

Climate change continues to cause uncertainties for commodity prices



It can alter rainfall patterns, increase temperatures, and cause extreme weather events. Climate played a major role in commodity price volatility last year and looks like doing so again in 2023.

Scorching heatwaves in the northern hemisphere hit production of wheat in the US and Europe in 2022, and climate change means that catastrophic weather events are becoming more frequent.

These include La Niña, which is stretching into an unprecedented third consecutive year and will be detrimental to maize and soybean production in the first half of 2023, in addition to other crops like sugar and coffee, according to Economist Intelligence Unit (EIU).

Wheat, which was heavily affected by war-related supply disruptions in 2022, faces significant climate risks. In the

US large swathes of the southern plains remain under drought conditions, and crops are in unusually poor condition heading into winter dormancy. Extremely dry, occasionally frosty weather in Argentina is causing damage across major producing provinces there, but Russia and Australia are on course for a second consecutive year of bumper crops, which, for the moment, is alleviating concerns about production in the western hemisphere.

Weather will loom large in energy markets as well, EIU noted. Europe's heatwave drove up demand last summer, causing gas and electricity prices to spike, especially as winds dropped to levels insufficient to generate enough power to meet Europe's electricity needs while drought affected hydropower generation in many countries.

These dry conditions, together with rising water temperatures, also hit nuclear power generation.

In addition, the severity of Europe's current energy crunch depends largely on how cold temperatures fall over the winter, not just in 2022/23 but in 2023/24 as well.

"The colder the winter, the more countries will have to draw down stockpiles built up over 2022. Below-normal temperatures will not only raise the spectre of energy rationing, but also put upward pressure on prices over the summer as Europe scrambles to refill reserves—this time without Russian supplies," EIU said.

Obviously, climate change can have significant impacts on commodity prices by affecting their production, transportation, and demand for various goods.

Climate change can impact commodity prices by affecting crop yields, energy prices, water availability, and transportation costs.

It can alter rainfall patterns, increase temperatures, and cause extreme weather events like droughts and floods, which can reduce crop yields.

This can lead to lower supply and higher prices for commodities like wheat, corn, soybeans, and other agricultural products.

Climate change can also impact energy prices by affecting the production and transportation of oil, natural gas, and other energy resources.

For example, extreme weather events can disrupt oil and gas production and transportation infrastructure, leading to supply disruptions and higher prices.

Changes in rainfall patterns and increased water scarcity due to climate change can impact the availability of water for agricultural production and energy generation. This can result in higher prices for water-intensive commodities like meat, dairy, and processed foods.

Climate change can also affect transportation costs, particularly for goods that rely on sea or river transportation.

Rising sea levels and changes in ocean currents can disrupt shipping routes and increase shipping costs, which can lead to higher prices for imported goods. e weather events like droughts and floods, which can reduce crop yields

UAE's ADNOC Gas to Start Trading in \$2.5bn IPO. International Energy Expert, Roudi Baroudi told AFP: "LNG is Most Important Transition Fuel in the move away

from hydrocarbons”.



UAE state energy company ADNOC's recently formed gas unit will launch on the Abu Dhabi stock market on Monday in a \$2.5 billion initial public offering aimed at tapping high demand for the fuel.

Shares in ADNOC Gas, which only became operational at the start of this year, were heavily oversubscribed even after the offering was expanded from 4.0 to 5.0 percent of issued share capital in response to strong interest.

The final price was set at 2.37 dirhams (\$0.65) per share, towards the top of its range, raising about \$2.5 billion and implying a market capitalisation of around \$50 billion.

ADNOC Gas is the biggest flotation yet on the Abu Dhabi stock exchange, which opens at 9:30 am (0530 GMT).

At more than 50 times oversubscribed, it is the biggest demand ever seen for an initial public offering in the Middle East and North Africa, outstripping oil firm Saudi Aramco's world-record \$29.4 billion listing just over three years ago.

The rapidly organised IPO from ADNOC, one of the world's biggest oil firms, follows last year's scramble for alternative gas resources after Russia's invasion of Ukraine, and comes as countries search for cleaner fuels to mitigate global warming.

Energy consultant Roudi Baroudi, who heads the Qatar-based Energy and Environment Holding firm, said he expected brisk demand when the shares start trading.

