

Oil and Gas News Briefs

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Canadian gas going out as LNG exports from Texas terminal

(Bloomberg; Feb. 13) - A stream of natural gas that's being unleashed from British Columbia's vast reservoirs is blazing a record-setting path through global markets, providing hope for Canada's beleaguered drillers and relief for energy-hungry economies around the world. Tourmaline Oil, Canada's largest gas producer, has started shipping gas on a 3,000-mile journey from northeast British Columbia to Chicago and then southbound to an LNG export facility on the Gulf Coast in Texas.

The journey is believed to be the longest path from a natural gas well to a liquefaction facility in the world. From Texas, it's being shipped to Asia or Europe on voyages that can range from 5,000 to 17,000 nautical miles, depending on the route. It promises higher prices for Tourmaline's gas and a new source of the fuel for European and Asian buyers that are scouring the globe for supplies. Canada's first LNG export terminal, on British Columbia's West Coast, is not expected to start up until 2025.

Tourmaline's is the first significant amount of Canadian gas sold for markets beyond North America, a milestone for an industry that has struggled with heavily discounted prices because of a lack of domestic LNG export facilities. The 15-year agreement to supply 140 million cubic feet of gas per day to Cheniere Energy took effect in January, enabling Tourmaline to send the equivalent of one ship per month to Asian markets, where gas prices are roughly 10 times higher than in the Canadian spot market.

Tourmaline is receiving about \$20 per thousand cubic feet for its gas, minus 86 cents for pipeline transport costs and undisclosed liquefaction and shipping costs — which could all total between \$7 and \$8. The current price of gas at Canada's AECO hub is \$2.05.

Energy industry waits for IRS, Treasury rules on hydrogen tax credits

(Wall Street Journal; Feb. 12) - Some of the world's biggest companies are fighting over what qualifies as green energy. At stake are tax credits worth billions of dollars under the new U.S. climate law for one of the most-hyped clean-energy technologies. Industry leaders such as BP and NextEra Energy are arguing against renewable-energy companies over tax credits for hydrogen, a fuel that when made from renewable energy could reduce carbon emissions from transportation and other industrial sectors.

The battle is about what types of hydrogen should be classified as "clean" and receive federal tax credits. The incentives are seen as vital to making clean hydrogen cost

competitive with hydrogen made from natural gas, which can be several times cheaper but emits carbon in its production process. Businesses large and small are repositioning to try to capture some of the tidal wave of government cash from the 2002 law.

The rules defining eligibility for hydrogen tax credits, now being written by the IRS and Treasury Department, are some of the most contentious because they could affect project investment decisions and the development of a new industry. “The decisions the IRS and Treasury make on this will absolutely shift billions of dollars moving forward,” said Danny Cullenward, policy director at CarbonPlan, a nonprofit that analyzes climate solutions. “The big risk is throwing out massive subsidies that don’t do anything.”

Most proposed clean-hydrogen projects use electrolyzers that split water into hydrogen and oxygen. When electrolyzers run on electricity from renewables, that hydrogen is considered green. Not so when natural gas is burned to generate the electricity or when hydrogen is produced from cracking open molecules of natural gas. The cheapest hydrogen made from gas costs about \$1.50 per kilogram to produce, while green hydrogen costs roughly \$5 or more. The proposed tax credit is up to \$3 per kilogram.

Korea plans more nuclear power and renewables, less LNG and coal

(Natural Gas Intelligence; Feb. 14) - South Korea, the third largest global LNG importer in 2022, will rely less on the fuel as the country’s latest plans call for an increase in the amount of nuclear and renewables used for power generation. Since President Yoon Suk-yeol took office in 2020, the government has reversed his predecessor’s policy of phasing out nuclear power. Suk-yeol’s government aims to reduce emissions by 40% from 2018 levels by 2030 and reach net-zero emissions by 2050.

