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Rising demand in Asia pushes coal to record high prices

(Reuters; Sept. 7) - Thermal coal prices across Asia hit new highs this week as China and India restock critically low inventories to meet robust power consumption, industry sources said. The most-traded thermal coal futures contract on the Zhengzhou Commodity Exchange hit a record high of \$151.63 a tonne on Sept. 7. In India, prices of better-burning U.S. coal in North Indian retail markets have risen by a third in the past 15 days and are up by more than 100% from a year ago to almost \$199 a tonne.

Coal supply is struggling to catch up with demand in top-consumer China as mine safety checks slow output. In No. 2 consumer India, the monsoon season and COVID-19 restrictions have hampered coal production. The tight coal market across Asia is accentuating a global bull market in all power-generation fuels, including natural gas and high-sulfur fuel oil, buoyed by economic growth and LNG supply issues.

"Prices are galloping due to China's heatwave, shortages with Coal India and power plants, high freight rates, increased appetite in the rest of Asia, tightness due to Indonesian rains, Hurricane Ida in the U.S., and in general a supply crunch," said Puneet Gupta, founder of Indian coal marketplace Coalshastra. Strict supply controls in China have been a catalyst behind the latest price surge. Shanxi, China's top coal province, on Sept. 3 ordered all its coal mines to carry out a two-month safety inspection, and said those which fail to comply would be shut down for recertification.

Coal prices reach record high in China amid strong demand

(Reuters column; Sept. 7) - China's coal prices have climbed to a record high, signaling the need for more production in the short term, even as the government tries to reduce reliance on coal-fired power generation in the long term. Prices for the most-traded thermal coal futures contract on the Zhengzhou Commodity Exchange hit \$150 a tonne on Sept. 7, up from \$85 a year ago, which was also the five-year average before the COVID-19 pandemic.

Surging prices are an indication of the tension between the country's surging electricity demand and the government's stated aim to limit coal output and reduce it over time in favor of renewable energy sources. Coal production in the first seven months of the year was up at a compound annual rate of only 4.1% compared with the same period in 2019, according to the National Bureau of Statistics. But the country's electricity

generation increased at a compound annual rate of 7.4% over the same period in response to strong residential and industrial demand.

Both wind and solar are growing from a very low base so they have contributed only a small share of the extra generation required, with most of the extra generation coming from thermal sources, mainly coal. China is installing more wind and solar capacity than any other country but it is still not enough to keep pace with surging electricity demand, forcing greater reliance on coal in the short term. As a result, the country is having to run new and existing thermal power plants for more hours.

Europe paying record prices for natural gas and electricity

(Bloomberg; Sept. 6) - Europe is facing an energy price shock as the cost of natural gas and electricity surges to record levels. A gas supply crunch is boosting the cost of producing power from the U.K. to Germany just as businesses reopen and people return to the office, increasing demand. Rising prices are fueling inflation and threatening to stall the economic recovery as energy-intensive industries from fertilizer to steel may need to curb output.

Prices are rallying even though it's still summer, when demand is usually low, setting the stage for a difficult winter. "The problem hasn't even started yet," said Julien Hoarau, the head of EnergyScan, the analytics unit of French utility Engie. "Europe will face a very tight winter." Europe is facing a gas crunch after a bitter winter left storage depleted. Boosting inventories hasn't been easy, with top supplier Russia limiting flows at a time when Asia is scooping up LNG cargoes that might otherwise head to Europe.

Benchmark European gas futures traded in the Netherlands surged to a record on Sept. 6, as did U.K. prices. Short-term power in Britain also climbed to an all-time high, as the year-ahead contract in Germany — Europe's biggest electricity market — also climbed to a record. Hot weather and low wind speeds are curbing production of renewable power, boosting the use of fossil fuel-fired generation and pushing the price of coal up more than 70% in Europe this year.

U.S. natural gas futures climb to 7-year high amid supply concerns

(Bloomberg; Sept. 8) - U.S. natural gas futures soared to a seven-year high amid escalating concerns about tight supplies heading into the winter heating season. Gas prices are soaring across the Northern Hemisphere as anxiety mounts about the prospects of a supply crunch in coming weeks when cold weather begins to descend and homeowners switch on furnaces. Production and processing disruptions are running smack into robust demand for gas in some of the world's biggest economies.

