

Oil and Gas News Briefs

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Oil sands pipeline cost estimate escalates 44% to US \$22 billion

(Reuters; March 10) - The cost of the Canadian government-owned Trans Mountain oil pipeline expansion has jumped 44% from last year's estimate to C\$30.9 billion (\$22.35 billion), the federal corporation building the project said on March 10. Trans Mountain Corp. said it is in the process of securing external financing to fund the remaining cost of the project, which is now expected to start shipping oil in the first quarter of 2024. The 590,000 barrel-per-day pipeline expansion will nearly triple the flow from Alberta's oil sands to Canada's Pacific coast, opening access to Asian markets.

The 610 miles of new pipe has been beset by regulatory delays, environmental opposition and hefty budget overruns. The Canadian government bought the pipeline from Kinder Morgan in 2018 to ensure the expansion got built, drawing criticism from environmental groups. Last February, TMC increased the cost estimate to C\$21.4 billion, up from C\$12.6 billion in 2020 and C\$7.4 billion in 2017. Following last year's jump, the government said it would halt any further public funding for the project.

Finance Minister Chrystia Freeland reiterated government plans to sell the pipeline once it is complete. Eleven oil shippers have committed to long-term contracts that take up 80% of the line's capacity. TMC blamed the overruns on a number of factors including high inflation and supply chain issues, floods in British Columbia, unexpected major archaeological discoveries and challenging terrain. The corporation also said the new estimate does not include reserves for "extraordinary risks" and could change again.

Exxon CEO says Europe needs to rethink attitude toward oil and gas

(Bloomberg; March 8) - ExxonMobil CEO Darren Woods used his prime-time address at the CERAWEEK by S&P Global conference in Houston to criticize European energy policy, which he said has gone too far. After years of deterring investment in oil and gas, Europe had no alternative but to burn coal to keep the lights on when Russia stopped delivering gas. But by continuing to hit the oil and gas industry with punishing measures like the European Union's windfall tax, things will only get worse, Woods said March 7.

"What we saw in Europe should be a wake-up call," he said. Exxon "stepped back and reevaluated" its investment strategy in the continent, he continued. Meanwhile, it's plowing ahead with new projects in the U.S., where the Inflation Reduction Act offers incentives for companies rather than punitive measures. U.S. carrots versus European sticks — that particular metaphor has become a recurring feature at CERAWEEK.

There's a noticeable spring in the step of American oil executives at the conference, and it's not just because of those carrots: Record profits and \$128 billion of cash showered on shareholders in the past year probably also have something to do with it. But there's a sense in Houston they've turned a corner in the climate debate, as well. "Balance" is now the buzzword for executives when describing the energy transition, as security and affordability have surged to the top of the agenda, vying for attention with sustainability.

Biden will limit future North Slope and offshore oil leasing

(Wall Street Journal; March 12) - President Joe Biden has moved to block future oil and gas leasing in the Arctic Ocean's federal waters, part of a sweeping plan to protect 16 million acres of land and water in Alaska. The evening announcement on March 12 comes as the administration is preparing to approve the massive Willow oil project onshore in the Alaska Arctic over the objections of environmentalists and many national Democrats who wanted the project scuttled, according to people familiar with the matter.

The new limits apply to future leases and would not stop ConocoPhillips' \$8 billion Willow project from moving forward. The company has held key oil and gas leases in the region for years. The Interior Department said Biden had decided to make about 2.8 million acres in the Arctic's Beaufort Sea off-limits to future oil and gas leasing indefinitely. The move completes a years-long effort by Democrats to restrict fossil-fuel development in the U.S. Arctic Ocean, building on previous moves by then-President Barack Obama to block leasing in the Chukchi Sea and part of the Beaufort Sea.

As part of the conservation plan, the administration will also move to issue new federal rules limiting oil and gas leasing on 13 million acres of the National Petroleum Reserve - Alaska, extending protections to key rivers and lakes. Administration officials argued that the efforts will form a "firewall" against future oil and gas leasing in the Arctic and federal lands in Alaska. The expected approval of the Willow project will nonetheless anger environmental activists, who for years have fought against the project.

