# Oil and Gas News Briefs Compiled by Larry Persily January 21, 2021

# Alberta looks to sell pipe to recoup investment in Keystone XL

(Bloomberg; Jan. 20) - The Canadian province that invested US\$1.1 billion of taxpayers' money in the controversial Keystone XL oil sands pipeline project is now considering the sale of pipe and other construction materials to try to recoup some of its funds. "If the project ends, there would be assets that could be sold, such as enormous quantities of pipe," Alberta Premier Jason Kenney said in a press conference Jan. 18.

With Joe Biden set to be sworn in this week, the U.S. president-elect's campaign promise to cancel the pipeline's license is haunting the Canadian oil sands industry. Meanwhile, the government of Canadian Prime Minister Justin Trudeau has vowed to defend the project. Alberta, home to the world's third-largest crude reserves, has struggled for years with a lack of pipeline capacity to ship its crude to the U.S. Gulf Coast and other markets. TC Energy's Keystone XL was one of the possible pipelines the industry was counting on to solve that capacity shortage.

The cancellation of Keystone XL would cost Alberta taxpayers, Kenney said. In March, Kenney's government agreed to fund the first year of construction with a US\$1.1 billion provincial investment and to guarantee US\$4.2 billion of loans as a way to jump-start construction. The province and TC Energy have a "solid legal basis" to recoup damages through the courts, Kenney said. Pipeline segments have been stacked along the route for years, waiting for the line to survive legal challenges and proceed to full construction.

# Work stops on Keystone XL pipeline as Biden revokes permit

(The Associated Press; Jan. 20) - Construction on the long-disputed Keystone XL oil pipeline halted Jan. 20 as President Joe Biden revoked its federal permit on his first day in office. The 1,700-mile pipeline was planned to carry more than 800,000 barrels of oil a day from Alberta to the Texas Gulf Coast, passing through Montana, South Dakota, Nebraska, Kansas, and Oklahoma. "The permit is hereby revoked," Biden's executive order said. "Leaving the Keystone XL pipeline permit in place would not be consistent with my administration's economic and climate imperatives."

Keystone XL President Richard Prior said more than 1,000 jobs will be eliminated in the coming weeks. "We will begin a safe and orderly shutdown of construction," he said. First proposed in 2008, the pipeline has become emblematic of the tensions between economic development and curbing the fossil fuel emissions that are causing climate

change. The Obama administration rejected it, but President Donald Trump revived it and has been a strong supporter. Environmental groups applauded Biden's move.

The premier of oil-rich Alberta called Biden's decision an "insult" and said the Canadian government should impose trade sanctions if it is not reversed. Canadian Prime Minister Justin Trudeau took a conciliatory tone. "We are disappointed but acknowledge the President's decision to fulfil his election campaign promise on Keystone XL," Trudeau said in a statement. The project is meant to expand critical oil exports for Canada, which has the third-largest oil reserves in the world and is America's No. 1 source of foreign crude. Oil sands producers need the additional pipeline capacity to reach markets.

# Biden faces several major litigation decisions on oil and gas issues

(E&E News; Jan. 15) - Legal experts will be watching to see what happens with courtroom battles over major oil and gas projects and the Trump administration's regulatory rollbacks when President-elect Joe Biden takes office. Pending litigation over land grabs and water permits for energy operations have the potential to draw the attention of the U.S. Supreme Court. And the new administration will need to contend with a string of lawsuits challenging Trump's efforts to weaken energy and climate rules.

"What will be interesting is to see how the new Biden administration handles litigation that has already been filed against the midnight regulations," said Robert Percival, director of the environmental law program at the University of Maryland. Biden may circumvent the courts in some cases if he chooses to take swift action to block controversial projects like the Keystone XL oil line.

It is less clear what action Biden may take on the Dakota Access pipeline, which is operating without a key easement. The Interior Department could use its enforcement discretion to stop oil flowing through the pipeline at any point, as a district court decision to revoke the line's permit remains under review in the U.S. Court of Appeals for the D.C. Circuit. Biden also will have to decide whether his administration will change course on issues such as rollbacks of energy efficiency standards for appliances, as well as deregulation of greenhouse gases from power plants and the oil and gas sector.

