## Oil | Agriculture | Metals | Carbon & Power |Dry Freight Click on headers to go to that section

## Top News - Oil

# Oil market to tighten with China demand and OPEC+ cuts, says IEA

Oil demand from China and developing countries, combined with OPEC+ supply cuts, is likely to keep the market tight in the second half of the year despite a sluggish global economy, the head of the International Energy Agency (IEA) said on Monday.

"Even in sluggish economic growth, China and other developing countries' demand is strong," IEA chief Fatih Birol told Reuters.

"Taken together with the production cuts coming from key producing countries, we still believe that we may see tightness in the market in the second half of this year." The Paris-based energy watchdog said last month the top oil importer's demand rebound after lifting COVID-19 restrictions was robust, and that countries outside the OECD group of developed nations would make up 90% of demand growth this year.

Still, the world's number two economy has registered some lacklustre economic data in recent weeks, with factory gate prices falling at the fastest pace in more than seven years in June, according to figures released on Monday.

Meanwhile Saudi Arabia will extend its 1 million barrel per day (bpd) output cut into August, and Russia will cut crude exports by 500,000 bpd.

The two countries are key producers in the OPEC+ bloc. OPEC - the Organization of the Petroleum Exporting Countries - listed an even stronger than previously expected economic rebound in China as a potential upside factor for the market in its monthly oil report in June.

# Iraq, TotalEnergies sign massive oil, gas, renewables deal

Iraq and French oil major TotalEnergies on Monday signed a long-delayed \$27 billion energy deal that aims to increase oil production and boost the country's capacity to produce energy with four oil, gas and renewables projects.

Initially signed in 2021, the deal has faced delays amid disputes between Iraqi politicians over the terms, but was finally closed in April when Iraq agreed to take a smaller than initially demanded stake in the project of 30%. TotalEnergies took a 45% stake and QatarEnergy holds the remaining 25%.

TotalEnergies Chairman and CEO Patrick Pouyanne signed the agreement with Iraqi oil minister Hayan Abdel-Ghani at a ceremony in Baghdad, with Pouyanne calling it a "historic day".

He said the project would break ground this summer and would see an investment of \$10 billion over the next four years.

"This is the starting day, and we'll deliver the projects in the next four years for the benefit of everybody in Iraq," he said.

The Gas Growth Integrated Project (GGIP) aims to improve the country's electricity supply, including by recovering flared gas at three oilfields and using the gas to supply power plants, helping to reduce Iraq's import bill.

TotalEnergies said it would also develop a 1 GW solar power plant to supply electricity to the Basra regional grid, inviting Saudi company ACWA Power to join the project.

"It is the real beginning of investment in renewable energy in Iraq," Abdel-Ghani said of the solar project. The GGIP includes a treatment plant that will enable drought-stricken Iraq to use seawater in the waterintensive oil production process instead of limited freshwater from rivers and marshes.

Iraq hopes the project will attract fresh foreign investment into its energy sector that has not been forthcoming since a flurry of post U.S.-invasion deals over a decade ago. "I hope that this will be a strong signal to other investors to come to Iraq," Pouyanne said.

Exxon Mobil, Shell and BP have all scaled back their operations in Iraq in recent years, contributing to a stagnation in oil production.

Iraq's oil production capacity has remained at around 5 million barrels per day in recent years.

Yet at one time there had been hopes of rivalling top producer Saudi Arabia with its output of 12 million bpd, more than a tenth of global demand.

The newly-inked deal includes plans to up oil production capacity at Basra's Ratawi field to 120,000 barrels per day (bpd) in two years and then to 210,000 bpd within four years, Pouyanne said.



An LSEG Business

## **Top News - Agriculture**

### FOCUS-Fertilizer company OCI bets big on climatefriendly ammonia

Without a single sales contract in hand, Dutch fertilizer company OCI is building a \$1 billion plant in Texas to produce ammonia with low greenhouse gas emissions, a gamble requiring heavy government subsidies, new markets and a contingency plan.

