Oil and Gas News Briefs
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Moody's warns oil and gas industry it needs to spend more

(Bloomberg; Oct. 7) - Oil and gas explorers need to raise drilling budgets by 54% this year to more than half a trillion dollars to forestall a significant supply deficit in the next few years, according to Moody's Investors Service. Drillers chastened by last year's collapse in demand and prices haven't responded to the recent market rebound as the industry typically does by searching for new supply. While international crude and U.S. natural gas prices have risen more than 50% and 120% this year, respectively, drilling outlays are only forecast to increase by 8% globally, Moody's said in a report Oct. 7.

That's too little drilling to replace what those companies will pump from the ground in 2022, setting the stage for even tighter supply scenarios, Moody's analysts including Sajjad Alam wrote in the report. Any such squeeze would come atop the current crises afflicting Asian and European economies scrambling to shore up fuel stockpiles as winter approaches and prices break records on a seemingly almost-daily basis.

"The industry will need to spend significantly more, especially if oil and gas demand keeps climbing beyond pre-pandemic levels through 2025," the Moody's analysts wrote. Oil and gas companies are expected to spend $352 billion on drilling and other activities this year, Moody's said, citing estimates from the International Energy Agency. If they raised to Moody's recommended $542 billion, that would be the highest since 2015.

U.S. heading into winter with heating oil stockpile at 20-year low

(Bloomberg; Oct. 7) - The U.S. may be heading into winter with the lowest stockpiles of heating oil to meet surging demand in more than two decades. Inventories of distillates — used as diesel for both transportation and heating oil — are enough to meet 31.2 days of demand, according to the Energy Information Administration. That's the tightest it has been for this time of the year since 2000.

The dwindling supplies raise the specter of energy shortages and price spikes in the U.S. this winter, at a time when the rest of the world has already been upended by fuel shortages and blackouts. They also underscore how the economic rebound from the pandemic, a surge in demand for virtually all goods and an ensuing trucking boom are now colliding with volatile energy markets, threatening to raise the cost of fuel for homeowners, farmers and truckers.

The tightness in diesel supply is largely the result of the freeze in Texas in February that took down 18 refineries. As much as 5.5 million barrels a day of capacity were taken offline by the Arctic cold, causing a drawdown of gasoline and diesel inventories. The squeeze may get worse before it gets better as truckers fill up their tanks in response to a surge in online shopping and historic delays in the global supply chain. And Midwest farmers are out with their tractors harvesting the second-largest corn crop ever.

U.S. shale producers reluctant to boost output, even at high prices

(Bloomberg; Oct. 6) - U.S. shale oil production will expand at a “modest rate” over the next 18 months even as prices touch multiyear highs, according to BloombergNEF, leaving OPEC in a powerful position as the world cries out for more barrels. U.S. shale producers are using cash flow to pay down debt and reward shareholders rather than invest in new drilling, BNEF said in a report published Oct. 6.

Yet demand for energy is rising around the world. U.S. crude futures reached a seven-year high this week after OPEC and its allies declined to alter their supply agreement to raise output. U.S. production will reach 12.1 million barrels by the end of next year, up 440,000 barrels a day from the end of 2021, according to BNEF’s base-case scenario. But that’s still lower than its pre-pandemic record high of 13 million in 2019.

Under a scenario in which prices average $80 a barrel from now until the end of 2022, BNEF sees production rising to 12.4 million barrels a day. “U.S. oil producers remain reluctant to increase production meaningfully,” BNEF analyst Tai Liu said in the report.

Analysts expect significant gas-to-oil switching

(Reuters; Oct. 7) – Soaring natural gas prices as winter approaches are likely to drive a switch to oil that boosts global crude demand by several hundred thousand barrels per day, squeezing already tight supply, analysts forecast. Natural gas prices, particularly in Europe, have spiked this year, buoyed by a combination of low inventories, low supplies and higher Asian demand. The jump in energy costs has led manufacturers to curtail activity from Spain to Britain and helped sparked power crises in China.

The leap in gas prices is set to send the substitution of oil for gas to generate power to unprecedented levels, Swedish bank SEB has forecast. "This has never happened before at such a global scale. The market has always tried to substitute from costly oil to much cheaper natural gas," Bjarne Schieldrop, chief SEB commodities analyst, said. "This is now totally turned around. The magnitude of the switching from natural gas to oil is hard to pinpoint but estimates are from 500,000 barrels per day or higher."

