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## Top News - Oil

### OPEC sees robust global oil demand growth in 2023 after 2022 Chinese contraction

OPEC on Tuesday said it expected to see robust global oil demand growth in 2023 with potential economic upside coming from a relaxation of China's zero-COVID policies, which this year have pushed the country's oil use into contraction for the first time in years.

World oil demand in 2023 will rise by 2.25 million barrels per day (bpd), or about 2.3%, the Organization of the Petroleum Exporting Countries (OPEC) said in a monthly report. The forecast was steady from November, after a series of downgrades.

"Although global economic uncertainties are high and growth risks in key economies remain tilted to the downside, upside factors that may counterbalance current and upcoming challenges have emerged as well," OPEC said in the report.

"A resolution of the geopolitical conflict in Eastern Europe and a relaxation of China's zero-COVID policy could provide some upside potential," the report said in a separate section.

Chinese demand, hit by COVID containment measures, will average 14.79 million bpd in 2022, down 180,000 bpd from 2021, OPEC said. OPEC figures in another publication, the Annual Statistical Bulletin, show it rising in the 2017-2021 period.

An annual contraction in Chinese demand for gasoline, diesel and jet fuel would be the first since 2002, according to Energy Aspects which earlier forecast one.

In the report, OPEC nudged up its 2022 economic growth forecast to 2.8% and left 2023 steady at 2.5%. As well as the relaxation of China's COVID policy, the report listed other sources of upside including commodity price weakness.

"Upside potential – or at least counterbalancing factors – may come from the U.S. Federal Reserve successfully managing a soft landing in the United States, as well as from a continued easing of commodity prices and a resolution of the tensions in Eastern Europe," OPEC said. Oil prices, which came close to the all-time high of \$147 a barrel in March after Russia invaded Ukraine, have unwound most of their 2022 gains. Crude was trading around \$80 on Tuesday.

#### OUTPUT FALLS AFTER CUT AGREED

The report also showed that OPEC's production dropped in November after the wider OPEC+ alliance pledged steep output cuts to support the market amid the worsening economic outlook and weakening prices.

For November, with prices weakening, OPEC+ agreed to a 2 million bpd reduction in its output target – the largest since the early days of the pandemic in 2020. OPEC's share of the cut is 1.27 million bpd.

In the report, OPEC said its output in November fell by 744,000 bpd from October to 28.83 million bpd, led by top exporter Saudi Arabia and other large producers such as Iraq. OPEC compiles the figures using secondary sources.

Based on a Reuters calculation using OPEC's figures, the 10 OPEC members covered by the OPEC+ agreement complied with 174% of the pledged supply cuts, because some members notably Nigeria and Angola are pumping well below their targets due to a lack of production capacity.

This is higher than the 163% compliance rate found by a Reuters survey.

### Keystone oil spill cleanup expected to last weeks - officials

Cleanup of the biggest U.S. oil spill in nearly a decade will take at least weeks more, local officials in Kansas said on Tuesday, citing a recent meeting with Keystone pipeline owner TC Energy Corp.

There is still no official timeline for a restart of the key Canada-U.S. pipeline, which was closed after the spill of roughly 14,000 barrels of crude was discovered on Wednesday in Washington County in Kansas.

TC and county officials met briefly on Monday.

"They told us they expected to be here for several more weeks," said Randy Hubbard, Washington County's emergency management coordinator. "They didn't qualify what that is."

The U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) said TC Energy is yet to submit a restart plan. The affected segment of the line cannot resume operation until regulators approve a restart plan in its entirety, according to a U.S. Department of Transportation document.

The 622,000 barrel-per-day Keystone line, which ships heavy Canadian crude from Alberta to U.S. refiners in the Midwest and the Gulf Coast, had received a special permit to run at a higher rate than any other crude line in the United States, and has been doing so since 2017. U.S. crude futures have jumped more than 6% this week, buoyed in part by supply concerns linked to the shutdown.

