# Oil and Gas News Briefs Compiled by Larry Persily January 14, 2021

#### U.S. agency forecasts gradual recovery in oil prices, production

(Bloomberg; Jan. 12) - The U.S. government is forecasting oil production to rise about 3.5% next year spurred by higher crude prices and a rebound in shale drilling. Oil output will average 11.49 million barrels a day in 2022, according to the Energy Information Administration. The agency, which left its production estimate for 2021 unchanged at 11.1 million barrels per day, said that recent crude price increases and rig additions will help production in the Lower 48 states begin to rise in the second quarter of this year.

U.S. crude production is hovering at about 11 million barrels a day, after climbing above 13 million early last year before the pandemic. The U.S. rig count has climbed for seven straight weeks and is at the highest level since May, Baker Hughes data show. But a comeback will likely be gradual. While prices surged above \$50 after Saudi Arabia last week surprised the market with a plan to slash production in the coming months, many drillers say they may resist temptation to turn on the taps quickly. Most shale producers are now more focused on clearing debt and honoring pledges to keep fiscal discipline.

The EIA raised its 2021 price forecast for West Texas Intermediate to \$49.70 a barrel from its December estimate of \$45.78 a barrel, and introduced its 2022 price forecast at \$49.81, according to the agency's short-term outlook released Jan. 12. Even though the EIA boosted its forecasts, it expects further gains to be limited by high global inventories and surplus crude production capacity. Rising global production will likely emerge as a moderate downward price pressure in the second quarter of the year, the agency said.

# Oil prices not high enough to fix everything for U.S. producers

(Reuters; Jan. 9) - A decision by OPEC and allied countries to cut crude production through March delivered a late Christmas present for U.S. shale firms that have slashed costs, but any boost in prices spurred by the unexpected move may be just a modest stocking stuffer. U.S. crude oil production has fallen 2 million barrels per day in the past year as low prices and demand forced shale producers to cut their losses.

Investors had already been pressuring the industry to curb spending and boost returns before the pandemic hit. Then on Jan. 5, Saudi Arabia, the world's biggest oil exporter, said it would voluntarily reduce its output by 1 million barrels per day in February and

March, helping to propel prices past \$50 a barrel. Higher prices will fall directly to U.S. producers' bottom lines given recent cost cuts and commitments to keeping output flat.

Another factor that will benefit producers is low service costs. Excess capacity forced the companies that provide fracking sand and field services to cut their fees, and they have not been able to raise them. "Margins are terrible," said Chris Wright, CEO of Liberty Oilfield Services, the second-biggest fracking company in North America. "They're slightly better now than they were six months ago, but they're still terrible."

But oil would have to hit \$60 to \$65 per barrel to restore U.S. output by 1 million barrels per day while improving investor returns, said Raoul LeBlanc, a vice president at data provider IHS Markit. Energy executives in Colorado, Oklahoma, Wyoming, and northern New Mexico in a Federal Reserve Bank of Kansas City poll released Jan. 8 said oil prices would have to average \$56 per barrel for them to substantially increase drilling.

#### Producer discipline aids market recovery; \$60 oil in sight

(The Wall Street Journal; Jan. 12) - Oil is extending a steady recovery into 2021, aided by fresh signals that the world's biggest producers won't turn on the spigots and flood the market. U.S. futures recently rose above \$50 a barrel for the first time in 11 months in a rebound fueled by an uptick in travel and economic activity following the easing of coronavirus restrictions. Output cuts by large suppliers from Saudi Arabia to U.S. drillers are boosting the advance, giving traders confidence that demand will exceed supply.

Prices have hit new peaks since Saudi Arabia said last week it would unilaterally cut its output in February as part of an agreement by the Organization of the Petroleum Exporting Countries and allies like Russia. The supply curbs instilled faith that the cartel will remain flexible with output, even if the pandemic worsens and hurts demand. U.S. shale producers are also indicating that they are in no rush to increase supply, and instead plan to pay off debt and return cash to shareholders.