Speaking at the Energy Intelligence Forum this week, Saudi Aramco CEO Amin Nasser also put the demand boost at 500,000 barrels per day. JP Morgan went higher, putting the potential bump in global demand for oil-fired power generation as high as 2 million barrels per day, but said a 750,000-barrel rise through March is more likely.

Start-up of expanded pipeline delivers more Canadian oil into U.S.

(Bloomberg; Oct. 6) - Canadian oil shipments to the U.S. jumped to the highest volume since the start of the year thanks in part to the start-up of a long-delayed Canadian pipeline. Weekly oil deliveries from America's northern neighbor reached 4.04 million barrels day, the most since January, according to the U.S. Energy Information Administration. It's only the third time the U.S. has imported more than 4 million barrels a day of Canadian crude since the agency began compiling weekly data in 2010.

It's likely these increased flows will be the new norm mainly because of the expanded Enbridge Line 3, said Elisabeth Murphy, ESAI Energy upstream analyst for North America. Last week, Enbridge started its new Line 3 crude pipeline after years of delays. It can transport 760,000 barrels a day of heavy and light oil, nearly double the size of the old line it replaced. Line 3 delivers oil into the upper Midwest.

The additional barrels from Canada come as a relief to U.S. refiners struggling with less supply from OPEC+, shrinking imports from Latin America and, more recently, the loss of about 30 million barrels of Gulf of Mexico production after Hurricane Ida. Gulf Coast refineries have increasingly been pulling from Canada to offset the crude production in the Gulf of Mexico that remains shut since the hurricane swept through over a month ago, said Shirin Lakhani, director of global oil service at Rapidan Energy Group.

Record LNG prices prompt worries of demand destruction

(Reuters; Oct. 6) - Some of the world's biggest importers of liquefied natural gas are reducing orders in the face of a 500% price surge within the year, raising concerns among major producers about potential long-term destruction of demand. LNG buyers, including numerous emerging economies in Asia, are balking at prices that have doubled just within the past month, while a growing number of exporters in North America are straining to boost export capacity that will still take years to come online.

Natural gas is viewed as a more acceptable fossil fuel as growing economies like India, China and Pakistan try to reduce their carbon emissions because it burns more cleanly than oil and coal. But the surge in gas prices is prompting power providers to revert to coal and fuel oil and causing a rethink on new LNG investments in Southeast Asia, which was expected to be the heart of LNG demand growth.

Within Asia, which accounts for 70% of global LNG imports, a majority of long-term contracts are oil-linked. But South Asia nations such as India, Pakistan and Bangladesh — which together account for 20% of Asia's imports — are much more exposed to spot prices, which are at a record of over $50 per million Btu. That's raised alarm, analysts say, as plans for new import terminals may be delayed given the LNG prices. For big U.S. export terminals, rising prices were initially welcome. However, the volatility makes it harder to sign additional long-term contracts needed for investment in new supply.

Costly LNG prices raise concerns of hit to demand, global economy

(Australian Financial Review; Oct. 7) - Soaring international gas prices have triggered a near 30-fold spike in the value of a single spot cargo ship of LNG to more than $US205 million in a price surge that delivers a windfall to gas producers but threatens to derail the global economic recovery. Australia-based Woodside Petroleum, a beneficiary of soaring prices for liquefied natural gas, voiced worries about a fall-out from the "extreme" prices as prices in Asia took yet another leap higher.

The surge in Asian benchmark LNG prices to more than $56 per million Btu, while short-lived, sent shockwaves through the global gas market, given that the cold Northern Hemisphere winter has yet to kick in. At that one-off price, a typical cargo of LNG would cost about $205 million, up from less than $7.3 million in June 2020, when Australian cargoes of LNG were sold at less than $2 per million Btu and dozens of ships were anchored around the world or were going around in circles amid a dearth of buyers.

"Although we are very pleased to see a recovery in the global economy, we are also concerned about the potential effects of recent high spot prices," Woodside's chief representative in Japan, George Gilboy, told a Russia-Australia energy dialogue event hosted from St. Petersburg. The remarkable turnaround has fueled concerns that unaffordable energy will stunt demand and more broadly has stoked fears of a growing global crisis that has the potential to drive a spike in inflation and curb economic activity.

