# Oil and Gas News Briefs Compiled by Larry Persily January 13, 2020

#### China's 2020 gas demand to grow at slowest pace in 4 years

(Reuters; Jan. 13) - China's natural gas demand in 2020 is expected to grow at its slowest pace in four years due to a faltering economy, according to a think-tank at the country's largest energy producer, China National Petroleum Corp. (CNPC). Slower demand growth in China would drag down global LNG markets already grappling with oversupply and low spot prices. In its annual outlook report released Jan. 13, the think tank forecast China's gas consumption to rise 8.6% this year to 11.65 trillion cubic feet.

That would mark the slowest growth rate since 2016. CNPC expects 2019 gas demand will show a 9.6% gain over 2018. "China's economy is in the process of structural upgrade. ... Also, coal-to-electricity and the use of clean coal will slow down the growth of gas demand," CNPC Research said. China's gas output will hit 6.52 tcf in 2020, up 8.2% year-on-year, boosted by Beijing's push to increase domestic production, it said, adding that imports of the fuel is expected to reach 5.3 tcf, up 9.3% from a year ago.

The imports will partly come from Russia, driven by the landmark Siberian gas pipeline that was launched in December. In 2020, LNG imports are expected to rise 9.5% year-on-year. China overtook Japan as the world's top importer of liquefied natural gas in November and December on a monthly basis, but on an annual basis Japan is still the No. 1 LNG importer worldwide.

### **Explorers discovered 12 billion barrels oil equivalent in 2019**

(Houston Chronicle; Jan. 10) - ExxonMobil led the way with new finds off the coasts of Guyana and Cyprus as global oil and gas discoveries in 2019 hit a four-year high, according to a new report. Energy companies discovered about 12.2 billion barrels of oil equivalent in 2019 — the highest since nearly 20 billion barrels in 2015 — from more than 25 discoveries of at least 100 million barrels each and mostly from international drilling offshore, according to the Norwegian research firm Rystad Energy.

And Rystad believes that new discoveries in 2020 will exceed the volumes found last year. ExxonMobil made four new discoveries off the coast of the small South American nation Guyana — adding to its tally of 15 finds in the country — and also made natural gas discoveries off of Cyprus in the eastern Mediterranean. Exxon also is exploring off of Egypt in the region. The company started up its Guyana oil production in December.

"ExxonMobil can be declared explorer of the year for a second year in a row," said Palzor Shenga, a senior analyst at Rystad. "The supermajor was exceptional, both in terms of discovered volumes and value creation from exploration." Exxon's finds account for 9 percent of the global oil and gas discovered in 2019. London-based Tullow Oil also made new discoveries off of Guyana last year. However, the single-largest discovery of 2019 came from BP off the coast of Mauritania in northwestern Africa. BP is expected to build another liquefied natural gas hub in the region.

#### U.S. Gulf of Mexico oil production tops 2 million barrels per day

(Natural Gas Intelligence; Jan. 8) - Oil production in the U.S. Gulf of Mexico last August exceeded 2 million barrels per day for the first time in history, as the once mighty energy region regained some of its swag. The Interior Department's Bureau of Safety and Environmental Enforcement announced the record figure, which followed on the heels of a record-blasting 2018 for the entire Outer Continental Shelf.

The production increase last year led to \$2.34 billion in royalty revenue for the U.S. Treasury. According to the Short-Term Energy Outlook issued in November by the U.S. Energy Information Administration, the main U.S. offshore production basket is expected to set records through 2020. EIA estimated Gulf of Mexico oil output would increase by 138,000 barrels per day in 2019 and an additional 116,000 in 2020.

Several big offshore projects shifted into high gear last year. The Shell-led Appomattox project about 80 miles south of New Orleans began production in May. With initial production targeted for 175,000 barrels per day, it was the first commercial discovery to ramp up in the Norphlet formation. Chevron in December sanctioned Anchor, 140 miles offshore Louisiana in Green Canyon. It's the industry's first deepwater high-pressure development at 20,000 pounds per square inch to win a final investment decision.

