

# Oil and Gas News Briefs

## Compiled by Larry Persily

### January 26, 2023

#### **Environmental concerns delay offshore drilling in Brazil**

(Bloomberg; Jan. 21) - The conflict between Brazil's ambitions to become a more responsible environmental steward while also ramping up lucrative oil exports has turned into an early test for President Luiz Inacio Lula da Silva. Off the coast of northern Brazil where the Amazon River enters into the South Atlantic, state-controlled oil giant Petroleo Brasileiro since early December has had an oil rig on site — which hasn't started drilling. The entire industry is waiting to see if the exploration well opens up a new oil frontier in an area known as the Equatorial Margin.

The delay is costing Petrobras \$1 million a day for the rig, helicopters, support boats and workers, according to consultancy Wood Mackenzie. The holdup: State authorities are reviewing a permit for Petrobras to operate a wildlife rescue facility in the event of a spill, and it could take them until April to make a decision. Petrobras planned to start the first well in late 2022 as part of a 16-well campaign. It's a region of mangroves and coral reefs which are considered unique ecosystems. Federal prosecutors asked Petrobras to review its oil-spill contingency plans and hold more discussions with local communities.

Petrobras and other explorers have had little success the past decade exploring Brazil's basins off its southern coast, which has made the Equatorial Margin a major priority. Brazil needs to find more reserves, otherwise production will start declining in the 2030s. At the same time, Lula has also vowed to strengthen the country's environmental agencies and oversight. A report by Lula's transition team, which was delivered to the mines and energy ministry in late December, recognized that oil exploration in sensitive areas like the Equatorial Margin may be incompatible with its environmental goals.

#### **Drilling starts at Uganda's first oil field**

(Al Jazeera; Jan. 24) - Uganda on Jan. 24 launched its first oil drilling program, its petroleum agency said, a key milestone as the country races to meet its target of first oil output in 2025. The Kingfisher field is part of a \$10 billion plan to develop Uganda's oil reserves under Lake Albert in the west of the country and build a pipeline to ship the crude to international markets via an Indian Ocean port in Tanzania.

"The president has officially commissioned the start of drilling campaign on the Kingfisher oil field," the Petroleum Authority of Uganda (PAU) said on Twitter. The East African nation discovered commercial reserves of petroleum nearly two decades ago in

one of the world's most biodiverse regions but production has been repeatedly delayed by a lack of infrastructure, including a pipeline.

The Kingfisher field, operated by the state-owned China National Offshore Oil Corp. (CNOOC), is expected to produce 40,000 barrels of oil per day at its peak, PAU said. Uganda's second oil field, Tilenga, located north of Lake Albert astride the River Nile, is operated by France's TotalEnergies. CNOOC and TotalEnergies co-own all of Uganda's existing oil fields alongside the state-run Uganda National Oil Co. At peak, Uganda plans to produce about 230,000 barrels of crude oil per day. The country's crude reserves are estimated at 6.5 billion barrels, of which 1.4 billion barrels are recoverable.

### **Lawsuit over access to snow crab could affect Norway's offshore oil**

(Reuters; Jan. 23) - Norway's Supreme Court will hear arguments Jan. 24 on whether European Union ships can fish for snow crab off the Arctic islands north of Norway, in a case that could decide who has the right to explore for oil and minerals in the region. At stake is whether EU-member vessels have the right to catch snow crab — whose meat is considered a delicacy by gourmets in Japan and South Korea — in the same way that Norwegian vessels do.

A Latvian fisheries company applied to Norway in 2019 for a fishing license to catch the species, but was turned down on the basis that only Norwegian vessels can harvest the crab. The Latvian firm will argue in court that it also can take crab under the 1920 Svalbard Treaty, which grants Norway sovereignty over the Arctic islands with the condition that other signatories have access to the territorial waters.

The case has far-reaching implications, according to Oeystein Jensen, a professor at the Fridtjof Nansen Institute in Oslo. "If the Supreme Court thinks the Svalbard treaty applies, it is not only about snow crab, it will be about oil, gas, minerals and fish," he told Reuters. "It is everything or nothing." In a sign of the importance the case has for Norway, 15 Supreme Court judges are expected to hear arguments during the four-day session. Most other cases are decided by a panel of just five judges.

### **Shadow fleet of tankers important to moving Russian oil**

(National Public Radio; Jan. 21) - Before Russia invaded Ukraine last February, Europe was by far the largest customer for the oil sales that give Moscow its wealth, even bigger than Russia's domestic market. But since European countries banned most Russian oil imports last year, Moscow has had to sell more of it to other places such as China and India. Yet Russia faces a dilemma: It can't pipe its oil to those places like it did to Europe, and its own tanker fleet can't carry it all. It needs more ships.