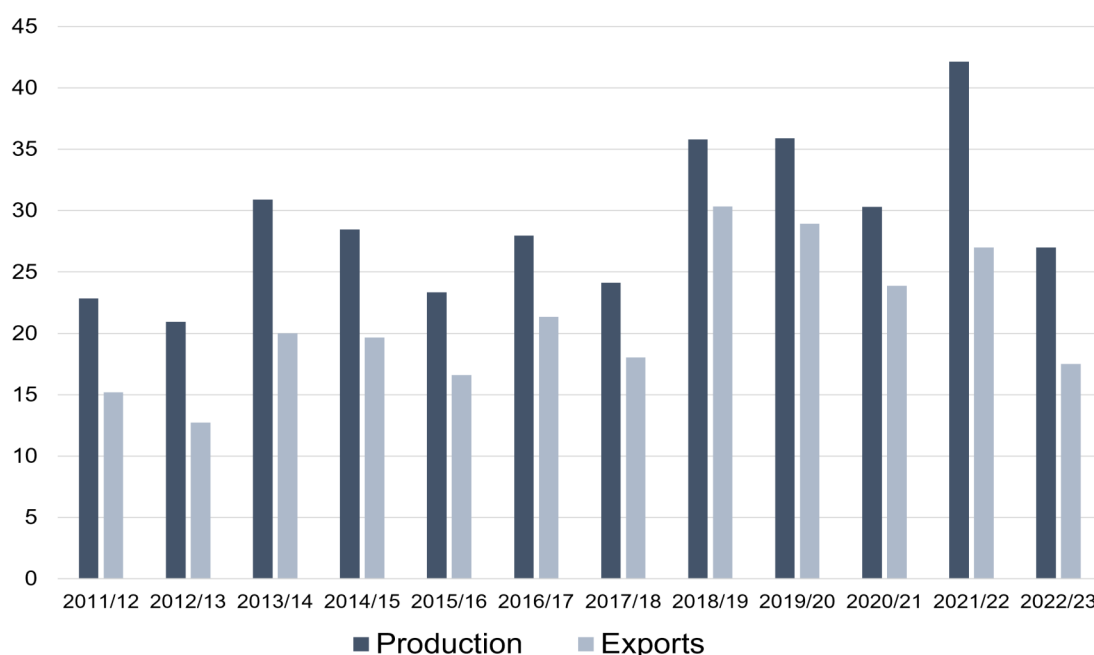
TC Energy shares have risen 0.8% since disclosing the spill.

The Canadian company has delayed a restart of the section of the pipeline that extends to Illinois by four days to Dec. 14 after efforts to restart were delayed by bad weather, Bloomberg reported, citing sources. The Keystone pipeline splits in Steele City, Nebraska. One leg serves refineries in the Midwest, while the other extends to the Gulf Coast. TC Energy said it had not yet identified a cause for the leak and that investigation was ongoing.

Sabotage has been ruled out, Kansas State Representative Lisa Moser said in a post online Monday. 'BOOTS ON THE GROUND 24/7'  
More than 300 people from TC, the Environmental Protection Agency (EPA), state agencies and the county are on-site, the EPA said. Workers have recovered roughly 2,600 barrels of oil and water from Mill Creek, which does not connect to a drinking water source, according to TC.

## Chart of the Day

### Ukraine Corn Output & Exports *(million tonnes)*



Data source: U.S. Department of Agriculture

@kannbwx

Washington Commissioner Raleigh Ordoyne said TC's clean-up efforts have exceeded expectations.

"In a time where nobody stands behind their product, or nobody takes accountability for actions or for a fault, TC Energy has come in and taken care of business," Ordoyne said.

"They've got boots on the ground 24/7 and I couldn't imagine this cleanup going any better." Vacuum trucks continue to suck oil out of Mill Creek but skimmers used to collect surface water are not working well because of cool temperatures, Moser said.

The spill directly affects five landowners, while another nine landowners have staging areas for TC workers on their properties, Moser said, adding that all 14 are receiving compensation.

Jeanette Stamm, 78, who owns pasture land two miles (3.2 km) from the spill site, said she is concerned about whether crews can remove all the oil from Mill Creek and whether crude could seep into the aquifer.

