# Oil and Gas News Briefs Compiled by Larry Persily January 12, 2023

## U.S. and its allies prepare for sanctions on Russian refined products

(Wall Street Journal; Jan. 11) - The U.S. and its allies are preparing their next round of sanctions on Russia's oil industry, aiming to cap the sales prices of Russian exports of refined petroleum products in an expansion of penalties the West already has imposed on the country's oil. In meetings across Europe this week, U.S. officials are discussing details of the coming sanctions on Russian refined products, set to go into effect Feb. 5.

The penalties will set two price limits on Russian refined products: one on high-value exports such as diesel and another on low-value ones such as fuel oil, according to people familiar with the plans. The new limits will follow moves last month by the U.S., the European Union and their allies in the Group of Seven advanced democracies to cap the price of Russian crude exports at \$60 a barrel. Those sanctions have had a relatively muted impact on global prices, encouraging Western officials who want to pressure Russia's budget while minimizing volatility in critical global energy markets.

But the penalties on refined products could have bigger economic impacts, particularly since they will take effect on the same day the EU will ban the import of Russian diesel and other products. Europe has relied on Russia for diesel for decades, raising fears about the impact. Market watchers and some Western officials expect that Russia will have a harder time reorienting its exports of refined products, which could weigh on global prices. Without access to the European market and facing Western sanctions on shipments elsewhere, Russian refinery production could decline, reducing global supply.

# Russia's flagship crude sold at \$37.80 a barrel on Jan. 6

(Bloomberg; Jan. 9) - Russia's flagship oil is selling at less than half international prices — and way below a Group of Seven-imposed cap — following sanctions targeting the Kremlin's revenue from petroleum sales. The nation's Urals grade, a far bigger export stream than any other crude that Russia sells, was \$37.80 a barrel at the Baltic Sea port of Primorsk on Jan. 6, according to data provided by Argus Media. Global benchmark Brent settled at \$78.57 on the same day.

It's hard to know how Russia might respond to such low levels. It needs all the revenue it can get to fund the war in Ukraine. But dropping too far could prompt Moscow to respond with production cuts, something it hasn't ruled out in the past. On Dec. 5, the European Union all but halted seaborne crude imports from the country, killing what was historically Russia's top export market. Simultaneously, the bloc joined with the G-7 industrialized nations in imposing a cap on the price of Russian supply at \$60.

Anyone wanting access to Western services — in particular industry standard maritime insurance, but also an array of other things — could only do so if they paid \$60 of less. A key driver of prices has probably been the lost European market, because it put Russia at the mercy of a tiny pool of large buyers, notably China and India. And with tankers having to sail thousands of miles farther to get cargoes from Russian ports to those buyers, freight costs soared. That forced barrels to be discounted to compete.

## **China imports wider variety of Russian crude**

(Bloomberg; Jan. 10) - China is importing a wider variety of Russian crudes, including the lesser-known Arco grade, just as the nation doubles down on purchases from Russia. Buyers snapped up three cargoes of crude from the Arctic including the highly sulfurous and dense Arco variety for arrival this month or in February, according to Vortexa, with data showing the first China-bound flows in November. Traders said the purchases may displace some Middle Eastern barrels, such as Iraq's Basrah Heavy.

Data and analytics firm Kpler said China's latest round of purchases included Varandey and a lighter variety known as Novy Port. Beijing's warm relations with Moscow have seen it boost imports of Russian oil since the outbreak of the Ukraine war, replacing European and U.S. buyers. The unusual purchases of Arctic oil come after China's daily crude and condensate imports hit the second-highest on record last month, Kpler said.

"The rerouting of Arctic grades is absolutely taking place," said Viktor Katona, Vienna-based lead oil analyst at Kpler, highlighting the date when European Union sanctions on Russian imports came into force. "Russia's Arctic grades were among the Europeoriented streams that since Dec. 5 have to find new homes elsewhere, and in all of those cases, it's pretty much an India and China split." Sellers are indicating a discount of at least \$10 a barrel to the Brent price for March-arriving Arco on a delivered basis.