But the U.S. and its allies have imposed restrictions to prevent tankers and shipping services from transporting Russian oil, unless it's sold at or under \$60 per barrel. Right now, Russia's flagship brand of oil, Urals, sells below that price. But that could change, and Russia would have to turn to a fleet of tankers willing to get around the sanctions to move its crude to farther locations in Asia or elsewhere. It's known as a "shadow fleet."

Erik Broekhuizen, an analyst at Poten & Partners, a brokerage and consulting firm specializing in energy and maritime transportation, said the shadow fleet consists of 200 to 300 ships. "The sole purpose of these ships is to move Russian crude just in case it would be illegal for sort of regular owners to do so." He said use of shadow fleets is a common practice and has long been used by Iran and Venezuela to avoid sanctions.

Most vessels in the shadow fleets are owned by offshore companies in countries with more lenient shipping rules, said Basil Karatzas, CEO of New York-based Karatzas Marine Advisors. Karatzas said the risk-reward ratio is favorable to owners of such tankers. "If you can make \$10, \$20 per barrel spread. And the vessel holds a million barrels of oil, you can make like \$5 (million), \$10 million profit per voyage." He said shadow fleet tankers tend to be old and junky, but they can be highly valuable.

## **[EU ban on Russian diesel could mess up markets, boost prices](#)**

(Financial Times; London; Jan. 21) - The European Union is on the brink of effectively severing ties with its biggest external diesel supplier when sanctions on imports of refined fuel from Russia take effect early next month. The move, which will be coordinated with a G7-backed global price cap on Russia's refined fuel sales starting Feb. 5 — similar to measures already applied to crude oil since December — has the potential to spark a renewed round of turmoil for global oil markets.

Diesel supplies are already tight, contributing to pump prices well above gasoline in many regions. European countries are among the world's largest users of diesel relative to other motor fuels and Russia has been their main source of imports for decades. One senior oil trader at a European commodities house said there was the prospect of a "shit show" developing in oil markets in the coming weeks, due to the logistical challenges, when China's reopening of its economy is expected to boost demand.

"Any shortfall of Russian product exports could coincide with higher demand in China, tightening markets even further and raising the prospect of price spikes that renew inflationary pressure," said Henning Gloystein, an analyst at Eurasia Group. But the oil industry is deeply split over whether the measures will lead to soaring prices and possibly even shortages, with many believing that a sector that has grown accustomed to trade flows being upended — by pandemics, sanctions or war — can quickly adapt.

## **Revenue could double at Russia's Sakhalin-2 LNG project in 2023**

(Reuters; Jan. 25) - Russia's Sakhalin-2 liquefied natural gas project could generate twice the revenue this year than it did before the Ukraine war thanks to long-term deals with Asian buyers and high prices, according to analysts and Reuters calculations. State-run top shareholder Gazprom stands to benefit from the boost which comes as Russia ramps up its military spending for its invasion of Ukraine. Moscow has already tapped its rainy day fund, boosted domestic borrowing and is considering raising taxes.

Renewed deals with Asian buyers could secure demand for 6.5 million tonnes of LNG annually from Sakhalin 2, according to contractual volume data from the GIIGNL international group of LNG importers and Reuters calculations. That could result in between \$3.8 billion and \$4.5 billion in revenue for Sakhalin-2 shareholders this year, according to Masanori Odaka, a senior analyst on Rystad Energy's gas and LNG team.

The project could earn an additional \$7.45 billion this year if it achieves its full output forecast and sells 4.9 million tonnes on the higher-priced spot market, according to Alexei Kokin, chief analyst with Russia's Otkritie brokerage. In 2021, the export project's revenue totaled \$5.7 billion and net profit was \$2 billion. Japanese shareholders Mitsui and Mitsubishi hold a combined 22.5% stake in Sakhalin-2, alongside Gazprom at 50%. Shell quit Sakhalin-2 as one of the many Western firms which pulled out of Russia.

## **Specialized LNG carriers and icebreakers open up Russia's Arctic**

(High North News; Jan. 23) - Russia's goal and one of President Vladimir Putin's top priorities in the Arctic to achieve year-round navigation on the Northern Sea Route for the export of liquefied natural gas and oil to Asia is becoming increasingly feasible. The combination of highly capable Arc7 ice-class LNG carriers, nuclear icebreakers and weakening Arctic sea ice now allows for semi-regular deliveries of LNG along the eastern parts of the NSR for most of the year.