The rally in North America and Europe is heightening inflation concerns and worries about ripple effects that could roil gas-intensive industries from fertilizers to steel and food producers. Gas for October delivery rose as much as 9.7% to \$5.01 per million Btu in New York on Sept. 8, a level not seen since unprecedented cold gripped the U.S. and Canada during the Polar Vortex of early 2014. U.S. futures have advanced 94% this year, on track for the best annual performance since 2000.

In Phoenix and Los Angeles, so-called spot prices jumped to \$30 and \$20, respectively, according to a source who asked not to be identified. Demand for the fuel is climbing in the U.S. West amid a heat wave that's lifting consumption of electricity to run air conditioners. European prices are in the midst of a record-setting ascent because deliveries from key producers have been stymied at a time of meager stored supplies.

High prices for coal and LNG make renewables look better

(Bloomberg opinion; Sept. 5) - You'd think that fossil fuels are back in business. Since breaking above \$100 a tonne in May, the price of coal at Australia's Newcastle port — a benchmark for Asia, which consumes about three-quarters of the world's soot — has gone almost vertical, hitting a record \$173.10 a ton Sept. 3. The key regional price for liquefied natural gas, the Japan-Korea Marker, is in similar territory, hitting \$18.02 per million Btu the same day. Not a record, but the third-highest spike LNG has ever seen.

If you think of high prices as a long-term path ahead for the commodities, you would be wrong. That view is simplistic. Commodity prices don't rise and fall based on the level of demand itself, but rather from the mismatch of demand and supply. A world in which fossil fuel consumption is on a long-term downtrend can still see temporary rich prices for the fuels in any period when supply and demand abruptly fall out of balance.

The price spike has multiple sources. One is the diversion of Russian gas from Europe to Asia, while another is China's coal-to-gas switch. And there's the relatively warm, dry summer that's reduced hydro generation and increased pressure on air conditioners. Most important, though, has been the recovery from 2020's bout of economic sickness, which has sent electricity consumption surging — and with it, the dirtiest forms of power.

Still, the price spikes provide a reminder to generators of why the days of thermal power are numbered. At current coal prices, even the most efficient power plant will be paying upward of \$60 per megawatt hour just for fuel. In the largest markets of China and India, the cost of new wind or solar generation is half as much, or less. That's the reason why the world will switch away from carbon as the base of electricity over the next decade.

Indian energy companies may invest in Russian LNG project

(Bloomberg; Sept. 6) - India's top energy companies, Petronet LNG and ONGC Videsh, are having discussions about buying a stake in Russia's planned liquefied gas project Arctic LNG-2 as their government seeks to secure supplies of the cleaner-burning fuel. Talks about acquiring a joint 9.9% stake from Novatek are continuing and no decisions have been made, according to a member of the Indian energy delegation in Moscow, who is involved in the negotiations and spoke on conditions of anonymity.

India's Prime Minister Narendra Modi is pushing for a gas-based economy by doubling the share of the fuel to 15% of the country's energy mix by 2030, which would boost imports of the fuel. Russia, which vies for a global leadership in LNG supplies and aims to build a number of production plants in the Arctic with a focus on deliveries to Asia, would be a natural ally for the South Asian nation.

Indian companies are in contact with Novatek about Arctic LNG-2 and "everything is on the table," Minister of Petroleum and Natural Gas Hardeep Singh Puri said at a briefing in Moscow. Puri led India's delegation at the Eastern Economic Forum in Vladivostok last week and met with a range of Russian oil and gas executives. Novatek, Russia's No. 1 LNG producer, owns 60% in the \$21 billion Arctic project. France's TotalEnergies, China National Petroleum Corp. and CNOOC have 10% each, with the remaining 10% held by a Japanese consortium. The partners expect to start production in 2023.

Oil and gas 'lost their appeal to investors'

(Sydney Morning Herald; Sept. 8) - Rising oil and gas prices are lifting the fortunes of Australia's big natural gas producers, but market enthusiasm for the sector is cooling as investors question the long-term future of fossil fuels in a decarbonizing world. Prices for spot cargoes of LNG, one of Australia's top exports, are trading at their highest levels in a decade during what is typically the low season for the commodity that usually benefits most from winter heating demand.