“South Korea will actively use renewable energy sources and nuclear power plants and come up with a feasible and balanced energy mix amid the country’s efforts to reach carbon neutrality,” the Ministry of Trade, Industry and Energy said last month after unveiling its latest energy plan. Under MOTIE’S 10th Basic Plan for Electricity Supply and Demand, the ministry forecasts that nuclear would account for 32.4% of total power generation by 2030 and 34.6% by 2036. That compares with 27.4% in 2021.

Seoul plans to extend the life of existing nuclear plants, complete construction work on previously suspended reactors and start-up new ones. Under MOTIE’s vision, the share of renewables would rise to 21.6% in 2030 and 30.6% in 2036. That compares to just 7.5% in 2021. Coal-fired power is projected to decrease to less than 15% in 2036, compared with 34.3% in 2021. The percentage of liquefied natural gas in the power generation mix is forecast to fall from 29.2% in 2021 to 22.9% by 2030. It’s projected to drop to 9.3% by 2036 as nuclear and renewables gain a larger share of the mix.

Pakistan will build more coal plants, turning away from costly LNG

(Reuters; Feb. 14) - Pakistan plans to quadruple its domestic coal-fired capacity to reduce power generation costs and will not build new gas-fired plants in the coming years, its energy minister told Reuters on Feb. 13, as it seeks to ease a crippling foreign-exchange crisis. A shortage of natural gas, which accounts for over a third of the country's power output, plunged large areas into hours of darkness last year. A surge in global prices of liquefied natural gas after Russia's invasion of Ukraine and an onerous economic crisis had made LNG unaffordable for Pakistan.

"LNG is no longer part of the long-term plan," Pakistan Energy Minister Khurram Dastgir Khan told Reuters, adding that the country plans to increase its domestic coal-fired power capacity to 10 gigawatts in the medium-term, from 2.31 GW currently. Pakistan's plan to switch to coal to provide its citizens reliable electricity underscores challenges in drafting effective decarbonization strategies at a time when some developing countries are struggling just to keep lights on.

Despite power demand increasing in 2022, Pakistan's LNG imports fell to the lowest levels in five years as European buyers were willing to pay more and elbowed out price-sensitive consumers. "We have some of the world's most efficient ... LNG-based power plants. But we don't have the gas to run them," Dastgir said. The South Asian nation, which is battling a wrenching economic crisis and is in dire need of funds, is seeking to reduce the cost of its fuel imports and protect itself from geopolitical shocks, he said.

Dutch cut natural gas consumption by 25% in 2022

(Reuters; Feb. 13) - Dutch natural gas use in 2022 was down 25% from 2021, reaching the lowest level in 50 years, Statistics Netherlands said on Feb. 13, citing higher prices that curbed demand after Russia's invasion of Ukraine. Consumption reached 1.1 trillion cubic feet, down from 1.4 tcf in 2021, with large industrial companies and households both reducing gas use by about 25% on average. The amount of gas used was lower than in 1972, when the country's population was a third smaller than today.

The agency said that about 10% of the reduction by households was due to an unseasonably warm autumn. Among industrial users, chemicals companies cut their use more than electrical utilities while large greenhouses, many of which have efficient generators to burn gas for warmth and sell the excess electricity to the national grid, used about 30% less gas in 2022. The country's gas storage facilities finished the year 75% full, at more than twice the level at the end of 2021.

German project close to 30% green hydrogen in natural gas mix

(Reuters; Feb. 13) - A German project aimed at boosting clean energy for home heating expects to hit a key milestone of 30% green-energy fuel blended with natural gas for some households southwest of the country within weeks, the company behind the project said. The project is the first of its kind in Germany to supply the blended fuels to households at the test site in the southwest town of Oehringen, which the firm hopes could serve as a blueprint for the rest of the country.

Under efforts to move away from fossil fuels and reduce carbon emissions, Germany is seeking to produce green hydrogen extracted from water using wind and solar power via electrolysis. It plans to store the gas or transport it to users on existing and new gas lines. Europe's biggest economy aims to eventually replace natural gas, creating a new value chain for green hydrogen that it would get from imports and domestic production.

