# Oil and Gas News Briefs Compiled by Larry Persily April 19, 2021

### Shell says it will produce 75% of its oil and gas reserves by 2030

(Reuters; April 15) - Shell said on April 15 that the majority of its oil and gas reserves will be produced by 2050, playing down the risk that it will leave behind stranded assets as it prepares to reduce its greenhouse gas emissions in the coming decades. The disclosure is a rare admission by a major oil and gas company that some of its remaining reserves may be worthless in a world shifting to renewable energy from fossil fuels in an effort to stem global warming.

The company said in a document to investors summarizing its climate strategy that around 75% of its proved oil and gas reserves will be produced by 2030, with an additional 3% produced after 2040. Since late 2019, Shell has wiped out over \$20 billion from the value of its oil and gas reserves after lowering the outlook for commodity prices because of the energy transition and the COVID-19 pandemic's impact on oil demand. Shell had just over 9 billion barrels of oil equivalent in proved oil and gas reserves last year, the equivalent of about seven years of its 2020 production, its annual report said.

Shell aims to cut its emissions from wellhead to petrol station to net zero by 2050, and has set out intermediate targets, in one of the sector's most ambitious plans. The company said it will focus on hydrogen, biofuels, and offshore wind as well as carbon-sucking technologies and planting trees, but it has yet to outline exact plans for reaching the target. Its annual spending, however, is set to stay focused on oil and gas in the coming years. Shell, the world's largest oil and gas trader, said it sells about 4.6% of energy consumed in the world and produces about 1.4% of total primary energy.

#### Goldman expects oil demand for transport fuels to peak in 2026

(Bloomberg; April 15) - Add Goldman Sachs to the forecasters calling for oil demand to peak sooner rather than later. The bank advanced its forecast for peak oil demand in the transportation sector by one year to 2026, if not sooner, largely due to accelerating adoption of electric vehicles. Overall oil consumption will keep expanding this decade due to jet fuel and petrochemicals, but growth will be at an "anemic" pace past 2025.

Goldman is the latest to reevaluate what the end of demand growth will look like for oil. Among the most aggressive calls is that from BP, which said last year that the era of oil demand growth may already be over, while the International Energy Agency has taken a more conservative view, seeing demand plateau around 2030. Most recently, Wood Mackenzie warned of "severe" risks for oil companies not preparing for an accelerated energy transition. In their most aggressive scenario, the dirtiest hydrocarbons risk being "squeezed out" in a move toward electrification over the next 30 years.

"Government policies driving higher efficiency gains and lower emissions have had the strongest bearing on road transport demand," Goldman analysts said. "Petrochemicals will become the new baseload for oil demand, driven by economic growth and rising consumption, especially in emerging markets." Goldman sees overall oil demand never returning to 2019 levels in developed markets. The decrease in road transport demand, which accounts for 43% of overall oil consumption, is exacerbated by a shift toward permanent work-from-home in the wake of the pandemic, Goldman said.

# Wood Mackenzie's energy-transition forecast looks bleak for oil

(Financial Post; Canada; April 15) - Oil producers could face a potentially catastrophic Brent crude price of \$10 per barrel if countries move to limit global warming to 2 degrees Celsius, according to a new study from Wood Mackenzie. The study, released April 15, is one of the most aggressive forecasts of falling oil demand published by a major energy consultancy. It predicts that global oil demand will begin to fall as early as 2023 in a scenario where countries adopt accelerated energy-transition plans.

Under this scenario, oil demand would drop from 100 million barrels per day to about 35 million by 2050. As a result, Wood Mackenzie predicts the Brent benchmark may drop to between \$10 and \$18 per barrel by 2050. "If we move to keep global warming to the 2-degree C limit set by the Paris Agreement, the energy matrix will change — and change profoundly," Ann-Louise Hittle, Wood Mackenzie's vice president for macro oils, said in a release, adding the accelerated transition is "not our best-case forecast."

"The oil and gas industry cannot afford to be complacent. The risks associated with robust climate-change policy and rapidly changing technology are too great," Hittle said. Wood Mackenzie said the grim scenario would depend on a number of drivers to come together. The scenario assumes that all sectors of the economy will rapidly electrify and the power generation sector will decarbonize through more renewables.