Record-high spot LNG prices affect a minority of buyers

(Reuters; Oct. 7) - "Unprecedented" is a word often overused to inject some hyperbole into a market narrative, but the current rally in spot Asian liquefied natural gas prices definitely qualifies. Depending on the assessment used, spot LNG prices have surged by as much as nearly 900% in the past eight months. Beyond the headlines, however, it's useful to ask just how relevant are the spot prices being quoted. In other words, just how much of the fuel is actually being traded at the record highs? Another question is how fast will demand erode as LNG becomes too expensive for users to tolerate?

The spot price of LNG surged above $50 per million Btu on Oct. 6, according to an assessment by S&P Global Platts. It's worth noting, though, that relatively very few cargoes are actually being traded at the current record high prices, and those that are that expensive have been bought mainly by Chinese utilities. About two-thirds of LNG shipped to Asia is traded under long-term contracts, mostly linked to crude oil prices.

While those cargoes will be hit by rising oil prices, the gain in crude has been nowhere near the massive increase in spot LNG — thus term LNG buyers are mostly insulated from the surge in spot prices. Buyers that have bought more on a spot basis in recent years, such as India and Pakistan, are said to have largely left the market at currently unaffordable prices. India tends to use gas in industrial processes, and such users will be doing their utmost to switch to alternative fuels or ultimately shut production. Buyers that use LNG at power plants will most likely idle units rather than incur massive losses.

LNG cargoes divert to highest bidder — 'system has gone haywire'

(The Wall Street Journal; Oct. 7) – A Shell-chartered tanker set sail to Asia from the west coast of France last month carrying liquefied natural gas. When it was about to enter the Strait of Gibraltar, the captain received a call, according to sources. "We have to go to Rotterdam now," his boss in London told him. The ship made a U-turn and backtracked up the coast of Spain and France to drop off part of its cargo at the Dutch port. On Oct. 7, it arrived in Bilbao, Spain, to deliver the rest of its load.

Buyers in Europe, Asia and Latin America are competing for limited supplies of gas, racing to fill tanks and caverns with the fuel before winter hits the Northern Hemisphere. Stockpiles are alarmingly low around the world, and prices in most places have never been higher. Meanwhile, shippers are diverting LNG tankers to the highest bidder, a rare occurrence that adds to the uncertainty in the market. "The system has gone haywire," said Øystein Kalleklev, CEO of Flex LNG, owner of a fleet of gas carriers.

An LNG tanker that had left from the U.S. Gulf Coast toward Asia rerouted toward the Mediterranean last week, according to vessel-tracking firms. In some cases, cargoes have been diverted because traders sell the product to higher bidders and compensate the original buyer, or shippers cancel contracts in favor of bigger profits. "The market is allocating supply by price, which is unusual — that historically has not been how LNG has worked," said Jason Feer, head of business intelligence at shipbroker Poten & Partners. "It's the coming of age of LNG as a more commoditized market."

British industries call on government to ensure affordable energy

(Reuters; Oct. 7) - Soaring natural gas prices are forecast to drive a switch to oil and put more energy suppliers in Britain out of business, while industry groups on Oct. 7 called for government action to ensure there is no supply interruption this winter. Gas prices, particularly in Europe, have rocketed this year due to lower-than-usual stocks, reduced supply from Russia, the onset of colder temperatures and infrastructure outages.

Record high energy prices in Britain and Spain have already caused some industrial companies, such as steelmakers and fertilizer plants, to curtail production and even led to warnings of food shortages this winter. The squeeze also has been felt in China, where power usage has been restricted by authorities.

Meanwhile, Britain's National Grid warned that the country faces tight electricity supplies this winter on rising demand and capacity constraints, although an official said he was confident it will keep the lights on. Any action to curb prices will be too late for the 12 energy suppliers which have already collapsed this year. Britain's Energy Intensive Users Group, which represents companies such as manufacturers of steel, chemicals, fertilizers, paper, glass and cement, has urged the government to adopt emergency measures to make sure energy supplies are not interrupted and are affordable.

Work at halfway point on LNG Canada project in British Columbia

(Natural Gas Intelligence; Oct. 7) - Construction on the first phase of the Shell-led liquefied natural gas export facility in Kitimat, British Columbia, named LNG Canada, has hit the halfway point, with activity to accelerate in the coming months. In a notice posted on the LNG Canada website on Oct. 6, management said the project had “just surpassed the 50% completion mark,” adding things were “moving swiftly” toward commissioning and start-up.