# Rosneft wants to send its gas to China in new Siberia pipeline

(Reuters; Jan. 9) - Russian oil major Rosneft wants to supply natural gas from its fields in the Krasnoyarsk and Irkutsk regions to the Power of Siberia 2 pipeline that will supply China via Mongolia, the newspaper Kommersant reported on Jan. 9. Russia's Gazprom is aiming to start delivering gas via the 1,600-mile Power of Siberia 2 pipeline by 2030. The pipeline could carry more than 1.7 trillion cubic feet of gas per year, which could accommodate supply from Rosneft in addition to Gazprom.

Rosneft has reserves of more than 50 tcf of gas in the fields along the route of the future pipeline, Kommersant reported. The 1,800-mile Power of Siberia 1, which started service in 2019 to bring gas from Siberian fields to eastern China, is scheduled to reach its full capacity by 2025, at about the same 1.7 tcf a year as proposed for Power of

Siberia 2. Russia's largest gas producer, Gazprom, supplies the first Siberia pipeline. Total cost of field development, the main pipeline and spurs for Power of Siberia 1 have been estimated at more than \$55 billion. Gazprom has not provided a definite number.

## Interior Department's 5-year offshore leasing plan due soon

(EnergyWire; Jan. 9) - The Interior Department's plan for selling new leases to drill off U.S. coasts is due any day, a legacy-defining policy for President Joe Biden. What's in the five-year offshore oil and gas plan, a program required under federal law, likely comes down to a fossil fuel lifeline tucked into last year's sweeping climate and cleanenergy law as a concession to pro-oil Democratic Sen. Joe Manchin of West Virginia.

Overall, it could have long-lasting impacts on the Gulf of Mexico, the country's largest offshore oil supplier. The plan — years in the making — highlights what's been a difficult balancing act for the Biden administration, the first to fully tangle with the challenges of managing the nation's vast resources of offshore oil and gas while also trying to address a worsening climate crisis. It is significant in that debate, as the plan determines how often the government sells new rights to drill in federal waters to oil and gas companies.

The program is under fierce scrutiny from climate activists calling on Biden to shift the nation away from its reliance on fossil fuels. It's also on the radar of Republicans, who noted as gasoline prices spiked last summer that the previous plan had expired during the Biden administration without another in place. Biden officials have blamed the Trump administration for suspending work on the program, which takes years to write.

A draft of the five-year oil plan, released by the Bureau of Ocean Energy Management in July prior to passage of the Inflation Reduction Act last year, left the administration's options open. According to that document, floated amid high-stakes negotiations over the clean-energy law, a final plan could include up to 11 sales, or none at all.

# Canada continues moratorium on Arctic offshore oil and gas work

(CBC News; Canada; Jan. 2) - A federal suspension of Arctic oil and gas exploration was set to lift in 2023, but the government of Canada said the order has now been extended. In 2016, the government announced a ban on issuing new offshore oil and gas licenses in Canadian Arctic waters. The federal government made that decision unilaterally and declared the moratorium indefinite. In response, the Northwest Territories premier at the time, Bob McLeod, issued a "red alert," accusing the federal government of being "patronizing" and "colonial" — and bypassing local government.

In 2019, the federal government expanded the 2016 restrictions and prohibited any kind of oil and gas work in Canada's Arctic waters. That legislation said those restrictions would be repealed on Dec. 31, 2022, but Crown-Indigenous Relations and Northern Affairs Canada said in an email that it is committed to extending the 2019 prohibition order for as long as the 2016 moratorium still is in place. A federal spokesperson later confirmed in an email that the moratorium order was extended in mid-December.

Jackie Jacobson, the member of the legislative assembly for Nunakput, the Northwest Territories' northernmost electoral district, said he wants the moratorium lifted — to create jobs for his constituents. "We need employment," he said. "Right now, people are really suffering in regard to work." Energy analyst Doug Matthews said whether the government lifts restrictions on Arctic drilling won't matter. "Nobody needs the oil," he said. Matthews said the market is expected to reach its peak before companies would be able to bring Arctic oil to market, even if they started drilling tomorrow.

