Oil and Gas News Briefs Compiled by Larry Persily February 27, 2020

Era of Canadian oil sands megaprojects may be coming to an end

(Bloomberg; Feb. 25) - Canada's oil sands industry may have built its last big mine. The cancellation of Teck Resources' C\$20 billion Frontier project in Alberta epitomizes the struggles of an industry that has seen most foreign investors flee. It is not clear that any other proposed mine would be able to clear the hurdles that felled Frontier, possibly marking the end of an era of megaprojects that transformed North America's energy landscape by turning Canada into the top crude supplier to the U.S. Investors poured more than C\$200 billion into oil sands projects during the boom of 2004-2014.

"This may be the nail in the coffin," said Laura Lau, who helps manage C\$2 billion (US\$1.5 billion) in assets at Brompton Corp. in Toronto. "I would expect some smaller projects would have a better chance going through." On top of middling oil prices, a pipeline capacity shortage in Canada and heightened competition from U.S. shale, the oil sands have become a particularly shunned industry in a world of rising concerns about climate change, leading some major investment funds to divest their holdings.

And with speculation that oil demand could peak in 10 years or so, companies are growing increasingly wary of committing to multibillion-dollar projects requiring decades to pay out. The oil sands have drawn the ire of environmental activists because of the region's vast open-pit mines that require clearing forests, produce massive lakes of wastewater, and consume more energy than other ways of extracting oil. Refining the sticky bitumen scooped from some mines in upgraders is also very carbon intensive.

Calgary suffers as oil and gas companies cut back or pull out

(Wall Street Journal; Feb. 25) - The steel-and-glass skyscrapers at the core of downtown Calgary once stood as a testament to the rise of Canada's oil-and-gas industry. Now more than a quarter of the space in the buildings is empty. In December the unemployment rate, at 7.5%, was the highest among Canada's largest cities. The city's economy is tied to oil and gas, which has been punished by a collapse in prices as supply from the booming U.S. shale industry has crowded out Canada's heavy crude.

Producers are having trouble even getting their oil to market as pipeline companies struggle to build new arteries to transport the crude amid a heated public debate over climate change. In recent weeks climate activists and indigenous groups blockaded Canada's rail network and disrupted the country's supply chain to protest a gas pipeline being built in British Columbia. Then on Feb. 23, Teck Resources said it would

abandon a plan to build a new oil sands mine in the northern reaches of Alberta, citing Canada's inability to reconcile resource development and environmental policy.

In October, oil-and-gas producer Encana — since renamed Ovintiv — said it would move its corporate headquarters from Calgary to Denver to make it easier for U.S. funds to buy its stock. Since June several companies have announced layoffs in the city, including Repsol, China National Offshore Oil Corp., and Husky Energy. In recent years foreign companies like Shell, ConocoPhillips and Norway's Equinor have pulled out citing concerns about expenses and greenhouse-gas emissions from the oil sands.

BP will quit industry lobbying groups over climate change policies

(Reuters; Feb. 26) - BP will leave the main U.S. refining lobby and two other trade groups as new Chief Executive Bernard Looney pushes some of the oil sector's most ambitious targets for curbing carbon emissions. The decision follows a review of BP's membership in more than 30 associations around the world, which Looney said in a post on Instagram was aimed at boosting people's trust in the oil and gas company.

"BP will pursue opportunities to work with organizations who share our ambitious and progressive approach to the energy transition," Looney said in a statement. BP said its view on carbon pricing, which it says is key in the energy transition, were "at odds" with those of the American Fuel & Petrochemical Manufacturers (AFPM), which has around 300 members. "Currently we have no areas of full alignment," BP said.

BP will also not renew its membership in the Western States Petroleum Association and Western Energy Alliance. BP has called for placing a price on carbon emissions in order to push out the most polluting fossil fuel production including coal and to encourage investment in renewable energy. Shell and Total last year both said they would not renew their memberships in the AFPM. BP is one of the largest U.S. refiners and petrochemical producers and fuel retailers.

Ontario police take down anti-pipeline rail blockade

(Natural Gas Intelligence; Feb. 25) - After standing aside during 17 days of fruitless truce talks, police Feb. 24 took down an Ontario railway blockade that eastern Canadian indigenous rights crusaders had erected to support western tribal protests against the Coastal GasLink gas pipeline project. Ontario Provincial Police enforced a court injunction against a Mohawk barricade on the Canadian National Railway mainline at Belleville, 162 miles southwest of Ottawa. Police arrested 10 protesters.

