# Oil and Gas News Briefs Compiled by Larry Persily October 3, 2022

## **OPEC+ will consider production cut of 1 million barrels a day**

(The Wall Street Journal; Oct. 2) - OPEC+ is set to consider Oct. 5 its most drastic production cut since the pandemic in order to help prop up falling oil prices, a move that could put pressure on global economic growth. The Organization of the Petroleum Exporting Countries and its Moscow-led allies, collectively known as OPEC+, is considering a cut of more than 1 million barrels a day, delegates in the group said.

Concerns about a slowing global economy have dragged down oil prices at their fastest pace since the pandemic began in early 2020, prompting OPEC+ to consider ways to prop up prices. Any OPEC+ move to raise prices could put more pressure on Western consumers already hurting from high energy costs, while also helping Russia — one of the world's biggest energy producers — fill its state coffers as it wages war on Ukraine.

Prices had shot up over \$100 a barrel and stayed there for months but Brent crude, the global benchmark, is now down 23% this quarter, falling to \$87.96 last week, its swiftest decline since 2020. A production cut would support higher prices. Adel Hamaizia, of the Center for Middle Eastern Studies at Harvard University, said such a move by OPEC+ could worsen recessions in some countries.

Oil prices have been falling in part due to slowing growth in China, which has been hit by persistent COVID-prevention measures. The World Bank expects China's economy to expand 2.8% in 2022, down from a 4.3% forecast in June. The option to cut more than 1 million barrels a day is backed by Russia, the group's biggest non-OPEC partner.

#### **OPEC production in September highest since 2020**

(Reuters; Sept. 30) - OPEC oil output rose in September to its highest since 2020, surpassing a pledged hike for the month, after production in Libya recovered from disruption and Gulf members boosted output under a deal with Western allies, a Reuters survey found on Sept. 30. The Organization of the Petroleum Exporting Countries has pumped 29.81 million barrels per day this month, the survey found, up 210,000 from August and the highest since April 2020.

OPEC and its allies, known as OPEC+, has been boosting output for months to unwind cuts made in 2020. But with prices weakening amid concern of recession, the bias shifted to cuts for October, and OPEC+ now looks set to tighten supply further at a meeting on Oct. 5.

## Drawing down U.S. oil reserves 'a risky policy'

(The New York Times; Sept. 29) - Since Russia's invasion of Ukraine, President Joe Biden has overseen the largest sale of oil ever from the Strategic Petroleum Reserve to ease prices at the gasoline pump. Having released 160 million barrels of crude since March, more than a quarter of the stockpile, the Energy Department has reduced the reserve to its lowest level in four decades. Some oil experts say continuing the withdrawals could test the nation's energy security.

Even though oil prices have fallen sharply from their peak, the administration is not ready to start refilling the reserve. Instead, rather than ending the releases in October as planned, it has decided to extend them, at a slower rate, for at least another month. "It's a risky policy," said Kevin Book, managing director of ClearView Energy Partners, a consulting firm in Washington, D.C. "This policy can only last until the stockpiles are exhausted, and replenishing the stockpiles would take years."

Industry executives say that while the reserve sales have helped lower prices, they are a short-term remedy and did nothing to encourage new production. "I'm not sure it will have any long-term impact," said Sean Strawbridge, CEO of the Port of Corpus Christi Authority, which manages the biggest port for U.S. oil exports. "What I do know is that if the intention of the federal government is to replenish the reserves to its intended inventory, that is going to take a tremendous amount of time." Refilling the reserve could even raise prices since it will increase demand and encourage drilling.

#### Gambling U.S. oil reserves on government-led profit a bad bet

(Bloomberg commentary; Sept. 29) - In the minds of some American politicians, making money in the oil market is as simple as "buy low and sell high." Congressman Frank Pallone, the New Jersey Democrat who chairs the House Energy and Commerce Committee, is so sure about the trading strategy he introduced a bill titled "The Buy Low and Sell High Act" to turn a portion of the U.S. Strategic Petroleum Reserve into some sort of oil hedge fund run by the American government.