The Oehringen "hydrogen island," an area in a town near Heilbronn with detached family homes, has been receiving a mix of natural gas plus gradually more hydrogen from its pipeline operator Netze BW — a subsidiary of utility EnBW — since autumn 2022. Netze's adjacent regional offices in Oehringen received the blends ahead of the homes, reaching a 30% mix last summer. "Within the next two weeks ... we will get to 30% in the households," project leader Heike Gruener told Reuters.

Russia likely will never recover from loss of gas sales to Europe

(Reuters; Feb. 14) - Meticulously crafted over decades as a major revenue stream, Moscow's gas trade with Europe is unlikely to recover from President Vladimir Putin's war on Ukraine. Since the war began a year ago, a combination of Western sanctions and Russia's decision to cut supplies to Europe drastically reduced the country's energy exports. The latest sanctions, including price caps, are likely to disrupt oil trade further — but it is easier to find new markets for crude and refined products than it is for gas.

Russia's gas trade with Europe has been based on thousands of miles of pipes starting from Siberia, locking Western buyers into a long-term supply relationship with the largest producer, Gazprom. "The work of hundreds of people, who for decades built the exporting system, now has been flushed down the toilet," a former manager at Gazprom told Reuters on condition of anonymity for fear of reprisal. Reuters' compilation of sales data, export forecasts and average gas prices implies Gazprom's export revenues will almost halve this year, widening the \$25 billion budget deficit Russia posted in January.

In an effort to replace sales to Europe, Russia is seeking to boost its pipeline gas deliveries to China, the world's largest energy consumer and top buyer of oil, liquefied natural gas and coal. Supplies began via the Power of Siberia pipeline in late 2019 and Gazprom aims to raise exports to almost 1.7 billion cubic feet per day by 2025. Moscow also has an agreement with Beijing for 1 bcf per day from a yet-to-be built pipeline from the Pacific island of Sakhalin, while Russia is also developing plans for Power of Siberia 2 from Western Siberia, which in theory could send an additional 4.8 bcf a day to China.

Whether that relationship can be as lucrative as supplying gas to Europe remains to be seen. Gas sale negotiations with China are expected to be complex, not least because China is not expected to need additional gas until after 2030, industry analysts said.

France wants EU to recognize nuclear power as ‘green’

(Bloomberg; Feb. 14) - A spat over defining “green hydrogen” may jeopardize a flagship project to pump hydrogen from Barcelona to Marseille, France, and then onto Berlin via pipeline. After a recent victory in Brussels for renewable hydrogen produced in countries with a low-carbon energy mix, France will keep pushing for nuclear energy to be considered a clean source of making hydrogen in negotiations over the European Union’s green targets, according to officials at the French energy transition ministry.

Failure to take into account nuclear in hydrogen targets for transport and industry would jeopardize the financial viability of projects such as the BarMar pipeline, also known as H2Med, the French officials added. The veiled threat highlights how politically sensitive defending nuclear energy is for France. Spokespeople for the governments in Madrid and Berlin have said they would oppose mentioning low-carbon hydrogen — which includes nuclear-produced hydrogen — as part of EU renewable energy goals.

Germany, where opposition to nuclear power is historically high, has lobbied hard for an exclusion of nuclear from the hydrogen definition. The country will phase out its last nuclear power plants by mid-April. The EU is discussing a directive that would set targets for using hydrogen in the industry and transport sectors. The decision to grant a carve-out for nuclear hydrogen “is an acknowledgment of the decarbonization efforts made by France,” French Energy Transition Minister Agnes Pannier-Runacher said in a statement. France typically gets most of its electricity from nuclear reactors. It wants to be able to use atomic energy in the future to produce low-carbon hydrogen.

OPEC expects 2023 oil demand will exceed pre-pandemic levels

(The National; Abu Dhabi; Feb. 12) – OPEC expects global oil demand to exceed pre-pandemic levels this year, amid an improving economic outlook in top crude importer China, Haitham Al Ghais, the group’s secretary-general, said on Feb. 12. Ghais, who was speaking at the Egypt Petroleum Show in Cairo, also said global investment of \$12.1 trillion is required through 2045 to ensure stable supplies in energy markets.