The climb above \$50 should benefit the global economy, analysts say. Prices are now high enough for many companies to cover their production costs, but not so lofty that fuel prices will jump for consumers. Some investors are betting the rally will continue as the delivery of coronavirus vaccines sparks travel. "There's such huge pent-up demand and people want to travel," said Gary Ross, CEO of Black Gold Investors and founder of consulting firm PIRA Energy. "Demand will be back to 2019 levels earlier than people think, probably by third-quarter (2021)." He expects \$60 oil in the first half of the year.

#### Goldman Sachs says oil could reach \$65 by summer

(Reuters; Jan. 11) - Brent oil prices could rise to \$65 per barrel by summer 2021, Goldman Sachs said Jan. 11, driven by output cuts in Saudi Arabia and the implications of a shift in power to Democrats in the U.S. The investment bank had previously predicted oil would hit \$65 by year-end. The Democrat-led sweep of the U.S. Senate runoff elections and Saudi Arabia's recent announcement of production cuts have left commodity markets with a "tighter" medium-term outlook, analysts at the bank said.

### Transportation demand will help determine the new 'peak oil'

(The Wall Street Journal; Jan. 8) - You might be filling up your tank a lot longer than BP thinks. Ambitious green policies — from politicians and even the newly climate-conscious oil companies — suggest the world is moving at warp speed away from fossil fuels. But the transition might not be easy on consumers' wallets, which is precisely why it could take a while. The idea of "peak oil," historically a reference to a fear that oil supply was running out, now means something entirely different — peak demand.

BP suggested that oil demand might have already reached its apex in 2019 if one were to imagine a world that doubles down on policies that restrict carbon emissions. Others are more conservative. Under its "stated policies scenario," the International Energy Agency estimates oil demand will peak around 2030 and plateau. That scenario takes into account announced policy measures and its own judgment of how attainable those policies seem. The IEA acknowledges that some of the policies are far-reaching targets.

Transportation plays a key role in the timing of that peak; it accounts for the largest share of oil consumption globally. For electricity to crowd out oil as a transportation fuel, governments must either provide taxpayer subsidies that make electric vehicles more affordable or place a cost on not switching, such as even higher taxes at the pump. But given the long time horizons, those electric-vehicle goals and others should be taken with a pinch of salt. Politicians making promises today won't be the same ones making tough decisions in a decade or two. Nobody likes paying more for energy.

# LNG buyers misjudged the market and are paying high prices

(Reuters' commentary; Jan. 11) - The surge to record highs for the price of spot-market liquefied natural gas is being largely attributed to severe cold weather over much of northern Asia, but miscalculations by buyers of the fuel are probably a larger factor. The weekly spot price assessment settled at \$21.45 per million Btu on Jan. 8, eclipsing the previous record of \$20.50 from February 2014. Prices have rallied an astonishing 1,060% since they hit an all-time low of \$1.85 in May.

While no doubt the winter has been more severe than usual, with massive snowfalls in Japan and temperatures falling to the lowest since 1966 in Beijing, the weather alone can't explain the price spike. In late November, when the spot price was just \$6.40, the message from importers in the top three buyers, Japan, China, and South Korea, was that they were comfortable with the LNG volumes they had ordered for the winter.

The view was also expressed that even if the winter did turn out to be colder than expected, there were plenty of spot cargoes available, given the surplus of production capacity. That comfort among buyers proved to be entirely misplaced, and the spot price started to surge from the week of Nov. 20 as buyers were forced to reassess the level of anticipated demand, gas inventories and the availability of spot cargoes.

What is likely is that some buyers misjudged the availability of spot cargoes, and when hit with a surge in demand found themselves unable to buy further supply, thus bidding up prices massively for the few cargoes still available. If this is the case, then prices could reverse as soon as the current period of strong demand starts to ease.

#### Japanese utility buys leftovers from LNG unloadings

(Reuters; Jan. 13) - Japan's Kyushu Electric is buying the remainder of cargoes of liquefied natural gas left after tankers discharge the fuel at Asian ports as it scrambles for supplies to fuel power stations as electricity demand surges. The unusual move by Kyushu Electric underscores the power crunch in Japan and other north Asian countries as exceptionally low temperatures grip the region, sending demand for electricity and heating prices surging while LNG suppliers have struggled to meet power needs.