If his plan is approved, the government would buy 350 million barrels of crude at prices of \$60 a barrel and below; and it would sell them when oil traded above \$90 a barrel for a tidy profit of, at the very least, \$10.5 billion. Pallone is so sure about his plan he even identified where he plans to spend the profits. Can it be done? It requires a stomach for big losses, too, and an appetite to buy crude from some unsavory sellers — the likes of Iran, Russia and Venezuela.

Washington should keep the Strategic Petroleum Reserve to manage serious supply crises, the likes triggered by a war, and not to influence the oil market in an effort to make a buck. U.S. lawmakers have, at times, shown an uncanny ability to profit personally from the equity market. But they are clueless when it comes to oil trading.

## Technology helps boost productivity in Permian Basin

(U.S. Energy Information Administration; Sept. 30) - The Permian Basin in western Texas and eastern New Mexico is one of the world's most prolific unconventional oil and gas producing regions. The Permian has become more productive because of technological advancements in drilling and completion techniques which allow operators to economically extract hydrocarbons from the low-permeability reservoirs.

The stacked reservoirs of the Permian Basin, and the Delaware and Midland subbasins within it, vary in thickness and depth. Improved geological understanding, known as subsurface delineation, helps operators place wells in the most productive areas. The Permian has produced oil and associated gas from vertical wells for decades. Since 2010, advances in hydraulic fracturing and horizontal drilling led to rapid production growth. The number of new horizontal wells increased to 4,524 in 2021, compared with 350 in 2010. In June 2022, the Permian Basin accounted for about 43% of U.S. crude oil production and 17% of U.S. gas production (measured as gross withdrawals).

The length of a well's horizontal section is a key factor in well productivity. In the Permian, average well horizontal length has increased to more than 10,000 feet in the first nine months of 2022, compared with less than 4,000 feet in 2010. Compared with other U.S. basins, the Permian benefits from lower operating costs, better access to oil field services, and its proximity to U.S. Gulf Coast refineries and export facilities. The average productivity of new wells in the Permian has grown for 12 consecutive years.

#### Washington refinery shutdown drives up British Columbia fuel prices

(CBC; Canada; Sept. 30) - The price of a barrel of oil has fallen by about 20% in the past month, a situation that would normally result in a comparable decline in the price consumers see when they fill up their cars with gasoline. But imbalances between supply and demand have caused pump prices in Canada to move in the opposite direction, and the effect on drivers has been dramatic.

On a day when the benchmark price for a barrel of oil lost about a dollar, gasoline prices skyrocketed in parts of the country on Sept. 29. The pain is currently most acutely felt in British Columbia, where the average price for a litre of gasoline is C\$2.39 (US\$12.50 per gallon), the highest average price on record for any jurisdiction in North America. While a lot goes into the price drivers pay at the pumps, the main culprit in B.C. right now is a shutdown of one of the region's main refineries, cutting the supply of gasoline.

The Phillips 66 refinery in Ferndale, Washington, was shut down for maintenance earlier this month, taking about 65,000 barrels a day of gasoline offline. "B.C and Vancouver import every last barrel of gasoline and diesel from (that) region of the United States," said Vijay Muralidharan, an energy analyst with R Cube Economic Consulting. "When the refining goes off, that amount of supply of gasoline gets shut." Because supply is

limited but demand is strong in the district that includes British Columbia, fuel from other regions is moving around to meet that need — and bringing up prices everywhere. "You have to compete for those limited barrels," Muralidharan said.

## LNG Canada 'doing everything we can' to complete project quickly

(Financial Post; Canada; Sept. 29) - LNG Canada CEO Jason Klein is starting to get used to hearing the same refrain at the end of calls with his project partners. On routine calls with the executives from the big energy firms that own stakes in the massive natural gas liquefaction plant under construction in Kitimat, British Columbia, "they always say, 'thank you — and anything you can do to be faster would be appreciated."

Since Russia's invasion of Ukraine disrupted global gas supplies, "there is more urgency," Klein said. "We were already doing everything we can to build it as quickly as possible." As Europe and Asia vie to secure gas for this winter amid the worst energy crisis in decades, Canada's first LNG export project is now over 70% complete and on track to see its first cargo of liquefied natural gas delivered by the middle of the decade.