"There is every reason to expect that the massive oversubscription we saw will carry over into strong interest when the shares are floated publicly," Baroudi told AFP.

– 'Transition fuel' –

Abu Dhabi National Oil Company, the United Arab Emirates' key revenue-earner, retains a 90 percent stake in the subsidiary formed from its former gas processing, LNG and industrial gas units.

Gas is being touted as cleaner than other fossil fuels as countries around the world strive to reduce their emissions.

Baroudi said Liquefied Natural Gas (LNG) was "the most important transition fuel in the move away from hydrocarbons".

In 2021, the UAE produced 57 billion cubic metres (bcm) of natural gas, or about 1.4 percent of global output, according to the BP Statistical Review of World Energy.

That same year, the Emirates exported 8.8 bcm of LNG, 1.7 percent of world LNG exports, the Statistical Review said.

"As global efforts to battle climate change gain pace, the role of natural gas in general... is widely expected to grow," Baroudi said.

"ADNOC enjoys a solid reputation, so it was to be expected that the ADNOC Gas IPO would attract strong interest."

ADNOC Gas could be the first in a series of share offerings in Abu Dhabi this year.

At least eight companies are expected to follow in fields ranging from technology to asset management and regenerative medicine, Bloomberg said, citing Sameh Al Qubaisi, director general of economic affairs at Abu Dhabi's Department of Economic Development.

<https://www.digitaljournal.com/business/uaes-adnoc-gas-to-start-trading-in-2-5bn-ipo/article>

Aramco Weighs LNG Exports as Hydrogen Talks Prove Tough



Saudi Aramco is weighing exports of liquefied natural gas

instead of blue hydrogen, as talks with potential buyers of the latter fuel prove tough.

The world's biggest oil company is investing billions of dollars in gas production. It's priority is to meet rising demand within Saudi Arabia and then convert what's left over into blue hydrogen, a fuel seen as important for the energy transition because the carbon emitted when it's made is meant to be captured.

Yet existing technology means blue hydrogen could cost the equivalent of around \$250 a barrel of oil, Aramco's chief executive officer said on Tuesday.

"It is very difficult to identify any off-take agreement in Europe" for blue hydrogen, Amin Nasser said on a call with analysts on Tuesday. "Even the customers in Japan and Korea are waiting for government incentives. Until they get these incentives, it'll be costly for them to pursue that blue hydrogen."

The company won't make a final investment decision to build hydrogen export facilities without first signing supply deals, he said. It's so far sent test shipments in the form of ammonia to South Korea and Japan.

"This is a very expensive program," Nasser said. "It's a lot of capital and you need customers. So we will not sanction a project without securing an off-take agreement."

The kingdom has some of the world's biggest gas reserves but barely exploited them in the past. Demand for gas has boomed recently, especially since Russia invaded Ukraine and cut supplies to Europe in retaliation against sanctions.

Much of Saudi Arabia's additional gas will come from Jafurah, one of the world's largest untapped fields. It aims to spend tens of billions of dollars developing it and has started discussions with investors in midstream projects such as pipelines, said Nasser.

Sinopec and TotalEnergies SE are among companies considering investing in those projects, Bloomberg reported this month.

Nasser spoke shortly after Aramco reported a net profit of \$31.9 billion for the first quarter and announced a plan to increase its \$76 billion annual dividend.

It had decided to prioritize blue hydrogen because it's seen as a cleaner fuel than LNG, Nasser said.

Still, even if Aramco doesn't export LNG from Saudi Arabia, it's keen on investing in foreign terminals, including in the US and Australia.

"We have started discussions with our partners globally on LNG opportunities," he said, confirming a Bloomberg report from March.

BP ventures back into oil frontiers to boost output



By Ron Bousso

LONDON (Reuters) – BP is ramping up oil exploration and drilling activity in frontier prospects as the energy giant tries to stem a decline in its oil and gas output after years of focusing on a shift to renewables to cut carbon emissions.

The move comes as companies try to balance pressure to slash climate-warming pollution against a desire to capitalise on soaring profits from oil and gas sales, even as governments work to tame energy prices following Russia's invasion of Ukraine.

BP said that on Monday it started drilling a wildcat, or exploratory, well far off the east coast of Canada which could open a new oil province in one of the world's most remote locations.

The Stena IceMax drilling ship arrived on Sunday at the site of the Ephesus well in the Orphan basin some 400 kilometres offshore, according to ship tracking data.