Australian energy consultancy EnergyQuest described the uplift in global gas prices including benchmark Asian LNG price, which last year dipped as low as \$US2 per million Btu during the COVID-19 crisis and are now above \$US19, as "extraordinary." "It's very unusual for this time of the year," EnergyQuest CEO Graeme Bethune said. After Asian gas buyers were caught short during a freezing cold snap last winter, analysts say a hotter-than-expected Northern Hemisphere summer increased gas demand to power air conditioners, and importers were once again stocking up.

Although demand is running hot for gas as a fuel in heating, cooking, manufacturing, and power generation, efforts are underway around the world to reduce all fossil fuels as part of the accelerating push to arrest global warming, and questions remain about its long-term outlook. "Oil and gas have lost their appeal to investors," Bethune said.

"For most people outside the industry, oil and gas is also seen to have lost its place in the world's future energy mix."

Feedstock shortage cuts into Trinidad's LNG production

(Argus Media; Sept. 8) - Trinidad and Tobago's beleaguered Atlantic LNG is working with the government on a restructuring to ensure its commercial viability, according to major shareholders Shell and BP. The complex is beset by a chronic feedstock shortage that led to the mothballing of the oldest of its four trains in December, taking down 20% of capacity. The first unit at the facility started up in 1999. At full capacity, the four trains are capable of producing almost 15 million tonnes per year.

LNG production in May was down by 19% from April, and marked the lowest level in 18 years, said the energy ministry. "Restructuring will enable longer-term investments in the upstream sector and in Atlantic," said Shell, which holds an average 53% interest in the complex. BP holds an average 39.2% stake. The disparate ownership structure of each of the four trains and demands from other industrial gas users have complicated feedstock allocation since the nation's gas production started falling over a decade ago.

The country's January-May gas output fell by 20% from a year earlier to 2.73 billion cubic feet per day. Train 1 was closed after BP, the country's biggest gas producer that supplies all the feedstock for the unit, said an infill drilling project had underperformed. A preliminary supply deal with neighboring Venezuela that would have rejuvenated Trinidad's gas-based industries did not materialize, despite Shell's participation.

More than 75% of U.S. Gulf oil and gas production still offline

(Reuters; Sept. 8) - More than three-quarters of the U.S. Gulf of Mexico's offshore oil and natural gas output remained shut in on Sept. 8 as the fallout from Hurricane Ida continued to hamper production. Some 1.4 million barrels per day of crude production and over 1.72 billion cubic feet per day of natural gas output were shut down. More than 70 platforms of the 288 evacuated ahead of the August storm remain unoccupied, according to the federal Bureau of Safety and Environmental Enforcement.

Occidental disclosed that 7 of its 10 offshore production platforms remain offline since Ida. Restarts have been delayed by damages to offshore oil and gas transfer facilities and onshore processing operations, it said. Shell this week said a production hub that brings oil and gas from three offshore oil fields was damaged by the storm. It has been unable to determine the extent of the damage or provide a schedule for restarting.

Refineries away from the coast have been regaining power and beginning to restart. ExxonMobil plans to complete the restart of its 520,000 barrel-per-day Baton Rouge

refinery this week, sources familiar with operations said Sept. 8. Exxon has requested 1.5 million barrels of crude from the national Strategic Petroleum Reserve for the Baton Rouge operation. Analysts expect other refineries to also request crude if the Gulf's oil producers cannot restore output after performing repairs.

Canadian pipeline company buys U.S. crude export terminal

(Reuters; Sept. 7) - Canadian pipeline operator Enbridge said on Sept. 7 it was buying logistics company Moda Midstream Operating for \$3 billion in cash, acquiring an export terminal in Texas that loaded more than a quarter of all U.S. Gulf Coast crude exports last year. North America's largest crude export terminal, Moda Ingleside Energy Center, connects the prolific Permian and Eagle Ford shale basins to international markets and has an export capacity of 1.5 million barrels per day, with storage of 15.6 million barrels.

Private-equity firm EnCap Flatrock Midstream owns Moda, which purchased the Ingleside export facility from Occidental Petroleum in August 2018. The terminal can partially load very large crude carriers, tankers that can carry as much as 2 million barrels of oil. Enbridge has previously said it wanted to boost its presence on the U.S. Gulf Coast, which is also an important refining hub for Canadian heavy oil. Demand for heavy crude has strengthened with output reductions in Venezuela and Mexico.