The joint venture — more than C\$40 billion, when upstream assets such as a pipeline are included — is owned by Shell (40%), Malaysia's Petronas (25%), PetroChina (15%), Mitsubishi (15%) and Korea Gas (5%). "When we start up, that's over 14 million tonnes of supply on Phase 1 that's going to go into the market," Klein said. "It's probably going to land in Asia in the first instance, just because of the shipping synergies.

The sprawling project is advancing quickly, with its workforce slated to peak next year at around 7,500 workers as the commissioning process for the new plant begins. Behind the scenes, LNG Canada's stakeholders are trying to determine whether a second phase of the project will go ahead — doubling the export capacity of the plant.

#### Shell looking at expansion of LNG Canada as Phase 1 work underway

(Bloomberg; Sept. 29) - Near the seaside fishing town of Kitimat on the coast of British Columbia, a colossal project is taking place that will profoundly alter the global liquefied natural gas market. Billed as the largest private-sector construction project in Canadian history, the C\$40 billion development includes a liquefaction plant, pipeline and gas field drilling. After four years of construction, and with 9,000-ton LNG modules now rearing up amid the forested landscape, completion is scheduled for the middle of the decade.

Yet amid a global energy crunch, and with Europe on the brink of the worst energy crisis in half a century, the operation of the LNG Canada project can't come soon enough. Its first phase is expected to produce 14 million tonnes of LNG per year. A possible second phase could double the capacity. The business case for that "looks very compelling," said Jason Klein, CEO of LNG Canada Development, the global consortium led by Shell that's behind the project. "We have substantially derisked Phase 2 by building Phase 1."

Most of the gas will be sent to Asia but the added supply is expected to help Europe by displacing gas from other regions. The project has major advantages over U.S. Gulf Coast production because it's so much closer to Asia and doesn't need to ship through the Panama Canal. The partial use of hydropower to run the plant will help make it the lowest carbon-emitting LNG facility in the world, Klein said, a key attribute as Canada struggles to reconcile its climate ambitions with a world suddenly craving its fossil fuels.

Work on the 1,000-acre site is a global endeavor. In addition to Shell, the consortium includes Mitsubishi, PetroChina, Korea Gas and Malaysia's Petronas. The project has weathered a number of hurdles in a country where dozens of LNG projects have been proposed and many canceled. The 2018 construction start followed years of regulatory delays. In July, TC Energy raised the price tag of the pipeline by 70% to C\$11.2 billion (\$8.2 billion) after Covid-19-related delays and Indigenous protests slowed construction.

## Cheniere adds berthing capacity at Louisiana LNG export terminal

(Bloomberg; Sept. 29) - Cheniere Energy, the largest U.S. exporter of liquefied natural gas, is preparing to add shipping capacity at its Louisiana terminal that will help it eke out more supplies to gas-starved European customers. The company's Sabine Pass facility is poised to become the first U.S. LNG terminal with three operational loading docks. Cheniere already made a small piece of history earlier this month when three LNG tankers were docked side-by-side.

Although Sabine Pass's new berth is still in the commissioning phase and needs approval from federal regulators before it can go into commercial service, its equipment can be tested and load LNG cargoes that are then sold on the global spot market. Any marginal addition export capability is welcome news for Europe as it struggles to replace Russian supplies following the invasion of Ukraine.

The third berth improves flexibility and efficiency for customers, said Florian Pintgen, vice president of commercial operations at Cheniere. Triple dockings typically allow one ship to finish loading and get ready to leave while the second is in the middle of loading and the third has just arrived, he said.

## **Qatar CEO talks of need for more investment in gas, cleaner energy**

(Reuters; Sept. 29) - QatarEnergy CEO and state Minister for Energy Saad al-Kaabi said on Sept. 29 that skyrocketing energy prices are "weighing painfully" on the global economy, dampening support for the transition to green energy. "Sadly, the growing

economic burden has fizzled the euphoria over the series of energy-transition plans, causing severe erosion in public support for reducing carbon emissions," Kaabi told a liquefied natural gas conference in Japan.

