Oil and Gas News Briefs
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June 29, 2020

Satellite data discovers large methane leaks from Russian gas lines

(Reuters; June 26) - Last fall, European Space Agency satellites detected huge plumes of the invisible planet-warming gas methane leaking from the Yamal pipeline that carries natural gas from Siberia to Europe. Energy consultancy Kayrros estimated one leak was spewing out 93 tonnes of methane every hour, about 3.5 million cubic feet of gas, meaning the daily emissions from the leakage were equivalent to the amount of carbon dioxide pumped out in a year by 15,000 cars in the United States.

The find, which has not been reported, is part of a growing effort by companies, academics and some energy producers to use space-age technology to find the biggest methane leaks. The potent heat-trapping gas builds up rapidly in the atmosphere. Kayrros, which is analyzing the satellite data, said another leak nearby was gushing at a rate of 17 tonnes an hour and that it had informed the pipeline operator Gazprom about its findings this month. Gazprom did not immediately respond to requests for comment.

Up to now, estimates of greenhouse gas emissions have relied mainly on paper-based calculations of what's pouring out of tailpipes and smokestacks, based on the amount of energy consumed. But as satellite technology improves, researchers can start to stress test the data — and the early results show leaky oil and gas infrastructure is responsible for far more of the methane in the atmosphere than previously thought. The revelation would heap pressure on energy companies — already targeted by climate activists and investors for their contribution to carbon dioxide emissions — to find and plug leaks.

BP will sell petrochemical business as part of plan to 'reinvent' itself

(The Wall Street Journal; June 29) - BP has agreed to sell its petrochemicals business to British chemicals company Ineos in a $5 billion deal that will help BP transition to lower-carbon energy, the company said June 29. The deal could help BP pare its relatively high debt load and separates it from its peers, as Shell and ExxonMobil have been growing their petrochemicals businesses. It would have taken considerable investment to grow the division, which is smaller than its peers' businesses, BP said.

Petrochemicals are expected to be the largest driver of oil demand in the coming years, comprising more than a third of oil demand growth to 2030, according to the International Energy Agency. BP and Ineos first proposed the deal several years ago and discussions were reignited in recent months, according to people familiar with the matter. Ineos, one of the world's largest petrochemical companies, bought the bulk of BP's petrochemicals business in 2005 for $9 billion.

"This is another significant step as we steadily work to reinvent BP," said CEO Bernard Looney. It is the first multibillion-dollar deal by an oil major since the novel coronavirus caused companies to cut costs and scale back investment plans. Oil prices have lost more than a third of their value since the start of the year. Earlier this month, BP said it was cutting 14% of its global workforce and would take a write-down of up to $17.5 billion on its asset values, accelerating existing plans to reshape the company after the coronavirus pandemic's crushing impact on oil prices.

Debt-ridden fracking giant Chesapeake Energy files for bankruptcy

(Washington Post; June 28) – Oklahoma City-based Chesapeake Energy, which more than any other company capitalized on the fracking revolution that turned the U.S. into the leading shale gas producer, filed for bankruptcy protection June 28. Staggering under $9 billion in debt and the historically low price for gas, driven down even lower by the coronavirus pandemic, Chesapeake said it will continue to operate and expects to reorganize and emerge from protection under Chapter 11 of the bankruptcy code.

Its fall since the heady days a dozen years ago has been epic. Once valued at $37 billion, its shares closed June 26 worth just $115 million. Chesapeake had been the country's second-largest gas producer. Under the leadership of the late Aubrey McClendon, it swept up leases from the Dakotas to Pennsylvania, Louisiana to New Mexico. The expansion was entirely fueled by debt, which crippled the company when its success as a producer — and the success of rivals — drove down the price of gas.

McClendon was forced out in 2013 and he died three years later, the day after he was indicted on price-fixing, when he drove his car into a concrete abutment. The company has reduced its debt since then, but not enough to escape bankruptcy court. The company has been trying to move into the oil business, but the pandemic has cut deeply into demand for oil — and thus the price. Chesapeake reported losses of $8.3 billion in the first quarter of this year. "The legacy debt and contractual obligations that have hindered our performance" finally had to be addressed the company said.