OCI's plant would be the world's first new commercial facility to capture and sequester 95% of the emissions produced from making ammonia. The hydrogen and nitrogen compound is mostly used as fertilizer.

But the lure for OCI and others of making ammonia with a smaller carbon footprint is a business with potential beyond the farm. That includes production of fuel for coalburning Asian utilities and for ships, both uncertain but potentially lucrative commercial possibilities.

"Are you crazy?' is the question, and I think it's a good question," OCI CEO Ahmed EI-Hoshy told Reuters, when asked why his company is betting on producing so-called

"blue ammonia."

Producing blue ammonia costs up to \$119 per metric ton more than the conventional method, but U.S. Inflation Reduction Act (IRA) subsidies worth roughly \$145 per ton cover the difference, said CRU Group fertilizers analyst Alexander Derricott. To make the economics of his Beaumont, Texas plant work, El-Hoshy said he also needs Asian utilities paying premium prices to justify the capital cost. The \$430 billion IRA aims to cut carbon emissions across the U.S. economy, mostly through technologies that are uneconomic without subsidies. But even with U.S. support, blue ammonia economics hinge on further government incentives. This time the incentives are expected from Japan and South Korea for utilities to produce electricity with less emissions, using coal and 20% ammonia. That is the percentage utilities consider technologically feasible for now without causing emissions of another pollutant, nitrous oxide, to increase. If utility premiums don't emerge, OCI plans to use its

## **Chart of the Day**

## North American LNG projects under construction

New projects will add around 80 million tonnes per annum of liquefaction capacity

Altamira Fast LNG
Golden Pass LNG
Plaquemines Phase 1
Plaquemines Phase 2
Corpus Christi Stage 3
LNG Canada Phase 1
Costa Azul LNG
Woodfibre LNG
Port Arthur LNG



Texas blue ammonia to make fertilizer in The Netherlands, where the company has under-utilized its plants due to high natural gas prices. It can also sell it to industrial buyers looking to decarbonize, or sell it in the United States, El-Hoshy said.

OCI's Texas plant, to start production in 2025, will produce 1.1 million metric tons annually. Global ammonia demand looks to climb 10% by 2030 from 2021 to 203 million tons annually, according to TD Cowen and Yara data. Demand then soars to 294 million tons by 2040 and 470 million by 2050, according to the data.

Others are tiptoeing into the sector. Fertilizer rivals CF Industries, Yara and Nutrien are mulling building their own U.S. Gulf Coast plants, but are at least a year from breaking ground.

Japanese utility JERA has signed non-binding agreements to buy low-emissions ammonia from CF and Yara, with commercial production slated around 2027. Mitsui is a partner with CF on its Gulf project and Mitsubishi has signed a non-binding offtake agreement with Nutrien.

CF has committed \$285 million to capture emissions at two U.S. ammonia plants and says it has firm buyers for all the blue ammonia it would produce from the possible new plant with Mitsui.

Investors and analysts are not yet convinced. Yara last month postponed an initial public offering of its clean ammonia business, citing low market valuation.

"Probably the biggest unknown is if the end markets will really be there," said Stephan Werner, senior portfolio manager for Germany's DWS Group.

If new markets do develop, however, "for sure these companies will be worth far more than they are today," Werner said.

Japan and South Korea are expected in the next year to create incentives for utilities to reduce emissions, unlocking premium prices for blue ammonia, EI-Hoshy said. "The question will be, how sufficient will the incentives be?"

### TECHNICAL QUESTIONS

Technology incorporating 20% ammonia in co-generating electricity with coal is still in development. Special burners are required for power units as ammonia burns more slowly than natural gas. Such plants would still spew double the air pollution of plants that use gas and steam, according to energy analysis firm TransitionZero. Co-firing ammonia could result in extended life for coal plants, rather than phasing them out, said Katrine Petersen, senior policy advisor at environmental group E3G.

"Ammonia co-firing is unlikely to ever become a widely

deployed approach to power-sector decarbonisation," Petersen said.

