter in Asia and China's zero-COVID policy, which suppressed economic activity and energy demand, have bolstered Europe's ability to divert LNG cargoes from the Asian market, Corbeau said. However, she is concerned about the next two winters due to the pace of new LNG project starts, Europe's main source of additional gas supply. Qatar's North Field East project and new U.S. export terminals are not scheduled to come online until 2025, she said.

Europe may have to reduce demand more than currently anticipated, as it also faces sharp declines in nuclear and hydropower generation, Corbeau said. However, Europe can manage without Russian gas starting in two to three years, Equinor chief economist Eirik Wærness said. But in the interim, cash-strapped Europeans will manage in part by rationing energy amid a cost-of-living crisis, he said. Parts of European industrial hubs could also see "uncontrolled deindustrialization" as high gas prices force fertilizer, steel and aluminum facilities to shut down, paving the way to recession, he said.

Despite cutoff of pipeline gas sales, Russia is sending LNG to Europe

(Bloomberg columnist; Oct. 13) - Looking southeast from the Acropolis of Athens, the silhouette of the tanker Pskov barely stood up last week against the azure waters of the Aegean Sea. Inside her navy blue hull, almost 985 feet long, was a treasure of liquefied natural gas. Europe is thirsty for LNG after Russia shut down most of its pipeline gas sales to the continent, turning energy into a weapon in its war against Ukraine and its Western allies. Dozens of LNG carriers are docking into Europe now, hauling friendly gas supplies from overseas to keep the lights on and the houses heated this winter.

But the Pskov didn't sail to Greece from a Western ally. Ironically, it sailed from Russia itself. And not from any unremarkable Russian LNG port. Instead, it was the maiden shipment from a new Baltic Sea terminal that Moscow is using to sell some of the very same gas that only a few weeks ago it shipped to Germany. The facility is located alongside a gas turbine pumping station on the now defunct Nord Stream 1 pipeline.

The Pskov — and her unlikely origin — is part of a much wider, and ballooning, trade that's receiving little attention despite its political and economic significance. Almost under the radar, Russia is still selling hundreds of millions of dollars of LNG cargoes, mostly to the same nations that have imposed sanctions against Moscow. Although better known for its vast pipeline gas exports, Russia is the world's fourth-largest LNG shipper, only trailing Qatar, Australia and the U.S. The LNG sales aren't nearly as big as pipeline exports were, but remain a source of revenue for Russia and its companies.

## France's TotalEnergies continues taking Russian LNG

(High North News; Oct. 14) - Whereas imports of natural gas via pipeline have decreased substantially, the flow of Russian LNG into Europe continues unabated, with large volumes shipped by French major TotalEnergies. The European Union remains a key importer of Russian LNG. While much of the public's focus in Europe has been directed toward the stark reduction in the flow of Russian gas to the continent through pipelines — including the apparent sabotage of the Nord Stream 1 and 2 pipelines last month — the continued import of Russian LNG has received much less attention.

Imports of Russian LNG into Europe have increased 15% during the first eight months of 2022 compared to the same period in 2021. A significant portion of this LNG comes to Europe from the Russian Arctic shipped in specialized ice-capable Arc7 LNG carriers. The LNG is shipped from the Yamal Peninsula and passes along Norway's seaboard en route to terminals in western Europe. France's energy major TotalEnergies accounts for a substantial share of LNG imports as it continues to ship Russian LNG into Europe.

"We will continue to ship LNG from Russia as long as there is no sanctions," said TotalEnergies' CEO Patrick Pouyanne earlier this month. But he also acknowledged that the operating environment was becoming more complicated. The increase in Russian LNG imports to France is due in part to the country's energy major TotalEnergies, which remains intricately linked to major LNG projects, including

Novatek's 5-year-old Yamal LNG terminal in the Arctic. TotalEnergies owns a 20% minority stake in the project and also owns approximately 20% of Novatek outright.