### Canadian crude selling at \$24 discount to U.S.

(Bloomberg; Jan. 10) - Canadian heavy crude's discount to U.S. benchmark oil hit the widest since Alberta introduced a plan to limit the province's production more than a year ago, threatening more adversity for the beleaguered industry. Western Canadian Select's discount to West Texas Intermediate reached \$24.05 a barrel on Jan. 10, the biggest gap since Nov. 30, 2018, the last trading day before Alberta announced it would order producers to cut 8.7% of their daily production to help clear a glut of crude.

The recent price decline heightens the troubles of an oil sands industry that holds the world's third-largest reserves but lacks the capacity to ship all of its production to refineries in the U.S. Midwest and Gulf Coast. With three key pipeline projects stalled,

producers are increasingly relying on more costly rail shipments at a time when storage tanks throughout Alberta are close to full.

The widening differentials suggest that Canadian oil is at high risk of a "blowout," Credit Suisse analyst Manav Gupta said in a report this week. If the differential widens beyond \$25 a barrel, the "Alberta government might be forced to step back in and raise the volumes on mandated cuts to control bloating inventory situation," he said. As the price gap has been narrowing, Alberta has progressively increased the province's allowed production since the limits went into effect at the start of last year.

### China will allow foreign companies to explore for oil and gas

(Reuters; Jan. 8) - For the first time, China will this year allow foreign companies to explore for and produce oil and gas in the country, opening up the industry to firms other than state-run energy giants as Beijing looks to boost domestic energy supplies. But experts say the long-awaited opening may not excite immediate interest from global drillers because of the poor overall asset quality of China's hydrocarbon resources.

"China is accelerating the sector reform due to growing energy security concerns," said Zhu Kunfeng, the Beijing-based associate director of upstream research at IHS Markit. China now imports 70% of the crude oil it refines and nearly half the natural gas it consumes, while state firms face an uphill battle boosting reserves and production outside the country amid growing geopolitical risks. Previously international companies could enter the industry only through joint ventures or cooperation with Chinese firms.

But as spending by global firms becomes more disciplined after the 2014 oil crash, and other resource-rich nations such as India and Malaysia look to burnish terms to attract investors, China's reform may not lure an immediate flow of foreign investment. Chinese majors have also tapped most of the country's best assets onshore and offshore with the under-explored resources, such as shale oil and gas, costly to develop because of their complex geology.

### Japanese LNG buyers resell surplus in small lots to China

(Nikkei Asian Review; Jan. 10) - Japanese gas companies are shipping unsold inventories to Chinese clients in relatively small amounts as demand at home has stagnated and parts of China unserved by pipelines are eager to buy. Shizuoka Gas shipped five 18-tonne containers of liquefied natural gas last year to PetroChina on a trial basis — each container can hold about 3 million cubic feet of gas. The Japanese company aims to finalize a three-year supply deal later this year that will transfer tens of thousands of tonnes of LNG annually.

LNG is normally hauled by large vessels with 70,000-tonne capacities. Instead, Shizuoka Gas will parcel out LNG in 18-tonne containers to fulfill a demand in China for smaller purchases that has been growing the past two or three years. Because many areas in China have no access to pipelines, a large number of traders use trucks or small ships to transport the fuel in the reusable containers to customers.

In Shizuoka Prefecture, demand for gas has dropped off mainly because of factory closures. Shizuoka Gas signed long-term contracts to purchase roughly 1.2 million tonnes of LNG a year but sells only 1 million tons in Japan. That leaves up to 200,000 tonnes of surplus LNG each year. Shizuoka's three-year plan is to sell about 100,000 tonnes annually to small-lot clients in China and elsewhere. Japan's Chubu Gas also sold LNG to China in containers last year in trials.