Industry says permitting reform needed to meet demand for U.S. gas

(Natural Gas Intelligence; March 9) - Demand endures. Supply is abundant. Technology to produce it efficiently continues to advance. But the United States needs to meaningfully expand its natural gas production and delivery infrastructure to meet domestic needs while also supporting increasing global demand for American exports of liquefied natural gas and fuels of the future such as hydrogen. To make this happen, the pipeline permitting process, in particular, must be reformed.

Such was the drumbeat from executives at CERAWEEK by S&P Global on March 8 in Houston. Regulatory hurdles and often flimsy legal challenges are holding up projects,

in some cases for years, said Williams Cos.' Chad Zamarin, executive vice president of corporate strategic development at the pipeline company. He cited the Mountain Valley Pipeline project, eight years in the making and still facing an uncertain finish line, as a key example. The Appalachian gas line is mired in regulatory scrutiny and lawsuits.

"The challenge that we have is the infrastructure," Zamarin said. "We've got to get back to building." He joined colleagues in calling on Congress to pass permitting reform legislation that would set reasonable but firm time limits on project reviews. Advocates for change also want lawmakers to require legal challengers to demonstrate they have evidence of potential problems in order to proceed in the courts. Otherwise, even frivolous suits can get "you caught up in the courts forever," Zamarin said.

Industry calls on governments to help make hydrogen commercial

(Reuters; March 8) - Governments worldwide need to simplify rules around hydrogen supply to attract investment and scale it up to become competitive enough to substitute for fossil fuel use in heavy industry, energy executives said this week. Hydrogen as a potential alternative to gas, coal or oil burned in heavy industry or shipping is seen as key to reducing emissions in industries in which electrification is not practical. Hydrogen is often described by color and many in the industry call it a "rainbow renewable," but the most important color for executives at the conference was green — as in cash.

Hydrogen can be made in many ways, some cleaner than others. Among methods that produce what is known as green hydrogen are electrolysis to split water into hydrogen and oxygen using power from renewables. Gray hydrogen is produced from fossil fuels. When carbon emissions from making hydrogen from natural gas are captured and stored, it is known as blue hydrogen. The industry is still in a nascent stage and the fuel is relatively expensive to produce, so governments worldwide are seeking ways to facilitate rapid development to make it an economic alternative to fossil fuels in industry.

"The market for hydrogen and people's willingness to pay a premium for low-emissions fuels ... hasn't quite taken off yet," ExxonMobil CEO Darren Woods said at CERAWEEK in Houston. Though federal legislation is incentivizing production of green and blue hydrogen, Woods said the associated costs are making it difficult for Exxon's partners to sell into Europe and Asia. Discussions and rules around classifying hydrogen should be secondary to making the fuel affordable for consumers, said Colin Parfitt, vice president of Midstream for Chevron. "There is way too much conversation about if it is blue or green," Parfitt said. "The challenge is how do you create hydrogen as a business."

Federal officials continue talks about 'responsibly sourced gas' label

(Bloomberg; March 9) - Biden administration officials met March 9 with U.S. energy executives about a potential framework to govern certification of so-called responsibly sourced natural gas, amid surging interest in how to distinguish between the most- and least-polluting suppliers of the fuel. Gas buyers are increasingly concerned with the amount of methane that goes straight into the atmosphere from leaky pipes and wells.

Third-party certifiers are vetting the methane intensity of some supplies, based on the promise that domestic utilities and foreign buyers of U.S. gas might eventually pay a premium when it's identified as having fewer emissions in production and transportation. The effort is also seen as critical to addressing wariness over the issue among European fuel buyers. Energy Department officials discussed their plan with gas producers, exporters and third-party methane assessors during a 90-minute closed-door meeting on the sidelines of the CERAWEEK by S&P Global conference in Houston.

The Energy Department said in a statement it will keep talking with international partners and stakeholders in a bid "to forge broader agreement" on a framework for measuring and monitoring, reporting and verifying the greenhouse gas intensity of natural gas across the supply chain. The latest U.S. effort — bringing together several federal offices — is seen as helping to rein in an emerging group of third-party certifiers of gas. It also responds to concerns from environmental advocates and fuel buyers that baseline standards are necessary to ensure the "responsibly sourced" label is credible.