"Many countries, particularly in Europe which had been strong advocates of green energy and a carbon-free future, have made a sudden and sharp U-turn. Today, coal burning is once again on the rise reaching its highest levels since 2014," Kaabi said. Governments across Europe have ploughed hundreds of billions of euros into tax cuts, handouts and subsidies to tackle the continent's worst energy crisis in decades that is driving up inflation, forcing industries to shut production and hiking bills ahead of winter.

Kaabi stressed the need to invest in cleaner and renewable energies, including gas, to drive capacity and baseload capabilities. "The lack of such investment is putting a heavy burden on both producers and consumers. Producers must find supplies that may not exist due to the lack of investment," he said at the online LNG Producer-Consumer Conference hosted in Tokyo. QatarEnergy, one of the world's largest LNG producers, is investing nearly \$30 billion in the North Field East expansion, which will increase Qatar's liquefaction capacity to 126 million tonnes per year from 77 million by 2027.

## LNG market could tighten next year if China's demand rebounds

(Reuters; Sept. 29) - LNG markets in 2023 could be even tighter as demand may rise in China, India and other parts of Asia, the head of the International Energy Agency said on Sept. 29. "We may well see that the LNG markets in 2023 will be rather tight, maybe tighter than this year," Fatih Birol said in remarks at the LNG Producer-Consumer Conference in Japan.

Global gas prices have surged to record levels this year, as Russia's gas supply cuts have placed enormous strain on the European and global market. High wholesale gas prices in Europe have seen the bloc import record amounts of LNG cargoes, drawing in volumes from top importing region Asia. "If the Chinese economy recovers ... it will be difficult for Europe to attract so much LNG," Birol said.

China's imports of LNG are on track to post their first major decline this year, as high prices and weak manufacturing due to COVID-19 lockdowns crimp demand for the fuel. The country became the world's top LNG buyer last year but surrendered the top spot back to Japan in the first four months of 2022. Should Japan restart its nuclear power plants, it would free up about 350 billion cubic feet of gas and "help the global LNG market," said Birol, without specifying a timeframe.

U.S. needs to boost gas production to meet domestic, export demand

(Reuters commentary; Sept. 29) - U.S. natural gas production will need to increase significantly to continue growing exports while ensuring fuel remains affordable for domestic power producers, households and industrial users. Production of dry gas (stripped of natural gas liquids) totaled 17.33 trillion cubic feet in the first six months of the year, according to data from the U.S. Energy Information Administration.

Dry gas output was up by 944 billion cubic feet compared with the same period in 2019, the last year before the pandemic. Domestic consumption increased by 440 billion cubic feet, with electricity generators accounting for 382 billion. But exports surged by 1.4 trillion cubic feet, largely as a result of the commissioning of large new liquefaction terminals. The massive increase in LNG exports has significantly tightened the availability of gas for domestic users and put upward pressure on prices.

As a result, inventories depleted by 876 billion cubic feet in the first six months of 2022 versus 246 billion in the first six months of 2019. The drawdown was the second largest on record and 65% higher than the average over the previous 10 years. To maintain and grow exports, U.S. gas producers will need to increase their output significantly in both the short and longer term. The challenge for the industry is to overcome supply chain constraints and scale up output profitably in order to satisfy domestic demand as well as its ambition to remain the primary supplier of the fast-growing global gas market.

#### U.S. East Coast LNG hopefuls have hurdles to overcome

(S&P Global; Sept. 29) – U.S. natural gas producers are keeping a watch over efforts to launch new LNG terminals on the Atlantic Coast, as developers attempt to overcome potential community resistance and unique commercial considerations to get projects off the ground. "There are a couple of companies that are trying to get (LNG) plants operational in Maryland as well as on the Delaware River," Dan Lopata, vice president of Marcellus for Chesapeake Energy, told the Hart Energy America's Natural Gas Conference in Houston Sept. 27.