CN prepared to resume running trains after a track safety inspection. The blockade had crippled freight and passenger service across eastern Canada, causing 1,500 railway

worker layoffs and interrupting industry and retail supply chains. The protesters were supporting opponents of TC Energy's C\$6.6 billion pipeline that will feed the liquefied natural gas export project under construction in Kitimat, British Columbia.

Coastal GasLink construction is back on schedule in British Columbia after the Royal Canadian Mounted Police enforced an injunction earlier this month against interference by the heads of the Unist'ot'en and Dark House clans of the Wet'suwet'en tribe. The hereditary chiefs argue TC Energy needs their consent for the pipeline route through tribal lands, but the developer counters that it obtained consent from the First Nation's elected council. The hereditary chiefs claim it is their decision, not the council's.

Coal use could peak in the next couple of years

(Reuters commentary; Feb. 21) - Glencore, the world's biggest commodities trader, had a bad week partly because the Swiss company's most profitable business — coal — is no longer getting a lot of love among investors and energy buyers. The grubby, planetwarming fuel is far from dead but, mercifully, the date for "peak coal" may finally be within reach. Glencore is a mining and trading powerhouse. It is the top producer and exporter of thermal coal (coal burned in electricity plants) and makes fortunes from it.

But the world is beginning to conspire against coal. Carbon taxes are rising and coal prices are falling, largely because of the glut of liquefied natural gas, a competing fuel with a lower carbon footprint. On Feb. 18, when it published last year's results, Glencore revealed a goodwill impairment of almost US\$1 billion on its Colombian coal operations. That write-off, combined with US\$1.8 billion in other goodwill charges, left Glencore with a net loss of US\$400 million. In the past year it has lost a quarter of its market value.

Some investors and analysts think it's time for Glencore and other big mining houses to ditch their coal assets by selling them or spinning them off into separate businesses. If they don't, they risk being blacklisted by ever-larger groups of investors whose buying and selling decisions are based on environmental, social, and governance concerns. Coal is an automatic minus on any such list. As the price of renewable energy and gas continues to fall, and as pressure mounts on countries that signed the Paris climate agreement to cut carbon emissions, coal use could peak in the next couple of years.

Pakistan considers canceling long-term LNG supply deals

(Bloomberg; Feb. 25) - Pakistan's main buyer of liquefied natural gas is considering canceling two long-term contracts as a slump in spot prices creates opportunities for cheaper supply, according to sources. State-owned Pakistan LNG is considering the possibility of exercising termination clauses in contracts it signed with LNG producer Eni

and trader Gunvor Group in 2017, according to the sources. No final decision has been made and the company is seeking input from the Ministry of Energy, the sources said.

Canceling both deals may cost the Pakistani firm nearly \$300 million in penalties, according to Bloomberg calculations. A glut of new LNG supply and sputtering demand growth have sent spot prices to record lows, below \$3 per million Btu this month, straining more expensive long-term supply deals linked to oil prices. The oversupply may persist over the next few years, analysts including Morgan Stanley forecast, stoking speculation that buyers will be pressuring sellers for revisions to term contracts.

The two term deals are linked to oil at a rate that prices cargoes at more than double what's currently available through the spot market. The Gunvor contract, which runs for five years to June 2022, is priced at 11.62% of Brent or about \$7.42 per million Btu, according to Bloomberg calculations using the average of November to January. The Eni contract, which runs to 2032, is priced about the same. Versus current spot-market prices, Pakistan is paying about \$15 million more per cargo under the contract terms.

Cheniere says it is struggling to sign up long-term LNG buyers

(Financial Times; London; Feb. 25) - America's largest exporter of liquefied natural gas said it is struggling to sign long-term contracts with potential buyers as a result of turmoil in the market, throwing into question plans to expand its export facility on the Texas coast. The comments Feb. 25 from Cheniere Energy highlighted mounting problems for the more than a dozen companies vying to export more U.S. LNG.

LNG prices have plunged because of oversupply, and buyers are happy to snap up the fuel as needed on the international spot market rather than lock themselves into 15- or 20-year deals. "Whether it be the coronavirus or a warm winter, the whole sense of urgency from the customers who sign long-term contracts has dropped," Cheniere CEO Jack Fusco told analysts as the company reported fourth-quarter results. Cheniere indicated it could delay a decision on expansion of its export facility at Corpus Christi, Texas. Binding contracts are critical to obtaining loans for the project.