"I hope (the area) will all be put back the way it was. I don't know if it ever will be."

TC said it had set multiple booms downstream of the release point to contain the oil from moving and that oil had not breached the containment area.

It rained in Washington County on Tuesday but cleared in the evening, according to the National Weather Service. Rainfall has not had a negative impact on containment on site, TC said. "They're using large equipment out in fields that are muddy, so undoubtedly it will slow things down," Hubbard said.

## Top News - Agriculture

### **COLUMN - Ukraine corn crop plunge balanced by huge stocks, aiding exports for now -Braun**

The precariousness of Ukraine's export situation resurfaced last weekend as Russian attacks on energy infrastructure around Ukraine's busiest port of Odesa suspended grain loadings.

But Ukraine, a major exporter of corn, wheat and sunflower oil, has shipped products perhaps more efficiently than many market-watchers expected, allowing export estimates to drift higher even with disappointing harvest volumes.

Operations at Odesa resumed Tuesday with the departure of eight agricultural vessels and another 23 waiting to load, though Ukraine's total grain shipments since July are down at least 30% on the year as not all export terminals are operational following Russia's late February invasion.

The apparent success of the Black Sea Grain Initiative, which took effect in late July and is valid until mid-March, has substantially raised Ukraine's export capability in recent months, pushing out some competition from other suppliers like the United States.

But that advantage could decline in the coming months as Ukraine is still trying to harvest its corn crop, and those losses could be larger than currently assumed. Still, there is a decent cushion in Ukraine's corn stocks, though next year's crop is never guaranteed.

#### **ESTIMATE ROUNDUP**

It was well anticipated that Ukraine's 2022 corn and wheat harvests would fall short of the 2021 records, but corn has recently taken an even sharper tumble. The U.S. Department of Agriculture on Friday cut the corn crop to 27 million tonnes from 31.5 million last month.

That is down 36% on the year but similar to average output levels from mid-last decade.

USDA's Kyiv attache on Monday projected a much grimmer outlook of 23.1 million tonnes, down from 25.8 million last month. Around 40% of corn was unharvested as of early this month due to high moisture, expensive or inaccessible grain drying and financial losses to farmers due to the conflict.

It is common for USDA and its attache to hold different views, but both have turned more optimistic on exports. USDA upped Ukraine's 2022-23 corn exports to 17.5 million tonnes versus 15.5 million last month and just 9 million forecast back in July.

The attache's exports jumped to 20.2 million tonnes from 13.9 million last month based largely on the extension of the Grain Initiative. That would be a record-high 87% of the crop exported, though declining population and lighter animal production amid the war could allow for it.

Before the invasion, Ukraine was exporting nearly 80% of its corn crop annually, preventing large year-end stocks.

Only 64% of last year's harvest was exported due to the curtailed 2021-22 season.

USDA's current estimate suggests 65% of the 2022-23 corn crop will be exported, up from 49% projected in November. But USDA expects above-average domestic consumption, leaving room for a possible export expansion.

Domestic corn use may be struggling based on farmers' ability to sell. A survey published last week by analyst APK-Inform suggested nearly 70% of the 530 surveyed Ukrainian producers are having difficulty selling their grain and oilseeds due to low bid prices.

If that trend continues, it could negatively affect 2023 crop potential.

#### **MORE CORN THAN WHEAT**

Higher grain stocks in Ukraine have allowed export estimates to rise while production falls, though corn inventory is much more plentiful versus wheat.

USDA's latest adjustment puts 2022-23 corn ending stocks in Ukraine at 6.9 million tonnes, up from 5.1 million the prior year. Before last year, those averaged about 1.3 million tonnes.

But compared with use, the stock buildup is even more impressive. Ukraine's 2022-23 corn stocks-to-use per USDA's estimates is 27% versus a pre-conflict average near 4%. That is the smallest ratio forecast so far this season, down from 38% last month and a high of 61% in July, before sea exports resumed.

To compare with the United States, a plentiful corn stocks-to-use is around 15% as in 2017-18 or 2018-19. But a ratio of 9%, projected for both this year and last year, is considered tight and has led to elevated prices.

