Oil and Gas News Briefs Compiled by Larry Persily May 22, 2023

Smaller players move in as majors move out of riskier projects

(Wall Street Journal; May 18) - Under pressure from shareholders and activists, major energy companies are retreating from higher-polluting and riskier projects around the world. A bunch of smaller companies are rushing in to fill the void. In Nigeria, smaller companies now hold nearly half of the country's oil and gas oil leases acquired from major companies that have retreated in recent years. In Latin America, an independent firm has pushed into oil exploration in areas eschewed by Occidental Petroleum and BP.

In Asia, Chevron is pulling out of a controversial gas project in Myanmar; a little-known Canadian firm has agreed to snap up its stake. It shows how smaller and more nimble firms are taking advantage of higher energy prices and the openings left by global companies pivoting toward cleaner energy or focusing on their most profitable projects. The trend also shows that despite major oil companies' efforts to reduce their carbon footprints, their exodus from fossil-fuel projects has little effect on emissions overall.

"What we are seeing is that the larger companies are reducing their share in aging assets with little upside production that have relatively large emissions," said Audun Martinsen, head of energy-service research at Rystad Energy. "Their space has been filled by smaller exploration and production companies." Such companies usually have lower costs and are better placed to run such operations, he said, since they can quickly recoup returns on investments before a downturn cycle.

Watchdog groups and human-rights advocates warn that smaller or private companies can at times pose a greater risk to climate and human rights because they aren't subject to the same public scrutiny and pressure as globally known, publicly traded players.

Latest IEA forecast points to growing oil demand exceeding supply

(Wall Street Journal; May 16) - China's insatiable demand for oil is growing at a faster-than-expected pace, threatening to tighten crude markets and send oil prices higher as supplies struggle to keep up, the International Energy Agency said. The agency's latest outlook points to a widening gap between demand for crude in the developing world and lackluster demand in Europe and North America where economic prospects look bleak.

It also highlights a disconnect between oil prices — which have tumbled to their lowest levels in around 16 months in recent weeks — and expectations that strong demand for oil and tight supplies will prompt a supply deficit that many analysts expect to lift prices.

In its monthly report, the IEA raised its forecast for demand growth this year by 200,000 barrels a day, to 2.2 million barrels. It said global demand would stand at 102 million.

China's share of the increase is growing and "continues to surpass expectations," the IEA said. The nation's crude demand hit a record 16 million barrels a day in March. China will account for 60% of all oil demand growth this year, the IEA said. While demand is set to boom in China and across the developing world, high interest rates and lingering inflation in developed nations are keeping demand for oil there in check.

The forecast of strong Chinese demand and a growing supply deficit from the IEA—and from other major energy forecasters, the U.S. Energy Information Administration and OPEC—is why many analysts are expecting oil prices will rebound this year.

Mideast and African suppliers lose out to cheaper Russian crude

(Bloomberg; May 17) - Russia is finding oil customers in Asia to replace sanctions-blocked European buyers — by clawing away at the market share of its energy allies. From West Africa to the Middle East, producers in the OPEC+ alliance are feeling pinched as buyers in India and China — Asia's top growth markets — scoop up cheaper Russian crude. The redrawn global oil trade map could be in place for years to come. The price of Urals delivered to India — including shipping costs — was almost \$12 a barrel cheaper than the global Brent benchmark on May 15, according to Argus Media.

"There is every reason for the Middle East producers to be worried about losing market share in China and India to Russian barrels," said Vandana Hari, founder of consultant Vanda Insights in Singapore. "There appears to be no end in sight to the trade flows shift." Prices for Russia's flagship Urals grade plummeted last year as Europe shunned purchases after Moscow invaded Ukraine. Asia's powerhouses stepped into the void, helping to lift Russia's seaborne oil exports to a post-invasion record in recent weeks.

India has historically relied on countries like Iraq, Saudi Arabia and the United Arab Emirates to supply most of its oil imports. Now those producers are feeling squeezed. Since January 2022 — the month before Russia invaded Ukraine — India's oil imports from the Mideast have plunged by 35% to about 1.9 million barrels a day in April, data from Vortexa show. Shipments from West Africa slumped by the same percentage, to 228,000 barrels a day. Meanwhile, India imported a record 1.9 million barrels a day of Russian crude in April — compared with just 65,000 on a daily basis in January 2022.