JERA said in a statement that it will begin demonstrating co-firing with 20% ammonia this fiscal year.

"The question is, when will this hit, not will this hit," said CF Chief Financial Officer Chris Bohn.

#### SHIPPING DEMAND

Member countries of the International Maritime Organization on Friday adopted a revised strategy for shipping that sets a net zero emissions target "by or around 2050."

The first ammonia-fueled ships are due to be piloted next year, but the toxic gas, also comes with higher safety issues and higher costs, two big impediments, said Oystein Kalleklev, CEO of ship-owning companies Flex LNG and Avance Gas. Kalleklev nevertheless ordered ships this spring that can burn ammonia as he weighs future options for his fleet.

Routes for ammonia-fueled ships along so-called "green corridors" can likely become workable with subsidies from national authorities, said Harald Fotland, CEO of Odfjell, a tanker company involved in an ammonia pilot project. However, using ammonia for ocean-going ships looks unprofitable for the foreseeable future and the fuel first needs to become readily available globally, he said. "We go to hundreds of ports," Fotland said. "So to get (ship owners) to go for an ammonia solution, that I think is very far in the future on deep sea."

# India's ethanol program will cap future sugar exports - BMI report

India, the world's second-largest sugar producer and a major exporter in recent years, will likely have a smaller role in the sugar export market going forward as its government-led ethanol program continues to expand, a report said on Monday.

According to the report Asia Biofuel Outlook, produced by research firm BMI, a unit of Fitch Solutions, India's pursuit of increased ethanol blending in gasoline, as a way to cut the oil products' import bill and reduce carbon emissions, will continue to support global sugar prices.

BMI says that there is currently a fast development of additional capacity to produce ethanol in India, where the biofuel is made mainly from sugarcane.

As more ethanol plants start production, more of the country's sugarcane crop will be used to make the fuel, limiting the amount of sugar that will be produced. According to the U.S. Department of Agriculture (USDA), India's ethanol blending has reached 11.5%, while the country's government target is to reach 20% by 2025. The report said that although it is "doubtful" that India will be able to achieve that by 2025, the program will cap



exports of feedstocks used in ethanol production. BMI noted that Indonesia is also getting back to an ethanol blending program with a 5% rate initially, and a target to get to 10% by 2030.

The research firm said that the country would need to

## Top News - Metals

# IEA says critical minerals supply could pull close to demand by 2030

Supply of minerals critical to the energy transition could move close to levels needed to support climate pledges by 2030 after a surge in investment, the International Energy Agency said on Tuesday - provided all projects go as planned.

Consultants and analysts have warned of looming shortages due to surging demand for key minerals like lithium and cobalt used in electric vehicles, wind turbines and other clean energy technologies.

But after investment in critical minerals production jumped 30% last year to \$41 billion, having gained 20% in 2021, that picture is looking brighter, the IEA said.

In key battery mineral lithium, the IEA forecasts supply by 2030 will reach 420,000 metric tons - only a touch short of demand estimated at 443,000 to meet government

sharply increase sugarcane planting to reach that target, and it would probably need to import ethanol to do it. Indonesia is not a regular exporter of sugar, so BMI says the program would not likely provide additional support to global sugar prices.

pledges, though well below the 702,000 required for net zero.

"We are happy that for a change we can give some good news," IEA Executive Director Fatih Birol told Reuters in an interview.

"This is testimony that the markets are buying in to the fact that the clean energy transition is moving very fast." Critical mineral start-up firms raised a record \$1.6 billion in 2022, up 160% from the previous year, the IEA said. Demand for critical minerals has surged over the past five years, including a tripling in consumption of lithium and a jump of 70% for cobalt, with the total critical mineral market now worth \$320 billion, it said.