Ukraine's corn stocks-to-use has not been near 27% in more than two decades, though heavier wheat supplies were common not that long ago, before wheat exports took a significant step upward about seven years ago. Wheat stocks-to-use is seen at 19% in 2022-23 versus 20% last year and 6% two years ago.

Ukraine's 2022 wheat harvest, down 38% on the year, was small enough that leftover supplies by mid-2023 are expected to be lower than this year, despite the large drop in exports. Ukraine sees a smaller wheat harvest in 2023 since winter sowing was 17% lighter than 2022's harvested area.

#### **YEARENDER-Food inflation: Tight grain, oilseed supplies to keep prices elevated**

Drought or too much rain, the war in Ukraine and high energy costs look set to curb global farm production again next year, tightening supplies, even as high prices encourage farmers to boost planting.

Production of staples such as rice and wheat is unlikely to replenish depleted inventories, at least in the first half of

2023, while crops producing edible oils are suffering from adverse weather in Latin America and Southeast Asia.

"The world needs record crops to satisfy demand. In 2023, we absolutely need to do better than this year," said Ole Houe, director of advisory services at agriculture brokerage IKON Commodities in Sydney.

"As this stage, it looks highly unlikely, if we look at the global production prospects for cereals and oilseeds." Wheat, corn and palm oil futures have dropped from record or multi-year highs but prices in the retail market remain elevated and tight supplies are forecast to support prices in 2023.

#### WHY IT MATTERS

With food prices climbing to record peaks this year, millions of people are suffering across the world, especially poorer nations in Africa and Asia already facing hunger and malnutrition.

Food imports costs are already on course to hit a near \$2 trillion record in 2022, forcing poor countries to cut consumption.

Benchmark Chicago wheat futures jumped to an all-time high of \$13.64 a bushel in March after Russia's invasion of key grain exporter Ukraine reduced supplies in a market already hit by adverse weather and post-pandemic restrictions.

Corn and soybeans climbed to their highest in a decade, while Malaysia's benchmark crude palm oil prices climbed to a record high in March.

Wheat prices have since dropped to pre-war levels and palm oil has lost around 40% of its value, amid fears of a global recession, China's COVID-19 restrictions and an extension of the Black Sea corridor deal for Ukrainian grain exports.

#### WHAT DOES IT MEAN FOR 2023?

While flooding in Australia, the world's second largest wheat exporter, in recent weeks has caused extensive damage to the crop which was ready for harvest, a severe drought is expected shrink Argentina's wheat crop by almost 40%.

This will reduce global wheat availability in the first half of 2023.

A lack of rainfall in the U.S. Plains, where the winter crop ratings are running at the lowest since 2012, could dent supplies for the second half of the year.

For rice, prices are expected to remain high as long as export duties imposed earlier this year by India, the world's biggest supplier, remain in place, traders said.

"Rice availability in most exporting countries is pretty thin except India, but it has export duties in place to reduce sales," said one Singapore-based trader at an international trading company.

"If we get a production shock in any of the top exporting or importing countries, it can really swing the market upside."

The outlook for corn and soybeans in South America looks bright for its harvest in early 2023, although recent dryness in parts of Brazil, the world's top bean exporter, has raised worries.

U.S. domestic supplies of key crops including corn, soybeans and wheat are expected to remain snug into 2023, according to the U.S. Department of Agriculture.

The agency is forecasting U.S. corn supplies to fall to a decade low before the 2023 harvest, while soybean stocks were seen at a seven-year low and wheat ending stocks are forecast at the lowest in 15 years.

Palm oil, the world's most consumed edible oil, is taking a hit from tropical storms across Southeast Asia where high costs have resulted in lower use of fertilizer.

Still, higher prices of grains and cereals have encouraged farmers to plant more crops in some countries including India, China and Brazil.

"Planting is higher in several countries but the output is expected to remain subdued due to adverse weather and other factors," said Ole. "Production is unlikely to be enough to replenish supplies which have been drawn down."