Pilot project uses hydrogen to run power generators near Tokyo

(Reuters; June 25) - Japan's Chiyoda Corp. and its partners said June 25 that their pilot project, using imported hydrogen from Brunei, has begun providing clean fuel for the gas-turbine power generators of Toa Oil Co. in Kawasaki, near Tokyo. The move marks the first consumption of foreign-produced hydrogen for power generation in Japan and the world's first successful international hydrogen supply chain, the companies said.

Chiyoda, Mitsubishi, Mitsui, and Nippon Yusen have been working on the hydrogen demonstration project since 2015, using the organic chemical hydride method. Their research unit, called Advanced Hydrogen Energy Chain Association for Technology Development (AHEAD), has built a hydrogenation plant in Brunei and dehydrogenation plant in Japan. The venture transports hydrogen, extracted from gas piped directly from liquefied natural gas plants, from Brunei in liquefied form.

It is dehydrogenated in Japan, extracting hydrogen for use as fuel at gas power generators. The pilot project will continue through November. Toa's Kawasaki plant can generate 80 megawatts of electricity. "We want to use hydrogen extracted from renewable energy in the future and establish a strong supply chain," said Takakazu Morimoto, president of AHEAD. Hydrogen has long been touted as a clean alternative to fossil fuels. Now as major economies prepare green investments to kick-start growth, advocates see a chance to drag the niche energy into the mainstream.

Oil and gas companies could see opportunity in hydrogen

(Bloomberg Green; June 25) - On particularly cold winter days, the vast majority of the U.K.'s energy comes from burning natural gas. That arrangement will have to change radically if the country is to hit its legally mandated target of net-zero emissions by 2050. As other countries adopt targets to align with the Paris climate agreement, they too will have to find an alternative to gas. That leaves fossil fuel companies with an opportunity.

Hydrogen burns cleanly, leaving only water behind, making it an attractive alternative fuel source — not just for governments looking to satisfy climate mandates, but also for oil companies trying to ensure their continued relevance. Oil-and-gas majors such as Shell, Equinor and BP have spent tens of millions of dollars on pilot projects. Now in the face of record-low oil prices, frozen international travel and growing shareholder unease over greenhouse gas emissions, investing in hydrogen has taken on a new urgency.

Hydrogen also burns very hot, making it useful for high-polluting heavy industries such as cement- and steel-making. These sectors have long relied on coal, as wind and solar cannot deliver the necessary heat. Supplying hydrogen may potentially become a huge new market that oil companies could dominate quickly with their expertise in moving and selling gas. "Some oil and gas majors see it as a lifeline," said Rachel Kyte, a dean at Tufts University and former special representative on sustainable energy at the U.N.

With European governments unveiling tens of billions of euros in new spending to re-start economies and satisfy pre-existing climate commitments, hydrogen development could get a major funding kickstart. Germany, for example, has allocated €9 billion ($10 billion) to the nascent industry. That spending will be crucial for the technology around hydrogen production to reach a scale that can compete in the international market.

[Tankers parked off Singapore hold 82 million barrels]

(Bloomberg; June 25) - For an insight into Asia's oil demand recovery and the health of energy markets, look no further than the volumes of crude and fuel floating off Singapore. Some 82.5 million barrels of crude and oil products was sitting in 67 vessels parked off Singapore and in the Malacca Strait as of June 23, according to data intelligence firm Kpler. That's up from 69.8 million barrels at the end of May. The floating stockpiles fluctuate as Asia buyer interest is countered by the arrival of more ships.

Poor refining margins, earlier contango plays where traders bought and held cargoes for later delivery, and a diversion of cargoes from weaker markets to Asia are all feeding the growing hoard of crude oil and fuels. While Asia's energy demand rebound has led the world, much of that has come from China, with other economies in the region struggling to emulate its rapid recovery.

Some of the tankers idling off Singapore were booked for three-month or longer storage plays earlier this year when the super contango made hoarding at sea more viable. Ships currently parked are carrying crude from everywhere from Venezuela to the Middle East to West Africa and some of them have been there for at least a month, according to Serena Huang, senior analyst at market analytics firm Vortexa. Aside from crude, the tankers also hold fuel oil, gasoline, diesel, and jet fuel.