# French central bank will exit coal, limit oil and gas investments

(Reuters; Jan. 18) - The French central bank said Jan. 18 it would exit from coal and limit exposure to gas and oil in its investment portfolio by 2024 as part of a shift toward more environmentally friendly assets. Many central banks have committed to green up their investment portfolios as part of a push to encourage the financial system to support a less environmentally damaging economy.

The Bank of France manages 22 billion euros (\$26.6 billion) of its own portfolio investments separately from asset purchases related to its monetary policy operations. It said in a statement that by the end of this year it would no longer invest in companies that generate more than 2% of their revenues from coal and reduce the threshold to zero by the end of 2024. Currently, the threshold stands at 10%.

It said it would also exclude by 2024 companies with more than 10% of their revenue coming from oil or 50% from gas, which could potentially mean the central bank would have to shun group's like French energy major Total. Already starting this year, the central bank said it would turn its back on companies that derive 10% of their revenues from shale oil or gas, oil sands, or exploration in the arctic or deep water.

#### Oil and gas spending will take years to recover, Wood Mackenzie says

(The Wall Street Journal; Jan. 17) - Oil and gas prices are rebounding from pandemic lows, but the road ahead for the industry remains challenging amid new competitive threats and demands from investors. Global spending on production is poised to remain below pre-pandemic levels through at least 2025, according to consulting firm Wood Mackenzie, as companies face pressure to improve returns and reduce greenhouse-gas emissions. Meanwhile, investment in renewables and other clean-energy technologies is taking off, threatening to eat into the market for oil and gas long-term.

Though oil prices have notched gains since November, they're expected to remain below levels that support attractive returns, particularly for an industry still recuperating from last year's historic drop in fuel demand. As a result, companies aren't rushing back into drilling. A third of oil producers surveyed by the Dallas branch of the Federal Reserve in the fourth quarter said they planned to raise capital spending only slightly this year. About half said they would either keep spending flat or trim investments.

Over the next five years, global oil spending is projected at a little more than half of what companies invested in the first half of the 2010s, Wood Mackenzie said. The slowdown comes as investors explore alternatives such as solar and wind power, which have seen costs drop dramatically in recent years, and emerging technologies such as battery storage and biofuels. Non-fossil-fuel investments will climb to an annual average spend 50% higher than projected for oil, gas and coal, the International Energy Agency said.

# FERC says Oregon LNG project developer needs state permit

(The Associated Press; Jan. 19) - Plans for a liquefied natural gas export terminal and pipeline in Oregon hit a snag Jan. 19 with federal regulators after a years-long legal battle that has united tribes, environmentalists, and a coalition of residents against the

proposal. The Federal Energy Regulatory Commission ruled the developer could not move forward without a key clean-water permit from the state of Oregon. FERC gave its tentative approval to the gas pipeline last March as long as it secured the necessary state permits, but the Canadian pipeline company has been unable to do so.

The developer had appealed to the commission over the state permit, arguing that Oregon had waived its authority to issue a clean-water certification for the project and therefore its denial of the permit was irrelevant. But FERC found instead that Calgarybased Pembina had never requested the certification and that the Oregon Department of Environmental Quality "could not have waived its authority to issue certification for a request it never received."

The ruling was hailed as a major victory by opponents of Jordan Cove LNG, which would include a 230-mile feeder pipeline across the state to the LNG terminal in Coos Bay. Opposition to the pipeline has brought together southern Oregon tribes, environmentalists, anglers, and coastal residents since 2006.

# Louisiana LNG developer solicits bids from potential buyers

(Reuters; Jan. 18) – The developer of Commonwealth LNG on Jan. 18 launched a bidding process for the proposed Louisiana plant's output, hoping to accelerate an investment decision by reducing uncertainty for potential customers and investors. The plant is among a dozen stalled last year as the drop in energy demand exacerbated a reluctance to sign on to projects without a certainty they would be completed. Bankers have said they expect no new U.S. LNG projects to go ahead this year.