The deal fits with Enbridge's sustainability focus, as the terminal includes plans to develop up to 60 megawatts of solar power, and may be suitable longer-term for carbon capture and storage, said Patrick Kenny, analyst at National Bank of Canada.

Lukoil calls \$65 to \$75 oil 'comfortable'

(Reuters; Sept. 6) - The head of Russia's No. 2 oil producer Lukoil said prices of \$65 to \$75 per barrel were "comfortable" for consumers and that the OPEC+ group of leading oil-producing nations was striving to maintain that price range by regulating output. In an interview with the Kommersant newspaper published on Sept. 7, Vagit Alekperov said any curbs by the producers alliance on oil output would depend on market conditions.

"Regulation (of output) can be different depending on the situation," Alekperov said. "For now, September 2022 will mark a milestone when the restrictions should phase out." The 23 members of OPEC+ have been slowly restoring the 10 million barrels per day of production they took offline last year, when global demand tanked as economies suffered under COVID-19 pandemic restrictions. The alliance plans to bring back all of the production by next fall. Lukoil "has up to 90,000 barrels a day of idle production, which we hope will be needed by the market," Alekperov said.

Exxon will start measuring methane emissions in New Mexico

(Reuters; Sept. 7) - ExxonMobil on Sept. 7 said it will begin measuring methane emissions from production of natural gas at a New Mexico facility, joining a number of shale gas producers seeking to provide the data to buyers. The largest U.S. oil company, under pressure from investors and environmentalists to address climate concerns, follows shale producers including EQT Corp. in offering independently verified emissions data to buyers seeking to reduce their own carbon footprints.

ExxonMobil said it signed an agreement with independent measuring firm MiQ to certify 200 million cubic feet of gas a day produced at its Poker Lake facilities in New Mexico. Poker Lake was chosen in part for having technology in place to spot leaks and reduce methane emissions. Exxon said it is evaluating additional next-generation applications in the region to reduce emissions, including satellites and artificial intelligence.

The assessment by MiQ will be available to clients in the fourth quarter, Exxon said. The initiative could be extended later to other shale production areas including Appalachia and Haynesville, it said. MiQ has signed similar deals with U.S. shale producers Chesapeake Energy and Northeast Natural Energy.

New law in Australia holds former owners liable for cleanup costs

(Reuters; Sept. 8) - Australia has passed legislation that could set a precedent for who pays to clean up the fossil fuel industry in Asia, making former owners of oil and gas fields responsible for the costs of dismantling facilities if later owners fail. The new law provides a blueprint for governments tussling with industry over removing hundreds of obsolete facilities, particularly as the world moves to a lower-carbon economy.

The cost of decommissioning offshore facilities in Australia is expected to run to \$40 billion, with half of that in the next 10 years. For Asia-Pacific as a whole the cleanup bill is estimated at \$100 billion out to 2050, say consultants Wood Mackenzie. Australia's legislation steps up scrutiny of asset sales to ensure any new owner has the financial and technical capacity to handle decommissioning. Most controversially, it introduces trailing liability, modeled on the U.K.'s North Sea regime, holding former owners of assets liable for decommissioning if a current owner goes bust.

Selling mature oil and gas fields to niche players with low overheads that can prolong the lives of the fields profitably has been standard practice at aging sites around the world, especially in the North Sea, U.S. Gulf of Mexico and off Australia. However, Australia acted after being left to handle the decommissioning, estimated at up to A\$1 billion (US\$725 million), of the Laminaria-Corallina oil fields in the Timor Sea, abandoned by a small company when it collapsed in 2019.

Shetland Islands caught in climate change transition

(BBC News; Sept. 6) - Nowhere else in the United Kingdom are the spoils of oil and gas more evident than on the Shetland Islands. At Sumburgh Airport, the air throbs with the noise of helicopters shuttling oil workers to and from offshore rigs and platforms. It's not as busy as it once was, but it's still going strong. Previously known for fishing and farming, the drills struck oil in the North Sea and the first crude was piped ashore in 1978, followed in later years by supplies from other fields.