## Top News - Metals

### Top accreditor of gold refiners sued over alleged human rights abuse

A British law firm said on Tuesday it had brought a case against the world's most important accreditor of gold refineries for renewing a refiner's certification despite alleged human rights abuses at a mine supplying it with gold.

The law firm, Leigh Day, filed the case in London's High Court against the London Bullion Market Association (LBMA), an industry body whose rules for gold refineries require that they source gold responsibly.

The firm is representing the families of two artisanal miners allegedly killed in 2019 by security personnel at the North Mara gold mine in Tanzania.

LBMA certification prohibits refiners from handling gold from sources contributing to human rights abuses, conflict, crime or environmental degradation.

"There is a long and troubling history of allegations of human rights abuses committed against local people in and around the mine," Leigh Day said.

"However, the LBMA continued (and continues) to issue a 'Responsible Gold Certificate' to the company which refines the gold."

The LBMA, which began accrediting the refiner, MMTC-PAMP, in 2014, said it believed the case had no merit because its rules were clear and had been followed. North Mara's owner, Canadian mining firm Barrick Gold, said that since assuming operational control of North



Mara from a subsidiary in 2019, it had "invited and worked with numerous national and local NGOs, appointed numerous independent human rights specialists, as well as undertaken third-party independent assessments".

It said it had acted on assessors' recommendations and that a review by the LBMA of sourcing from the mine had not found any "zero-tolerance" violations of its rules.

"Barrick continues to operate transparently and responsibly," it added.

MMTC-PAMP, which is in India, said it stood by its due diligence procedures.

The refiner said it had hired Synergy Global Consulting to visit North Mara in 2020 and 2022 and shared a summary of a report by Synergy from September which said management of risks and security forces had improved at North Mara, and recommended MMTC-PAMP continue to work with the mine.

Synergy did not respond to a request for comment.

#### POLICE

Locals living around North Mara often enter its territory to dig for rocks containing a little gold, which they process and sell, according to a letter of claim issued by Leigh Day and seen by Reuters.

The case alleges that the two artisanal miners, both aged 23, went to the mine to dig gold and were shot by security guards or police, dying from their wounds.

Reuters could not independently confirm this version of events.

Leigh Day, which is working with UK-based corporate watchdog RAID, said Barrick provided money and other support to police stationed at North Mara, and that these police clearly worked on behalf of the mine or in accordance with its instructions.

Barrick said it did provide police with some support but denied controlling or directing them. "The Tanzanian Police Force operates under its own chain of command and makes its own decisions ... for RAID, Leigh Day, or any other organization to suggest otherwise is simply not true," the company said.

It said its agreement with the police incorporates human rights principles and prohibits the provision of weapons. It said its own security personnel are unarmed.

Barrick chief Mark Bristow said in a statement the company was proud of its human rights record and relationship with local communities but the mine was under constant threat.

"There are rogue bands, armed and well-organised, who from time to time invade North Mara to steal gold-bearing rock," he said. The statement did not say whether the two miners at the centre of the lawsuit were part of such bands.

Barrick has faced several lawsuits alleging violence by security forces at North Mara, including one filed on Nov. 23 in Canada claiming the firm was complicit in extrajudicial killings by police, which Barrick denies.

LBMA accreditation is valuable for refiners and the mines supplying them because it allows the gold they produce to

### MARKET MONITOR as of 07:15 GMT

Contract	Last	Change	YTD
NYMEX Light Crude	\$75.20 / bbl	-0.25%	-0.01%
NYMEX RBOB Gasoline	\$2.16 / gallon	-0.16%	-3.19%
ICE Gas Oil	\$890.75 / tonne	0.82%	33.55%
NYMEX Natural Gas	\$6.66 / mmBtu	-3.92%	78.63%
Spot Gold	\$1,809.90 / ounce	-0.02%	-1.01%
TRPC coal API 2 / Dec, 22	\$250 / tonne	0.00%	103.25%
Carbon ECX EUA / Dec, 22	€88.51 / tonne	-0.15%	9.75%
Dutch gas day-ahead (Pre. close)	€138.35 / Mwh	0.99%	108.05%
CBOT Corn	\$6.44 / bushel	0.08%	8.60%
CBOT Wheat	\$7.29 / bushel	-0.58%	-5.45%
Malaysia Palm Oil (3M)	RM3,942 / tonne	1.44%	-16.07%
Index (Total Return)	Close 13 Dec	Change	YTD Change
Thomson Reuters/Jefferies CRB	297.78	2.11%	20.55%
Rogers International	28.77	1.25%	23.45%
U.S. Stocks - Dow	34,108.64	0.30%	-6.14%
U.S. Dollar Index	103.97	-0.03%	8.34%
U.S. Bond Index (DJ)	406.29	0.68%	-14.50%