The tender applies a contracting technique akin to energy pipelines that employ "open season" bidding to solicit shippers, said Jason Feer, head of business intelligence at Poten & Partners, a shipbroking and LNG advisory firm managing the tender. Commonwealth is asking potential buyers to submit their offers for LNG pricing, volume and contract duration, subject to its approval. Bids are solicited through April 2 and, if accepted, contracts will be signed by June, Commonwealth said.

"It is too early to say whether this becomes a model for LNG project development," Feer said. "It has benefits for the LNG company and for off-takers." A final investment decision on the project, at 8.4 million tonnes per year of LNG, has been delayed more than a year to the first quarter of 2022 with initial output scheduled for mid-2025.

#### Asian utilities search for oil to keep up with winter power demand

(S&P Global Platts; Jan. 19) - Northeast Asian utilities are set to extend their search for more oil for power generation amid tight natural gas supplies, as South Korean power

companies issue multiple tenders to secure fuel oil and Japanese electricity providers continue to search for any available direct-burning crude in the region. The low availability of spot LNG cargoes from Malaysia and Indonesia, coupled with Panama Canal traffic restrictions delaying deliveries and ice conditions hampering North Asian ports, have contributed to the LNG supply crunch in Northeast Asia in recent weeks.

As a result, the tighter LNG stocks have prompted Northeast Asian electricity providers to secure, by whatever means necessary, other sources of power generation and industrial feedstocks to keep up with robust winter energy demand. The tight LNG supply will likely prompt South Korea to raise its dependence on fuel oil for winter electricity power generation throughout the cold spells in the first-quarter.

South Korea is estimated to have imported about 11 million barrels of fuel oil in the fourth quarter of 2020, up 62.7% from 6.76 million barrels received in the same period a year earlier. Shipments may reach 12.2 million barrels in the first quarter of 2021.

#### China's coal-to-gas switching adds to supply shortage, high prices

(CNBC; Jan. 19) - China's shift from coal to gas is a "big, overlooked factor" in record high natural gas prices, according to political risk consultancy Eurasia Group. Henning Gloystein, director of energy, climate and resources at Eurasia, said millions of households in China were estimated to have moved from coal to gas for heating their homes in 2020. The majority of those transitions happened in the last quarter of the year just before winter arrived, he said Jan. 18.

Gas prices in Asia fell to a record low in the second quarter of last year as COVID-19 spread, but they have surged more than 1,000% since July. According to S&P Global Platts, the benchmark Japan-Korea Marker spot price for LNG in February reached a record \$32.49 per million Btu last week. Much of the price surge is due to extremely cold weather in North Asia, which caused gas demand for heating to soar.

But Gloystein said new demand from China also likely drove prices to record highs. "We think this is a big, overlooked factor," he said. "Sure, it's been cold across the northern hemisphere and there've even been some supply outages, but what happened in China last year is — there are estimates that more than 10 million households were moved from heating using coal ... to using natural gas." Utilities and energy companies did not have enough storage to prepare for such a big increase in demand, he said. Demand outstripped supply and drove prices to record highs.

# 'Coal is proving highly resilient' for power generation

(Reuters; Jan. 15) - A perfect storm of freezing temperatures and a supply-led natural gas price rally has stoked thermal coal demand with prices at multi-year highs, reminding power suppliers and consumers that coal's appeal will not fade in a straight line. The Northern Hemisphere weather has highlighted coal's relative endurance, some 200 years after it was powering the first Industrial Revolution, even as several countries abandon the fuel to decarbonize and meet climate change targets.

In Asia, liquefied natural gas supply issues and cold weather have sent prices rocketing, pulling U.S. and European gas prices higher. When coal is more competitive than gas, it can encourage power producers to burn coal. But coal's current cost benefits may wane when LNG prices cool with warmer weather. Still, the efficiency of switching to coal is not lost on companies. Japan is rolling out new, more efficient coal-fired units. JERA, the country's biggest power generator, last week started operations of one such unit.