"I do think that market will be tougher for us to continue to get our fair share of those contracts and be able to commercialize stage three at this point," Fusco said. A final investment decision would be made in 2020, Cheniere said. The oversupply has emboldened utilities and power generators to buy more gas on the spot market. "Better pricing and more flexibility have superseded security of supply on the priority list," said Ira Joseph, head of gas and power analytics at S&P Global Platts.

Cheap spot LNG versus costly contract prices a problem for India

(Reuters; Feb. 24) - India's top gas utility GAIL (India) sees the falling spot price of liquefied natural gas as the biggest risk to its business, its chairman, Manoj Jain, said Feb. 24. Spot prices of LNG in Asia hit a record low around \$3 per million Btu this month, making supplies of gas under previously agreed long-term deals unattractive for price-sensitive customers in India. GAIL overcommitted to LNG volumes through long-term deals with the U.S. and Russia earlier this decade when supply was scarce and buyers rushed to secure deals. Spot prices at that time were in the double-digits.

"The biggest risk is about the present prices of gas. ... The gap between spot and long-term is widening and that is a cause of concern for us," Jain said. GAIL had resold most of its LNG purchases under the long-term deals, he said, but up to 30% is still an open position. GAIL has deals to buy 5.8 million tonnes per year of LNG from U.S. suppliers and up to 2.5 million tonnes of LNG a year from Russia's Gazprom. The landed price of LNG under the deal with Gazprom — linked to oil prices — is currently around \$7.50.

GAIL renegotiated its contract with Gazprom in 2018. "We are looking at it and at an appropriate time we will make a commercial call," Jain said, when asked if GAIL would try to renegotiate deals with the U.S. and Gazprom. "There is a need to realign the long-term contracts looking at the current situation." The costly LNG under the term contracts presents a challenge for GAIL and other buyers that can procure the fuel at much lower cost on the spot market — though spot prices can be volatile if the oversupply dries up.

Saudis plan start-up of new gas field by 2024

(Reuters; Feb. 22) - Saudi Aramco said Feb. 22 it had received regulatory approval to develop Saudi Arabia's Jafurah non-associated gas field and expects production to start in early 2024. It said output would reach around 2.2 billion cubic feet per day of sales gas by 2036 with an associated 425 million cubic feet per day of ethane. The field also would produce some 550,000 barrels per day of gas liquids and condensates.

Gas resources in the Jafurah, the largest unconventional non-associated gas field in the kingdom, are estimated at 200 trillion cubic feet of raw gas, the company said. Aramco plans to invest \$110 billion to develop Jafurah, state news agency SPA said, and cited Saudi Crown Prince Mohammed bin Salman as saying the field's development would provide the state with annual net income of \$8.6 billion over 22 years.

Jafurah is the world's largest conventional oil field. Unconventional gas refers to reserves requiring advanced extraction methods, such as those used in the shale gas industry. Non-associated gas is not a by-product of oil output.

Saudis unlikely to become gas exporter, even with new field

(S&P Global Platts; Feb. 24) - Saudi Arabia is unlikely to start exporting gas despite plans to invest \$110 billion to develop its biggest unconventional gas field, although the asset could help wean the kingdom off burning crude for power generation, analysts said. Saudi Energy Minister Prince Abdulaziz bin Salman has previously said the kingdom will be able to become a future gas exporter, and over the weekend plans were announced to develop the Jafurah field, estimated to hold 200 trillion cubic feet of gas.

State-owned Aramco said it plans to start production in 2024 and reach 2.2 billion cubic feet a day of sales gas by 2036. The field in the oil-rich eastern province also is expected to produce 425 million cubic feet per day of ethane, which represents 40% of Saudi's current production, and 550,000 barrels a day of gas liquids and condensate.

"Saudi Arabia is still burning around 400,000 barrels per day of oil for power generation on top of large volumes of fuel oil and diesel," said Siamak Adibi, head of the Middle East gas team at consultancy FGE. "If they proceed with an aggressive fuel switching (to gas) to bring direct crude oil burning to near zero, there will be not much surplus gas for exports." Aramco produced 8.9 bcf per day of gas in 2018, a nearly 20% increase from 2013. The kingdom has been ramping up exploration for gas with a view to freeing up oil and oil products currently used for power generation for export.

Oil Search director has hope for Papua New Guinea LNG expansion

(Financial Times; London; Feb. 23) - Plans to double Papua New Guinea's gas output could be revived, said the outgoing head of resources company Oil Search, who expects an eventual deal between oil majors and the Pacific Island nation. Peter Botten, who will stand down as managing director of the Australian-listed Oil Search on Feb. 25, said he was optimistic that talks between ExxonMobil, Total, Oil Search, and government authorities could still result in the \$13 billion LNG expansion going ahead.