Rising costs, higher interest rates cut into wind power development

(Bloomberg; March 10) - Off the coast of New England, winds create perfect conditions for giant offshore turbines. While plans are in place to tap that natural power to generate electricity, progress — here and around the world — is being held up by soaring inflation. As investment foundations crumble due to rising interest rates and higher materials costs, developers in the U.S. are delaying clean-power projects like the 1.2-gigawatt Commonwealth Wind development near Massachusetts, which would be one of the largest wind farms in the country and capable of powering 700,000 homes.

The problem is even worse in Europe, where authorities have in some cases made the situation harder. About 6 gigawatts of wind farms proposed off Germany's coast won't move ahead as planned. The setbacks mean precious time is lost in reducing the use of fossil fuels to fight the climate crisis. "Governments need to wake up to the reality that investments in offshore wind are not happening," said Giles Dickson, head of industry group WindEurope. "The stakes are very high here."

Unlike traditional power plants that pay for fuel forever, the vast majority of the cost for renewables comes upfront. That makes the sector especially sensitive to changes in financing and construction costs. That's particularly true for giant offshore wind farms, which use turbines the size of skyscrapers, specialized installation vessels and miles of copper cables to connect them to grids on shore. "The offshore wind business is in a

brewing perfect storm,” said Thomas Arentsen, a partner at Bain & Co. “Profitability is heavily squeezed across the whole value chain from developers to supply chain.”

Geothermal industry may benefit from fracking research

(Bloomberg opinion; March 9) - Knowledge gained from fracking and producing oil and gas from deep shale rocks may provide a piece of the puzzle to building zero-carbon grids, turning geothermal energy from a niche into a powerhouse. Currently, geothermal electricity — tapping hot zones deep underground to drive turbines at the surface — is a relative rarity. Volcanic areas such as Iceland, Kenya, New Zealand, the Philippines and western U.S. use it quite extensively, thanks to high temperatures close to the surface.

Elsewhere, the useful rocks are either too deep or too impermeable to be much use. While wind and solar power generation increased by about 2,600 terawatt-hours between 2009 and 2021, geothermal added just 28 TWh. It’s stuck in similar doldrums to the ones fracking was in 20 years ago, before the boom took hold in the U.S. Yet both drill holes deep in the ground and hope to extract energy by forcing fluids to the surface. Both originated in the middle of the 20th century but remained small-scale for decades, with technology and economics barring wider deployment. Both suffer decline rates.

There are already signs that spillovers are happening between the oil and gas industry and geothermal. The U.S. government has developed a fluid to fracture impermeable rocks to open up more geothermal reservoirs, a process identical to what frackers use in petroleum deposits. Start-up Eavor Technologies plans to use the horizontal drilling pioneered by the unconventional oil and gas industry to build radiator-like pipe networks in areas that would otherwise be unsuitable for development. The question is whether oil and gas innovations will be sufficient to overcome geothermal’s high upfront costs.

U.S. regulators order lower pressure in Keystone oil pipeline

(Associated Press; March 10) - U.S. regulators have stopped allowing a large part of the Keystone oil pipeline to operate at higher-than-normal pressures following a 13,000-barrel oil spill in Kansas in December. The order from pipeline safety regulators covers 1,220 miles of the line in seven states. Regulators already had ordered the system’s operator, Canada-based TC Energy, to reduce pressure in a 96-mile segment of the pipeline from southern Nebraska into central Kansas, where the spill occurred.

TC Energy said in a statement March 10 that it was already operating within the pressure limits set by this week’s order. The order from regulators directed TC Energy to lower the maximum pressure by 10% on the pipeline from North Dakota’s border with Canada to Oklahoma, as well as a spur from southern Nebraska into central Illinois.

That would bring the maximum pressure in line with what's normally allowed, slightly reducing the flow, after TC Energy had received a special permit to exceed it in 2017.

A Governmental Accountability Office report to Congress in July 2021 noted that regulators had allowed the higher-than-normal maximum pressure on the system in order to boost the flow into the U.S. The 2,700-mile Keystone system carries heavy crude oil from oil sands in western Canada to the Gulf Coast and to central Illinois. TC Energy said last month that a flawed weld caused a crack that grew over time because of the stress on a bend in the pipeline where the rupture occurred.