Early seismic testing shows the Orphan basin may hold up to 5

billion barrels of oil equivalent (boe), one company source said. BP has drilled for oil there in the past with no success, but continues its search for resources.

It also holds a 35% stake in the nearby Bay du Nord offshore acreage operated by Norway's Equinor, which is considering developing the block after making several discoveries there.

In addition BP has revived in recent weeks plans to develop a complex oil reservoir in the Gulf of Mexico named Kaskida that was shelved a decade ago due technical challenges. The new technology it will use to do so, if successful, could help unlock other similar resources around the world, it said.

GRAPHIC: BP's spending
<https://www.reuters.com/graphics/BP-SPENDING/egpbyezxwvq/chart.png>

STRATEGY SHIFT

BP largely abandoned exploration of new oil and gas frontiers after Chief Executive Officer Bernard Looney in 2020 announced plans to reduce its oil and gas output by 40% by 2030 as part of an ambitious climate strategy.

Instead, BP focused on searching for small reservoirs in basins where it operates such as the Gulf of Mexico, the North Sea and Angola that can be easily and quickly linked to existing platforms.

But Looney decided in February to scale back plans to cut oil and gas output – already down some 10% from 2019 levels – in response to investor pressure, now aiming to cut output by 25% by 2030 to 2 million boe per day.

The focus has once again shifted to discovering, developing and acquiring new resources to offset a 3% to 5% natural decline of fields as reservoirs are depleted.

BP will reach its lower production target mostly through

selling ageing oil and gas assets by 2030, while maintaining its underlying production by investing in new fields, Looney said in February.

The group has 15 oil and gas projects, including in Canada, Brazil, Senegal and Mauritania, which it is considering developing after 2025 to sustain its production, Chief Financial Officer Murray Auchincloss told Reuters.

In recent weeks, it has announced plans to acquire a stake from Shell in Australia's giant Browse gas project, and is also in talks, together with Abu Dhabi's national oil company, to buy a 50% stake in Israeli gas producer NewMed Energy.

While investing more in oil and gas, BP in February said it was also increasing spending on low-carbon fuels and renewables.

KASKIDA

BP now expects to make a final decision on the development of its 100% owned Kaskida reservoir by the second half of 2024, with the field expected to start production by the end of the decade, Auchincloss said.

The Kaskida prospect was discovered in 2006 some 250 miles southwest of New Orleans by the Deepwater Horizon drilling rig, on which 4 years later a deadly blast occurred, leading to the largest oil spill in U.S. history.

The field, which holds an estimated 4 billion barrels of oil, was the heart of a large BP project to develop technology to drill in high pressure and high temperature offshore reservoirs.

The so-called Project 20K aimed to design and develop drilling rigs, subsea production system and blowout prevention equipment to produce oil and gas in reservoirs with extreme conditions of pressure of up to 20,000 pounds per square inch

and temperatures as high as 350°F (175°C).

The project was however put on hold in 2013 due to its high costs and technical challenges.

BP has now decided to revive it thanks to improvements in geological analytics and drilling technology, Auchincloss said.

“We always kept Kaskida as an option, and it looks like its time has now come,” he told Reuters.

BP believes that the Kaskida prospect will allow it to unlock other, similar geological reservoirs in the Gulf of Mexico, where it is one of the largest producers, he added.

The group is the front-runner in a licensing round for the Keathley Canyon lease, which contains already-discovered resources that could be used to expand the Kaskida project, according to an internal memo seen by Reuters.

(This story has been refiled to add a dropped word in paragraph 3)

(Reporting by Ron Bousso; Editing by Jan Harvey)

QatarEnergy enters Suriname offshore exploration



QatarEnergy has entered into two Production Sharing Contracts for Blocks 6 and 8 offshore the Republic of Suriname, following successful bids in these blocks, as previously announced in June 2021.

Pursuant to the signed agreements, QatarEnergy will own a 20% working interest in both blocks, where licensing of the new 3D seismic and associated exploration activities are planned. The remaining working interest is shared equally between TotalEnergies (Operator) and Staatsolie's affiliate, Paradise Oil Company.