[Analyst says LNG market could come up short if demand recovers]

(S&P Global Platts; June 25) - Fears of a crude supply crunch in the coming years are overblown, as economically driven shut-ins, particularly in the U.S. shale patch, could be reversed with relative ease, but that is not the case for natural gas as the spate of LNG project deferrals could eventually lead to shortages, the head of oil and gas for consultancy EY, Andy Brogan, said in an interview with S&P Global Platts.

While natural gas prices are currently depressed and looked likely to remain so for the next few years due to overcapacity, overall demand is expected to continue rising. Eventually, demand would outpace new supply additions, given that a number of new LNG projects had been canceled or deferred due to market conditions, Brogan said. "There's a lot of capacity available from projects where most of the cost has already been sunk," he said. "In the medium term, you can see that these project deferrals will begin to have an impact. But in the short term, gas kind of looks stuck where it is."

Oil demand, however, is likely to remain impaired for a while as the global economy recovers from the coronavirus pandemic. Between lower demand and OPEC+ production cuts, there remains ample spare capacity to supply foreseeable needs, Brogan said. Should demand fully rebound and new production be needed, wells could easily be reactivated or drilled in fields where production had been reined in, whether due to OPEC+ cuts or economic factors, such as in the U.S. and Canada.

U.K. agency ready to help finance Mozambique LNG project

(Reuters; June 26) - Britain's export credit agency U.K. Export Finance is set to back a $20 billion liquefied natural gas project in Mozambique, a source with direct knowledge of the matter told Reuters on June 26. UKEF listed the project, led by French energy major Total , as under consideration for financing last August. A decision to participate will draw criticism from environmental campaigners who oppose such a move. The source said UKEF was planning to commit about $800 million in funding to the project.

One of the world's biggest gas finds in a decade lies off the Mozambique coast, with the potential to make the country, one of the world's least developed nations, a major LNG player. Opponents, however, say such projects lock in harmful emissions for the foreseeable future and often hurt impoverished local communities, especially in countries with a history of corruption, like Mozambique. "The U.K. should never finance another fossil fuel project if they are serious about being a climate leader," said Alex Doukas, program director at campaign group Oil Change International.

The Export-Import Bank of the U.S., similar to the U.K. Export Finance agency, last fall voted to authorize a direct loan of $5 billion for the LNG project to support the export of U.S. goods and services for the development and construction of the project. Total has secured $15 billion in financing for the project, with the financing agreement expected to be signed next week. It aims to start producing gas in 2024.

Russia eyes boost in pipeline gas sales to China

(S&P Global Platts; June 26) - Russia's Gazprom is considering — with Chinese partners — increasing the capacity of its Power of Siberia gas pipeline by 15% to 1.55 trillion cubic feet per year from the current design capacity of 1.34 tcf, CEO Alexei Miller said June 26. In an entry to his online column following Gazprom's annual general meeting, Miller also said there is the potential for Russia's pipeline gas export capacity to China to more than triple in the future with the addition of other routes.

Gazprom began its first gas exports by pipeline to China in December with the launch of the Power of Siberia line. Flows started at around 350 million cubic feet per day and are set to ramp up to capacity gradually in the coming years to about 3.5 bcf a day. Gazprom has also begun design work on a second gas pipeline to serve the growing Chinese market, a 1.8-tcf-per-year artery that would carry Russian gas through Mongolia to some of China's biggest demand centers, dubbed Power of Siberia-2.

Miller said the growth in supplies through Power of Siberia lines would outstrip both LNG imports and the supply of Central Asian pipeline gas to China. As well as the plans for the Power of Siberia-2 pipeline, Gazprom is also considering supplying China with gas from its Far East reserves.

Longer horizontal wells boost U.S. oil and gas production

(World Oil; June 25) - Increases in drilling efficiency helped push U.S. crude oil and natural gas production to set new records in 2019 of 12.2 million barrels per day and 111.5 billion cubic feet per day respectively, according to research from the U.S. Energy Information Administration. One factor that contributed to the jump in production has been the ability to contact more of each formation using longer horizontal drilling.