Libya targets raising oil production to highest level in a decade

(Bloomberg; May 19) - Libya is aiming to boost its oil production by about 8% by December, a level that would catapult it to the highest in more than a decade. North

Africa's biggest producer should be able to pump about 1.3 million barrels a day by the end of 2023, Farhat Bengdara, chairman of the National Oil Corp., said in an interview. Avoiding field closures and steps like improving oil workers' pay already helped boost output by nearly a quarter since January 2022 to 1.2 million barrels a day, he said.

Libya has been dogged by political turmoil ever since the overthrow and killing of leader Moammar Al Qaddafi in 2011. Crude production has frequently been held hostage to infighting, although output has held steady this year, offering hope that the country's troubles might abate. Bengdara said \$17 billion of investment across 45 projects would allow Libya to raise production to 2 million barrels a day within five years. If sustained, that would far exceed anything achieved during Qaddafi's rule.

The government will offer rights to develop additional fields next year, the chairman said. The Nation Oil Corp. on May 16 signed a \$1.05 billion deal with Italy's Eni to capture flared natural gas, a project that should start operating in 2025. International companies are working in the country to expand production from some of its main fields. Eni and BP are set to start new drilling operations by the end of 2024, Bengdara said.

Nations call for more surveillance of unregulated oil transfers at sea

(Reuters; May 8) - The U.S., U.K., Denmark and other countries have called for more action, including increased surveillance, over the booming practice of unregulated oil transfers at sea, as fears grow over potential pollution, according to a paper submitted to the U.N. "These transfers undermine the rules-based international order and increase the risk of pollution to nearby coastal states. This threatens global efforts to prevent pollution from ships," the paper said.

The paper was submitted to the United Nations shipping agency, the International Maritime Organization, by the member states ahead of a major marine environment protection committee session in July. It was also backed by Australia, Canada, Spain and Ukraine. Hundreds of "ghost" tankers, which are not fully regulated, have joined this opaque parallel trade over the past few years, carrying oil from countries hit by Western sanctions and restrictions, including Russia and Iran.

The number of incidents last year, including groundings, collisions and near misses involving these ships reached the highest in years, a Reuters investigation showed. "These risky practices, although under the jurisdiction of a flag state, unjustly expose national and local governments and authorities to paying for response and cleanup costs and compensating victims," the paper said. Tactics used by such ships include switching off tracking transponders, faking locations and conducting ship-to-ship operations at locations outside of authorized transfer zones.

First cargo of U.S. crude headed to South Africa since May 2021

(Reuters; May 20) - A shipment of U.S. oil is headed to South Africa for the first time in two years and destined for a Glencore-owned refinery in Cape Town that has restarted operations after an explosion shuttered it in 2020, according to ship tracking data and a source. U.S. oil exports this year hit a record 4.5 million barrels per day as competitive pricing for U.S. oil and China's reopening after COVID-19 have fueled global demand. U.S. benchmark prices are about \$4 a barrel below the international Brent benchmark.

A tanker carrying light sweet oil left Corpus Christi, Texas, on May 16 for Saldanha Bay on the west coast of South Africa, according to ship tracking information from Refinitiv Eikon and energy data provider Kpler. South Africa gets most of its oil from West and Central Africa as well as Saudi Arabia, according to Kpler data. But competitive pricing for U.S. crude and changes to oil flows since Russia's invasion of Ukraine have opened new markets. The last shipment of U.S. oil went to South Africa in May 2021.

The 850,000 barrel-cargo of West Texas Light was purchased by Swiss-commodities trader Glencore, a person familiar with the matter said. Glencore's majority-owned Astron Energy restarted production at its 100,000-barrel-per-day Cape Town refinery nearly three years after a deadly explosion shuttered operations and killed two workers. Glencore declined to comment on the shipment.

South Africa plans oil and gas lease sale in controversial area

(Reuters; May 18) - South Africa will auction at least 10 new onshore blocks for shale gas exploration in the environmentally sensitive Karoo region, a government official said, as the country eyes alternative energy sources to ease its worst-ever power crisis. South Africa's first competitive auction for oil and gas resources, expected in 2024 or 2025 after legislation for the bid round is passed, includes acreage once held by Shell.