Global oil demand is expected to reach record levels this year after China, the world’s second-largest economy, lifted pandemic curbs following strict adherence to a zero-COVID policy for nearly three years. China’s economy is forecast to grow 5.2% this year after beating expectations with a 3% acceleration in 2022, according to the International

Monetary Fund. The International Energy Agency has said China will account for nearly half of its 2023 oil-demand growth forecast of 1.9 million barrels per day.

China's recovery and sanctions on Russian oil exports are expected to tighten global crude supplies in the second half of the year, several analysts said. An increase in China's demand for crude this year could push oil markets back into a supply deficit in June and lead OPEC+ to reverse its production cuts adopted last year, Goldman Sachs said in a research note last week.

China's state-owned refining companies step up Russian oil imports

(Bloomberg; Feb. 12) - China's state-owned oil refining giants are speeding up purchases of Russian crude, citing the allure of cheap cargoes from the OPEC+ producer as demand recovered after the country ditched zero-COVID. China Petroleum & Chemical Corp., or Sinopec, as well as PetroChina and CNOOC will continue to ramp up their procurement of Russian grades in the coming months, said people with knowledge of the matter, who asked not to be identified as the information is private.

Shipments purchased include flagship Urals, which ships from Russia's western ports, as well as ESPO, which loads from Pacific terminals. The move by the state-owned companies marks a significant shift in the attitude of Chinese oil majors toward Moscow, opening the floodgates for Russian crude and fuels to infiltrate more parts of Asia's No. 1 refining nation. China and India have been the top two buyers of Russian crude since the European Union slapped sanctions on Russia over the war in Ukraine.

Chinese state-owned refiners have erred on the side of caution, however, while private refiners doubled down on cheap oil from Russia. Processing more Russian crude should improve refining margins at Chinese state-owned refiners, placing them in a competitive position to also export fuels to other buyers in Asia and Europe, said Daphne Ho, senior research analyst for oil and refining at Wood Mackenzie.

Russia manages to keep drilling despite Western sanctions

(Bloomberg; Feb. 14) - When Russia announced last week that it would cut oil production by half-a-million barrels a day in retaliation against Western sanctions, there was skepticism about whether it was really doing so by choice. Russia is entangled in a tightening web of economic restrictions, from prohibitions on exports of technology to the country to a recent European Union ban on most imports of its oil. As far as the West is concerned, Moscow is buckling under the weight of sanctions.

"It wasn't voluntary, it was forced on them," Kadri Simson, EU Commissioner for Energy, said in an interview. "They don't have the ability to keep up the production volumes

because they don't have access to necessary technology." Yet data from within Russia tells a different story. Russian companies did the most drilling in over a decade last year, with little sign that sanctions or the departure of some big Western firms directly harmed upstream operations. This helps to explain how its oil production rebounded in the second half of 2022 even as further restrictions were imposed on its exports.

"The industry largely continues working just like before," said Vitaly Mikhalchuk, head of the research center at Business Solutions and Technologies, formerly the Russian unit of consultant Deloitte & Touche. "Russia has been able to retain most oil-service competencies, assets and technologies." First, top international providers accounted for only 15% of the country's total oil-services segment in 2021, according to data from Vygon Consulting. The in-house units of domestic producers such as Rosneft, Surgutneftegas and Gazprom make up the bulk of the market, the data showed.

Second, some of the most significant Western service providers didn't leave the country. Third, the two oil-service giants that did depart Russia — Halliburton and Baker Hughes — sold off their in-country businesses to the local management. This allowed the units to retain personnel and expertise, according to Victor Katona, an analyst at Kpler.