#### Korea Gas reacts to competition and adopts new LNG pricing

(S&P Global Platts; Jan. 10) - South Korean power utilities are likely to be less tempted to import liquefied natural gas directly from overseas suppliers, bypassing Korea Gas Corp., as the state-run gas company has decided to adopt a new gas-pricing format, a KOGAS official said Jan. 10. KOGAS has long provided imported LNG to power utilities at prices based on the company's average import costs, an "average tariffs" formula.

But under the new format, KOGAS will charge different prices to utilities through negotiations with each power utility, called an "individual tariffs" system. "The new individual tariffs system is expected to make local power utilities refrain from seeking to import LNG directly from overseas suppliers because they can get gas at lower prices from KOGAS through negotiations," the official said.

As direct importers have been able to buy LNG on the oversupplied global market at lower prices than offered by KOGAS, more companies are rushing to import directly from overseas suppliers. "The prices offered by KOGAS under averages tariff formula have become higher than market prices, which have prompted local power utilities to seek direct LNG imports rather than purchasing from KOGAS," the official said. Direct buyers imported a total of 6.14 million tonnes of LNG in 2018, accounting for 14% of the country's total imports, a sharp increase from 1.88 million tonnes in 2015.

# Analysts predict LNG market will tighten, then return to oversupply

(Australian Financial Review; Jan. 8) - The notorious cyclical nature of the global LNG sector is on full display, says Bernstein Research, which is forecasting an earlier end to today's glut than most analysts — but then followed by another bout of oversupply. A likely recovery in Asian demand growth for liquefied natural gas together with winding

up the current wave of new production capacity should tighten the current oversupplied market in the second half of 2020, Bernstein analysts led by Neil Beveridge said.

Bernstein said 2020 will mark the end of a five-year expansion in global LNG production capacity when an unprecedented 130 million tonnes of annual LNG capacity was added to the market, pushing supply well beyond demand. But while the glut could come to an end with growing demand, which should lift rock-bottom spot prices, the race to give the green light for still more new projects has intensified, the analysts said. The winners in the next race will be low-cost producers with clear funding plans.

History will repeat itself. "Competition to sanction the next wave of LNG projects has intensified, risking another glut in the mid-2020s," Bernstein said. "The seeds of the next cycle are already being planted." After a series of final investment decisions over the past 12 to 18 months, Bernstein expects an additional 70 million tonnes of annual LNG capacity to start construction over the next 18 months with the new projects coming online in the mid- to late-2020s.

#### Russia's Novatek in 2019 acquired licenses to 140 tcf of Arctic gas

(Barents Observer; Norway; Jan. 8) - The remote Arctic Yamal and Gydan peninsulas are increasingly important for Russia's energy sector. The tundra hold what appears as an endless pool of natural gas, and the region is the priority of Novatek, which is owned and managed by Russia's richest man, Leonid Mikhelson.

Novatek opened its Yamal LNG plant in 2017 and is building a second liquefied natural gas export terminal nearby, Arctic LNG-2. In 2019 the company won several new licenses to fields in the area. The latest of the acquisitions is Bukharinskoye, a field located partly on land, partly offshore, on the Gydan Peninsula. A Novatek subsidiary won the right on Dec. 27 to exploit the field that holds an estimated 42 trillion cubic feet of gas and more than 500 million barrels of liquid hydrocarbons.

The Bukharinskoye follows the acquisition of the Vostochno-Ladertoyskoye field in mid-December, which holds an estimated 6.5 trillion cubic feet of reserves. The biggest acquisition of the year was the Soletsko-Khanaveyskoye field with as much as 77 tcf. In May another three license areas were obtained in the northern part of the Krasoyarsk region, an area located east of the Gydan Peninsula. Altogether, Novatek's license acquisitions in the region in 2019 most likely amounted to more than 140 tcf of gas.