In the automotive sector, that means that 80% of all new vehicles sold in 2050 are electric and that even ships and long-haul trucks are powered by hydrogen. It also assumes that petrochemical demand is dampened by "far higher rates of recycling."

## East Coast Canada oil headed to West Coast U.S.

(Bloomberg; April 15) - Canadian oil sellers are sending exports to the U.S. West Coast, an unexpected move prompted by the staggered global demand recovery from the

pandemic. For the second time this month, a tanker will load crude from eastern Canada's oil-rich Newfoundland province and head to the U.S. West Coast, shipping fixtures compiled by Bloomberg show. The BP-booked Aquasurazo is set to receive supplies this weekend destined for the Cherry Point refinery in Washington state.

Last week a Chevron-chartered vessel loaded at the same province and is on route to deliver crude to plants in California. The rare voyages reflect the changing needs — albeit temporary — of the largest buyers of Newfoundland's crude. While a swift vaccine rollout is boosting consumption in the U.S., demand remains muted in Europe with lockdown restrictions in place. Canada is also facing similar confining measures. The shifts in consumption are resulting in growing piles of unsold oil in the Atlantic Basin.

The Newfoundland cargoes, each about 600,000 barrels, are set to arrive on the West Coast in May. In the past, exports from the province to the U.S. have targeted the East and Gulf coasts, according to Statistics Canada. "East Canadian oil is traveling farther to find a home," said Randy Giveans, a vice president of Equity Research for Energy Maritime at Jefferies. The long voyage, which is expected to include the Panama Canal, isn't cheap, and sellers would have discounted prices to offset the extra cost, he said.

#### Nigeria close to cutting oil tax, royalty rates to attract investment

(Reuters; April 16) - Nigeria has sweetened the terms of a sweeping oil reform bill in a bid to attract much-needed investment to its oil industry, four people closely involved with the legislation said, and a letter from oil companies, seen by Reuters, showed. The proposed changes signal a shift by Africa's largest oil producer and show the impact of an increasingly competitive environment in the energy business after 2020's global oil price collapse and an expected shift to renewables.

Nigeria in 2019 fast-tracked a law to boost its take of offshore oil revenue. Industry experts said at the time it could put billions of dollars of offshore oil investments at risk. Now Nigeria has changed its stance in a move to balance immediate revenue demands with the need to lock-in long-term investment. The reform bill has been in the works for two decades, but the contentious nature of changes to the oil sector, which provides 90% of foreign exchange and almost half the budget, have sunk previous versions.

With political alignment between President Muhammadu Buhari and the National Assembly, the measure is expected to pass this year, though likely not before late May, the people said. The bill would lower the royalties for new production from deepwater oil fields to 5% from 7.5% and boost the production level that triggers higher royalties from 15,000 barrels per day to 50,000. For onshore and shallow water fields, it would reduce the hydrocarbon tax to 30% for converted leases, down from 42.5% in the original bill.

## Global oil stockpiles returning to normal as supply rebalances

(Bloomberg; April 18) - The unprecedented oil inventory glut that amassed during the pandemic is almost gone, underpinning a price recovery that's rescuing producers but costing consumers. Barely a fifth of the surplus that filled storage tanks of developed economies when oil demand crashed last year remained as of February, according to the International Energy Agency. Since then, the lingering remnants have been whittled away as supplies hoarded at sea plunge and a key depot in South Africa is depleted.

The rebalancing comes as OPEC and its allies keep vast swathes of production off-line and a tentative economic recovery rekindles global fuel demand. It's propping up international crude prices near \$67 a barrel, a boon for producers yet an increasing concern for motorists and governments wary of inflation. "Commercial oil inventories across the OECD are already back down to their five-year average," said Ed Morse, head of commodities research at Citigroup. "What's left of the surplus is almost entirely concentrated in China, which has been building a permanent petroleum reserve."

Working off the remainder may take more time, as OPEC+ is returning more production and new virus outbreaks in India and Brazil threaten demand. Still, the end of the glut appears in sight. Inventories in developed economies stood just 57 million barrels above their 2015-2019 average as of February, down from a peak of 249 million in July, the IEA estimates. It's a turnaround from a year ago, when lockdowns crushed world fuel demand by 20% and trading giant Gunvor fretted that storage space would run out.