"We are also running our other coal plants at above nameplate capacity," JERA spokesman Atsuo Sawaki said. The International Energy Agency said in December demand for coal was set to jump 2.6% this year, after last year's pandemic-led drop, as recovering economies will drive usage for electricity and industrial output. "Coal is proving highly resilient, and while some countries are moving to accelerate retirements of coal plants, overall coal-fired generation in Asia is on an upward trajectory in the next few years," said Alex Whitworth, research director at consultancy Wood Mackenzie.

#### China's growing natural gas production closes supply gap

(The Wall Street Journal; Jan. 17) - Unfortunately for gas producers, today's lofty prices for liquefied natural gas aren't sustainable and the longer-term supply picture is bearish. Supply stoppages combined with the coldest winter in Asia in decades are a perfect market for those gas producers that still have capacity to supply spot shipments. But futures are already pricing in warmer weather a few months out: The April contract is currently trading around \$7, down two-thirds or more from recent record highs.

Further out, Chinese demand is still the swing factor. Here the news is bullish, but perhaps less so than some LNG sellers might hope. China's demand continues to expand robustly, and China continues to consume far more gas than it produces. The bad news is that the growth of that supply gap has slowed noticeably in recent years. New policies introduced in China in 2018 and 2019 — including a 30% resource tax cut for shale gas and a subsidy pegged to how fast drillers increase output of shale gas and other forms of so-called unconventional gas — have sparked a sharp rise in investment.

Chinese oil and gas exploration and development spending rose 25.5% in 2019, according to S&P Global. Natural gas production in 2019 rose faster than consumption

for the first time since 2015, improving by 10%. More recently, production growth in the first 11 months of 2020 was up about 9% compared with a year earlier. Annual output growth only averaged 6.7% from 2011 to 2018. Meanwhile, additional pipeline capacity for gas from Russia is poised to come online, which could boost pipeline gas imports.

#### Total pays \$2.5 billion for stake in world's largest solar developer

(The Wall Street Journal; Jan. 18) - French energy giant Total said it would pay \$2.5 billion for a 20% stake in the world's largest solar developer, the latest move by an oil major to expand in renewable power. Total said Jan. 18 the investment in Adani Green Energy would help it meet its targets for generating more power from low-carbon sources amid a continuing global transition away from fossil fuels — a shift some analysts say is being accelerated by the pandemic.

The company, along with other oil majors including BP and Shell, has pledged to increase spending on renewable energy such as wind and solar power in an effort to reduce carbon emissions. Total plans to spend \$3 billion a year on renewables by 2030, about 20% of its annual investment budget and up from \$2 billion last year. The Adani deal gives Total exposure to a leading renewables business in India, one of the world's fastest-growing markets for energy demand. Adani has 54 wind and solar projects in operation across the country, including one of the world's largest solar projects.

The move will help Total toward its goal of having 35 gigawatts of renewable power capacity by 2025, up from around 7 gigawatts last year. "Given the size of the market, India is the right place to put into action our energy transition strategy based on two pillars: renewables and natural gas," said Total CEO Patrick Pouyanne. Total and Adani Group, one of India's largest infrastructure conglomerates, have previously made other joint investments, including in liquefied natural gas.

# Saudis and partners gauge interest in \$5 billion hydrogen project

(Reuters; Jan. 13) - A joint venture comprising the world's largest hydrogen producer, Air Products, along with ACWA Power and NEOM has hired financial firm Lazard to advise it on a planned \$5 billion hydrogen project in the NEOM high-tech business zone in Saudi Arabia, sources said. Lazard, which advised Saudi oil giant Aramco on its initial public offering in 2019, has approached banks to sound out their appetite for the project, said sources familiar with the matter.

The project, which will be equally owned by the three partners, will produce green ammonia for export to global markets, the companies said in July last year. NEOM — announced in 2017 as a pillar of Saudi plans to diversify the economy — is a 10,230-

square-mile high-tech development on the Red Sea with several zones, including an industrial and logistics areas, planned for completion in 2025. This week Saudi Arabia Crown Prince Mohammed bin Salman unveiled plans to build a zero-carbon city at NEOM with infrastructure costs of \$100 billion to \$200 billion.