The Petroleum Agency of South Africa estimates the Karoo Basin holds about 209 trillion cubic feet of technically recoverable shale gas resources, although a 2017 study by geologists at University of Johannesburg said this was probably 13 tcf, the lower end of estimates between 13 tcf to 390 tcf. Even 5 tcf would be enough for a 1,000- to 2,000-megawatt gas-fired power plant to supply electricity for up to 30 years, the Academy of Sciences of South Africa said in its Karoo action plan released last year.

It isn't clear how the cost would compare to existing coal-fired power stations or the ever-cheaper wind and solar energies that are gradually replacing them. Fracking in the Karoo Basin, a vast area covering more than half of South Africa's land surface, has been shelved for a decade because of resistance from environmental activists and farmers, and regulatory uncertainty. Shell's acreage is available after the oil major early last year withdrew an application to explore. Activists and farmers worried about air quality, soil degradation and water use in a parched, semi-arid region remain skeptical.

Producers and Tanzania take another step toward LNG project

(Reuters; May 19) - Equinor, Shell and ExxonMobil have agreed to a deal with the government of Tanzania for the development of a liquefied natural gas export terminal, Equinor's manager in the East African country said on May 19. The agreement is a milestone for the long-delayed project to unlock Tanzania's vast but remote offshore gas resources, which the companies have said is expected to cost tens of billions of dollars.

The deal includes the key elements of a host government and production-sharing agreement, and is subject to legal reviews and quality assurance before an expected signing in the coming weeks. The reserves are estimated at 57 trillion cubic feet of gas.

A final investment decision for the Tanzania LNG project is still believed to be some years away. The next steps toward realizing the project involve a period of detailed engineering design work, Shell's Tanzania Chair Jared Kuehl said in a separate statement posted on Linkedin. Equinor and Shell are joint operators of the development, while Exxon and others are partners in the project. Last June, the parties signed a framework agreement aimed at bringing closer the start of the project's construction.

Japanese utility pays less than \$10 for spot LNG cargo

(Bloomberg; May 18) - A Japanese utility paid the least for liquefied natural gas in more than two years, potentially limiting the impact of electricity rate hikes that threaten to boost inflation. Tohoku Electric Power bought a spot shipment for late July at a rate just below \$10 per million Btu on May 8, according to traders with knowledge of the matter. That's a third of the price it paid for a December cargo of the power-station fuel.

Global LNG prices are plummeting after a mild Northern Hemisphere winter left utilities with ample stockpiles, a reversal from last year's energy shortage that triggered a record-breaking price rally. Lackluster demand from China is also weighing on prices. Several Japanese utilities are so well supplied they are offering to resell spare shipments on the spot market, according to traders.

Gas-fired power plant closure could jeopardize LNG import terminal

(Boston Globe; May 21) - When the clock strikes midnight just over a year from now, it will be lights out for the largest power plant in Massachusetts, the Mystic Generating Station in Everett. It might not be the only major piece of New England's energy infrastructure to go. Mystic's demise means the Everett LNG import terminal next door faces a precarious future. Both are owned by the same company, Constellation Energy. Mystic is the liquefied natural gas terminal's biggest customer by far.

Both are currently running thanks to an electric ratepayer subsidy that ends on May 31, 2024. Everett is the longest-operating LNG import terminal in the country. Elsewhere, U.S. ports have been exporting LNG as the nation produces far more shale gas than it needs and global markets, particularly Europe, are hungry for the fuel. Everett was the only U.S. terminal to receive cargoes this past winter, but its shipments could soon end if Constellation determines it is not commercially viable without its largest customer.

The 52-year-old terminal is a linchpin for the region's gas distribution system, especially on chilly days when the two main pipelines into New England get maxed out. Not only does Everett fuel Mystic's turbines, it's also a backup supply for the two pipelines and provides much of the LNG that utilities store around the region. The terminal's fate could become the latest flashpoint in New England's debate about shifting away from fossil fuels. Move too slowly, and the region falls short of aggressive goals to reduce carbon emissions. Move too quickly, and it risks ending up in the dark or feeling the chill.

Hawaii utility plans to convert oil-fired power plant to renewables

(The Associated Press; May 19) - Hawaii's largest electric utility aims to transform an 85-year-old oil-fired power plant into one that will run on renewable energy. Hawaiian Electric plans to replace six oil-fueled generators at its Waiau Power Plant in Pearl City outside Honolulu with smaller generation units powered by fuels like biodiesel and possibly hydrogen, the Honolulu Star-Advertiser reported on May 19.