But he warned there was a risk that the deadlock in negotiations could cause the companies to turn their attention to competing projects. "We started off two years ago being toward the front end of the [development] queue. Now we're toward the back end of the queue and pricing, and the market, is changing," said Botten, who has led Oil Search for a quarter of a century. In that time the company has grown from a A\$250 million minnow into a A\$10 billion company.

Oil Search owns 29% of PNG LNG, an Exxon-operated plant that is part of negotiations to double the country's gas exports to 16 million tonnes a year by 2024 by tapping new fields. Talks between Exxon and the government stalled last month over financial terms to develop the P'nyang gas field, a big part of the project. The government said Exxon was unwilling "to agree reasonable terms." Botten suggested the companies have room

to improve their terms. Botten described Oil Search's role as a "marriage guidance counselor" between the oil majors and the government.

Oil Search pressing for Exxon, Papua New Guinea to revive talks

(Reuters; Feb. 25) - Oil Search is pressing to revive talks between ExxonMobil and the Papua New Guinea government over a \$13 billion plan to double the country's liquefied natural gas exports, the company's new boss said Feb. 25. Oil Search CEO Keiran Wulff said he hoped negotiations could resume "within weeks" between its partner Exxon and the state. The government ditched talks with Exxon in January over terms for developing the P'nyang gas field to feed an expansion of Exxon's PNG LNG plant, amid a push to reap more benefits from resources for the impoverished South Pacific nation.

"We would hope to see some sort of formal negotiations recommence between Exxon and the state negotiating team within a reasonable period of time," Wulff told Reuters in an interview after the company released earnings Feb. 25. "We're hopeful that it's weeks. We don't think it'll be months," he said. Oil Search's growth prospects are largely tied to a combined plan to develop the P'nyang field and a Total-led gas project that combined would feed three new liquefaction units at Exxon's LNG plant.

All the partners want a three-train development, Oil Search said, as sharing infrastructure would be the most efficient way to develop the new fields and more than double the country's LNG output to about 16 million tonnes per year. ExxonMobil had no immediate comment, but Chief Executive Darren Woods said earlier this month the company hoped to revive talks on P'nyang to get to a "win-win proposition."

Continued drop in oil prices could put strain on Russian economy

(Nikkei Asian Review; Feb. 22) - The biggest trade concern for Russia is that the coronavirus outbreak could send oil prices tumbling. China's oil demand has fallen 20% since the outbreak of the epidemic in late January, a development that has unnerved global markets. The global benchmark Brent crude fell from a high of \$69 a barrel in January to below \$57 a barrel on Feb. 18. Prices could collapse even further unless the outbreak is reined in over the next couple months, warned Alexey Belogoryev, deputy director of energy studies at the Moscow-based Institute for Energy and Finance.

"If the epidemic continues into May or June, then the price of oil will definitely fall below \$50 and OPEC won't be able to stop it because China is the primary expanding market and it therefore exerts a major influence on [global] demand," Belogoryev said. "A fall in oil prices means lower revenues from oil for our (Russian) companies and a worsened

trade balance. It also would put downward pressure on the ruble, which will provide further risks to many sectors of the Russian economy."

Chevron's reserve-replacement ratio worst since 2010

(Bloomberg; Feb. 23) - Chevron's future growth prospects may be dimming after the oil explorer pumped more crude than it discovered or bought last year, eroding its portfolio of untapped fields. New finds, acquisitions and expansions of existing oil and gas holdings were equivalent to just 44% of Chevron's 2019 production, said a regulatory filing Feb. 21. It was the company's poorest performance in that key metric since 2010.

The measure, known as the reserves-replacement ratio, is important for investors because it helps them gauge whether a company is doing enough to sustain future production that underpins everything from dividends to buybacks to acquisitions. For Chevron, the data signals the company may be struggling to locate untouched caches of oil and gas as investors are increasingly skeptical of the industry's sustainability.

Shell said last month that it replaced just 65% of its 2019 output with new discoveries and purchases. And some analysts expect ExxonMobil to take a write-down on some fields when it discloses reserves data in coming weeks. Chevron CEO Mike Wirth made financial discipline his mantra upon taking the top job two years ago. But analysts have questioned whether the company has sufficient projects-in-waiting to increase production through the late 2020s.