The first phase of the $30 billion project comprises two liquefaction trains capable of producing a total of 14 million tonnes of LNG per year. A second phase, which has not been sanctioned, could expand the facility by two additional trains. The project is expected to ship its first cargo around the middle of the decade. The LNG Canada consortium is in ongoing talks with Canadian pipeline giant TC Energy over increased costs and delays on the gas pipeline that would supply feed gas to the facility.

Shell holds a 40% interest in LNG Canada. Its partners are Malaysia’s Petronas, with 25%, PetroChina and Japan’s Mitsubishi with 15% each, and Korea Gas with 5%.

Woodside says high LNG prices help with expansion decision

(Australian Financial Review; Oct. 8) – The combination of worryingly high international prices for gas and an infrastructure partnership look set to pave the way for Woodside Petroleum to give the go-ahead by December on the A$16.4 billion Scarborough gas project, the biggest investment in a fossil fuel project in Australia for almost a decade.

The unprecedented spike in LNG prices this week is expected to nudge fearful Asian buyers toward locking in long-term contracts for likely cheaper supplies, potentially helping Woodside fill its order book for LNG from the gas project in Western Australia.

Woodside CEO Meg O'Neill attributed much of the price spike to current shortages in Europe, and said the volatility showed the value of long-term contracts in creating certainty for suppliers, customers and new project developers to maintain a healthy balance between supply and demand. "The fundamentals are that natural gas is in demand. This is in part because of the role gas plays in the energy transition: It can generate power with lower emissions than coal, and it can enable broader and more reliable use of renewables by stabilizing power grids," O'Neill said.

U.S. investment fund Global Infrastructure Partners is in the box seat to buy 49% of the second liquefaction train to be built at Woodside's 9-year-old Pluto LNG plant to process Scarborough gas. However, the improved market prospects for the West Australia project come amid heightened opposition among some financiers, activist groups and other stakeholders to directing fresh capital into fossil fuel development.

Papua New Guinea wants LNG stake under Santos/Oil Search deal

(Reuters; Oct. 7) - Papua New Guinea Prime Minister James Marape said the country wants to own an additional stake in the $19 billion PNG LNG project if Santos' proposed takeover of Oil Search goes ahead, the Australian newspaper reported Oct. 8. Marape met with Santos CEO Kevin Gallagher and Oil Search CEO Peter Fredericson on Oct. 6 to discuss the deal, which the government has said must meet the national interest.

The newspaper, citing unnamed sources, said the cash-strapped Papua New Guinea government, which needs to give permission for the takeover to proceed, would expect to acquire a stake for a low price or potentially via a loan. "All things considered, the state would like to pick a portion of whatever Santos will make available in their rebalancing," PNG Petroleum Minister Kerenga Kua told the Australian.

"The prime minister is asking that the joint-venture project partners should all agree for the state to be given the first right of refusal to acquire some portion of that equity," Kua said. Credit Suisse analyst Saul Kavonic said it was likely that negotiations were just beginning. "Our view is the government will extract something here, but ultimately it will be modest and shouldn't prevent the deal from proceeding," Kavonic said.

Under the proposed deal, Santos will acquire Oil Search's holding in the prized PNG LNG project, making it the biggest single shareholder at 42.5% in the 7-year-old gas project operated by ExxonMobil. Gallagher has said Santos would look to sell down part of its stake in PNG LNG to help align partner holdings in that and another gas project set to be developed, TotalEnergie's Papua LNG project.

[FERC looks at requiring gas projects to curb greenhouse emissions]

(Argus Media; Oct. 5) - The Federal Energy Regulatory Commission is starting to explore options for requiring developers of natural gas pipelines and liquefied natural gas export facilities to curb their greenhouse gas emissions as a condition of obtaining federal approval. FERC has scheduled a technical conference for Nov. 19 to get input on the methods the agency could use to estimate the volume of greenhouse gas emissions tied to a proposed project.

The staff-led conference also will look at how developers might mitigate those emissions, through options like carbon capture or renewable energy, and methods to verify compliance in the decades after a project begins commercial operations. Any substantial changes to the permitting process for natural gas infrastructure would have to later be approved by FERC commissioners, likely through a proposed rulemaking to revise a policy statement the agency has relied on since 1999.

The Nov. 19 conference will provide key information for the agency as it considers applying a first-ever climate test when determining if a gas pipeline or LNG export facility is in the public's interest under the Natural Gas Act. FERC chairman Richard Glick has said the agency should determine if new gas projects will have a significant effect on the climate and, if so, it could consider requiring some form of mitigation to reduce those effects. But it remains far from clear the volume of emission cuts the agency could require of developers and what emission offsets would be allowed.