Novatek's carriers have now completed numerous voyages during December, January and February. They have also conducted test voyages in May and early June. This leaves only the months of March and April – when ice conditions along the route remain most formidable – during which no routine LNG deliveries have occurred.

With additional nuclear icebreakers becoming available over the next two to three years, as well as the even more powerful Leader-class icebreakers, the route will likely see this late-winter gap of March and April close in the coming years. The next iteration of the Arc7 LNG carriers will feature more powerful engines and an optimized hull design to pass through even the thickest winter ice along the route. The first updated Arc7 carrier – constructed at Russia's Zvezda shipyard in the Far East – may enter service in 2023.

Most recently, the LNG carrier Vladimir Voronin left from the Siberian port of Sabetta on Dec. 1 and delivered its cargo to the Chinese port of Tangshan just 20 days later. A comparable journey via the Suez Canal would take about 45 to 50 days on average.

### **Floating gas production facility on its way to BP's West Africa project**

(UPI; Jan. 23) - A floating processing center for natural gas production is on its way from a Chinese shipyard to the coast of West Africa, BP announced on Jan. 23. The floating production, storage and offloading (FPSO) vessel left a Chinese shipyard on Jan. 20 for its 12,000-nautical-mile journey to the coast of Mauritania and Senegal. Once it arrives, it will be moored about 25 miles offshore to process natural gas from subsea wells.

The broader project is called Greater Tortue Ahmeyim, and BP said the floating production facility represents something of a milestone for its LNG portfolio. "We are developing one of the world's most unique and innovative gas projects, and the FPSO forms one of the most important components," said Rahman Rahmanov, BP's vice president for Mauritania and Senegal.

Eight production and processing components onboard the FPSO will be able to process about 500 million cubic feet of natural gas per day. The FPSO is designed to remove water and other impurities from the gas, preparing it for shipment via pipeline to a floating liquefaction facility 6 miles offshore. BP made its final investment decision on Greater Tortue Ahmeyim in 2018. The first phase of the project aims to produce 2.3 million tonnes of LNG per year, with production to start by the end of the year.

### **Freeport LNG asks permission to restart Texas plant closed by fire**

(Reuters; Jan. 23) - Freeport LNG, the second-largest U.S. liquefied natural gas export terminal, on Jan. 23 said it had completed repairs to its Texas plant and asked U.S. regulators for permission to take early steps to restart the fire-idled facility. The closely held liquefied natural gas company's export facility was knocked offline by a fiery blast on June 8 and is barred from resuming production until federal regulators complete an extensive safety review and approve resulting changes.

Freeport LNG sought permission to begin introducing gas into the plant's piping system, according to a filing with the Federal Energy Regulatory Commission, released on Jan. 23. "Subsequent approvals would be necessary" to fully return the liquefaction trains to service, Freeport wrote. The facility draws about 2.1 billion cubic feet per day of gas when operating at full capacity.

The start-up procedure, which would take about 11 days, would be a first step to returning the 15 million-tonne-per-year export facility to normal operations after a seven-

month outage. The outage at Freeport forced big customers including Japan's JERA and Osaka Gas to book hundreds of millions of dollars of losses as they had to buy more expensive LNG elsewhere to meet their needs.

### **Sempra signs up another European buyer for Texas LNG project**

(S&P Global; Jan. 25) - Poland's PKN Orlen — owner of gas importer PGNiG — has agreed to a 1 million-tonne-per-year LNG purchase deal with Sempra Infrastructure for cargoes from Phase 1 of the planned \$10.5 billion Port Arthur export facility in Texas, the companies said Jan. 25. Under the agreement, PKN Orlen has agreed to purchase LNG for 20 years, the companies said, with first deliveries expected in 2027.

Sempra said that with the agreement, the projected LNG offtake capacity for Port Arthur Phase 1 (10.5 million tonnes) is fully subscribed under binding long-term agreements. "With the long-term offtake capacity for Phase 1 now sold under binding agreements, we expect to reach FID (final investment decision) later this quarter," said Sempra Infrastructure CEO Justin Bird. PGNiG and Sempra signed a heads of agreement in May 2022 for the potential supply of 3 million tonnes per year — 1 million tonnes from Port Arthur and 2 million from expansion at Sempra's Cameron terminal in Louisiana.

PGNiG has built out a significant U.S. LNG import portfolio in recent years, having already agreed to take 7 million tonnes per year, including 5.5 million tonnes from Venture Global project in Louisiana. U.S. LNG developers benefitted from a wave of commercial activity in 2022 as gas supply concerns mounted over Russia's war in Ukraine, having signed firm long-term deals covering more than 50 million tonnes per year of supply over the past year. The dealmaking has continued in 2023.