Both the number of active rigs and the number of wells drilled in 2019 were at the lower end of the range for the past 45 years, despite the record production. But the average length drilled per well was 15,000 feet in 2019, reflecting longer horizontal well lengths. The number of U.S. oil and gas wells drilled each month per active rig has decreased since the peak in 1986 of 3.6 wells per rig per month. In 2019, an average rig drilled 1.5 wells per month. However, by drastically increasing the horizontal length of wells, producers have increased production despite using fewer rigs and drilling fewer wells.

Horizontal wells in the U.S. averaged about 10,000 feet of lateral length. The increased productivity of wells with longer horizontal lengths has more than offset the effects of rigs drilling fewer wells. Horizontal wells have more wellbore — the hole that forms the well — in contact with the producing formation, boosting the amount of oil or gas that can be recovered versus a traditional vertical well.

U.S. natural gas storage inventories higher than normal

(S&P Global Platts; June 24) - With gas storage volumes approaching or surpassing five-year maximums in multiple regions across the U.S., and imports from Canada likely to rise later this summer, a resurgence of LNG feed gas demand will likely be required to tighten the market and prevent further price collapses at Henry Hub. Underground storage volumes in the southeastern U.S. and Texas have exceeded 1 trillion cubic feet nearly four months earlier than normal, according S&P Global Platts Analytics.

Over the past five years, storage in the region on this date averaged 771 billion cubic feet. The coronavirus pandemic outbreak combined with a milder-than-normal winter has combined to create the oversupply. The power-burn demand jump typically seen in the region in June for air conditioning has failed to materialize this summer. What's more, the drop in feed gas demand for LNG exports has exacerbated the oversupply.

Platts now forecasts LNG feed gas demand to average between 3 bcf and 3.5 bcf per day in July and August, down more than 50% from the start of 2020. This helped drive a price collapse in mid-June when Henry Hub plummeted to $1.38 per million Btu, its lowest since 1998. It is possible the weak prices could improve U.S. LNG export netbacks to markets in Asia and Europe, especially in September and October.

Judge orders Enbridge to shut down pipeline under Great Lakes

(Bloomberg; June 25) - Enbridge was ordered to temporarily halt operations of its Line 5 crude oil pipeline by a Michigan judge, handing a victory to state officials who have sought to shut down the conduit. Circuit Court Judge James Jamo ruled June 25 against the continued operation of the conduit's west line and prevented Enbridge from restarting the east line. The shutdown must happen within 24 hours, and the orders will remain in effect until a hearing on the state's request for a preliminary injunction.

It's a win for Michigan Gov. Gretchen Whitmer and Attorney General Dana Nessel, who have tried to shut down the pipeline since taking office last year over concerns about a potential spill in the Great Lakes. Enbridge has planned a US$500 million project to replace the decades-old line and enclose the segment that runs under the lakes in a tunnel to improve its safety, but even that is controversial among opponents.

Line 5 runs 645 miles from Superior, Wisconsin, to Sarnia, Ontario, carrying as much as 540,000 barrels a day of light crude, synthetic crude, and natural gas liquids that are refined into propane. The line was built in 1953 and consists mostly of 30-inch diameter pipe. It splits into two 20-inch-diameter lines for the 4.5-mile section that runs under the Straits of Mackinac, which connects Lake Michigan and Lake Huron. The most recent tussle started last week, when Enbridge discovered that a support for the segment in the strait had shifted from its original position. There was no leak or spill.

Cuts to federal royalty rates hit state share of revenues, too

(Financial Times; London; June 28) - Oil and gas companies that drill on U.S. government-owned land are spending less for access after the Trump administration invoked the coronavirus crisis to slash the royalties they pay. About 300 million barrels of the 4.5 billion barrels of U.S. oil production last year came from wells on federal lands, while 700 million barrels was pumped in offshore federal waters. Energy production yielded $12 billion in direct revenue for Washington in fiscal 2019.