"As an emergency measure, we have begun buying 2,000 to 4,000 tonnes of LNG (about 100 million to 200 million cubic feet of natural gas) left in tankers in Asia after discharging," a Kyushu Electric spokesman said Jan. 13. Tankers typically leave what is known as "heel" LNG in their tanks after discharging cargoes to keep them at the super-cold temperatures required to hold liquefied natural gas. Kyushu Electric is also asking other utilities to supply any excess LNG supplies and to swap delivery schedules where possible, the spokesman said.

Benchmark power prices in Japan hit a record high of 232.2 yen (\$2.24) per kilowatt hour on Jan. 13 as the cold snap continued, although forecasters are expecting temperatures to rise in the coming days. Japan's utilities on Jan. 12 also asked businesses and residential users to save power as electricity generators resorted to using fuel oil instead of coal to meet the demand for heating.

#### Warmer weather, new supplies will knock down Asia LNG prices

(Reuters; Jan. 13) - The breathtaking rally in liquefied natural gas is likely set for a fall in coming weeks as a cold spell in Asia gives way to milder weather and lower heating demand, traders and analysts said. Spot LNG prices have jumped by nearly 200% in the past month as freezing temperatures across North Asia boosted demand and depleted inventories. Over the last six months, prices have soared a dizzying 1,000%.

"Once temperatures rise and more LNG supply returns to the market, the rally should ease," said Chong Zhi Xin, director of Southeast Asia gas and LNG at IHS Markit. The return of cargoes from Shell's Prelude floating facility in Australia after being offline for nearly a year will also help boost supply, Chong said. "U.S. LNG cargoes that are produced today can also reach Asia in 38 days, even if they travel via the Cape of Good Hope, so prices should definitely ease by mid-February."

S&P Global Platts' Japan-Korea-Marker, a reference for spot cargoes in Asia, rose Jan. 12 to a record \$32.494 per million Btu for February delivery. But with temperatures expected to rise above average levels in Tokyo, Seoul, and Shanghai over the next few weeks, prices for spot cargoes delivered into North Asia in March will be lower, traders said. There are signs buyers from China are holding off from buying at record highs and instead opting for deliveries at later dates such as in March, several traders said.

# Record high winter LNG prices could push India to cut imports

(S&P Global Platts; Jan. 11) - The unprecedented surge in spot prices has taken India's LNG buyers by surprise and forced importers to stay away from such purchases, which could lead to lower throughput at some terminals, reduce gas-based power generation as well as slow consumption in industrial sectors. With spot prices hitting record highs, analysts and industry officials said throughput at some terminals could fall by about 10% to 12% in the first quarter of 2021 due to a slowdown in spot arrivals, although LNG cargoes based on term contracts were expected to arrive as per schedule.

"A lot of Indian buyers can't afford to pay these prices. We will see demand destruction across various sectors," said a senior official at a leading Indian LNG firm. "Whatever little availability is there in the global spot market, China is taking those cargoes." The Japan-Korea Marker benchmark for Asian spot LNG prices surged to \$21.453 per million Btu on Jan. 8 amid record low temperatures in North Asia, high freight rates, congestion in the Panama Canal and supply disruptions.

The benchmark for spot LNG prices delivered to India hit an all-time high at \$17.925 on Jan. 8, S&P Global Platts data showed. A leading Indian LNG importer said the country could see LNG imports dropping by about 1 million tonnes in the first quarter of 2021. "Gas-based power generation is economical for us if (the price) is at \$4 or the delivered price of gas at the burner tip is no more than \$5.50," a major Indian utility said.

#### LNG carrier spot-charter rates hit record \$350,000 a day

(Bloomberg; Jan. 11) - An unprecedented shortage of liquefied natural gas carriers has made them the most expensive ships ever hired to move commodities. Spot rates have more than tripled in the past month, with BP last week paying \$350,000 a day for an LNG carrier to pick up a cargo from the U.S. The previous high for a commodity carrier was set in late 2019 when an oil supertanker was booked at \$308,000 a day, according to data compiled by Clarkson Research Services, part of the world's biggest shipbroker.