## Refilling U.S. Strategic Petroleum Reserve will not be easy

(Wall Street Journal; Jan. 9) - It took less than a year to draw 180 million barrels of oil out of the U.S. Strategic Petroleum Reserve. Replacing those barrels will likely take a lot longer, if it happens at all. After President Joe Biden authorized a historic emergency release last year, there were roughly 372.4 million barrels left in the SPR as of Dec. 30, the lowest level in 39 years. No wonder the Energy Department is pivoting to a refill.

In mid-December, the agency announced it would start repurchasing crude for the SPR. It is taking baby steps, starting with a 3 million-barrel pilot program under which it would offer market participants a fixed price for future delivery. This is a new approach for the Department of Energy, which has typically purchased for more immediate delivery. The idea is to use fixed-price contracts as a carrot for U.S. oil firms to invest in production.

The carrot might not be all that enticing, though. The White House has indicated that it plans to repurchase crude oil for the SPR when West Texas Intermediate crude prices are at or below \$67 to \$72 a barrel. A good buying window might be approaching if the administration wants to take it: WTI crude is trading around \$74 a barrel. Waiting around to sign future delivery contracts at the \$70-a-barrel range could prove trickier.

To attract more interest, the department might have to offer a higher price. Bloomberg reported Jan. 6 that the administration is delaying replenishment of the SPR because the offers it received are either too expensive or didn't meet required specifications. What seems more likely is a new normal for SPR stockpiles, which might be leaner for quite some time. Yet with European sanctions on Russian petroleum-product imports a month away and a reopening of China under way, that U.S. cushion could be useful.

## Forecast says record output will hold down U.S. natural gas prices

(S&P Global Platts; Jan. 10) - Anticipating growing U.S. natural gas production that will top previous highs, the U.S. Energy Information Administration has scaled back its near-term natural gas price forecasts, expecting Henry Hub spot prices will average \$4.90 per million Btu in 2023, down from \$6.42 in 2022. In its January Short-Term Energy Outlook, the EIA on Jan. 10 lowered its first-quarter 2023 forecast for Henry Hub spot prices by \$1.18 to \$4.99. The forecast pegs the average price in 2024 at \$4.80.

"The natural gas market is particularly uncertain, but we expect that U.S. natural gas production will establish new record highs in both 2023 and 2024, leading to lower domestic prices," said EIA Administrator Joe DeCarolis, in a statement released alongside the report. The EIA boosted its total gas marketed production forecast for 2023 to 109.11 billion cubic feet per day on average, growing to 111.24 bcf in 2024.

"Increases in U.S. gas production, relatively flat LNG exports, and declining domestic consumption in the electric power and industrial sectors will limit upward pressure on prices in 2023," the EIA said. In 2024, even as new LNG export capacity is slated to come online, the agency expects robust production will keep gas prices "relatively flat — with the possibility of lower prices." Coal-fired generation is expected to continue its slump, falling from 20% of the U.S. mix in 2022 to 18% in 2023 and 17% in 2024. Renewables will continue their rise, reaching 24% of the mix in 2023 and 26% in 2024.

# Chesapeake back from bankruptcy and making large profits

(Wall Street Journal; Jan. 10) - Chesapeake Energy was one of the biggest stars of the hydraulic fracking boom, riding high for years on its ability to tap vast troves of American natural gas. By the summer of 2020, the pandemic and lockdowns had caused revenue to dry up, and the company, after a big, ill-timed expansion, filed for bankruptcy protection. Yet last year, Chesapeake racked up \$1.3 billion of profit in the first nine months. It sent its shareholders \$800 million in dividends over that same period. Its stock has more than doubled since the company re-listed its shares in early 2021.

U.S. gas production — Chesapeake's focus — has hit record levels. But as surging global demand for U.S. oil and gas has fueled high profit margins for producers, President Joe Biden has accused them of profiteering during a crisis. They see it differently. "What's really happened is the world has realized there is a need for hydrocarbons in energy policy," said Domenic Dell'Osso, Chesapeake CEO.