"There are some hurdles to get clear on the infrastructure side before we can be really serious about answering the question on whether it's likely to see more LNG on the East Coast." Lopata said. Sanctions against Russian energy have created an onramp for additional LNG demand from the U.S., with a number of projects under development in the Gulf Coast promising to significantly expand U.S. LNG exports 2025-2027.

Aside from community challenges, LNG terminals along the Atlantic Coast could run into a shorter demand window compared to Gulf Coast projects expected to begin service in the next few years. Some market watchers have recently suggested that launching East Coast terminals later this decade risks outrunning European demand, which could pull back in the long term due to Europe's decarbonization goals. "Europe's need for LNG is large in the short term but extremely uncertain beyond 2030," according to a Columbia University Center on Global Energy Policy study published Sept. 22.

## Study finds methane emissions from U.S. wells higher than thought

(The Wall Street Journal; Sept. 29) - Emissions of methane from oil and gas wells are far higher than previously thought because a technique the facilities use to prevent the greenhouse gas from escaping into the atmosphere isn't working as expected, scientists said in a study published Sept. 29 in the journal Science. Called flaring, the technique burns gas that leaks from wells. The study, which involved testing the air around 300 flares in four states, showed that many flares were unlit or operating inefficiently.

As a result, emissions from the flaring facilities of methane — the principal constituent of natural gas — are five times greater than previous estimates by the U.S. Environmental Protection Agency. If all the flares were working properly, "it would be equivalent to removing about nine million cars from the road," said study co-author Dr. Eric Kort, professor of climate and space sciences and engineering at the University of Michigan.

An EPA standard calls for flares to burn methane with 98% efficiency. The study put the flares' efficiency at about 91%. A colorless, odorless gas, methane is second only to carbon dioxide as a contributor to rising global temperatures, according to the EPA. The oil and gas industry is the second-leading contributor of methane emissions in the U.S., behind agriculture and ahead of landfills, waste treatment plants and coal mining, according to the EPA. Researchers on the ground used infrared imagery to check flares at oil and gas wells in Texas, New Mexico, North Dakota and Montana.

#### **BBC investigation finds gas flaring unreported at many fields**

(BBC; Sept. 29) - Major oil companies are not declaring a significant source of greenhouse gas emissions, a BBC News investigation has revealed. The BBC found millions of tonnes of undeclared emissions from gas flaring at oil fields where BP, Eni, ExxonMobil, Chevron and Shell work. Flaring of natural gas is the burning of excess gas released during oil production. Flared gases emit a potent mix of carbon dioxide, methane and black soot which pollute the air and accelerate global warming.

The BBC has also found high levels of potentially cancer-causing chemicals in Iraqi communities near oil fields where there is gas flaring. These fields have some of the highest levels of undeclared flaring in the world, according to BBC findings. Companies have long recognized the need to eliminate all but emergency gas flaring. BP, Eni, ExxonMobil, Chevron and Shell are committed to a 2015 World Bank pledge to declare and end routine flaring by 2030 — in Shell's case by 2025.

But the companies say that where they have contracted with another partner to run dayto-day operations, it is that other firm's responsibility to declare flaring emissions. Such fields are a major part of oil production — accounting for 50% of the five companies' portfolios, on average. However, the BBC found dozens of oil fields where the operators are not declaring the emissions, meaning no one is. Using World Bank flare-tracking satellite data, the BBC was able to identify the emissions from each of these sites, estimated at greenhouse gas emissions that 4.4 million cars would produce in a year.

## Short-term emissions not expected to deter Europe's long-term plans

(CBC; Canada; Oct. 1) - Before the Nord Stream gas lines under the Baltic Sea sprung massive leaks this week, spewing out tons of methane into the water and air, Europe had started planning for a long-term future without Russian gas. "With this event the Nord Stream projects are dead. They are finally dead," said Johan Lilliestam, professor of energy policy at the University of Potsdam in Germany. "They've been geopolitically difficult for quite some time, but I don't see any scenario where these pipes come back."