While the supply picture is improving, the Paris-based energy watchdog warned that delays and cost overruns for projects posed a risk to the upbeat scenario. More work is also needed to diversify from key nations

MARKET MONITOR as of 06:34 GMT			
Contract	Last	Change	YTD
NYMEX Light Crude	\$73.33 / bbl	0.47%	-8.63%
NYMEX RBOB Gasoline	\$2.50 / gallon	0.28%	0.91%
ICE Gas Oil	\$748.00 / tonne	-0.93%	-18.78%
NYMEX Natural Gas	\$2.66 / mmBtu	-0.52%	-40.67%
Spot Gold	\$1,931.27 / ounce	0.33%	5.86%
TRPC coal API 2 / Dec, 23	\$116 / tonne	-3.33%	-37.21%
Carbon ECX EUA / Dec, 23	€86.15 / tonne	-0.17%	2.60%
Dutch gas day-ahead (Pre. close)	€31.33 / Mwh	-5.06%	-58.54%
CBOT Corn	\$4.96 / bushel	0.71%	-26.88%
CBOT Wheat	\$6.49 / bushel	0.35%	-19.09%
Malaysia Palm Oil (3M)	RM3,930 / tonne	0.26%	-5.85%
Index (Total Return)	Close 10 Jul	Change	YTD Change
Thomson Reuters/Jefferies CRB	294.45	0.01%	-2.29%
Rogers International	26.33	-0.02%	-8.16%
U.S. Stocks - Dow	33,944.40	0.62%	2.40%
U.S. Dollar Index	101.97	-0.29%	-1.50%
U.S. Bond Index (DJ)	403.66	-0.88%	2.85%



that have tight control on output of many minerals, such as China, Indonesia and Congo, the IEA added in a report. The newly financed projects will help meet rising demand for critical minerals that the IEA has calculated will be needed to meet climate pledges made by governments, which would likely result in a global temperature rise of 1.7 C by 2100.

The agency made separate estimates of what would be necessary to meet a net zero-emission scenario by 2050. Mining companies needed to make more progress in curbing greenhouse gas emissions and water use, the IEA said.

Twenty top miners emitted 0.18 kg of CO2 per kg of minerals in 2021, the same as in 2020, while water use climbed to 7.9 cubic metres per metric ton of mined output in 2021 from 5.4 cubic metres in 2019, the IEA said.

# China gallium curbs raise chip questions for future EV models

China's looming gallium export controls leave automakers with a dilemma over whether they can continue to rely on a metal which had been seen as a game changer for electric vehicles.

Gallium is currently used in a wide variety of applications, from LEDs to smaller mobile phone adaptors. Little known to most people, gallium in pure form can melt in your hand - but in a couple of compounds has become sought after for semiconductors.

Automakers are hungry for anything that boosts EV efficiency and reduces weight, helping them to cut costs. Gallium Nitride does both and is far cheaper than other semiconductor materials like platinum or palladium. Gallium is found in trace amounts in zinc ores and in bauxite, and gallium metal is produced when processing bauxite to make aluminium. Around 80% is produced in China, according to the European industry association Critical Raw Materials Alliance (CRMA).

For EVs, the compound gallium nitride can handle a lot of power without generating heat - making it ideal for onboard chargers and possibly inverters, which help control the flow of electricity to and from the battery pack. "Gallium nitride is a huge game multiplier," said Umesh Mishra, co-founder at Goleta, California-based Transphorm, which is developing chips using the compound.

Transphorm uses ultra thin layers of gallium nitride that are a micron, or one thousandth of a millimetre thick, on its semiconductors.

"You can either charge faster with the same footprint or if you want to charge at the same rate, you can do it in a much smaller point," Mishra said.

Transphorm is working with automakers in the design phase for on-board chargers on a wide range of EV models - which should hit the market around 2026 - and is in conversations with others for using them in inverters, Mishra said.

But some mineral experts say China's decision last week to impose export controls on gallium, along with another semiconductor material germanium, starting next month could force automakers to think again.

The auto industry is only now recovering from a pandemic -fueled global semiconductor shortage that forced automakers to halt production of some models and in some cases to leave unfinished vehicles standing waiting for a single chip.

Alastair Neill, a director at the Critical Minerals Institute, said that automakers who are in the early stages of designing their next generation of EVs could opt for silicon carbide, even though gallium nitride performs about 30% better, rather than risk a fresh supply chain headache.