Chesapeake recently put a seventh drilling rig to work in the Haynesville basin, a giant gas field straddling east Texas and northwest Louisiana that has also known booms in the past. In all, 69 drilling rigs were operating there in early January, compared with 32 in the summer of 2020. Behind the company's push back into the Haynesville now is a bet that the U.S. and the rest of the world won't be able to unwind quickly their reliance

on fossil fuels, and especially on natural gas and U.S. exports of LNG, which many in the industry say could be a bridge to a future in which renewables dominate.

## Restart of Freeport LNG could get delayed into February

(Reuters; Jan. 11) - Top U.S. gas exporter Freeport LNG is expected to further extend the seven-month-long outage of its liquefied natural gas export plant in Texas to February as it awaits regulatory approvals, three sources told Reuters on Jan. 11. Accounting for more than 15% of U.S. LNG exports, resumption of the facility is important to ease the squeeze of global supplies, especially as Europe is rebuilding its gas storage after Russia cut gas exports following Moscow's invasion of Ukraine.

"There has been no official messaging, but nobody expects any cargoes until end of February, at the earliest," one of the sources said. "Second half of January is now out of sight," another source said. Freeport LNG spokeswoman said the restart timeline still stands and the company was still targeting the second half of this month for the initial restart of its liquefaction facility, pending regulatory approvals.

The facility was initially expected to restart in October, but pushed back that date several times since the plant closed on June 8 following a fire that a consultants' report determined was due to inadequate operating and testing procedures, and human error and fatigue. In late December, the company said reconstruction work was substantially complete but regulators need to approve the restart, adding it did not anticipate the restart to begin until the second half of January. The delays have forced big customers including JERA and Osaka Gas to book hundreds of millions of dollars in losses.

# Europe has easier time in LNG market when China pulls back

(Bloomberg; Jan. 9) - In 2022, China threw gas-hungry Europe a lifeline. The world's most populous nation had a year earlier become the largest importer of liquefied natural gas, toppling Japan. But as Europe scrambled for LNG to replace Russian piped gas, competing demand from China was curtailed by its draconian COVID lockdowns and high prices. Importers there even resold surplus cargoes. As a result, Europe snapped up record LNG cargoes — even buying from Russia — while China's demand slumped.

And the trend persists: BloombergNEF estimates that northwest Europe, Italy and Austria will absorb two-thirds of the global flexible supply pool of LNG for the rest of the Northern Hemisphere winter. Deliveries continue to arrive, and benchmark gas prices have cooled from summer peaks. The good news for Europe in the fight against Russia's weaponization of gas is that Mother Nature is also lending a helping hand. An unusually mild January so far, combined with efforts to reduce demand and expand renewable energy capacity, means the continent's gas reserves remain robust.

China, though, is no longer sitting on the sidelines. The world's No. 2 economy abruptly abandoned its pandemic restrictions last month, as Beijing needs to accelerate growth.

The International Energy Agency has warned that Europe risks a gas shortfall this year if Russia cuts all exports and Chinese imports rebound to 2021 heights. Yet, China's demand looks very unlikely to quickly surge back to where it was in 2021.

## German environmental group challenges LNG terminal license

(Reuters; Jan. 11) - A German environmental group has lodged a complaint against the operating license of a new floating liquefied natural gas terminal at Wilhelmshaven, arguing the discharge of chlorine was harmful and Germany's climate targets could be put at risk. In the latest hurdle to the government's efforts to reduce German reliance on Russian energy, Deutsche Umwelthilfe (DUH) said in a complaint to the commercial regulator in the state of Lower Saxony that the license should end in 2032, not 2042.

The DUH objects to the discharge of large quantities of environmentally harmful chlorine, used for cleaning on the floating LNG import terminal the Hoegh Esperanza, operated by Uniper. The complaint underscores growing tensions over Berlin's climate policy. Environmentalists say climate goals are being neglected during an energy crisis caused by Russia's invasion of Ukraine last year, forcing a return to dirtier fuels.