### Insurance premiums increase on tankers in Strait of Hormuz

(Reuters; Jan. 8) - Even as the U.S. and Iran appear to signal a keenness to avoid further conflict, oil and gas ship owners are bracing to pay a price for the war of words

that culminated in rocket strikes in Iraq — higher insurance bills. According to industry sources, payments known as war-risk premiums for tankers shuttling through the Strait of Hormuz could rise significantly, adding hundreds of thousands of dollars to shipping costs in some cases that will ultimately be passed on to fuel buyers — mostly in Asia.

About 20% of the world's oil supply and 25% of the global supply of liquefied natural gas is transported on tankers through the Strait of Hormuz, a narrow passage between the Gulf and the Indian Ocean. Ship owners pay annual war-risk insurance as well as an additional premium when entering high-risk areas. Premiums have increased with the recent tensions. One Singapore-based LNG shipbroker calculated it as significant. "Depending on the type of ship, this adds about \$150,000 to \$200,000 per trip."

### Canadian Mounties investigate gas pipeline blockade in B.C.

(Calgary Herald; Jan. 9) - The Royal Canadian Mounted Police have opened a criminal investigation after discovering "traps" and gasoline-soaked rags in the blockade by a breakaway First Nations group against the C\$6.6 billion Coastal GasLink pipeline. RCMP officers on patrol this week along the pipeline blockade in northern British Columbia found three stacks of tires covered by tarps and trees, along with multiple jugs of gasoline, diesel, oil, and kindling as well as "bags full of fuel-soaked rags."

Police said Jan. 8 that they had found the tires and fire-starting equipment on a forest service road that leads into a Coastal GasLink pipeline work camp. Dozens of trees had also been felled along the road and other trees were partially cut, which the RCMP said created a dangerous hazard. "These concerning items have been brought to the attention of the Wet'suwet'en Hereditary Chiefs. They have also been advised that the RCMP has entered into a criminal investigation," the RCMP release stated.

Coastal GasLink stretches 415 miles from Dawson Creek, B.C. to the C\$40 billion LNG Canada project under construction in Kitimat. The company won a court injunction against protestors in the area and an enforcement order from the Supreme Court of British Columbia last week. Protestors believe indigenous law gives hereditary chiefs the right to evict Coastal GasLink from the area because the land had never been ceded in a treaty with the provincial or federal government.

# B.C. human rights commissioner calls for pipeline work to stop

(The Canadian Press; Jan. 11) - British Columbia's human rights commissioner has called for a halt to a contentious natural gas pipeline until the affected indigenous groups fully consent to the construction. Kasari Govender said she believes Canada is shirking its obligations as a signatory to the U.N. Committee for the Elimination of Racial Discrimination. "I join (the U.N. Committee for the Elimination of Racial Discrimination)

in urging Canada to immediately cease the forced eviction of Wet'suwet'en and Secwepemc peoples," she wrote on Twitter.

Coastal GasLink is building a pipeline from northeastern B.C. to LNG Canada's export terminal in Kitimat on the coast and has signed agreements with all 20 elected First Nation councils along the planned 415-mile route, but hereditary chiefs say the project does not have their consent. The company said Jan. 11 that the project is approved, permitted and under construction by more than 1,000 workers, including many indigenous people from across the North.

But Govender said she believes Canada is shirking its responsibilities by allowing construction to continue. "Canada cannot simultaneously vie for a seat at the Security Council while ignoring their obligations to other parts of the U.N.," she wrote. "It's critical to the future of human rights that Canada and B.C. cement the credibility of our institutions by meeting our obligations."

#### World flares enough gas to supply France, Germany and Belgium

(Wall Street Journal commentary Jan. 10) - Tremendous quantities of natural gas are burned off to make way for oil production — and it's likely to get worse. An estimated 5.1 trillion cubic feet of gas was flared worldwide in 2018, according to the World Bank — equivalent to the total consumption of France, Germany, and Belgium. The U.S. was the No. 4 gas-flarer behind Iran, Iraq, and world-leader Russia. Why so much waste? Because it's often an unwanted byproduct of an oil well, and it isn't worth enough to sell.