"If you are already banking on gallium nitride and designing it into your platform, then you're in trouble," he said.

Automakers have responded cautiously to China's announcement, with many saying they are monitoring the situation.

A source at a Japanese automotive supplier told Reuters the company was weighing up whether to use gallium nitride or silicon carbide for future power semiconductors. "Of course this factor (China's export controls) would be an issue if we'd use a large quantity of these devices in the future," said the source, who was not authorized to speak on the record.

Some chipmakers have also been reticent to speak. Germany's Infineon announced in March it was acquiring Canada's GaN Systems for \$830 million, citing the anticipated rapid growth in gallium nitride chips. The company said it does not comment on specific materials.

Transphorm's Mishra said that, as gallium metal is produced when processing bauxite to make aluminium, he is confident other countries will step in to replace the China supply.

"If China completely locks it down, there will be a blip, there will be an uptick in prices and people will just fire up their plants in other countries," Mishra said.

Others are less confident.

"People have to look for other options, but gallium nitride is hard to replace, said the CMI's Neill. "Coming up with an alternative would take a lot of time."



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

## Next wave of North American LNG export projects to face labor challenges

A coming wave of North American liquefied natural gas (LNG) export projects faces staffing challenges that are prompting some of the biggest developers to expand training and coordinate projects to keep construction workers.

There are eight export projects now under way that when completed would add 86 million tonnes per annum (MTPA) capacity of the chilled natural gas. The projects have already created thousands of construction jobs and are soon to employ hundreds of operators.

Paul Marsden, head of Bechtel Corp's Energy global business unit, which has built 30% of the world's LNG plants in the last 20 years, said industry, labor and education must work together to provide the training and workers to staff all the projects.

"Labor has grown as an inflationary concern for everyone in the industry. We need to actively forecast and manage labor availability and supply chain like never before," Marsden said in an interview via email last week. In the past, soaring construction costs in U.S. LNG projects hurt project economics and even led to bankruptcy for one major contractor, said Alex Munton, a director at consultancy Rapidan Energy Group. "We have multiple projects that are under way at the same time and four mega projects, with the possibility of a fifth to be announced soon, and they require the same type of labor," he said. "This will drive up labor costs, increase schedule risks and create productivity issues." Bechtel is developing projects with some 27 MTPA of new capacity, including Sempra's Port Arthur LNG project and an expansion at Cheniere Energy's Corpus Christi plant, with an additional 29 MTPA waiting for formal approvals to move ahead.

#### WORKERS NEEDED

At present Bechtel has more than 3,000 professionals working on its LNG projects. At peak, the company expects the number to grow to close to 20,000 craft professionals, Marsden said.

Cheniere Energy, one of Bechtel's largest customers and the biggest LNG exporter in the U.S., has scheduled its construction so it can move existing workers from the Corpus Christi expansion to its next project when that gets going, to ensure it does not lose workers. Two other projects - Golden Pass LNG and Plaquemines LNG have added workers and are moving to 24-hour work schedules.

Cheniere preordered material for its newer Corpus Christi

project to avoid inflation, said Chief Operating Officer Corey Grindal.

"We expect to be able to move from Stage 3 straight in to our further expansion, which is basically on the same compound, so we believe that with our contractor, Bechtel, we will be able to retain our workers," Grindal said.

Cheniere and Bechtel are training workers using virtual simulations or via partnerships with local schools. LNG Canada, located in Kitimat in a remote corner of British Columbia, invested more than C\$5 million (\$3.74 million) in training including at local colleges, the company said.

The local area has few big facilities, "so we're trying to make sure we develop that workforce locally," LNG Canada CEO Jason Klein said.

#### MODULAR DESIGNS

Some newer plants are employing modular and pre-built components to avoid the inflationary pressure of a stickbuilt plant by outsourcing some of the construction to countries with lower labor costs.

"We had more than 10,000 people at a time in different yards in China, and that just would not be possible in Kitimat," Klein said.