The state Public Utilities Commission must approve the plan. It will also consider competing proposals by independent power companies. In 2014, Hawaii became the first state in the U.S. to require its electric utilities to generate 100% of their power from renewable sources. Utilities must reach that threshold by 2045. As of last year, Hawaiian Electric generated 32% of its energy from renewable sources.

Hawaiian Electric declined to say how large the new Waiau power plant would be or how much it would cost ratepayers, citing the competitive-bidding process. The plant's existing infrastructure would provide cost savings and limit effects on the community, it said. If the company's plan is approved, the utility expects to have initial replacement generation units ready for use in 2029. The 500-megawatt Waiau plant is the second-largest power production facility on Oahu. Only the utility company's oil-fired Kahe Power Plant in Waianae is bigger, at 650 megawatts.

Gas utilities increasingly look to test hydrogen blending

(S&P Global; May 17) - Gas utilities have announced more than three dozen hydrogen pilot projects across the U.S. as the industry continues to explore the fuel's potential to decarbonize distribution systems. Reflecting that goal, more than half of the 39 projects

identified by S&P Global Commodity Insights were focused on blending low- or zero-carbon hydrogen with natural gas into pipeline networks. Gas utilities have announced at least 22 blending projects through April, up from 13 pilots in October 2021.

Pipeline blending has the potential to reduce the carbon intensity of the nation's gas grids because hydrogen does not release carbon dioxide during combustion. However, pilot projects are needed to fill substantial knowledge gaps about hydrogen's impact on gas infrastructure and leakage rates, particularly at blends greater than 5% of volume. However, many climate activists and safety advocates argue that low-carbon hydrogen should be reserved for hard-to-electrify applications, including high-heat industrial processes and heavy transport, not the general gas distribution grid.

Pipeline blending pilots were among the earliest projects that gas distributors announced. They included projects to blend small amounts of hydrogen into working gas systems, as well as research into hydrogen blending at higher volumes in testing facilities. The inclusion of a hydrogen production tax credit in the Inflation Reduction Act has encouraged the efforts, such that utilities are increasingly piloting hydrogen blending in gas turbines to decarbonize gas-fired power plants.

Santos working on technology for direct air capture of CO2

(Bloomberg; May 18) - Santos, Australia's second-biggest gas producer, says it can slash the cost of sucking carbon dioxide directly out of the atmosphere, allowing it to manufacture a synthetic version of natural gas that it says would have no climate impact. The company is testing technology that could bring the cost of "direct air capture" to just \$75 a ton by 2030, far cheaper than current methods, Chief Executive Officer Kevin Gallagher told journalists on May 18.

Direct air capture is a nascent technology that its proponents argue could one day draw significant amounts of CO² out of the atmosphere and store it underground, slowing global warming — provided the cost is brought down. Only a handful of direct capture projects are up and running and the cost is hundreds of dollars per ton of CO² captured. But Gallagher said Santos' technology, which absorbs fluid from the atmosphere and heats it to extract the CO², is less energy intensive than many existing methods.

"A lot of the technologies around the world require very high temperatures to heat up the fluid for the CO² to be released," Gallagher said. Santos' technology would use a much lower temperature (167 degrees Fahrenheit). "If we can achieve that, it means much less energy is required." Initially, the CO² will be piped into depleted underground gas reservoirs in South Australia for permanent storage, generating carbon credits that could then be sold to companies looking to offset their own emissions. But in the longer term, the CO² could be combined with hydrogen to make "green methane," which could replace the fossil fuel without adding to atmospheric CO² levels, Gallagher said.

French-built hydrogen-powered train coming to Quebec this summer

(Business Insider; May 19) - North America will have its very first hydrogen-powered train this summer. Alstom, a French rail transportation company, announced earlier this year that it's shipping one of its new hydrogen-powered Coradia iLint trains to Quebec for a summer demonstration. The train will be operated by rail service Train De Charlevoix, and people traveling on the picturesque route along the St. Lawrence River will be able to get an innovative, hydrogen-fueled ride starting June 9.

The hydrogen train runs thanks to fuel cells — battery-like systems that don't require recharging — which produce electrical energy from the hydrogen in the train's tanks. Hydrogen produces heat and electricity when combined with oxygen, and the whole thing only emits water vapor and condensed water as an emission. Alstom first started running two of its bright blue Coradia iLint trains in Europe in 2018, and it has delivered 41 more since then. They are considered the first hydrogen-powered trains in the world.