trade in the London market, the world's largest. Big banks that dominate gold trading tend only to deal with gold from LBMA-certified refiners.

The LBMA in a statement expressed its sympathy to the families of anyone killed or injured mining gold in Tanzania but said its certification "operates on transparent and well-published principles that all refiners must follow."

"Failure to comply with the LBMA rules results either in suspension or removal," the LBMA said.

### **Miner BHP accused of delaying \$6 billion-plus Brazil dam case**

Global mining giant BHP Group was on Tuesday accused of trying to "forever put off" the question of liability for a 2015 dam collapse that triggered Brazil's worst environmental disaster.

BHP is facing a 5 billion pound-plus (\$6 billion-plus) lawsuit brought by 200,000 Brazilians at London's High Court over the collapse of the Fundao dam, owned by the Samarco joint venture between BHP and Brazilian iron ore mining company Vale.

The disaster killed 19 people as more than 40 million cubic metres of mud and toxic mining waste swept into the Doce river, obliterating villages and reaching the Atlantic Ocean more than 650 km (400 miles) away.

BHP, the world's biggest miner by market value, denies liability and earlier this month applied to join Vale to the

case. Vale said in a statement that it "intends to contest any alleged liability".

The lawsuit, one of the largest in English legal history, was thrown out in 2020 before the Court of Appeal ruled in July that it could proceed. BHP has applied to the Supreme Court to overturn that decision and its application is pending.

Lawyers representing the claimants – which include hundreds of businesses, 25 municipal authorities and members of the Krenak indigenous tribe, some of whom flew to London for the hearing – said BHP was trying to delay the determination of liability.

Alain Choo-Choy said BHP's approach to the case was "the forensic equivalent of death by a thousand cuts", adding: "These victims suffered the collapse over seven years ago. They started their claim over four years ago." He argued BHP was trying to "forever put off the question of substantive liability for another few years – that would no doubt be very convenient."

But BHP – which says the lawsuit duplicates legal proceedings and reparation and repair programmes in Brazil – argued that it was "not appropriate or even feasible" to have a trial on the issue of liability in early 2024.

Charles Gibson, representing BHP, said in court documents that the list of current claimants was "chaotic" and there was "continuing uncertainty" around whether thousands of individuals wanted to continue their cases.

## **Top News - Carbon & Power**

### **EU delays decision on natural gas price cap, countries still at odds**

European Union energy ministers meeting in Brussels on Tuesday failed to strike a final deal on a bloc-wide cap on natural gas prices, after months of debate between countries over whether the measure can ease Europe's energy crisis.

Responding to repeated requests from some countries, the European Commission proposed a gas price cap last month as the latest EU response to the economic upheaval caused by Russia cutting natural gas deliveries to Europe this year, leading to energy price spikes.

But with countries still split over the details of the cap, Tuesday's meeting did not yield a final decision - leaving EU energy ministers to try again for an agreement at another meeting on Dec. 19.

"We have made progress, but we are not done yet. Not all questions could be answered today," German Economy Minister Robert Habeck said after the meeting, which overran by hours as ministers hunted for a compromise.

Czech Industry Minister Jozef Sikela, who chaired the meeting, said he had "a good feeling" that countries could next week agree the price level for triggering the cap, which he said was the only issue still unresolved.

"I think we are almost there, but now we need to get together and show that unity is not an empty word," he told a news conference, adding that countries had agreed other details, including that the cap would not initially apply to private gas trades outside energy exchanges. Germany, Austria and the Netherlands have warned against a gas price cap, which they fear could divert much-needed gas cargoes away from Europe and disrupt the functioning of energy markets.