Commonwealth LNG, which hopes to get a financial green light for its first project by the end of the year, is also looking to modular plant designs to lower labor costs. "The Australian projects, the initial ones, were as much as two to three thousand dollars per tonne of production, said Chairman Paul Varello. "Our number is like \$700 per tonne."

Venture Global LNG stitched together 18 liquefaction units in its highly modular Calcasieu Pass LNG plant, allowing it to open the facility in what it said was record time. But problems with the equipment have prevented it from delivering contract cargoes, the company has said. First commercial cargoes will not be available until 2024, two years after processing began.

### COLUMN-Europe's surging solar sector set for cannibalization risk: Maguire

Europe's utilities generated a record 10.4% of electricity from solar sources in June, according to Ember, marking a more than doubling in solar's share of the generation mix since 2018 and a key milestone for the continent's energy transition efforts.

However, the rapid growth in solar supply capacity throughout Europe's electricity grids is already starting to



erode producer profitability, as surplus power from solar sites depresses wholesale electricity prices and results in utilities earning shrinking revenues from renewables. The phenomenon, known as the renewables cannibalization effect, is a result of a feature of Europe's electricity system which both prioritizes clean electricity supplies and sets the price of wholesale electricity off the most expensive source of electricity needed to fulfil system demand at any given time.

Natural gas has been the primary source of electricity in Europe for decades, and so the gas-fired price of electricity generation has historically been the main factor that determined electricity producer prices.

However, since Russia's invasion of Ukraine snarled Europe's gas markets in 2022, Europe's power generators have accelerated the build-out of renewable energy capacity while cutting back on electricity generation from fossil fuels.

This has tipped the balance of the continent's electricity price-setting markets away from natural gas toward solar and wind sources and resulted in cheap-to-produce renewable power having increasing sway over wholesale electricity pricing.

#### MINORITY RULES

Wind and solar sites accounted for roughly 19% of total electricity generation over the first half of 2023, which is less than the 24.7% share from natural gas over the same period, data from think tank Ember shows. However, wind and solar's combined share is up from 14% in 2021, while natural gas's share is down from nearly 26% in 2021. This combination of increased renewables alongside diminished gas-fired generation has altered the load profile of Europe's electricity markets and allowed utilities to deploy maximum volumes of renewable power while conserving natural gas. In turn, this has allowed utilities to boost revenues on electricity generation, as they have been able to scrimp on the volumes of high-priced natural gas needed to generate power, while allowing cheap-to-produce renewables to make up for any electricity shortfall. However, those strong earnings may start to become harder to generate as additional volumes of solar capacity are brought online and compete with all other forms of generation to set wholesale electricity prices.

### CAPTURE RATES & CAPTURE PRICES

Capture rates and prices are key factors that determine how much a power producer can earn from selling electricity over any given period.

The capture price is a weighted average price during which the generation asset produces electricity.

The capture rate is a measure of the capture price divided by market price available.

In the case of a natural gas plant that only produces power during peak demand periods, the typical capture rate can be 100%, as the plant can despatch maximum volumes to fulfil demand needs at peak prices, and then reduce or stop output when demand declines. For renewables assets, the capture rate is typically less than 100% and may be substantially lower still for solar

assets that only produce electricity when the sun shines and often hit peak output just when demand and prices may be near their lowest during a typical day.

#### SOLAR'S SETBACKS

Solar generation assets can be cheap to install and can nearly generate electricity for free when the sun shines, but they have their downsides when system capacity exceeds system demand.

This problem has been made famous by the California electricity market's "Duck Curve," wherein daily power prices have become shaped like a duck due to the impact that surplus solar generation has on prices during the middle of the day.

Power producers must accommodate increasingly cheap electricity prices when solar output is at its maximum similar to a duck's down-sloping belly - but then must ramp up output from other sources once the sun sets, producing the duck's neck.

European solar power producers are not yet faced with anything like the problems seen in California, where solar can account for 40% of total electricity generation. But as more solar supply capacity gets added to Europe's generation system, solar producers must expect the extra competition from other solar sources to drive electricity prices lower for all electricity generators.