### **U.S. grants license for Trinidad to help develop Venezuela gas field**

(Reuters; Jan. 24) - The Biden administration has granted a license to Trinidad and Tobago to develop a major gas field in Venezuelan territorial waters, U.S. and Trinidad officials said on Jan. 24, marking a further easing of sanctions on Venezuela. The license, issued by the U.S. Treasury Department at Trinidad's request and intended to enhance Caribbean regional energy security, means the island nation can do business with Venezuela's heavily sanctioned state-run oil company PDVSA.

Prime Minister Keith Rowley, speaking at a news conference in Port of Spain, said Trinidad expects to gain access to 350 million cubic feet of gas per day from the Dragon field. PDVSA has found reserves of 4.2 trillion cubic feet in the Dragon field, on the Venezuelan side of its maritime border with Trinidad. The project was headed for production more than a decade ago but stalled over lack of capital and partners, as well



as sanctions. Under U.S. sanctions, companies and governments must obtain authorization from the U.S. Treasury Department to do business with PDVSA.

The license allows PDVSA, Trinidad and operator Shell to jointly plan and develop a gas export project. The liquefied natural gas export terminal in Trinidad has operated for almost 24 years, though production has been in decline due to lack of gas. Even with Washington's granting of Trinidad's request, it could take years of investment and development to bring Venezuelan gas to Trinidad and boost LNG exports, experts said.

### **Libya will sign deal with Italy's Eni to develop offshore gas fields**

(S&P Global; Jan. 24) - Libya's state-owned National Oil Corp. (NOC) and Eni will sign a production agreement to spend \$8 billion to produce about 850 million cubic feet per day from two offshore gas fields in the Mediterranean Sea, the company's chairman said Jan. 23. NOC and Eni, which will sign the agreement on Jan. 28, will develop the two fields that were already explored according to a 2008 deal and were supposed to start production between 2017-2018, Farhat Bengdara told Libya's Al-Masar TV.

Eni already produces gas in Libya from its Wafa and Bahr Essalam fields operated by Mellitah Oil & Gas, a joint venture between the Italian company and Libya's company. Gas from the fields is brought to Italy through the 323-mile Green Stream pipeline that crosses the Mediterranean Sea. Italy is trying to diversify its sources of gas following the reduction of Russia supplies to Europe in the wake of Moscow's invasion of Ukraine.

Libya is trying to woo back international oil companies to explore for gas and oil, particularly offshore, after lifting in December a force majeure on exploration and production. NOC is hoping to court more international oil companies like BP, Eni, TotalEnergies, ConocoPhillips, OMV and Repsol to resume upstream work in the country. Libya is desperate to expand the presence of companies as its recent production recovery has been stymied by a lack of funds and aging infrastructure.

### **Japanese company studies converting LNG terminals to ammonia**

(Reuters; Jan. 25) - Japan's IHI Corp. has started studies on possible conversion of liquefied natural gas receiving and storage terminals located close to gas-fired power plants into ammonia-based facilities, it said Jan. 25. IHI will look at possibly modifying LNG import terminals in the second half of this decade, as it wants to use ammonia — a carbon-neutral fuel — for boilers and gas turbines, the engineering company said.

Last week, IHI agreed with General Electric's turbine manufacturing unit to develop gas turbines operating on ammonia to reduce carbon dioxide emissions. Japan hopes to use ammonia to gradually replace coal and develop a fully ammonia-fired power plant

by 2050, but its reliance on coal and gas for power generation has grown since the 2011 Fukushima disaster, which left its nuclear power industry in crisis.

In 2021, Japan's biggest power generator JERA and IHI began to use small volumes of ammonia along with coal at JERA's Hekinan coal-fired power station in central Japan as part of a demonstration project to reduce the facility's emissions of carbon dioxide.

### **Shell delivers first verified carbon-neutral LNG cargo**

(Reuters; Jan. 25) - The first carbon-neutral liquefied natural gas cargo using the emissions monitoring and verification framework set up in 2021 by an international industry body has been delivered to Taiwan. The International Group of Liquefied Natural Gas Importers said in a statement Jan. 24 that Shell Eastern LNG delivered a pilot "greenhouse gas neutral" LNG cargo from the Gorgon LNG project in Australia to Taiwan's state refiner CPC Corp.