Other states, including Greece, Belgium, Italy and Poland have demanded a cap, which they say would shield their economies from high energy prices.

"European citizens are in agony, European businesses are closing and Europe has been needlessly debating," Greek Energy Minister Konstantinos Skrekas said on Tuesday ahead of the meeting.

#### **TECHNICAL DETAILS**

The Czech Republic - which holds the EU's rotating presidency - drafted a new compromise proposal on Tuesday which would trigger the cap if prices exceed 200 euros per megawatt hour over three days on the front-month contract in the Dutch Title Transfer Facility gas hub. The contract price would also need to be 35 euros higher than a reference price based on existing liquefied natural gas (LNG) price assessments for three days.

The latest proposal is lower than the 275 eur/MWh price cap proposed by the European Commission, but some pro-cap countries said it was still too high.

"Having a trigger with a high value will not calm the markets," Maltese Energy Minister Miriam Dalli said. The pro- and anti-cap camps of countries could each have enough votes to block a deal.

France could prove decisive in the final negotiations. It initially backed a price cap, but last week expressed concern over its possible impact on financial markets, three EU country diplomats said.

EU Energy Commissioner Kadri Simson said some energy ministers had asked for more time to discuss the proposal with their finance ministers, without naming specific countries.

Last week the European Central Bank warned that the proposed EU price cap could jeopardise financial stability. The EU has already agreed emergency energy measures this year, including gas storage requirements. But other policies are being held up by the price cap rift.

Countries on Tuesday opted to again delay the approval of measures including faster permits for renewable energy projects without a deal on the gas price cap first.

### **U.S. lab hits fusion milestone raising hopes for clean power**

U.S. scientists on Tuesday revealed a breakthrough on fusion energy that could one day help curb climate change if companies can scale up the technology to a commercial level in the coming decades.

Scientists at the Lawrence Livermore National Lab in California on Dec. 5 for the first time briefly achieved a net energy gain in a fusion experiment using lasers, the U.S. Energy Department said. The scientists focused a laser on a target of fuel to fuse two light atoms into a denser one, releasing the energy.

Kimberly Budil, the director of Lawrence Livermore, told reporters at an Energy Department event that science and technology hurdles mean commercialization is probably not five or six decades away, but sooner. "With concerted effort and investment, a few decades of research on the underlying technologies could put us in a position to build a power plant," Budil said.

Scientists have known for about a century that fusion powers the sun and have pursued developing fusion on Earth for decades. The experiment briefly achieved what's known as fusion ignition by generating 3.15

megajoules of energy output after the laser delivered 2.05 megajoules to the target, the Energy Department said.

Arati Prabhakar, director of the White House Office of Sciences and Technology Policy, who heard about fusion at Livermore when she worked there briefly in 1978 as a teenager, said the experiment represents a "tremendous example of what perseverance can achieve."

Nuclear scientists outside the lab said the achievement will be a major stepping stone, but there is much more science to be done before fusion becomes commercially viable.

Tony Roulstone, a nuclear energy expert at the University of Cambridge, estimated that the energy output of the experiment was only 0.5% of the energy that was needed to fire the lasers in the first place.

"Therefore, we can say that this result ... is a success of the science – but still a long way from providing useful, abundant, clean energy," Roulstone said. In order to become commercial, a power plant would have to produce enough energy to power the lasers and to achieve ignition continuously.

"This is one igniting capsule (of fuel) one time," Budil said about the experiment. To realize commercial fusion energy you have to ... be able to produce many, many fusion ignition events per minute."

The electricity industry cautiously welcomed the step, though emphasized that in order to carry out the energy transition, fusion should not slow down efforts on building out other alternatives like solar and wind power, battery storage and nuclear fission.

"It's the first step that says 'Yes, this is not just fantasy, this can be done, in theory,'" said Andrew Sowder, a senior technology executive at EPRI, a nonprofit energy research and development group.