Germany and several other countries have turned to their previously mothballed coal plants to start producing electricity again, to conserve scarce supplies of gas for heating homes this coming winter. Now, as Europeans face spiking energy prices, Germany has also decided to delay the full shutdown of its nuclear power plants, which was supposed to happen by the end of 2022. Two of the plants will be kept functional until April next year, as the country tries to secure other energy supplies to get through the winter.

These sudden changes mean, temporarily at least, European countries will have to emit more greenhouse gases from burning fossil fuels to produce energy — even as they plan to shift to greener energy like wind and solar in the future. "In the short term, emissions are very likely going to increase in Germany and in Europe, simply because we need to turn on whatever capacities we have," Lilliestam said. "We need whatever energy we can get our hands on this winter and probably next winter. But after that things are going to change, things are going to fall back into place."

## Japan to provide low-interest loans for utilities facing high LNG costs

(Reuters; Sept. 29) - The Japanese government will provide support through public financial institutions to help utilities secure liquefied natural gas amid a surge in prices, the Nikkei business daily reported on Sept. 29. The state-owned Japan Bank for International Cooperation will provide low-interest loans to electric utilities and city gas companies to buy the fuel on the spot market, the paper said, without citing sources.

The move is aimed at avoiding an energy crunch by offering financial support before winter, when heating demand is expected to increase. Spot LNG prices remain at high levels amid the risk of supply disruption from Russia. Japanese utilities buy the bulk of their LNG through long-term contracts, but about 20% comes from the spot market. It would cost Japan over 1 trillion yen (\$6.9 billion) to buy 6 million tonnes of LNG a year from the spot market if imports from Russia were stopped completely, the Nikkei said.

## Australia reaches deal with LNG exporters to cover domestic needs

(Reuters; Sept. 29) - Australia will not put curbs on the country's gas exports after reaching a deal with its three East Coast producers of liquefied natural gas to avert a forecast supply crunch, Resources Minister Madeleine King said on Sept. 29. The government threatened the export curbs in August, worrying Asian buyers and LNG investors, following a warning by the competition watchdog that the East Coast market faced a shortfall of gas in 2023.

The pact provides for Queensland Curtis LNG, run by Shell, Australia Pacific LNG, run by ConocoPhillips, and Gladstone LNG, run by Santos, to offer additional gas to the domestic market next year. "Given the agreement means the projected shortfall will be avoided, I am satisfied I do not need to take steps to activate the Australian domestic gas security mechanism at this time," the resources minister said.

The terms require the LNG exporters to offer uncontracted gas to the domestic market before international buyers, and ensure domestic buyers will not pay more for uncontracted gas than customers offshore. King said the pact would not affect supplies to overseas customers or existing contracts. Santos' Gladstone LNG, whose partners include TotalEnergies, Korea Gas and Malaysia's Petronas, had been seen as the most vulnerable to export curbs. This is because it is the only East Coast exporter to take more gas out of the domestic market each year than it produces on its own.

#### First Nations sign on for stake in Enbridge Alberta pipelines

(Calgary Herald; Sept. 28) - Calgary-based Enbridge has signed an agreement with 23 First Nation and Metis communities to sell an 11.57% interest in seven pipelines located in the Athabasca region of northern Alberta for C\$1.12 billion. The deal is the largest energy-related Indigenous economic partnership transaction in North America to date, the pipeline company said Sept. 28. A newly created entity called Athabasca Indigenous Investments (AII) will be responsible for the investment.

"The deal is significant because it gives all 23 Indigenous communities that are directly impacted by these assets a direct stake," said Justin Bourque, All president. He said the deal will be funded through a mix of debt and equity, with the debt financing coming from Alberta Indigenous Opportunities Corp., a group that finances Indigenous communities seeking commercial partnerships. Frog Lake First Nation Chief Greg Desjarlais described the deal as "historic" for communities in the region.

The agreement is part of Enbridge's Indigenous reconciliation action plan, which tries to boost its relationships with Native communities and employees. Pipelines included in the deal are the Athabasca, Wood Buffalo/Athabasca Twin and associated storage tanks, Norlite Diluent, Waupisoo, Wood Buffalo, Woodland and the Woodland extension. Enbridge said these assets provide "highly predictable cash flows."