Bullish factors have struck the LNG shipping market: robust Asian gas demand in a cold winter, record-high exports from U.S. projects and, perhaps most importantly, delays traversing the Panama Canal. Vessels have been forced to take longer routes to Asia, increasing transport time and significantly curbing the number of available vessels in the Atlantic. Spot LNG daily tanker rates in the Atlantic Basin rose to a record \$322,500 on Jan. 8, up from \$99,000 on Jan. 5, according to Spark Commodities, which collects the data. Meanwhile, Pacific spot rates increased to \$221,750, according to Spark.

The same factors have helped push prices for prompt LNG cargoes to records. The Japan-Korea Marker, the regional benchmark, rose almost 32% to \$28.221 per million Btu on Jan. 11, according to S&P Global Platts.

#### China calls on icebreaker, hot-water canon to clear path for tanker

(Bloomberg; Jan. 11) - China's coldest winter in decades meant state-owned energy giant Sinopec was desperate to unload heating fuel from a vessel headed to a northern port, yet freezing temperatures that have swept parts of Asia froze a thick sheet of ice and blocked access. With the help of an icebreaker and a cannon loaded with hot water, workers spent 20 hours clearing a pathway for the tanker to dock and discharge its cargo of liquefied natural gas in Tianjin.

The effort underscores how frigid temperatures have upended energy markets across Asia, catching some companies flat-footed and sending prices for electricity, fuel, and charter tankers to record highs. And with temperatures showing no signs of easing in key markets in Japan, China and South Korea, it could be weeks before normalcy. "This winter has definitely caught the market off-guard," said Henning Gloystein, a director at Eurasia Group. "My hunch is that this spike will end with springtime."

Beijing last week recorded its lowest temperature since 1966, while Seoul had its coldest day since 1986, and record snowfall is sweeping across Japan's west coast. The chill is creating a surge in heating demand across the region. Japan's spot electricity prices have soared more than 10-fold to record levels, while South Korea and China's main grid have set records for power demand. Those three countries are the world's biggest LNG importers, and the extra demand has helped send prices for spot cargoes and tankers carrying the fuel to record levels.

#### Taiwan receives first U.S. LNG cargo under 25-year deal

(Reuters; Jan. 9) - Taiwan's state-owned CPC Corp. began receiving liquefied natural gas cargoes from Cheniere Energy on Jan. 10 under a 25 year deal signed with the U.S. company in 2018, and will receive about 30 shipments annually. CPC said the vessel carrying the gas from Cheniere's Corpus Christi, Texas, LNG facility, had arrived at the LNG import terminal in Taichung.

Taiwan's government has viewed the deal as an important part of its efforts to reduce its yawning trade surplus with the U.S., which has become a source of tension with Washington, Taiwanese officials have previously said. The U.S. has become a major LNG exporter, mostly due to the ramp-up of Cheniere's Sabine Pass terminal in Louisiana, which opened in 2016. The Corpus Christi terminal started up in late 2018.

#### Shell's Prelude LNG back to work after 11-month shutdown

(Financial Times; London; Jan. 10) - Shell has resumed shipping liquefied natural gas from the largest floating structure ever built following a year-long technical disruption that has damped industry appetite for floating LNG technology. The restart of the 1,600-foot-long Prelude facility is a welcome boost for Shell. But construction challenges, cost overruns, and technical problems with Prelude, as well as challenging market conditions, have prompted Shell and other producers to cancel other floating LNG projects.

"Prelude has been a 'white elephant' — we always felt it was a technology looking for a solution rather than the other way round," said Neil Beveridge, an analyst at Bernstein. He said there are a large number of competing onshore LNG projects aiming to come to market that do not require the expensive, pioneering technology necessary for Prelude. As a result, very few large-scale FLNG projects are going ahead, he said. Prelude had been offline for 11 months.