Geography determines whether the gas is worth something or not. For example, the big oil fields of eastern Siberia and Algeria's Sahara Desert are so far from markets that the investment to process, gather and transport the associated gas produced would exceed its market value. The U.S. has enough gas pipelines to reach the moon, but its gas is incredibly cheap, which encourages waste. Building more gas pipes to the Permian Basin, the center of America's oil patch, is less of a priority than completing oil pipelines.

Geography causes the problem, but geology is making it worse. Shale oil wells have much steeper decline rates than conventional ones. The furious pace of drilling needed to keep oil production stable or rising creates more unwanted gas. Few things irritate oil men as much as taxes and red tape, but with growing criticism for adding to greenhouse gas emissions and enough gas being wasted to supply most of Western Europe, there's money to be made in finding uses for it. Forcing producers to pay for flaring and helping them profit from capturing the gas could help them while doing the Earth good.

#### U.S. natural gas futures price lowest since 2008

(Reuters; Jan. 10) - U.S. natural gas prices have fallen even further in recent weeks as the market tries to avert a glut by encouraging power producers to maximize gas combustion and switch away from coal. Warmer-than-normal temperatures over the past three weeks have been responsible for pushing prompt gas prices within a whisker of multi-year lows. Futures prices for gas delivered at Henry Hub in March fell to just \$2.09 per million Btu on Jan. 2, the lowest since the contract started trading in 2008.

Since Jan. 2, prices for gas deliveries in March 2020 have risen slightly to \$2.15, but they are down from \$2.88 at the same point last year and \$2.94 in 2018. The fall comes as temperatures across the main population centers of the country have been consistently above average since Dec. 21, data from National Oceanic and Atmospheric Administration's Climate Prediction Center shows. Meanwhile, cheap gas and maximum power burn are intensifying the problems of coal-fired power plants, which find themselves unable to compete and accelerating their closures.

#### Israel will add gas-fired power as it works to be coal-free by 2025

(Reuters; Jan. 7) - A government panel has approved an Israeli Energy Ministry proposal to build two power units to be operated solely with natural gas as part of a plan to eliminate coal use by 2025 and improve air quality, the ministry said Jan. 7. The two units are slated for completion in 2022 and will supply 1,200 megawatts of power, replacing four coal-fired production units, the ministry said.

They will be built at a power plant in the central city of Hadera, which currently has six coal units, providing 2,500 megawatts of electricity. Israel's percentage of electricity from coal dropped to 30% in 2018 from 59% in 2010, leading to a 50% decline in air pollution the past five years, the ministry said.

### Coal prices plunge in Europe as fuel loses out to gas

(Bloomberg; Jan. 9) - European coal faces another depressing year as natural gas floods the region and clean-energy policies reduce demand for the dirtiest fossil fuel. Coal use across seven European economies fell to historic lows last year, pushing benchmark rates down by almost a third to \$62 a ton. The prospects for 2020 are looking equally bleak with analysts from S&P Global Platts and Capital Economics predicting prices plunging to the \$50 mark, the lowest in four years.

It's the latest indication that the economics for burning coal have collapsed in little more than a year since the commodity hit \$100 a ton. Europe's goal of zeroing out carbon

emissions by the middle of the century along with ever-cheaper wind and solar power and falling gas prices all point to drastic reductions for generators that burn coal.

For most of past decade it was more profitable to burn coal than gas in Germany, Europe's biggest economy. That relationship was turned on its head last year as imports of liquefied natural gas and mild weather pushed down prices for the cleaner fuel, encouraging utilities to switch away from coal. Part of the reason is the abundance of natural gas. Ample flows from pipelines along with near-record levels of LNG shipments arriving in Europe have left storage sites brimming.