Asia spot-market LNG prices down 81% from August record

(Reuters; March 10) - Asian spot liquefied natural gas this week hit its lowest level since July 2021 on muted demand, but such low levels have incentivized the return of some Chinese players to the market, which if sustained could fuel competition with Europe. The average LNG price for April delivery into northeast Asia was \$13.50 per million Btu, down \$1 from the previous week, industry sources estimated. Prices have fallen nearly 52% year-to-date and around 81% from the August 2022 peak at \$70.50 per million Btu.

"Pricing in Asia is now sufficient to bring Chinese activity, with two cargoes booked to a state-owned enterprise ... both at attractive pricing, with one below \$12," said Toby Copson, global head of trading at Trident LNG. Samuel Good, head of LNG pricing at commodity pricing agency Argus, said many traders continue to eye potential Chinese demand for this summer with European underground gas storage looking set to enter the injection period very well stocked. He added that sustained lower prices have pulled players from Southeast Asia and South America back for spot-market purchases.

Southeast Asia needs affordable gas to grow economy

(Reuters; March 8) - Southeast Asia's future economic growth and commitments to net-zero emissions goals will weigh heavily on the region's access to affordable natural gas, according to preliminary findings in a study to be released in the coming weeks. Paul Everingham, chief executive officer of the Asia Natural Gas and Energy Association, said last year's sky-high gas prices pose a threat to the region's developing economies, some of which have switched back to coal for cost reasons.

"Unless there is additional gas put into the Asia Pacific, and most likely from North America," said Everingham, "Southeast Asia will likely remain energy poor and won't achieve its growth or GDP target over the next 30 to 40 years," he added, referring to the association-sponsored study's initial findings. North America has the gas reserves and the ability to quickly bring LNG to the market and dampen the price, he said.

Iran says it has restarted work on first LNG export project

(Argus Media; March 9) - Iran has restarted work on a major gas liquefaction project it was forced to abandon several years ago due to sanctions, and expects to have its first export plant operational before the current administration's time in office ends in mid-2025. The two-train Iran LNG project is one of three export projects the gas-rich country was planning to launch in the early 2000s, only for them to be shelved several years later because of international sanctions related to Tehran's nuclear program.

The two other projects were Pars LNG and Persian LNG on Iran's Mideast Gulf Coast, which were being led by TotalEnergies and Shell, respectively. Iran LNG was planned for 10.8 million tonnes per year output capacity; Pars LNG at 10 million; and Persian LNG at 16.2 million tonnes. The Pars and Persian LNG plants were still at the early stages of development when they were abandoned, but work at the Iran LNG project at Assaluyeh, in Iran's southern Bushehr province, had progressed to the point that preparations to install the liquefaction trains had been largely completed.

German industrial engineering company Linde was originally supposed to provide the liquefaction equipment, but the sanctions imposed in the mid-2000s and then again in the early 2010s hindered Linde's ability to supply the technology. The project never really progressed beyond this point. But today, Iran insists work on the project has already resumed despite U.S. sanctions still being in place, and that the administration is pushing to "accelerate" work to complete the project before its term in office ends.

EU urges members not to sign new contracts for Russian LNG

(Reuters; March 9) - European Union countries and companies should not sign new contracts to buy Russian liquefied natural gas, as part of the bloc's attempt to end its energy dependence on Moscow, the EU's energy policy chief said on March 9. Russia curbed gas supplies to Europe last year following its invasion of Ukraine, causing an energy crisis of squeezed supplies and record-high prices. The EU has vowed to quit Russian fossil fuels by 2027, and replaced around two-thirds of Russian gas last year.

But while Moscow slashed pipeline gas flows, deliveries of Russian liquefied natural gas to Europe increased last year — to about 780 billion cubic feet of gas, up from 565 bcf in 2021, according to an EU analysis. "We can and should get rid of Russian gas completely as soon as possible, still keeping in mind our security of supply," EU Energy Commissioner Kadri Simson told a meeting of EU lawmakers on March 9. "I encourage all member states and all companies to stop buying Russian LNG, and not to sign any new gas contracts with Russia once the existing contracts have expired."

The LNG volumes were far lower than the 5.5 trillion cubic feet of pipeline gas Moscow had sent Europe each year before the Ukraine war. Europe replaced most of that volume with LNG from alternative suppliers like the United States, renewable energy

and energy savings. As EU countries begin preparations to secure energy supplies for next winter, Simson said the European Commission would propose that EU countries extend, to next winter, a voluntary target to cut their winter gas consumption by 15%.