In turn, this will shave each producer's capture rate, which in the case of solar producers in Europe's top solar producer, Germany, may decline from around 94% currently to less than 80% during peak production periods by 2026, and to under 50% during the summer by 2029, according to analysis by Refinitiv.

Most European utilities are still predominantly focused on trying to replace fossil fuel generation assets with renewables, so may not have dwelt much on the prospect of cannibalization.

But as solar capacity continues to climb at breakneck pace across the continent, utilities looking to secure financing for new generation assets must plan for the impact of cannibalization, or risk losing market share to competitors who do.

(The opinions expressed here are those of the author, a columnist for Reuters.)



## **Top News - Dry Freight**

# Putin-Erdogan talks only hope for Black Sea grain deal extension- RIA

Expected negotiations between Russian President Vladimir Putin and Turkey's President Tayyip Erdogan remain the only hope to extend the Black Sea grain deal that is set to expire next week, Russia's RIA news agency reported on Monday.

The Black Sea deal, brokered between Russia and Ukraine by the United Nations and Turkey in July 2022, aimed to prevent a global food crisis by allowing Ukrainian grain trapped by Russia's invasion to be safely exported from Black Sea ports.

Citing an unnamed source familiar with negotiations, RIA reported "there is no optimism" for the extension of the deal - a position that Moscow has reiterated frequently in recent weeks.

"Our practice shows that it is the negotiations between the two leaders that are able to change the situation, the current difficult period is no exception," RIA cited the source as saying.

"Today, this remains the only hope."

Erdogan said on Saturday he was pressing Russia to extend the grain deal, currently due to expire on July 17, by at least three months and announced a visit by Putin in August.

The Kremlin said over the weekend there was no phone call scheduled and that there was no certainty about the two leaders meeting.

Ankara angered Moscow with its July 8 decision to release to Kyiv five detained Ukrainian commanders of a unit that for weeks defended a steel works in the Ukrainian city of Mariupol, with the Kremlin saying Ankara violated agreements.

# Singapore port authority seeks proposals for fully electric harbour craft

Singapore's Maritime and Port Authority (MPA) has issued an expression of interest (EOI) calling for proposals to design and promote the use of fully electric harbour craft in Singapore, it said in a statement on Tuesday.

The EOI document is a further step towards MPA's rule that all new harbour craft operating in its waters to be fully electric, or run on biofuels or net-zero fuels from 2030. The final aim is to achieve net zero emissions by 2050. Proposals have to be submitted before midnight on Sept. 15 (1600 GMT).

The EOI will first focus on smaller harbour craft that typically have gross tonnage of 20 to 40, overall length of 10 to 20 metres, and combined shaft power of 200 to 400 kilowatts.

There are about 400 harbour craft with these specifications deployed in Singapore. Overall, there are 1,600 harbour craft operating in the port.

Proposals should consider design standards and guidelines for essential safety systems and vessel structure optimised for efficiency, battery management and energy storage systems. They should also demonstrate the commercial viability of business models based on an aggregated harbour craft fleet.

"With common referenced designs and the aggregation of demand, we hope to reduce the upfront premiums and operating costs for new harbour craft," said MPA Chief Executive Teo Eng Dih.

Operators with plans to deploy new harbour craft should also inform the MPA about their plans from January 2027, so that designs can be adjusted if required, the MPA said.



## **Picture of the Day**



Power-generating windmill turbines are seen at a wind park in Bevillers, France, June 27, 2023. REUTERS/Pascal Rossignol

(Inside Commodities is compiled by Archak Sengupta in Bengaluru)

For questions or comments about this report, contact: commodity.briefs@thomsonreuters.com

To subscribe to Inside Commodities newsletter, click here.

© 2023 Refinitiv. All rights reserved.

Refinitiv 28 Liberty Street, New York, NY 10005

Please visit: **<u>Refinitiv</u>** for more information.

#### Privacy statement