But as the devastating impacts of climate change driven by the exploitation of fossil fuels have become clearer, the conversation has shifted rapidly and Shetland, along with the rest of the world, now faces a new question. Should drilling stop immediately — and, if so, how would these islands cope without their grimy golden goose? In climate campaigners' crosshairs is Cambo, a deep-water oil field around 78 miles west of Shetland that is estimated to contain about 800 million barrels of oil.

Siccar Point Energy and Shell have applied for a production license and hope to extract oil between 2025 and 2050. Meanwhile, at the heart of the no-fossil-fuel climate strategy is a vast new wind farm being constructed on an exposed peatland moor in the central mainland of Shetland. It will transform the landscape, with turbines standing along a prominent ridge and visible from miles around. It will also transform the production and distribution of energy in Shetland, which is currently provided by diesel and natural gas.

Shipping industry proposes carbon emissions levy

(Reuters; Sept. 6) - Leading shipping associations have proposed creating a global levy on carbon emissions from ships to help speed up the industry's efforts to go green. With about 90% of world trade transported by sea, shipping accounts for nearly 3% of the world's CO2 emissions and the sector is under growing pressure to get cleaner. The International Chamber of Shipping and Intercargo jointly proposed a levy for each tonne of CO2 emitted from ships exceeding 5,000 gross tonnes and trading globally.

The money collected would go into a climate fund that would be used to deploy bunkering infrastructure in ports around the world to supply cleaner fuels such as hydrogen and ammonia, according to the proposal. "What shipping needs is a truly global market-based measure like this that will reduce the price gap between zero-carbon fuels and conventional fuels," ICS Secretary General Guy Platten said.

The proposal was submitted on Sept. 3 to the U.N.'s shipping agency, the International Maritime Organization. The organization will hold an intersessional working group meeting scheduled for late October, ahead of a late-November session of the Marine Environment Protection Committee, to address issues including carbon-reduction efforts. An IMO-driven carbon levy would enable more industry input at the global level as concerns grow at regulation by separate jurisdictions such as the European Union.

World's largest shipping line invests in green-fuel start-up

(Bloomberg; Sept. 8) - A.P. Moller-Maersk has agreed to buy a minority stake in a green-fuel start-up backed by Warren Buffett, as the world's largest container line latches on to new technologies to decarbonize its fleet. Maersk, which didn't disclose the size of the deal, said its investment in California-based WasteFuel is part of a wider strategy to commit funds toward developing energy that doesn't pollute.

"We need green fuels from all over the world and we need them in huge quantities," Morten Bo Christiansen, the director in charge of cutting CO2 emissions at the Copenhagen-based shipping firm, said in an interview. WasteFuel, which converts trash into green bio-methanol, sustainable aviation fuel and renewable natural gas, "is at the forefront in its field and we hope that one day we can make an off-take agreement with them," Christiansen said.

Maersk consumes about 12 million tons of marine oil per year, roughly equal to all the oil produced in the world in a single day. The company needs to find green alternatives for all that fuel by 2050, when it plans to be carbon neutral. "It's a chicken-and-egg problem," Christiansen said. "No one is making green methanol because there's no demand to consume it, but there are no vessels to consume it because there is no methanol to buy. We are trying to break the situation by helping create a market."

<u>Ice-class luxury cruise ship takes tourists to the North Pole</u>

(The Barents Observer; Norway; Sept. 7) - Russian nuclear-powered icebreakers have brought wealthy tourists on voyages from Murmansk to the North Pole every summer since the early 1990s, but the purpose-built expedition ship Le Commandant Charcot brings a whole new level of luxury for those willing to pay more than \$40,000 for a two-week tour to the top of the world.

With a guest capacity of 270 and a crew of 235, the Norwegian-built ship has an indoor swimming pool, spa, restaurants, suites with private balconies and even a few with Jacuzzis. The new cruise vessels just add to the long list of new ice-class expedition ship aimed at Arctic waters. The ship's operator, French cruising company Ponant, plans to add to its fleet. The Arctic cruises operate out of Norway.

It might seem like a paradox, but global warming opens more and more Arctic waters for vessels with tourists who want to see the sea ice before it vanishes. The new cruise ship is the first for the tourist industry, featuring a Polar Class 2 ice-strengthened hull sailing with LNG-powered, hybrid-electric engines.