The floating facilities liquefy gas from remote offshore fields without the need for onshore facilities to turn it into LNG. Gas is pumped from below the seabed to the floating platform, where it is cooled to turn it into liquid for transport. But the exercise has turned out to be costly for Shell and its partners: Japan's Inpex at 17.5%, Korea Gas at 10%, and Taiwan's OPIC at 5%. Shell has not revealed the cost of Prelude but analysts estimate the price tag has ballooned to as much as A\$17 billion for the operation that is designed to produce 3.6 million tonnes per year of LNG.

#### Australian state decides Gorgon LNG needs permit review in 2028

(Australian Financial Review; Jan. 11) - Australia's second-biggest liquefied natural gas export facility has had the tenure of its environmental approvals halved by the Western Australian state government after a campaign by conservation groups. Chevron's permit to operate the Gorgon LNG terminal will now expire in July 2028 rather than July 2038 after the state's Environment Minister Stephen Dawson decided that 10 years was a more "reasonable" duration given Gorgon's unique carbon-capture system.

Gorgon is expected to export LNG for 40 years. The change consigns Chevron to more frequent cycles of review and permitting, but the company is not expected to fight the change. Gorgon is located on Barrow Island, ranked as a Class A reserve of Crown Land and subject to the highest level of environmental protection under the state's Land Administration Act. The Conservation Council of Western Australia has launched multiple appeals against Gorgon's approvals, pushing for a shorter permitting duration.

Previous approvals for Gorgon's three liquefaction units, diesel storage, waste systems and other infrastructure were consolidated into a single, 20-year permit in July 2018, in keeping the state environment department's "default position" for 20-year permits. The approval was amended in 2019 to include Gorgon's carbon-capture and storage system, which began injecting carbon dioxide into geological formations beneath Barrow Island in 2019 as part of efforts to reduce carbon emissions from the project.

"A shorter duration for the Gorgon license provides an opportunity to review all the conditions within a reasonable time after the (carbon dioxide) injection system has been operational," Dawson said. Chevron owns 47.3% of Gorgon; ExxonMobil and Shell own 25% each; Osaka Gas, Tokyo Gas, and Japanese power producer JERA own the rest.

# Papua New Guinea finds it difficult to manage resource development

(Nikkei Asia commentary; Jan. 11) – French oil major Total is at the final stages of settling the terms for its proposed \$13 billion LNG project that will double Papua New Guinea's gas export capacity. Days before its executives were to arrive in the capital to seal the deal, Prime Minister James Marape's government was shaken by a political crisis. Opposition lawmakers attempted to oust him through a no-confidence motion after his government tried to speed a controversial budget through the parliament.

The bid to oust Marape failed, but his problems show it is often difficult for developing countries to get the most out of their resources. Rich in gas, gold, and copper, Papua New Guinea is also one of the world's least developed countries. PNG LNG, the country's first gas project, was awarded in 2008 to a consortium led by ExxonMobil on the promise of a windfall. The \$19 billion project was expected to double the country's GDP, raise household incomes by 84% and increase employment by 42%. Nearly

\$31.7 billion was forecast to flow to the state and landowners over the project's 30-year life.

But after an initial spurt of activity, the economic dividends have dissipated. Now, six years after the first gas came on stream, residents have seen little of the promised benefits. Marape came to power promising a better deal on such projects. Instead of granting companies the right to exploit resources and receive royalties and taxes in return, he wants the government to get a share of the profits. That is all very well, but he faces a difficult economic environment and stiff resistance at home and abroad.

Making deals sweeter may appear prudent to kick-start projects such as the Exxon-led venture, but once the gas started flowing it triggered a political backlash that ultimately led to the removal of Marape's predecessor. When it comes to resources, getting the fiscal terms right is a delicate balancing act. Make it too difficult and you risk scaring away investors. Keep it too liberal and you end up leaving cash on the table.