"There must be no environmental discounts when approving plants for liquefied natural gas," said DUH Managing Director Sascha Mueller-Kraenner, adding that numerous permanent licenses for fossil fuel projects would jeopardize Germany's climate goals. "The lifespan of the LNG terminal must be limited to a maximum of 10 years."

# New investment will allow Norway to maintain strong gas production

(Bloomberg; Jan. 9) - Norway will be able to sustain natural gas production at last year's elevated level until at least 2026 thanks to 300 billion Norwegian kroner (\$30 billion) of investment in new offshore fields. "Only rarely have we seen so much oil and gas produced on the Norwegian shelf as was the case last year, and only rarely have we seen such significant investment decisions," the Norwegian Petroleum Directorate said Jan. 9 in its annual report.

Norway has become the most important supplier of gas to Europe, following Russia's decision to squeeze gas supplies to the continent after its invasion of Ukraine. The Nordic country's output rose 8% in 2022 to 4.3 trillion cubic feet, the highest in five years, according to the NPD. It will stay at similar levels for the next four to five years, the directorate said, adding that the fuel now accounts for more than half the production from the Norwegian continental shelf.

Export revenue from Norway's oil, gas and condensates reached a record of about 1.7 trillion kroner (\$170 billion) in 2022. That was due to a combination of high prices, especially for gas, and greater production, the NPD's temporary Director General Torgeir Stordal said in a presentation on Jan. 9. The government received 13 new field-development plans last year, as companies including Equinor and Aker BP rushed to take advantage of COVID-era tax breaks that expired at the end of December.

## Next competitive battle could be green hydrogen electrolyzers

(Bloomberg; Jan. 9) - A decade ago, China used low prices to rule solar manufacturing, wiping out Western competitors just as global demand for panels started to soar. The U.S. and Europe are determined not to let it happen with hydrogen. As the world sprints to decarbonize, the next round of competition involves a device called an electrolyzer. Plug them into clean electricity such as solar power and it's possible to extract hydrogen from water without producing any planet-warming emissions. That's a crucial step in creating a green fuel capable of decarbonizing such industries as steel and cement.

Companies around the world are already revving up electrolyzer production, green hydrogen plants are under construction, and the industry is making the leap from pilot projects to industrial scale. BloombergNEF, a clean-energy research group, estimates worldwide electrolyzer production will need to grow 91 times by 2030 to meet demand. But many Western clean-tech veterans eye the emerging competition with a feeling of déjà vu. Over 40% of electrolyzers made today come from China, according to BNEF.

Chinese electrolyzers aren't as efficient as those made in the U.S. and Europe, but they cost far less — about a quarter of what Western companies charge. China's electrolyzer companies still largely serve their domestic market, but they're starting to expand sales overseas. "I've heard too many government officials say we cannot repeat the experience of solar again," said BNEF hydrogen analyst Xiaoting Wang. "The reality is, the U.S. is going to give very generous subsidies to ensure that local suppliers survive."

# Norwegian hydrogen company attracts Japanese investors

(Reuters; Jan. 11) - Norwegian hydrogen company Hystar has secured \$26 million in funding, including from Japanese industrials Mitsubishi and Nippon Steel Trading, to scale up its electrolyzer production, it said on Jan. 11. Mitsubishi co-led the funding round together with London-based fund AP Ventures, an existing investor, Hystar CEO Fredrik Mowill told Reuters.

"We wanted to bring along some very large international industrial investors to help to develop the business, who could not only invest cash but that can also help grow the business," he said. In addition to the two Japanese firms, other investors include

Belgium-based investment company Finindus, owned 50% by steel-maker ArcelorMittal, Mowill added. All three firms are also potentially large customers, each with ambitious plans for implementing green hydrogen, he said.

Financial firms Hillhouse Investment and Trustbridge Partners also joined the latest funding round. Electrolyzers produce green hydrogen by splitting water with the use of electricity, allowing for the decarbonization of otherwise hard-to-abate industry sectors. Hystar says its technology will use 10% less energy compared to currently available models and is easy to scale up. The fresh capital injection will help set up an automated production line, support sales and marketing operations and finance staff expansion, with Hystar seeking to double its number of employees from 30 at present, Mowill said.