Debra Callahan, who worked at Lawrence Livermore until late this year and is now a senior scientist at Focused Energy, said the lab's results will help companies figure out how to make lasers more efficient. "Everyone is excited about what's been achieved and what's in the future."

Focused Energy is one of dozens of companies working to commercialize fusion energy that have raised about \$5 billion in private and government funding, with more than \$2.8 billion coming in the 12 months before June of this year, according to the Fusion Industry Association. Several, including Commonwealth Fusion Systems, seek to use powerful magnets instead of lasers.

## **Top News - Dry Freight**

### **Sudan to develop Red Sea port in \$6-bln initial pact with Emirati group**

Sudan on Tuesday signed a preliminary agreement with a group led by the UAE's AD Ports Group and Invictus Investment to build and operate the Abu Amama port and

economic zone on the Red Sea with a \$6-billion investment.

The project, located about 200 km (124 miles) north of Port Sudan, would include an economic zone, an airport

and an agricultural zone of 400,000 feddans (415,000 acres).

A 450-km-long (280 mile) road will connect Abu Amama port with the agricultural area of Abu Hamad in Sudan's River Nile State, the two sides said at the signing ceremony held in the Sudanese capital, Khartoum.

Invictus Investment is headed by Osama Daoud Abdellatif, the chairman of Sudanese conglomerate DAL, who had previously described the port as a joint project between DAL group and AD Ports. AD Ports is owned by Abu Dhabi's holding company ADQ.

Abdellatif had said the port would be able to handle all kinds of commodities and would compete with the country's main national port, Port Sudan, which has suffered recently from stoppages linked to the country's political turmoil.

Sudan's Finance Minister Jibril Ibrahim said the country would be entitled to 35% of the net profits from the \$6 billion Abu Amama venture.

The deal was signed just over a week after Sudan's military and civilian political parties signed a framework agreement aimed at forming a civilian government and launching a new political transition after an October 2021 coup.

#### **India's poultry industry seeks corn export curb to calm local prices**

India needs to restrict corn exports to curb a rise in domestic prices and to ensure sufficient supplies of the main poultry feed, the country's livestock industry said on Tuesday.

Domestic corn prices have surged, driven by high demand, increased exports and some damage to the crop following heavy post-monsoon rains.

"We are staring at massive shortages of corn. That is why we have requested the government to ban corn exports," Neeraj Kumar Srivastava, chairman of the Compound Livestock Feed Manufacturers' Association of India told Reuters in an interview.

Corn prices at the Gulab Bagh market in the eastern state of Bihar, a major corn hub, have risen by around 12% to 25,000 rupees (\$302.02) a tonne over the last year, pushing up the cost of production for India's poultry industry.

"Corn prices have been going up for the past few years, but the recent spike has come as a big blow to the industry, and that is why we are going through a rough patch," Srivastava said.

"We cannot any longer pass on the cost to consumers as higher egg and chicken prices will make these poultry products unaffordable for many common consumers," he said.

India exported 3.6 million tonnes of corn in 2021, up from 1.9 million tonnes sold on the world market in 2020, according to trade and industry estimates.

Between January and September this year, India shipped out 2.4 million tonnes of corn.

In the world market, Indian corn is priced at \$315 a tonne to \$320 a tonne against \$350 a tonne for rival supplies from Argentina, the world's biggest corn exporter after the United States.

India supplies corn to countries including Bangladesh, Nepal, Sri Lanka, the United Arab Emirates and Vietnam.

"Exports have primarily picked up due to India's competitive pricing, but higher prices of other grains like broken rice have made it difficult for the poultry industry to replace corn with any other livestock feed," said Amit Sachdev, the India representative of the U.S. Grains Council.



**Picture of the Day**

*An electricity pylon is seen at an Engie subsidiary Electrabel combined-cycle gas turbine power plant in Drogenbos, Belgium December 8. REUTERS/Yves Herman*

(Inside Commodities is compiled by Sandhra Sam in Bengaluru)

For questions or comments about this report, contact: [commodity.briefs@thomsonreuters.com](mailto:commodity.briefs@thomsonreuters.com)

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