[U.S. will follow law and sell 26 million barrels from petroleum reserve](#)

(Bloomberg; Feb. 13) - The Biden administration plans to sell more crude oil from the Strategic Petroleum Reserve, fulfilling budget directives mandated years ago that it has sought to stop as oil prices have stabilized. The congressionally mandated sale will amount to 26 million barrels of crude, according to people familiar with the matter. The sale is in accordance with a budget mandate enacted in 2015 for the current fiscal year, said a spokesperson for the Department of Energy.

The Energy Department has sought to stop some of the sales required by the 2015 legislation so that it can refill the emergency reserve, which currently has about 371 million barrels. After this latest release, the reserve will dip to about 345 million. Biden officials decided last year to tap 180 million barrels from the strategic reserve in an effort to ease supply issues after Russia invaded Ukraine, upending global oil flows and sending crude above \$100 a barrel. The SPR is at its lowest level since 1983.

The latest release comes after Russia unveiled plans to curtail production by 500,000 barrels a day next month to retaliate against Western sanctions. Russia's move, which was downplayed by the European Union, follows China's rapid economic reopening with the scrapping of COVID-19 restrictions. The SPR release may give pause to the OPEC+ alliance, which earlier said that global oil markets remain balanced.

[U.S. oil exports increasingly affect global prices](#)

(Wall Street Journal; Feb. 15) - The world's oil traders are increasingly adopting an old slogan as they track prices and try to shield themselves from volatility: Don't mess with Texas. Traders swapped contracts for oil sold in Houston and Midland, key hubs of the Texas export boom, at a record clip Feb. 8, according to exchange giant CME. By Feb. 13, the number of outstanding agreements for such oil deliveries sat at a record high.

The surge in activity reflects how U.S. crude exports increasingly shape global oil prices, as well as the financial instruments bought and sold by producers, refiners and traders to avoid or capitalize on price swings. In June, a Texas-produced crude will be formally added to the Brent complex, the global price benchmark. A spurt in U.S. crude production over the past decade accelerated the shift, pushing exports to new heights.

Taken together, analysts say, the changes in physical and financial markets mean the cost of driving cars, shipping freight or flying jets increasingly relies on what happens along the U.S. Gulf Coast. "We have gone from a very domestically focused market into an international powerhouse," said Peter Keavey, CME Group's global head of energy and environmental products.

In 2015, Washington reversed decades-old limits on crude exports after innovations in drilling tapped gushers from U.S. shale regions. Producers in the epicenter of the boom, the Permian Basin, have since shuttled more output to international markets via Gulf ports. Crude exports hit a record of 5.1 million barrels a day the week that ended Oct. 21, according to the U.S. Energy Information Administration, a roughly 10-fold increase since President Barack Obama signed a bill opening the door to such shipments.

[Price volatility could continue in U.S. natural gas market](#)

(Wall Street Journal; Feb. 11) - Last year, natural gas prices were — by some measures — the most volatile since the U.S. shale boom began about a decade earlier. Despite the recent plunge in prices, it could be just a preview of coming attractions. There were 18 days last year when the benchmark Henry Hub futures contract daily closing prices moved by more than 10%, the most since the New York Mercantile Exchange natural gas contract made its debut more than three decades ago, according to Eli Rubin, senior energy analyst at EBW Analytics Group.

Price volatility could get even higher in the coming years, Rubin notes. The supply and demand buffers that historically quelled severe swings are getting thinner. While domestic gas consumption rose about 25% between 2011 and 2021 and exports more than tripled, the nation's gas storage capacity that ensures adequate supplies in winter has not budged. Data from S&P Global Commodity Insights shows that gas prices spiked up a lot more than usual when storage volumes fell below the five-year average.

Moreover, the choice for power plants to switch to coal if gas is short is diminishing. That pressure valve has been disappearing at a pace of about 11 gigawatts worth of

coal-fired capacity every year from 2015 to 2020. By 2029, about 23% of existing coal-fired power capacity in the U.S. is expected to be retired, according to the U.S. Energy Information Administration. Meanwhile, gas production growth in the U.S. is expected to be somewhat constrained as producers watch their spending. In addition, U.S. LNG export capacity is set to increase by an additional 40% by 2025, tightening the market.