#### BP will spend \$1.3 billion to reduce gas flaring in Permian Basin

(The Wall Street Journal; April 18) – BP has been one of the companies most responsible for the burning of unwanted natural gas in the busiest U.S. oil field. Now it is trying to clean up its act. The British oil giant plans to spend about \$1.3 billion to build a massive network of pipes and other infrastructure to collect and capture gas produced as a byproduct from oil wells in the Permian Basin of Texas and New Mexico. It plans to announce April 19 that it will eliminate routine gas flaring in the oil field by 2025.

BP's investment reflects the growing pressure big oil companies face from regulators, investors and buyers of gas to reduce the fossil fuel's carbon footprint and contributions to climate change. BP has pledged to reinvent itself as a cleaner energy company, saying it will let its oil and gas fuel production fall 40% by 2030 and ultimately sell more renewable energy than oil while reducing its net carbon emissions to zero.

Flaring is prevalent in the Permian because most producers drill for more profitable oil and often incinerate the gas that comes up as a byproduct because there isn't enough capacity to pipe and process all of the gas to get it to market. Flaring is also necessary in emergency situations to release gas to relieve pressure builds. But flaring is under increased scrutiny because it results in sizable greenhouse gas emissions. BP has more work to do in the Permian than its counterparts. As recently as 2019, it burned a higher proportion of the gas it produced than all but one other producer in the Permian, according to analytics firm Rystad Energy. The investment already appears to be making an impact. BP burned about 3.5% of the gas it produced in the second half of 2020, down sharply from 13% in the second half of 2019, according to Rystad.

## BP cut its greenhouse gas emissions when it left Alaska

(Bloomberg; April 14) - The chief executive officer of BP had something exciting to tell investors in September 2019. The fifth-largest multinational oil producer in the West had just inked a deal to sell everything it owned in Alaska, marking a sudden exit from a region the company had prized since the birth of the state 60 years earlier. The \$5.6 billion sale would help reduce BP's corporate debt, but that wasn't the only benefit. BP would be proudly shedding unwanted greenhouse gases, paving the way toward what would soon become its signature goal: zeroing out emissions by midcentury.

"There are going to be projects that we don't do, things that we might have done in the past — certain kinds of oil, for example, that have a different carbon footprint," then-CEO Bob Dudley said on the conference call. The divestiture would help the British supermajor meet its climate targets while it gradually reinvents itself as a clean-energy leader backed by sustainability-minded investors. It's one of two recent moves that allows BP to wipe at least a sixth of its 2019 emissions from future reports.

Not all crude is created equal, particularly as measured in planet-warming emissions. Some is trapped within sludgy sands that require energy-heavy refining. On Alaska's North Slope, each barrel of oil that BP extracted had double the average emissions from its portfolio, according to one third-party estimate based on how it is produced. With no place to go, North Slope methane gets put to use as an underground injection that squeezes out ever-shrinking quantities of oil. That's an energy-intensive process, and that made it an affront to the company's celebrated push to zero-out its emissions.

## China will export more refined products, pressuring its competition

(Bloomberg; April 16) - China's ever-expanding oil refining capacity will increase competition among refiners worldwide and weigh on their margins, the nation's biggest energy producer said. China's refining capacity will reach 6.6 billion barrels this year and rise to almost 7.2 billion by 2025, according to a report from Economics & Technology Research Institute, an affiliate of China National Petroleum Corp. Capacity will outstrip local demand by at least 1.1 billion barrels a year by 2025, CNPC said.

A frenzy of refinery building means China is on track to surpass the U.S. as the world's biggest crude processor this year, while a government drive to decarbonize the

economy will weigh on demand growth for fuels like diesel and gasoline later in the decade. The growing imbalance between growing supply and consumption in China is set to lead to an increase in its fuel exports, putting pressure on other suppliers in the global market. In the shorter term, worldwide refining margins will be under pressure.

#### Nova Scotia LNG developer says it is working to decide by June 30

(Reuters; April 15) - Canadian energy company Pieridae Energy said on April 15 it continues to work toward making a final investment decision by June 30 to build its proposed Goldboro liquefied natural gas export plant in Nova Scotia. That would allow the \$10 billion project to produce first LNG in 2025-2026. Pieridae has a 20-year agreement to sell all the LNG from Goldboro's first liquefaction train — about 5 million tonnes per year — to German utility Uniper. Pieridae said engineering firm Bechtel plans to deliver by the end of May a fixed-price proposal to build the plant.