The collapse in oil prices as the pandemic set in forced companies to suspend drilling and in some cases close wells. Seeking to keep wells from abandonment, the U.S. Interior Department on April 21 declared that oil and gas operators could seek lower royalty rates. The government has since cut royalty rates on hundreds of properties, in many cases from 12.5% to 0.5%, data show. While a small portion of federal government revenue, energy royalties are important to resource-rich states in the mountain west that receive about half of what Washington collects inside their borders.

“These oil and gas royalties are an integral component of many western states’ budgets, and suspending their collection would have a direct negative effect on states,” the Western Governors’ Association wrote in early April to David Bernhardt, a former oil lobbyist who serves as Interior Secretary. In fiscal 2019, the federal government disbursed $2.2 billion back to states, more than half to New Mexico — home to a portion of the prolific Permian Basin oil field — and almost 30% to Wyoming.

Iran builds new oil pipeline to avoid Strait of Hormuz

(S&P Global Platts; June 25) - Iran on June 25 officially started building a 620-mile pipeline to avoid the disputed Strait of Hormuz for oil exports, state television reported. The Goureh-Jask route will bring 1 million barrels per day of oil from the southern Bushehr province to the Iranian coast on the Sea of Oman for exports. The project, which will cost more than $1.1 billion, envisages storage capacity of 10 million barrels of crude at the shipping terminal.

"This is a strategic project in terms of security, economy and energy ... customers who buy oil from us want to be confident that they can take our oil under any conditions," President Hassan Rouhani said in a televised video conference to launch construction. He added that Iran would be the only country whose oil exports would be completely cut if the Strait of Hormuz were to be closed. "On a rainy day, it would be us who would be in trouble. We have got past this problem," he said.

The water channel is the key chokepoint for oil and gas tankers traversing the Persian Gulf and has been scene to military tensions between the U.S. and Iran as well as attacks on tankers. Rouhani said he hoped the pipeline would be completed by March.

Mideast countries continue drive to diversify from oil

(Bloomberg; June 26) - It’s been a busy week for dealmaking in the Middle East. In a matter of days, about $25 billion in deals have been struck in the oil-rich region, including the year’s biggest infrastructure and banking transactions even as the coronavirus pandemic cripples dealmaking. The blitz is quite rare for a region often known for political unrest and its influence on energy markets. It is also welcome relief for bankers looking to salvage what could be a tough year for mergers and acquisitions.

Mergers and acquisitions activity in the Middle East is reviving as governments take measures to diversify their economies away from oil. They’re also seeking to create more efficiencies through consolidation or by bringing in overseas investors. Sovereign wealth funds including Saudi Arabia's Public Investment Fund are deploying billions of dollars to buy stakes in companies ranging from Facebook to Citigroup to take advantage of a downturn in share prices.

The value of deals in the Gulf states, including proposed deals, is up tenfold so far in June compared with the same period last year, according to data compiled by Bloomberg. Abu Dhabi has been leading the region in the past two years or so in bringing in more international investors to some of its prized assets. The emirate's state-owned Abu Dhabi National Oil Co. raised $10 billion on June 23 by selling a stake in its gas pipelines to a group of investors including Singapore's sovereign wealth fund.

Nigeria's state oil company will disclose finances

(Bloomberg; June 27) - Nigeria's powerful state oil company, whose finances and operations have been shrouded in secrecy for decades, is opening itself up to greater public scrutiny. The Nigerian National Petroleum Corp. (NNPC) on June 14 published its 2018 annual report, which contained an audited account of all its 20 units for the first time in its 43-year history. The 2019 figures are set to be divulged in "coming months," and the company has pledged to make the financial release a tradition.

The significance of those developments is underscored by the NNPC's overarching dominance of Nigeria's oil industry, which is Africa's largest and generates about half of all government revenue. It operates joint ventures with international energy companies that produce most of the nation's crude. It also has outright control of leases to offshore blocks that contain two-thirds of Nigeria's oil reserves.

"NNPC used to be the very definition of opacity," said Waziri Adio, head of the Nigeria Extractive Industry Transparency Initiative, created in 2005 when the government signed up to a global drive to improve disclosure of revenue generated from oil and minerals. The disclosure commitment is good for accountability and represents "a major milestone not just for NNPC but for the oil and gas sector in Nigeria," he said.