Freeport LNG seeks FERC permission to resume operations

(S&P Global; Feb. 13) - Freeport LNG wants permission to resume full commercial operations, the operator said in a Feb. 13 filing with regulators. The request came a day after the operator of the Texas export terminal shipped its first cargo since a June 2022 fire shut the facility. Freeport told the Federal Energy Regulatory Commission that its Liquefaction Train 3 is "ready to transition to full, commercial operations and production of LNG" after successfully completing restart. The remaining two trains of the 15 million-tonne-per-year terminal south of Houston are close to restarting, the operator said.

To load the first shipment since the outage, Freeport used supplies that were in its storage tanks when the fire forced the terminal offline in June, a market source said. The cargo was loaded on the BP-chartered Kmarin Diamond, which departed Feb. 12. A second tanker, the SK-operated Prism Agility, docked at the terminal that same day.

Freeport told FERC that Train 3 had been fully restarted and is "is ready to ramp up to full production rates," adding that it is ready to begin restart activities of Train 2 and expects Train 1 to follow "within the next few weeks."

It was a profitable year for companies selling LNG at market prices

(S&P Global; Feb. 15) - LNG trade flows, pricing bases and relative values all showed significant upheaval during 2022. Market share among companies changed markedly, too, while market intervention from previously hands-off countries may have the longest-running impact. The companies that stood to gain immediately from changes in market dynamics 2022 were those with significant liquefied natural gas offtake that they could sell at market prices, and also buyers with long-term supply contracts priced against less volatile, non-LNG-based prices, such as oil or other benchmarks.

U.S. Gulf Coast LNG liquefaction project developers reaped the greatest benefit from 2022's situation: They signed 51 million tonnes per year worth of LNG sales and purchase agreements, more than double the volume in 2021, according to S&P Global Commodity Insights data. This enabled many of these projects to get within touching distance of a final investment decision, when just a year prior it seemed unlikely.

As to the short-term beneficiaries of 2022, here are some numbers: Platts Northwest Europe price benchmark, which reflects prices into the gas-starved region, averaged \$32.738 per million Btu. S&P Global Commodity Insights calculated the average all-in cost of U.S. Gulf Coast LNG in 2022 at \$12.59 per million Btu. That includes an average cost of gas into an LNG plant, plus the gas consumed in the process, plus a liquefaction fee and shipping to Europe. LNG supplies linked to the price of a barrel of oil under long-term contracts were delivered at far lower prices than the volatile spot market.

Novatek's first LNG transshipment unit soon headed to Barents Sea

(High North News; Feb. 13) – Russian liquefied natural gas producer Novatek's first floating storage unit will arrive in the Barents Sea within a month, setting off a busy choreography of LNG tankers traveling up and down along Norway's coastline. The unit has capacity to transship 20 million tonnes of LNG per year. A second unit will follow later this year, anchoring in Bechevinskaya Bay off Kamchatka in Russia's Far East.

The first of two storage vessels, Saam FSU, is expected to depart from the Daewoo Shipbuilding & Marine Engineering shipyard at Geoje, South Korea, in the coming days. According to an industry source, Saam FSU will travel through the Suez Canal and up the Norwegian coast to the Barents Sea. The FSU will then anchor in Ura Bay to the west of Murmansk approximately 50 miles from the Norwegian border. Daewoo won the two-vessel \$748 million contract in 2020. Each can hold LNG from almost three tankers.

Novatek will use the two FSUs to temporarily store LNG from its Yamal plant during the transfer from ice-capable LNG carriers to conventional LNG carriers. The FSUs are critically important for Novatek to optimize the use of its costly ice-capable fleet. "Each complex (in the Murmansk Region and in Kamchatka) will have one floating gas storage unit and two anchorages for ship-to-ship operations, which will ensure annual transshipment of more than 20 million tonnes at each of them," the company said.