Argentina hopeful this year will mark end of LNG imports

(Reuters; March 8) - Argentina plans to spend about \$1.8 billion on imports of liquefied natural gas in the coming months, its last big purchase before a key gas pipeline to be inaugurated from its massive Vaca Muerta shale region brings balance to domestic gas supplies, Energy Secretary Flavia Royon said on March 8. Argentina sits on one of the world's largest shale gas reserves, but the country has in recent years imported high volumes of LNG to generate electricity mainly due to lack of pipelines for its own gas.

Its energy deficit, estimated at some \$5 billion last year, is set to ease with less need for costly LNG imports. The Argentine government also has begun removing energy subsidies to industrial and commercial customers to meet budgetary commitments with the International Monetary Fund. "This will be the last year that Argentina makes a big purchase of LNG, which has already been agreed," Royon said on the sidelines of the CERAWEEK energy conference in Houston.

The country expects to pay an average of \$20.80 per million Btu for LNG imports this year, compared with up to \$40 in 2022, which forced a switch to power generation using lower-cost fuels, according to the secretary. The South American country is in talks with funds from Saudi Arabia and China for financing the second phase of the gas pipeline from Vaca Muerta. The line's first phase is planned for start-up in June.

New Brunswick oil tank farm loses tax-exempt status

(CBC Canada; March 9) - A property tax exemption that the Canadian province of New Brunswick granted Irving Oil 42 years ago for its coastal crude oil terminal in Saint John appears to have ended, at least temporarily, although exactly what killed it is not clear. Provincial agencies declined comment, and Irving Oil did not respond to a request for information. The tank farm, at the edge of the Bay of Fundy, has a storage capacity of 6 million barrels and supplies Irving Oil's Saint John refinery from shipments it receives from oceangoing tankers that arrive from around the world multiple times every month.

The tank farm and infrastructure cover 1,060 acres of land and seafloor and is assessed for taxes at \$30.2 million. Since 1981, it has been one of a handful of New Brunswick business properties exempt from paying provincial property tax. The concession was granted to help Irving weather the 1979 oil crisis that saw crude prices spike and North American demand for petroleum products crater in response. The oil crisis eventually passed and consumer demand returned, but the tax concession continued on decades.

New Brunswick's Department of Finance valued the exemption in 2021 at \$674,929. Over 42 years, it has saved Irving Oil more than \$20 million. The objective of the exemption, according to the Department of Finance, is "to support the competitiveness of infrastructure that is important to economic development." According to property records, the tank farm was switched from "provincial rate excluded" to "fully taxable" for 2023. The tax exemption has been politically controversial for several years.

UN close to unloading oil from decaying tanker offshore Yemen

(Reuters; March 9) - The U.N. has purchased a large tanker to store about 1.1 million barrels of oil that will be transferred from a decaying vessel off Yemen's coast in a bid to avert an environmental disaster, officials said March 9. U.N. officials have been warning for several years that the Red Sea and the coastline of Yemen was at risk as the tanker Safer could spill four times as much oil as the 1989 Exxon Valdez disaster off Alaska.

But the top U.N. official in Yemen, David Gressly, said no one had stepped up to donate a tanker and no company was willing to lease a vessel that would be used near a civil war. The U.N. has struggled to raise the \$129 million needed to remove the oil from the Safer and pay for the vessel bought from Euronav for \$55 million. So far, it has pledged of \$95 million, mostly from governments. Even a public crowdfunding drive was started last year, which Gressly hopes can help provide more money to "finish the job."

Gressly, wanting to spur more donations, praised students at an elementary school in Bethesda, Maryland, for raising \$200 by selling lemonade. U.N. Development Program Administrator Achim Steiner described the tanker's price as "painful" amid a hot market driven by factors stemming from Russia's war in Ukraine, but Gressly said the world body had no other choice. "We hope, if all things go according to plan, the operation of the ship-to-ship transfer would actually commence in early May," Steiner said.

The supertanker was being used as a floating storage facility and is moored off Yemen's Red Sea oil terminal. Offloading and maintenance were suspended in 2015 because of the war in Yemen. The tanker's structural integrity has significantly deteriorated.