#### Norway's Equinor sets goal of emissions-free facilities by 2050

(Bloomberg; Jan. 7) – Norway's Equinor, which is based in Stavanger, on the edge of the North Sea's oil and gas riches, is trying to adapt its business model to a world increasingly alarmed by the fallout of climate change. CEO Eldar Saetre put it simply. "The most important question for us as a company and as an industry — and also for Norway as a nation — is this: How do we remain relevant and competitive?"

Equinor, which is controlled by the Norwegian state, just launched its most ambitious climate goals to date. The idea is to make oil and gas installations virtually emissions-free by 2050. "This isn't politics, it's business," Saetre said Jan. 6. Equinor, formerly known as Statoil, is betting that lower emissions in production can keep it competitive. And with roughly a quarter of Norway's total emissions coming from Equinor, any cuts the company can achieve would make a meaningful difference to the whole country.

To be sure, emissions caused during production represent just a small fraction of the total over an oil barrel's life cycle. And other oil companies are chasing more ambitious goals. Repsol of Spain said last month it would cut all emissions by 2050, including from the products it sells. Equinor and its partners plan to invest about \$5.7 billion to reach a first target to cut emissions by 40% by 2030. That will mostly be done by connecting offshore platforms and onshore plants to Norway's electricity grid, which is dominated by hydropower. Reductions will then reach 70% in 2040 and almost 100% by 2050.

# Report says U.S. oil and gas expansion adds to greenhouse gases

(Houston Chronicle; Jan. 8) - Oil and gas industry expansions could add as much greenhouse gas pollution as the equivalent of 50 coal plants by 2025 — with much of that increase coming from Texas and Louisiana — at a time when pressure to slow down global warming rises, a new report found. Greenhouse gas emissions in the U.S. fell about 2 percent last year, mostly as a result of a decrease in coal consumption.

Not only is that progress not enough, said Eric Schaeffer, executive director of the Environmental Integrity Project (EIP), but it's being undercut by expansion in the oil and gas industry. Over the next five years, the industry plans to build or expand 157 plants, in addition to more drilling that could release up to 227 million tons of greenhouse gases — up to 30 percent more than 2018, according to the nonprofit's new report, "Greenhouse Gases from Oil, Gas, and Petrochemical Production."

For its analysis, EIP focused on companies that extract or refine oil and gas, export liquefied natural gas, or manufacture petrochemicals, plastics, or fertilizers. The U.S. has become a global leader in oil and gas production but it comes with consequences in the form of greenhouse gases and pollutants, said Courtney Bernhardt, EIP's director of research. Texas has the highest emissions from coal, petroleum, and gas of all the states, according to the U.S. Energy Department. Houston takes the top spot per capita.

### Oil sands producer sets goal of net-zero emissions

(Bloomberg; Jan. 9) - Cenovus Energy has joined some of its oil sands peers in setting a goal of reaching net-zero emissions from its operations, part of a push to improve the industry's reputation and win over environmentally minded investors. Cenovus is aiming to achieve the net-zero goal by 2050, and in a statement released Jan. 9 it also set targets of reducing its emissions per barrel of oil produced 30% by 2030 and keeping its absolute emissions flat in that timeframe.

Both of those targets include direct emissions from its own operations, as well as the indirect emissions from the generation of energy that it uses at its facilities. The companies that produce crude from Canada's oil sands have been trying to revamp their public image as ecological offenders as investors increasingly focus on firms' environmental, social, and governance performance. That dirty-fuel reputation has led to fierce opposition and delays to pipelines that export oil sands crude.

Cenovus' peers Canadian Natural Resources and MEG Energy have both set long-term "aspirational" targets of achieving net-zero emissions from their oil sands operations. Putting those goals within reach are advances in technologies like carbon capture and sequestration, as well as increased use of solvents — rather than energy-intensive steam — for extracting the thick oil sands bitumen, said Al Reid, Cenovus's executive vice president in charge of stakeholder engagement.