Commenting on the signing of the agreements, HE Minister of State for Energy Affairs, the President and CEO of QatarEnergy Eng. Saad bin Sherida Al Kaabi said: "We are pleased to have concluded our entry into Blocks 6 and 8 along with our partners, TotalEnergies and Staatsolie, and look forward to commencing exploration in this promising basin."

HE Minister Al Kaabi added: "I would like to take this opportunity to thank the Surinamese authorities, Staatsolie, and our strategic partner TotalEnergies for their excellent commitment and support that resulted in the signing of these agreements."

The contracts, and other key agreements, were signed on behalf of QatarEnergy by Manager of International Upstream and Exploration Ali Abdullah Al Mana during a ceremony hosted by Staatsolie, Surinames State Oil Company in Paramaribo, the capital of Suriname.

Located in the Southern part of offshore Suriname, the adjacent Blocks 6 and 8 are immediately South of Block 58 in shallow waters, with depths ranging between 40 and 65 metres.

China gas demand to surge in 2023 as Europe Slumps, says IEA



Rising demand for natural gas in Asia and the Middle East is set to offset a decline in other regions this year, helping to

keep the global market tight, according to the International Energy Agency.

China's consumption is forecast to jump by more than 6%, underpinning an increase of almost 3% in Asia on the whole, the agency said in its quarterly Gas Market Report. Demand in Europe's advanced economies is poised to drop 5% as renewable energy takes up a larger share of power generation.

Gas markets were upended last year as Russia cut most pipeline flows to Europe amid its war in Ukraine. The continent was spared a harsh winter as it cut demand and relied on liquefied natural gas to help fill the gap. However, supply risks still lurk, including competition with Asia, the possibility of lower flows from Russia, and a potentially hot summer or cold winter.

"Global gas supply is set to remain tight in 2023, and the global balance is subject to an unusually wide range of uncertainties," said the IEA, which advises major economies.

Asia's consumption – and China's recovery from the Covid era, led by its the industrial sector – will be key for the market. The IEA expects the country's imports of LNG to jump by as much as 15% this year, while still remaining below 2021 levels.

India's gas demand is projected to increase by 4%, following a drop amid soaring prices in 2022.

Elsewhere, consumption of gas in the Middle East is expected to rise by 2%, in large part due to Iran and Saudi Arabia. In North America, it's set to drop by 2%, as less of the fuel is used in heating and power generation. Global demand is forecast to remain flat.

"The improved outlook for gas markets in 2023 is no guarantee against future volatility and should not be a distraction from measures to mitigate potential risks," the IEA said.

While the US is set to become the world's main LNG exporter this year, global supply of the fuel is expected to increase by just 4%. That's not enough to offset the forecast drop in Russian pipeline deliveries, according to the agency.

LNG imports in Europe's advanced economies are forecast to

decline for the remainder of the year, after posting strong growth in the first quarter. The change is due to lower needs for storage and reduced gas demand.

European gas consumption dropped 16% for the 2022 winter heating period and marked the steepest drop in absolute terms for any winter in the IEA's records. Still, weather-related factors accounted for just 40% of the region's decline in demand. Other factors included gas-saving policies, fuel-switching and rising energy prices.

IQ earns QR1.2bn net profit on QR4.8bn revenues in Q1



Industries Qatar (IQ) – the holding entity of Qatar Petrochemicals, Qatar Fertiliser and Qatar Steel – has reported net profit of QR1.2bn on revenues of QR4.8bn in the first three months of this year.

The group's operations continue to remain stable and strong as production volumes for the current period improved by 11% year-on-year to 4.4mn MTs in the first quarter (Q1) of 2023, largely driven by higher operating rates, and better plant availability across all the segments.

However, the group's net earnings were down 57% on an annualised basis.

The group's financial position continues to remain robust, with cash and bank balances at QR13.9bn as of March 31, 2023, after accounting for a dividend payout relating to the financial year 2022 amounting to QR6.7bn. Currently, the group has no long-term debt obligations.

IQ's reported total assets and total equity reached QR39.1bn and QR36.5bn, respectively, at the end of March 31, 2023. The group generated positive operating cash flows of QR1.2bn, with free cash flows of QR0.8bn during Q2-23.

The petrochemicals segment reported a net profit of QR382mn for Q1-23, significantly down by 43% versus Q1-22. This decrease was mainly linked to a 26% decline in segmental revenues, which were affected by lower blended selling prices realised during Q1-23.