Schlumberger chief sees slower growth in U.S. oil output

(Reuters; Feb. 25) - The growth in U.S. shale oil production will slow to 600,000 to 700,000 barrels per day in 2020 and to 200,000 in 2021, the chief executive of U.S. oil field services giant Schlumberger said Feb. 25. U.S. oil output has surged over the past three years to some 13 million barrels per day, making the country the world's biggest producer of crude oil. But lower oil prices and investor demand for higher returns have forced producers to scale back investment and plans to boost production.

"Next year it will be 200,000 barrels per day," Olivier Le Peuch told Reuters on the sidelines of a conference in Riyadh, adding that was his estimate as of now. U.S. shale growth would then plateau and not return to the expansion of the past three to five years unless new technology to lower costs attracts another wave of investment, he said earlier in a panel discussion at the conference. "Shale production growth will go to a new normal ... unless technology helps us crack the code," he said.

Maritime shipping regulator may ban heavy fuel oil in the Arctic

(The Canadian Press; Feb. 22) - The global body that regulates shipping is moving to eliminate a highly polluting fuel in the Arctic. But environmentalists say the International Maritime Organization proposal is so full of loopholes that heavy fuel oil will go on being burned for another decade. On Feb. 21, the IMO passed a draft regulation to ban use of heavy fuel oil in the Arctic by 2024. But it allows Arctic nations to exempt their own ships from the ban for five more years, said Andrew Dumbrille of the World Wildlife Fund.

Research by the International Council on Clean Transportation suggests most ships in the Arctic burn the fuel. It is considered a major spill risk because it is so thick that it is very difficult to clean up. The fuel is also a major source of black carbon, a type of soot that settles on sea ice and snow, darkening it and hastening its melt. The same research by the transportation council found about two thirds of black carbon emissions attributable to Arctic shipping in 2015 were from burning heavy fuel oil.

The fuel has long been banned in the Antarctic. Canada supported a total ban coming into force in 2024, but Dumbrille, who was at the meetings in London, said the five-year loophole was drafted to get Russia to sign. "Russia wasn't going to sign on to the ban until the domestic waiver was put in place," he said. Russian carriers used 56% of the heavy fuel oil burned in the Arctic in 2015, says the council. Canada comes next, at 6%. The IMO will consider final ratification of the ban at a meeting in October.

FERC decides to keep oil line tariff structure for annual rate increases

(S&P Global Platts; Feb. 20) - The Federal Energy Regulatory Commission on Feb. 20 ended consideration of a potential overhaul of how oil pipelines set their rates, a decision welcomed by pipeline owners that want to keep the current indexing system that allows annual rate increases. It has been longstanding FERC policy to set a ceiling on oil pipeline rates, allowing owners to raise fees up to that limit and forcing shippers to bring complaints to FERC when they think the rates exceed actual costs of service.

FERC reviews the index every five years to ensure it corresponds to industry-wide oil pipeline cost changes. The commission will consider a new rate-escalation index later this year for the five-year period starting July 1, 2021. Several oil producers and other pipeline customers had urged the commission to adopt a cost-of-service rate structure closer to those used in the electricity transmission and natural gas pipeline sectors.

In October 2016, FERC launched an advance notice of proposed rulemaking to investigate oil shippers' complaints about pipeline tariffs and potentially modify data reporting requirements intended to help the commission ensure that oil line rates better reflect costs. The Feb. 20 vote shut down that rulemaking effort. The vote was 2-1.

Equinor drops drilling plans for controversial area offshore Australia

(BBC; Feb. 25) - Oil giant Equinor has abandoned controversial plans to drill in the Great Australian Bight in a move hailed by environmentalists as a "huge win." The Norwegian firm was given approval in December to begin exploratory drilling in seas off South Australia. But it told regulators Feb. 25 that the plan was "not commercially competitive" compared to options elsewhere. Australia's government said the withdrawal is disappointing.

The Great Australian Bight is said to be one of the most unspoiled marine environments in the world. Green groups have sought for decades to protect it, but Canberra has been open to extracting the possible oil riches there. Equinor is now the latest company to have abandoned proposals for drilling in the area since 2016, following competitors BP, Chevron and Karoon Energy. The decision has been welcomed by activists and lawmakers who argued that oil and gas drilling would threaten wildlife and the climate.

Equinor said a review of its global exploration portfolio showed better opportunities for new fields elsewhere. The Great Australian Bight is a large open bay, roughly in the middle of the continent's vast southern edge. Whales come to give birth, and it's a refuge for sea lions, dolphins, and penguins. It was, until the decision, also a frontline in a battle between the global resources sector and an alliance of anti-drilling protesters.