Hydrogen has gained traction as the future green fuel of choice, increasingly touted as a way to decarbonize emissions-intensive heavy industry and transport sectors. The \$5 billion project in NEOM would consist of a 1.2 million tonnes a year green ammonia plant, which will use hydrogen produced from an electrolyzer powered by more than 4 gigawatts of solar, wind, and storage. Production is due to begin in 2025.

# Wood Mackenzie says 'decarbonizing' a priority for gas industry

(LNG Industry; Jan. 15) - 2021 will be a defining year for the natural gas and LNG industry, says Wood Mackenzie in its latest outlook report. "Policy makers will need to provide clarity on decarbonization plans, including how they see the role of natural gas, following pledges to achieve climate neutrality," said Wood Mackenzie vice president Massimo Di Odoardo. "Gas players will have to show commitments to decarbonize gas, including through carbon capture, utilization, and storage (CCUS) and blue hydrogen."

"Decarbonizing natural gas will become a strategic priority for the gas industry," the report said. Wood Mackenzie identified themes that would impact the industry this year: Almost 50% of today's global carbon emissions and 75% of today's LNG demand are covered by countries with carbon-neutral goals. The resilience of gas in the energy mix will depend upon the pathways that policy makers adopt to achieve net-zero targets.

The acceleration in coal-to-gas switching is a key theme to watch in Asia as coal accounts for over 50% of the region's energy mix. In Europe additional coal plant closures in Germany and Poland could support more gas utilization in the medium term. Players across the gas value chain have announced proposals for the development of large-scale CCUS projects to decarbonize localized industrial clusters and/or to use in combination with steam methane reformers to produce blue hydrogen from natural gas.

#### German-built 'green hydrogen' plant planned for Quebec

(CNBC; Jan. 19) - A major green hydrogen project in Canada took another step forward with an engineering contract to a subsidiary of German industrial giant Thyssenkrupp. The agreement, announced Jan. 18, will see the green hydrogen product division of Thyssenkrupp Uhde Chlorine Engineers install an 88-megawatt water electrolysis plant for Hydro-Quebec, an energy firm backed by the provincial government.

Electrolysis splits water into oxygen and hydrogen. If the electricity used in the process is from a renewable source, it's termed "green hydrogen." For the project in Canada, the electricity will come from hydropower. Thyssenkrupp said the facility will be built in Varennes, Quebec, and will be able to generate 11,100 tonnes of green hydrogen a year. The hydrogen and oxygen produced by the unit — the oxygen is a byproduct of the process — is set to be used at a plant to generate biofuels for use in transportation. Commissioning of the green hydrogen facility is slated for the end of 2023.

At the moment, the vast majority of hydrogen generation is based on fossil fuels, which in turn has an effect on the environment. It is within this context that the idea of green hydrogen is so attractive, although its role in the overall energy mix is small and accounted for just 0.1% of worldwide hydrogen production in 2020, according to Wood Mackenzie. Green hydrogen is also expensive to produce, but an August 2020 report from Wood Mackenzie said costs could fall by as much as 64% by 2040.

#### UAE sees future as hydrogen producer

(Bloomberg; Jan. 19) - The United Arab Emirates aims to become a major hydrogen producer, contributing to the oil-rich state's effort to slash polluting carbon emissions by nearly 25%. The Middle Eastern country will use carbon-capture technologies to create what's known as blue hydrogen, Sultan Al Jaber, CEO of Abu Dhabi National Oil Co. (Adnoc), said at a virtual conference Jan. 19. Abu Dhabi is the UAE's capital and holds most of the OPEC member's oil and gas.

The UAE can be "one of the lowest-cost and largest producers of blue hydrogen in the world," Al Jaber said at the Abu Dhabi Sustainability Week online conference. There is "no credible way" of meeting global climate goals without carbon capture and storage, he said. Blue hydrogen is a form of the fuel created from natural gas in a process that stops the carbon emissions being released into the atmosphere. Adnoc currently has one project to capture, store and use carbon.