The delivery of the cargo is aligned with GIIGNL's Monitoring, Reporting and Verification and GHG Neutral Framework that was launched in November 2021. "The framework assists the industry in achieving greater transparency and accuracy in reporting and compensating for emissions, and we are very happy to see the first application of the GIIGNL Framework," said GIIGNL President Jean Abiteboul.

GIIGNL's framework requires companies to monitor and verify their greenhouse gas emissions intensity. To declare that a shipment is carbon neutral, companies need to show transparent emissions data, reduce emissions at its operations and use offsets for any remaining emissions for the cargo's lifecycle or those generated when the fuel is consumed. Environmental groups are skeptical about carbon-offset usage, saying that the ability to pay for emission reductions elsewhere could prolong the use of fossil fuels.

### **Germany joins Spain, Portugal, France in hydrogen pipeline**

(DW; German public broadcaster; Jan. 22) - Germany will join a new hydrogen pipeline project between Spain, Portugal and France, according to a Franco-German declaration on Jan. 22. The project, called H2Med, will connect Portugal and Spain with France and now Germany to supply about 10% of the European Union's hydrogen demand by 2030. The pipeline under the Mediterranean Sea will carry green hydrogen, made from water via electrolysis using renewable energy in Spain and Portugal.

The Spanish government estimates H2Med will be able to supply some 2 million tonnes of hydrogen annually. It comes as Europe scrambles to reduce dependence on Russian energy and shift from fossil fuels to cleaner energy. German Chancellor Olaf Scholz and French President Emmanuel Macron said they were "stepping up our investments in the



technologies of tomorrow, particularly renewable and low-carbon energies." A joint working group between the two countries will make "recommendations on our strategic choices regarding hydrogen development" at the end of April 2023.

"We want hydrogen to be available in large quantities and at affordable prices as the gas of the future," Scholz said. When Madrid, Paris and Lisbon agreed in December to build the pipeline, it was expected to cost €2.5 billion (\$2.6 billion). However, it wasn't immediately clear how much Germany's inclusion would add to the costs.

### **Proposed North Sea hydrogen pipeline seeks expedited permitting**

(Reuters; Jan. 23) - Pipeline operators Gascade and Fluxys are stepping up the pace on plans for a green hydrogen pipeline in the North Sea by applying to the European Commission to qualify for fast-track approvals and funding, they said on Jan. 23. Germany and the European Union are seeking to shift future energy production more to renewables and to produce, import and market clean hydrogen, derived from carbon-free wind and solar power, to eliminate emissions of climate-warming gases.

The two pipeline infrastructure companies said in a joint statement they are seeking to help to speed up the development of a hydrogen economy. Germany's Gascade and Belgium's Fluxys are seeking "Project of Common Interest" status from the EU, under which they could benefit from accelerated permitting procedures and funding. Financial details were not disclosed. Their 250-mile pipeline, called AquaDuctus, could become a collecting path, or "backbone," for electricity output from offshore wind power production sites that would convert water on-site into clean hydrogen via electrolysis plants.

Shipments would start in 2030 from the wind park SEN-1 in the North Sea. In later years, wind farms farther offshore in Germany's exclusive economic zone in the North Sea may be linked up to move hydrogen from plants operated by other countries, such as Norway or Britain, into Germany. Studies identify up to 100 gigawatts of hydrogen capacity potential in the German and European North Sea, the companies said.

### **Coal imports into China, Japan, South Korea highest in 16 months**

(Reuters columnist; Jan. 24) - Thermal coal imports into China, Japan and South Korea — three of the world's largest coal users — hit their highest combined total in 16 months in December as the North Asia manufacturing powerhouses primed their economies for growth in 2023. Economic momentum in the countries, which collectively accounted for nearly half of all coal imports in 2021, was subdued in 2022 as China's zero-COVID measures stifled industrial activity across the world's largest manufacturing base.

Japan and South Korea have extensive supply chain ties with China, which meant that each country suffered slowdowns in both productivity and demand growth in 2022 as China's COVID-19 curbs stifled movement of goods and people over much of the year. But thanks to a slew of stimulus and easing measures adopted by Beijing that are designed to kickstart a revival in China's economy this year, factories and industries throughout North Asia are now also primed for a pickup in 2023.

To feed that anticipated sustained rise in consumption, each country has stepped up imports of thermal coal, which generates power for electrical grids as manufacturers of cement, ceramics, refined metals, chemicals, heavy machinery and fertilizers. That collective climb in coal use is set to generate a swell in emissions from China, Japan and South Korea, which together accounted for 36% of global carbon dioxide emissions from energy use in 2021, according to the BP Statistical Review of World Energy.