[Japan will develop standards for measuring LNG emissions]

(Reuters; Oct. 5) - State-run Japan Oil, Gas and Metals National Corp. will develop a global standard for measuring greenhouse gas emissions in the liquefied natural gas industry, a senior official at Japan's industry ministry said on Oct. 5. The LNG sector is facing increasing pressure to cut emissions of greenhouse gas, including methane, to help tackle climate change, but calculation methods vary by country and company.

"JOGMEC will develop a simple and highly accurate methodology for calculating GHG emissions in the LNG value chain," Shin Hosaka, commissioner at the Agency for Natural Resources and Energy, told an LNG producer-consumer conference. The company aims to verify the methodology using actual data from LNG plants in the near future, he said. The agency is a division of the Ministry of Economy, Trade and Industry.

The methodology will be comparable internationally to promote emissions cuts in every phase of LNG production and distribution, a ministry official said, and is aimed at making new development cleaner so that new projects can secure financing. "LNG is an important resource for the energy transition in Japan and Asia, and it needs to be developed and used more cleanly," Hosaka said.

Rockies Express line will move gas certified as lower-emissions

(Argus Media; Oct. 7) - The Rockies Express gas pipeline will dedicate a portion of its capacity to transporting gas that meets lower-emissions requirements from Appalachia to markets in the midcontinent. The move comes as REX operator Tallgrass Energy enters a multi-year partnership with Project Canary, a third-party certification company that uses emissions-detection technology and environmental monitoring to affirm gas production sites meet environmental, social and corporate governance standards.

Producers such as Chesapeake Energy and EQT have recently turned to third-party certification to validate their produced gas is meeting certain reduced-emissions levels. Under the partnership, REX aims to become the first interstate gas transmission pipeline in the U.S. to receive comprehensive and independent environmental assessment and certification from Project Canary. The pipeline will implement "real-time" emissions detection and monitoring across its 22 compressor station sites.

The Project Canary Midstream Certification process is expected to begin in the fourth quarter of this year and be completed by mid-2022. REX is a 1,700-mile line that can move up to 4.4 billion cubic feet of gas per day in either direction between Appalachia and the Rockies, serving producers in both regions and users along the way.

Canadian oil and gas companies seek tax credit for carbon capture

(Reuters; Oct. 7) - Oil and gas companies have asked the Canadian government to design a tax credit to pay for 75% of the cost for building carbon-capture facilities to curb greenhouse gas emissions, the country's main energy industry group said Oct. 7. The Canadian Association of Petroleum Producers made the request in August just before the federal election, seeking a tax credit at a level high enough to provide an economic return, Ben Brunnen, CAPP's vice president of oil sands, told Reuters.

Carbon-capture facilities are expected to be a key part of global efforts to contain emissions from fossil fuels production. Canada is the world's fourth-largest oil producer and has a set a goal of reaching net-zero emissions by 2050. The carbon captured from oil and gas operations is less concentrated than that of some other large emitters, such as fertilizer plants. That means that capture costs are higher on a per-tonne basis for oil companies, Brunnen said.

"Because of that, this (credit) needs to be designed to drive a balance and reflect the economic realities," he said. "The government role should be providing the playing field to enable companies to make these investments." Prime Minister Justin Trudeau's government began industry consultations in June on the proposed carbon-capture investment tax credit, before the election last month. Trudeau won a third term and talks are expected to resume before the government finalizes the credit next year.

[Bitcoin miners find a use for gas that otherwise would be flared]

(Argus Media; Oct. 8) – U.S. oil producers are turning to an unexpected source to help solve the environmental problem of excess natural gas — cryptocurrency miners. On remote well pads dotted across the Bakken shale play of North Dakota and Montana, shipping container-sized data centers packed with computers power energy-intensive operations of Bitcoin miners. Their computers, running around the clock to earn crypto tokens by authenticating digital transactions, are powered by gas-fired generators, running on gas from the oil wells that would otherwise be flared on site.

Mining for virtual currencies has attracted widespread criticism because it uses vast quantities of energy, more than some nations use in a year. That has led crypto miners to try and cut down on their energy use, or at least find ways to shrink their carbon footprint. In the Bakken, they are able to capitalize on an abundance of surplus gas — a by-product of oil production — that would otherwise be burned off due to a lack of pipelines to take it to market. The environmentally harmful practice of flaring has come under intense scrutiny from regulators, climate campaigners and investors.