## North Dakota-based hydrogen hub venture includes BNSF railway

(Natural Gas Intelligence; Jan. 10) - With a partnership between Bakken Energy and Berkshire Hathaway's BNSF Railway, the U.S. railway industry could see a boost from natural gas-derived hydrogen as plans for a regional hub progress. In 2021, Mitsubishi Power Americas inked a deal with Bakken Energy to develop a regional hydrogen hub (H2Hub) in North Dakota. Gov. Doug Burgum last October said the state, as well as Minnesota, Montana and Wisconsin, would join up with Mitsubishi and Bakken Energy to develop an H2Hub using funds under the Infrastructure Investment Act of 2021.

Bakken Energy in 2022 signed a memorandum of understanding for the Mandan, Hidatsa and Akira Nation, which is the sovereign tribal nation of the Three Affiliated Tribes, to become the gas supplier for the Great Plains Hydrogen Hub. The hub, the nexus of which is expected to be Bakken Energy's Great Plains Synfuels Plant, is expected to produce more than 380,000 tonnes per year of hydrogen. The project's full application for federal funding is due by April 7.

"Part of the equation is production, but the other part is distribution and that's where BNSF will be invaluable. Being able to transport our hydrogen by rail would dramatically reduce our distribution costs and therefore the cost to consumers," Bakken Energy CEO Mike Hopkins said. The Heartland H2Hub is also expected to produce about 390,000 tonnes of blue hydrogen per year — Bakken Energy said it estimates about 95% of the carbon dioxide created during production would be sequestered underground. Work on the synfuels plant is expected to start in the first half 2024 and take about three years.

# India expects to continue burning more coal; will boost imports

(Reuters; Jan. 10) - India expects its power plants to burn about 8% more coal in the fiscal year ending March 2024, according to a government official and a power ministry presentation, after the country missed its 2022 renewable-energy goal by over 30%.

The world's third-largest energy consumer and emitter of greenhouse gases has been clinging to coal as it tries to get its economy back on track after a COVID slowdown and stave off power shortages that led to idled factories and villages without electricity.

An uptick in economic activity and a heatwave during the first quarter triggered a surge in power demand — an increase the government expects will persist in 2023-24, according to the senior official and the presentation. The government has estimated that the coal demand can't be met through domestic sources and because of logistical challenges, and has asked power plants to import 6% of their requirement.

The federal push to increase imports by the world's second-largest coal importer could drive up global prices as China ends its zero-COVID policy and attempts to ramp up industrial activity. China and India together account for three-fourths of electricity consumption in Asia-Pacific, with coal fueling over 70% of India's power generation.

## Texas Tech University adds 140-foot-tall teaching tool

(Lubbock Avalanche-Journal; Texas; Jan. 6) - Texas Tech University hopes to strike black gold and give petroleum engineering students some in-the-field experience at the same time. The university made history on Jan. 5 by raising the 140-foot mast on the first full-scale operational oil rig on a university campus in the nation. The rig is on Texas Tech property off the central campus at the East Campus Oilfield Technology Center.

Funded exclusively by alumni, the drilling rig came in pieces in 45 truckloads from all across Oklahoma, said Marshal Watson, chair of the Bob L. Herd Department of Petroleum Engineering at Tech. Watson said the project has been more than two years in the making. "They are able to see touch, feel, hear the real equipment utilized in the oil field," he said. "It's to take the material out of the textbook and bring it to real life."

The rig is fully electric, and will draw power from the Lubbock power grid. It's also equipped with three backup generators. After raising the 140-foot mast into its upright position, Watson said the team will next lift a substructure an additional 25 feet into the air to install blow-out prevention equipment. Students will be able to visit the rig this upcoming spring semester, when they will learn from the machine while also being environmentally conscious, focusing on methods of sustainable oil drilling.