Blended product prices for the segment declined by 23% versus last year, as result of general decline in the petrochemical prices at the macro-level due to combined effect of declining crude prices and weakened consumer demand against a backdrop of deteriorating macroeconomic fundamentals, and general decline in demand due to recessionary fears.

Sales volumes also fell 4% year-on-year. On the other hand, production volumes improved by 7% against the backdrop of higher facility availability.

The fertiliser segment's net profit was QR510mn for Q1-23, a decline of 71% year-on-year, primarily driven by a 44% shrinkage in segmental revenue, due to a 45% plunge in selling

prices, amid macro-pressures affecting fertiliser markets. Sales volumes were marginally up 3% during Q1-23, mainly due to improved production levels which increased by 11% on year-on-year basis, amid relatively lower shutdown days reported for Q1-23 versus Q1-22.

The steel segment reported a net profit of QR134mn, down by 49% versus last year, on lower revenues, which fell 6% versus Q1-22. Additionally, the earnings were also impacted by higher volume related operating expenses, and marginally reduced other operating income.

The decline in revenue was primarily driven by lowered selling prices which declined by 16% on year-on-year basis. This was partially offset by higher sales volumes which increased by 12% mainly linked to higher production volumes.

Aramco in talks with Sinopec and Total on \$10bn Saudi gas deal



Sinopec and TotalEnergies SE are among companies holding talks to invest in the Jafurah development in Saudi Arabia, according to people familiar with the matter, as the kingdom seeks to exploit one of the world's largest untapped gas fields.

The Chinese and French energy giants are in separate discussions with Saudi Aramco about the plans that may include the construction of facilities to export the fuel as liquefied natural gas, some of the people said, asking not to be identified because the matter is private. Aramco is seeking to raise a total of around \$10bn for the projects, the people said.

Saudi Aramco has been seeking equity investors that could help fund midstream and downstream projects at its more than \$100bn Jafurah gas development in the east of the kingdom. The state-controlled company has been reaching out to private equity firms and other large funds that invest in infrastructure to offer stakes in assets such as carbon capture and storage projects, pipelines and hydrogen plants, Bloomberg reported in December.

Investment bank Evercore Inc is advising Aramco on the plans. Talks are ongoing and no final decisions have been made, the people said. Representatives for Aramco and TotalEnergies didn't immediately respond to a request for comment. China Petroleum & Chemical Corp, as Sinopec is officially known, didn't respond to emailed requests for comment made during China's Labor Day holiday.

The war in Ukraine has led to a surge in demand for natural gas, led by European nations that traditionally got their supplies from Russia. This has led to Gulf States embarking on ambitious plans to expand their gas output.

Saudi Arabia has some of the biggest gas reserves in the world, but has barely exploited them in the past. Now, Jafurah is a key part of Riyadh's strategy to diversify its exports beyond oil. The field is estimated to hold 200tn cubic feet of gas, and Aramco expects to begin production there in 2025, reaching about 2bn standard cubic feet per day of sales by 2030.

A decision to build an LNG export terminal would mark a u-turn for Aramco. The company has recently said that the majority of the gas from Jafurah and other fields would be used for the domestic market and to make blue hydrogen.

Since Aramco was fully nationalised in 1980, most foreign investment in the kingdom's energy industry has been restricted to downstream assets such as refineries and petrochemical plants. In the past, Aramco has struck joint ventures with firms including Shell Plc and TotalEnergies for the exploration and drilling of natural gas within its borders.

Opec output falls on Iraq pipeline halt, Nigeria strike



Bloomberg
London

Opec's oil production fell last month as Iraq's exports were reduced by a pipeline suspension while a labour strike cut shipments from Nigeria.

Output from the Organisation of Petroleum Exporting Countries declined by 310,000 barrels a day to an average of 28.8mn, the lowest level in almost a year, according to a Bloomberg survey.

Opec and its allies have announced new production cutbacks starting this month to shore up global oil markets, but the biggest supply changes in April were unintentional.

Iraq accounted for about 80% of the drop.

A political spat between the central government in Baghdad and the semi-autonomous Kurdistan region has led to the halt of a

pipeline that normally carries 500,000 barrels a day to international markets via Turkiye.

In Nigeria, a production recovery seen in the run-up to presidential elections has fizzled, with industrial action forcing Exxon Mobil Corp to renege on shipments from several terminals last month.