Companies tapping surplus gas to run their cypto-mining computer banks see a double benefit: Reducing the damage of gas flaring and cutting their carbon footprint. Denver-based Crusoe Energy operates 44 data centers in Montana, North Dakota, Wyoming and Colorado, and was due to deploy another 16 units by the end of September. Plans are afoot to start an initial project in the top oil-producing Permian Basin of Texas and New Mexico later this year before ramping up there in 2022.

[BP will spend $269 million to improve Washington state refinery]

(Natural Gas Intelligence; Oct. 6) - BP is pouring $269 million into three projects at its Cherry Point Refinery in Washington state to improve efficiencies, reduce emissions and increase renewable diesel production capability. The projects align with the major's goal to reach net-zero emissions across its operations by at least 2050. BP also has set a goal to reduce by half the carbon dioxide intensity of its products in the next 30 years.

In the hydrocracker improvement project, estimated to cost $169 million, BP plans to improve efficiency and reduce planned maintenance, resulting in fewer unit shutdowns and associated flaring events. Work is to begin this year and be completed in 2023. The hydrocracker, considered the heart of the refinery, produces gasoline, diesel and jet fuel. The planned cooling water infrastructure project, estimated at $55 million, is designed to increase utilization and efficiencies, while reducing CO_2 emissions.

The renewable diesel optimization project, at $45 million, should more than double annual output capability to around 2.6 million barrels. Renewable diesel is manufactured from biomass-based feedstocks, such as vegetable oils and rendered animal fats.

Alberta natural gas selling at steep discount to U.S. prices

(Calgary Herald; Oct. 7) - Heavily discounted natural gas prices in Alberta have domestic producers frustrated they could miss out on much of the upside of a global rally as prices skyrocket ahead of the winter. Gas prices are hitting multi-year seasonal highs across North America due to a combination of low storage levels and red-hot demand from overseas markets even before winter heating season begins in earnest.

The Henry Hub benchmark price in Louisiana traded for US$5.69 per thousand cubic feet on Oct. 5, while prices at Dawn, Ontario, traded at US$5.19 per mcf according to ATB Capital Markets. By contrast, Alberta's AECO benchmark price averaged US$3.12 on Oct. 5 — a discount to U.S. gas of $2.57. Producers point to maintenance and expansion work on TC Energy's Nova Gas Transmission Canadian pipeline system for the disconnect between Alberta's market and the rest of North America.

Calgary-based TC Energy said its maintenance and expansion is part of the company's $8 billion in spending to expand the system and remove bottlenecks over a five-year period. Nova is the largest gas transmission system in Canada and TC Energy also operates the largest network of export pipelines, moving Alberta gas east to Ontario and west to San Francisco. In an effort to diversify from the volatility and discounts of the AECO benchmark, producers pay to move their gas on long-haul lines to the U.S. West Coast, Chicago and Central Canada, where prices typically are higher than in Alberta.

China orders coal miners to boost production

(Reuters; Oct. 8) - China ordered miners in Inner Mongolia to ramp up coal production and oil prices jumped on Oct. 8 as a record surge in the cost of natural gas revived demand for the most polluting fossil fuels to keep factories open and homes heated. The rebound in economic activity from coronavirus restrictions has exposed alarmingly low supplies of gas. It has left traders, industry executives and governments scrambling as the Northern Hemisphere heads into winter.

The energy crisis, which has led to fuel shortages and blackouts in some countries, has highlighted the difficulty in cutting the global economy's dependency on fossil fuels as world leaders seek to revive efforts to tackle climate change at talks next month in Glasgow. In China, where coal production had been curtailed to meet climate goals, officials have ordered over 70 coal mines to ramp up production by nearly 100 million tonnes, or 10%, as the world's No. 1 exporter battles its worst power shortages in years.

India, the second-largest coal consumer after China, is also suffering electricity outages because of a lack of coal, with over half of its coal-fired power plants with less than three days worth of fuel stocks, data from the federal grid operator showed. China is going to allow coal-fired power prices to fluctuate by up to 20% from base levels, instead of 10% to 15% previously, in order to prevent high energy consumption, state broadcaster CCTV reported on Oct. 8, citing a meeting of the State Council, or cabinet.