Energy producers are looking to hydrogen, which produces only water when burned, as a cleaner way of generating power. The UAE is also investing in green hydrogen, which is produced using renewable energy, like solar power, that doesn't emit carbon. While hydrogen is seen as crucial for the transition from oil and gas to cleaner fuels, the technology to make it is still comparatively expensive. Asia and Europe are potential markets for the UAE's future exports of the fuel, AI Jaber said.

# World's largest wind power operator will produce 'green hydrogen'

(Bloomberg; Jan. 20) - Danish utility Orsted has taken a final investment decision on its first hydrogen project as it expands beyond wind power. The world's biggest producer

of electricity from turbines at sea will use the technology at its Danish demonstration project H2RES to produce green hydrogen. It is a small but concrete step for the company that could help it stand out in the upcoming competition for billions of euros of government subsidies to scale up the industry.

Hydrogen made from wind or solar is essentially a fossil-free fuel. It's seen as crucial by governments and utilities to help cut carbon from industry and transport. The technology has a central place in the European Union's Green Deal package, with investment in the bloc expected to reach as much as 470 billion euros (US\$570 billion) in the coming decades. "We see renewable hydrogen and other sustainable fuels as cornerstones in reaching net-zero emissions by 2050," said Martin Neubert, CEO at Orsted Offshore.

The project will have a capacity of two megawatts, producing as much as 2,200 pounds of hydrogen daily, which will be used for road transport in Greater Copenhagen and the surrounding area, Orsted said in a statement. That is tiny compared with the scale that would be needed to make a major impact on the climate. These early projects will rely on government subsidies to get built.

#### Oman wants to boost capacity past 1 million barrels per day

(S&P Global Platts; Jan. 14) - Oman is planning to raise its crude output to as much as 1.1 million barrels per day when the OPEC+ supply accord expires, a source from the sultanate's Ministry of Oil and Gas told S&P Global Platts. The OPEC+ deal is set to run through April 2022, though ministers have said it could be extended if market conditions call for more production restraint. "If there is not a new agreement, we will increase to the maximum capacity," said the Omani source, who asked not to be identified.

Hydrocarbons-dependent Oman had recently reached a maximum production capacity of about 1 million barrels per day but the source said that has dwindled due to the need to shut down wells to comply with its quota under the OPEC+ agreement. Oman is the Middle East's largest oil producer that does not belong to OPEC, but it is a party to the OPEC+ pact along with Russia, Kazakhstan, and six other non-OPEC countries.

Oman pumped 720,000 barrels per day in December, according to the latest Platts survey of OPEC+ production, matching its quota, which increased to 732,000 for the January to March period. In February, Oman's output of crude and condensate combined is expected to be around 910,000, the source said. The level of investment needed to raise capacity over 1 million barrels has not yet been determined, the source added.

#### German energy provider doubles LNG order with Australian project

(Australian Financial Review; Jan. 18) - Woodside Petroleum has doubled the size of a long-term sales contract with German energy company Uniper, in a move that builds toward a go-ahead targeted for December for its \$16 billion Scarborough gas project in Western Australia. The volume of gas to be initially supplied under the 13-year sales deal, which was signed in December 2019, is 1 million tonnes a year. That will rise to about 2 million tonnes a year from 2026 as long as the offshore Scarborough project is developed as planned, Woodside said Jan. 18.

Woodside would supply some of the LNG to be shipped to Uniper from an expansion at its 9-year-old, single-production-train Pluto LNG plant near Karratha. CEO Peter Coleman said Woodside has now locked in long-term customers for more than 40% of its expected share of production from the project, which was delayed last year due to the oil-price slump. "We expect the timing to be right for final investment decisions on Scarborough and Pluto Train 2 in the second half of this year," Coleman said.

Skyrocketing spot prices for LNG in Asia in recent weeks are expected to play in Woodside's favor, with Macquarie Equities saying last week it expects one key outcome of the "super-spike" in LNG is that customers will "start to reengage more seriously in long-term contracts on new sources of reliable supply." Most analysts want to see the bulk of LNG from Scarborough committed under long-term sales contracts before a final investment decision for the venture.