Pieridae said a year ago it would delay making an FID until after Sept. 30, 2020, as government efforts to curb the coronavirus outbreak cut global economic growth and energy demand. Pieridae is one of several companies developing North American LNG export plants that have delayed projects in recent years as global gas prices dropped to the lowest levels in years in an oversupplied market in 2019, and then plunged to record lows in 2020 with the coronavirus-induced collapse in demand.

Money appears to be an issue. The developer, which would get its gas from Western Canada, asked Canadian officials in December for almost C\$1 billion as a grant, repayable contribution or loan guarantee. "Due to COVID and the inability to raise funds in the current ... energy markets in Canada and the U.S., government financial support is critical to moving the project forward," Pieridae said in a slide presentation. Goldboro is one of 13 North America LNG projects that have said they plan to make FID in 2021.

#### Environmental groups call on Biden to stop LNG exports

(New Jersey Spotlight; April 16) - More than 200 environmental groups from 27 states urged President Joe Biden to halt the export of liquefied natural gas from six ports and stop the development of almost two dozen more, including one in New Jersey. Activists including the New Jersey Student Sustainability Coalition argued in a letter to Biden on April 14 that LNG exports result in emissions at least as potent as coal in forming greenhouse gases, and are at odds with the climate policies of the new administration.

LNG exports stimulate the production of fracked natural gas whose main component, methane, is many times more powerful than carbon dioxide as a greenhouse gas, the letter said. "The expansion of LNG export capacity requires the proliferation of gas

drilling and fracking to feed the demand created by the export market," the letter said. "This induces new and expanded fracking and its infrastructure, such as pipelines and, with that, environmental destruction, public health harm, and climate damage."

In New Jersey, opponents of LNG exports are pressing to block a plan by New Fortress Energy to build a dock at Gibbstown on the Delaware River, where gas from Pennsylvania would be loaded onto tankers for shipment overseas. The Interstate Natural Gas Association of America said LNG exports actually help cut carbon emissions by promoting the use of cleaner-burning gas. The U.S. started exporting LNG in 2016 after the fracking boom accessed abundant domestic reserves of natural gas.

# Exxon in costly proxy fight with activist hedge fund

(Reuters; April 16) - ExxonMobil and a small activist hedge fund are waging a more than \$65 million proxy fight over board seats, with the largest U.S. oil producer marshalling executives, TV appearances, social media, and websites to rebut the challenge. The David-and-Goliath fight has Exxon determined to block Engine No. 1's four nominees at its May 26 shareholder meeting, while urging shareholders reject proposals to split its chairman and CEO roles, and block climate-related reports sought by other groups.

Exxon has out-promoted its tiny rival's \$30 million budget with spending the company expects will be about \$35 million above its usual proxy solicitation costs, according to regulatory filings. Its campaign includes more than 130 proxy-related filings through April 14, about four times as many as its rival, plus a website, Twitter posts, blogs, and employee forums. "Don't be deceived by a months' old hedge fund, Engine No. 1, that wants your company to pursue a vague and undefined plan — which we believe will jeopardize our future and your dividend," Exxon wrote to shareholders this week.

The hedge fund last year took on the oil producer for "significant underperformance" and criticizing its lagging approach to cleaner fuels. Exxon's historic \$22.4 billion loss last year, three debt downgrades in two years and continued reliance on fossil fuels for future results has led to "the staggering decline of a once-iconic American company," the hedge fund said. Exxon has sought to blunt the hedge fund's nominees by expanding its board. It also has pledged to increase low-carbon initiatives.

## Occidental buys credits to sell carbon-neutral oil cargo

(Reuters; April 16) - In January, Occidental Petroleum announced it had accomplished something no oil company had done before: It sold a shipload of crude that it said was 100% carbon-neutral. While the 2-million-barrel cargo to India was destined to produce more than a million tons of planet-warming carbon over its lifecycle, from well to tailpipe,

the Texas-based driller said it had completely offset that impact by purchasing carbon credits under a U.N.-sponsored program called CORSIA.