### France agrees to share its imported gas with Germany

(Bloomberg; Oct. 13) - French gas-transmission system operator GRTgaz started shipping natural gas directly to Germany for the first time on Oct. 13, making good on Paris' pledge to help ease the fuel crunch across the Rhine while Berlin helps France cope with its electricity production shortfall. After completing work to enable the reversal of what have historically been westbound flows at the Franco-German border, gas has started moving east, GRTgaz said in a statement.

"That's the first time that France is sending gas directly to Germany," Thierry Trouve, the GRTgaz chief executive officer, told journalists on Oct. 12. "In case of a normal winter, we're reasonably optimistic in our ability to meet demand in France, underpin power generation and ensure European solidarity." That also would hold true if it is a cold winter and users moderate their consumption, Trouve said. France imports liquefied natural gas from multiple sources in addition to pipeline gas.

The new eastbound flow is part of an accord between French President Emmanuel Macron and German Chancellor Olaf Scholz to reduce risks of energy shortages. Russia is cutting gas deliveries to Europe, with Germany particularly affected, while Electricite de France grapples with lower-than-usual availability of its nuclear plants. As part of the deal, Germany has agreed to postpone the phaseout of two of its three remaining reactors beyond the end of the year, making electricity available for France.

# Germany reaches gas storage target ahead of schedule

(Bloomberg; Oct. 13) - Germany has met a crucial natural gas storage target more than two weeks ahead of plan, but the country's energy regulator warned that isn't enough to guarantee supplies during the coldest months. Gas storage in Europe's biggest economy is now on average 95.14% full, ahead of a Nov. 1 deadline, according to the Economy Ministry. In comparison, it was at only 72% in October 2021. Germany, which had relied heavily on Russian gas, set an even higher target than the European Union.

While the strategy of appealing to industry and citizens to cut back demand to prevent gas rationing later in winter appears to be paying dividends, a colder-than-normal winter could disrupt economic output and homes might not get enough fuel to keep warm. "The well-filled storage facilities will help us in winter but the storage facilities alone are not enough," said Klaus Mueller, president of the Bundesnetzagentur, Germany's energy watchdog. "The gas in the storage facilities is enough for about two cold winter months."

Even so, Economy Minister Robert Habeck said storage levels showed new regulation on gas inventories was taking effect and provisions for the coming winter have been boosted significantly. "This is an important milestone," Habeck said in a statement.

#### Japanese government will buy LNG if companies can't cover needs

(Bloomberg; Oct. 14) - The Japanese government plans to buy liquefied natural gas in the event companies can't secure cargoes, as the resource-scant nation steps up efforts to compete over the scarce fuel. The nation's cabinet approved changes to a law that will allow for the trade minister to order state-owned Japan Oil, Gas and Metals National Corp. to procure gas when private firms can't, trade minister Yasutoshi Nishimura said on Oct. 14. The framework also will allow the minister to order large-scale gas consumers to restrict use when supplies are tight.

The move comes as global competition over LNG intensifies, with Europe seeking to replace Russian pipeline supplies that have been cut off in the wake of the invasion of Ukraine. That's putting pressure on big importers like China, Japan and South Korea as they brace for the upcoming winter. Japan earlier this week asked Malaysia to replace LNG shipments lost from a pipe leak disruption at a Petronas plant.

## FERC gives Freeport LNG in Texas more time to complete expansion

(Reuters; Oct. 14) - U.S. energy regulators extended to August 2028 the deadline for Freeport LNG to complete the fourth liquefaction train at its Texas export plant. The three existing liquefaction trains at Freeport have been shut since June 8 after a pipe explosion. The company expects the plant to return to at least partial service in November. Freeport has not yet committed to construction of the fourth train.

Freeport said the expansion project has been delayed by the replacement of its engineering, procurement and construction contractor and the pandemic, including its effects on the global supply chain and the impact on global LNG demand. However, Freeport said demand for LNG has rebounded and it has been actively negotiating with potential off-take customers needed to commit to the expansion.

The Federal Energy Regulatory Commission first approved construction of the fourth train in May 2019, requiring Freeport to finish it by May 2023. In September 2020, FERC extended the deadline to May 2026. The three trains already at Freeport can turn about 2.1 billion cubic feet per day of natural gas into LNG.