#### Norway looks to mining minerals from the seabed floor

(Reuters; Jan. 12) - Norway's oil and gas reserves have made it one of the world's wealthiest countries, but its dreams for deep-sea discovery now center on something different. This time, Oslo is looking for a leading role in mining copper, zinc, and other metals found on the seabed and in hot demand in green technologies. Norway could license explorers for deep-sea mining as soon as 2023, its oil and energy ministry said.

That could place it among the first countries to harvest seabed metals for electric vehicle batteries, wind turbines, and solar farms. That could also place it on the front line of a controversy over the environmental risks posed by exploiting the world's unexplored seabeds, however. Norway on Jan. 12 announced it was starting preparations for an environmental impact study needed to open areas of its seabed to mineral exploration and production.

The move follows three years of expeditions that have found deep-sea deposits of copper, zinc, cobalt, gold, and silver, according to the Norwegian Petroleum Directorate, which conducted the work. There could be up to 21.7 million tonnes of copper — more than the world's copper output in 2019 — on Norway's continental shelf, researchers estimate. Once completed, the government plans public meetings on its environmental impact assessment and a proposal for opening areas for exploration and production by the end of 2022, followed by debate and a vote in parliament in second-quarter 2023.

#### Enbridge rejects Michigan order to shut down liquids pipeline

(The Associated Press; Jan. 12) - Enbridge said Jan. 12 it will defy the state of Michigan's demand to shut down an oil pipeline that runs through a channel linking two of the Great Lakes, contending that Gov. Gretchen Whitmer's decision was based on bad information and political posturing. The governor in November moved to revoke a 1953 state easement that allowed part of the Canadian company's Line 5 to be placed along the bottom of the Straits of Mackinac, citing the risk of catastrophic spills.

Saying Enbridge had repeatedly violated the easement terms and put the lakes at risk, Whitmer gave the company 180 days — until May 12 — to turn off the flow. Enbridge filed a federal lawsuit challenging the order shortly after it was issued. Vern Yu, president for liquids pipelines at Enbridge, gave a point-by-point-response to the state's notice on Jan. 12 and said it wouldn't close Line 5. "Our dual pipelines in the straits are safe, fit for service and in full compliance with the federal safety standards," Yu said.

Dan Eichinger, director of Michigan's Department of Natural Resources, described the Jan. 12 letter as "Enbridge's attempt to power-wash the company's long history of violating the terms of the 1953 easement, and their current non-compliance." Line 5 is part of an Enbridge network that carries oil and liquids used in propane from western Canada to refineries in the U.S. and Ontario. The line moves 550,000 barrels daily between Superior, Wisconsin, and Sarnia, Ontario, across Wisconsin and Michigan.

Enbridge reached a deal with then-Gov. Rick Snyder in 2018 to replace the underwater line with a new pipe in a tunnel drilled beneath the lakebed. The company is seeking permits for the \$500 million project, which is not affected by the shutdown order.

# Nigerian leader vows assembly will reform oil laws

(Reuters; Jan. 12) - Nigeria's senate president said that despite forces "working desperately" to derail a long-delayed oil overhaul bill, lawmakers will push the bill through the national assembly. The measure, 20 years in the making, underpins everything from oil exploration to gas pipelines and fuel regulation. President Muhammadu Buhari sent the bill to the senate in September, and it passed a first reading in both chambers before the end of 2020.

The bill would change the structure of state oil company, amend oil and gas taxes and revenue-sharing and create new regulatory bodies, among other things, to make Nigeria's oil sector more dynamic and efficient. The laws governing Nigeria's oil and gas exploration have not been fully updated since the 1960s because of the contentious nature of any change to oil taxes, terms of exploration, and revenue-sharing.

With the 2021 budget now signed into law, the petroleum bill will be the first priority when the national assembly reconvenes later this month. Senate President Ahmad

Lawan said people inside and outside Nigeria are fighting to scuttle the reform. But he likened the bill to a law passed in 2019 to increase the government take of offshore oil revenues, one that oil companies opposed and regarded as a "joke," he said. The national assembly passed it within weeks of introduction. "That is what we intend to do with the PIB (Petroleum Industries Bill) by the grace of God," Lawan said.