Carbon credits are financial instruments generated by projects that reduce or avert greenhouse-gas emissions such as mass tree plantings or solar power farms. The projects' owners can sell the credits to polluting companies, which then use them to offset their carbon emissions. Two sources involved in the Occidental deal told Reuters that the producer paid about \$1.3 million for the credits — or about 65 cents per barrel. Oil currently sells for more than \$60 a barrel.

Occidental and the U.N. program say such credits make the oil cargo carbon-neutral because they represent an equivalent amount of greenhouse gas removed from the atmosphere by the projects generating the credits. It's a growing trend. Oil and gas companies are increasingly trying to market their products as cleaner using several methods, including buying credits, powering drilling with renewable power and investing in expensive and commercially unproven technology to capture and store emissions.

## Total looks to make its LNG more acceptable in low-carbon world

(S&P Global Platts; April 13) - French energy major Total said April 13 it is working with Germany's Siemens Energy to study ways to reduce carbon emissions in LNG production, amid similar efforts by North American exporters and liquefaction terminal developers. The global transition to greater use of cleaner-burning fuels has presented challenges for LNG producers in securing buyers of their supplies and addressing the impact on their growth in a future of lower demand for fossil fuels after 2040.

Some market participants are taking proactive measures to make their LNG more palatable to regulators, bankers and end-users. Total, with a significant LNG portfolio that is expected to reach 50 million tonnes per year and a global market share of about 10% by 2025, has a big role to play in Europe and also in the U.S. and Mexico, where it is both a producer and an offtaker.

"Reducing its carbon footprint is essential for LNG to play its role fully in the energy transition," Total's upstream chief Arnaud Breuillac said in a statement. The agreement between Total and Siemens is a technical collaboration designed to deliver "industrial-stage" solutions. These include combustion of clean hydrogen in gas turbines, competitive all-electrical liquefaction, optimized power generation, and the integration of renewable energy in liquefaction plants' power systems.

## Tokyo Gas promotes sale of carbon-neutral LNG

(S&P Global Platts; April 13) - Tokyo Gas has signed up 2.5 billion cubic feet a year of carbon-neutral city gas supply customers — with its latest deliveries starting this month — as it sees great potential in the growing demand for carbon-neutral liquefied natural gas. "Carbon-neutral LNG is ... a capable solution to date (toward decarbonization), and we expect to see an increase in requirements from end-users, which are seeking highly effective measures by 2030," a spokesman told S&P Global Platts on April 13.

Tokyo Gas started carbon-neutral gas deliveries April 1 to the Yakult Central Institute, marking the first introduction of carbon-neutral city gas supply in the beverage industry. Under the five-year supply deal to 2026, the Yakult Central Institute will switch all of its supply to carbon-neutral gas. The move by Tokyo Gas comes as the Ministry of Economy, Trade and Industry has directed industry of the need to decarbonize their heating demand as the country heads toward carbon neutrality by 2050.

Carbon-neutral LNG has been identified as among possible measures for decarbonizing Japan's consumer and industrial sectors as heating demand accounts for roughly 60% of the energy consumption in the sectors. Tokyo Gas in July 2019 received its first carbon-neutral LNG cargo of about 3.3 billion cubic feet of gas from Shell, following the signing of an agreement under which Shell's carbon credits will be used to compensate the full carbon dioxide emissions generated from exploring and producing the gas.

#### Japanese companies look at methane as marine fuel

(Bloomberg; April 14) - Some of the biggest industrial companies in Japan are working on a project that could trigger a wave of investment into one of the most controversial forms of carbon capture: methanation. Shipping giant Mitsui OSK Lines is leading a group of nine companies including Nippon Steel to assess the viability of producing and using methane to power "zero-emission ships" instead of burning liquefied natural gas or other fossil fuels, including a fleet that would transport carbon dioxide for processing.

Methanation is "the most realistic solution" for OSK to achieve net-zero emissions by 2050, CEO Takeshi Hashimoto said. The challenge for the next 10 or 20 years is whether the company can turn the technology into a sustainable and practical solution by reducing costs, he said. Discovered over a century ago by French chemists, methanation is a two-part process to convert carbon dioxide and hydrogen into methane. The hydrogen can be produced by splitting water using renewable energy such as wind or solar. The methane can be as a fuel in ships or power plants.

The costs of producing and transporting the gases and the technical hurdles have so far kept the process largely at an experimental level. That may change as demand for carbon-neutral energy increases. For shipping, the task of finding an emission-neutral fuel is critical because onboard solar and wind systems don't generate enough energy

to propel large vessels. The group is conducting a life-cycle assessment of methanation and "is working to remove difficulties step by step to make the technology feasible," said Hirohiko Oyabu, an assistant to the director of the shipping line's technical division.

#### Mining company tries out biofuel in oceangoing bulk carrier

(Reuters; April 15) – Mining company BHP Group said April 15 it completed its first refueling of a ship with biofuel this month in a trial run that is part of its efforts to reduce carbon emissions. It was also the first time that a ship has been refueled with biofuel in Singapore, the world's largest bunkering hub. A biofuel blend derived from certified sustainable feedstock sources such as cooking oil, crude tall oil (a byproduct of wood pulp manufacturing), and sewage sludge was used on April 4 to refuel the 81,000-deadweight-tonne dry bulk carrier Kira Oldendorff on its way from Australia to Europe.

The blend required no significant modifications to the engine or other components, a BHP spokesman said. The mining giant is exploring the use of fuels such as liquefied natural gas and biofuels to replace fuel oil, aiming to reduce carbon emissions by 40% when shipping its ore products as part of the company's climate change goals for 2030. The biofuel blend used is said to reduce well-to-exhaust CO2 emissions by 80% to 90% compared with conventional residual fuel oils, BHP said in a statement.

The spokesman said the biofuel was tested for several days during the vessel's voyage. He declined to comment on the price of the biofuel. The shipping industry is examining a range of technologies as it looks to meet an International Maritime Organization target of a 50% reduction in overall greenhouse gas emissions from 2008 levels by 2050. The biofuel was supplied by Netherlands-based GoodFuels in partnership with German shipping group Oldendorff Carriers and the Maritime and Port Authority of Singapore.

#### German utility may convert unused coal plant to hydrogen terminal

(Reuters; April 14) - German utility Uniper is studying the conversion of its coal-fired power plant site at Wilhelmshaven on Germany's North Sea coast into an import and electrolysis hub to tap into emerging demand for "green" hydrogen. Policymakers in Europe aim to produce green hydrogen from renewable power through electrolysis, to replace coal and gas-based hydrogen and open up new areas of usage to substitute oil products across manufacturing industries, heating, and transport.

Wilhelmshaven was retired in December under an agreed exit from carbon-emitting coal, while Germany will accelerate the buildup of renewable electricity and low-carbon hydrogen to reach climate protection goals. Uniper, which has committed itself to a

more eco-friendly course, said April 14 that Wilhelmshaven's transformation could provide 10% of German hydrogen demand by 2030.

Uniper said the project could come on stream in the second half of this decade. A 410megawatt electrolysis plant would supply hydrogen to local industry and the national hydrogen network. The terminal and electrolysis plant together could supply 295,000 tonnes of green hydrogen, providing Germany with a pillar of supply.

## Total postpones drilling at offshore South Africa gas block

(Reuters; April 14) - French oil major Total has decided to postpone its application for additional drilling in a South Africa offshore gas block, according to a letter seen by Reuters from the consultancy conducting the environmental and social assessment. The delay is a potential blow to South Africa as it seeks to reduce its reliance on coal and increase the use of natural gas and renewables in its energy mix.

More than 80% of the power supplied in South Africa comes from coal-fired plants, making it one of the world's biggest carbon dioxide emitters. The government has suggested that gas from Total's fields could eventually be used as feedstock at South Africa's ailing 45,000 barrel per day gas-to-liquid refinery at Mossel Bay, which has run out of domestic gas feedstock.

Total discovered two large gas fields, Brulpadda and Luiperd, about 110 miles off the southern coast. "This letter serves to notify you that Total ... has decided to postpone their application for the additional drilling and associated activities in Block 11B/12B at this time," said the letter from the SLR environmental consultancy to stakeholders, dated April 13. An official at SLR Consulting declined to provide reasons for the delay.