Still, the supply losses by Opec and its allies – both deliberate and accidental – are barely propping up an oil market that's being roiled by fears over economic growth in China and the wider world.

Crude futures briefly sank below \$72 a barrel in New York on Tuesday to the lowest since March.

While group leader Saudi Arabia drew another rebuke from the White House when the latest curbs were unveiled on April 2, the move is looking increasingly prescient as oil prices sag.

Production from the full 23-nation Opec+ alliance should decline by another 1.2mn barrels a day this month as those new curbs take effect. Russia, another member of the Opec+ coalition, also announced cutbacks in response to sanctions over its invasion of Ukraine, but the implementation so far remains unclear.

In terms of supplies in April, the largest adjustments were involuntary.

Iraq's output slumped by 250,000 barrels a day to 4.13mn – the lowest since late 2021 – after Turkiye suspended the northern pipeline following a ruling by an international business tribunal. While Baghdad and Kurdish authorities have struck a temporary deal to get oil flowing again, "technical matters" are delaying the restart.

Nigeria retreated by 120,000 barrels a day to 1.32mn, the survey showed, reversing a surge seen earlier this year when the country reached an accord with a former warlord in the oil-rich Niger Delta region.

Workers at Exxon Mobil facilities in the country returned to work last week, allowing production and exports to resume after a two-week industrial action.

Bloomberg's survey is based on ship-tracking data, information

from officials and estimates from consultants including Kpler Ltd, Rapidan Energy Group and Rystad Energy. Opec+ is due to meet on June 4 to review production levels for the second half of the year.

Fight over subsidies amid \$200tn energy transition narrative



Biden's \$370bn plan to support businesses, leading the transition to a low-carbon economy, has riled some of the largest US trading partners

The global energy transition is estimated to bring close to \$200tn in opportunities and its own series of challenges. Now a global green trade and subsidy war is accelerating

US President Joe Biden's \$370bn plan to support businesses, leading the transition to a low-carbon economy has riled some of America's largest trading partners, who say the measures unfairly benefit US companies and harm free trade.

Now the European Union is striking back with state support for industries that could generate as much as \$1tn in green investments by 2030.

Asian allies are following suit, too.

Last August, Biden signed into law the US Inflation Reduction Act (IRA) to finance projects over the current decade and relies entirely on higher tax revenues, to the tune of \$739bn.

The IRA offers tax credits and other incentives for the production of electric vehicles, renewable energy, sustainable aviation fuel and hydrogen.

European nations are upset at the IRA's raw protectionism. The biggest flash point is the consumer tax credit of up to \$7,500 that is available only for electric vehicles assembled in North America.

Policymakers in Europe, Japan and South Korea worry that the law could lure investment to the US that might otherwise flow to their regions.

German carmaker Volkswagen, for example, opted in March to build a \$2bn factory for its new electric Scout brand in South Carolina and picked a site in Canada for its first battery plant outside of Europe, describing the incentives on offer as akin to "a gold rush."

Japan's government initially complained that the US measures were "discriminatory" but Washington and Tokyo ultimately struck a deal to allow critical minerals sourced in Japan to qualify for the US subsidies.

South Korea's Hyundai Motor Co and its affiliate Kia Corp said

the law puts them at a disadvantage because they don't have any EV plants in the US yet, though they soon will.

South Korea has announced its intention to jump into the fray with a 550tn won (\$413bn) investment plan focused on public-private partnerships in chips, batteries, robots, EVs, displays, biotechnology and other areas.

Europe is advancing its own subsidies and tax breaks. The proposed Net Zero Industry Act aims to spur the investments required to meet at least 40% of the EU's "clean technology" needs from within the bloc's own borders by the end of the decade.

The hope is that companies will prioritize manufacturing in Europe and resist the lure of Biden's tax breaks. The EU also passed a €43bn (\$47.5bn) subsidy programme in April called the Chips Act to support advanced semiconductor manufacturing in the bloc.

When deep-pocketed governments attempt to outspend each other to produce national champions, companies in small and developing economies are usually impacted the most because their governments can't muster the same scale of funding.

Despite the global outcries, the chances of the current tensions evolving into a full-fledged trade war are seen less likely.

Biden has sought to dial down the tension, acknowledging the US law has some "glitches" and that there's room for tweaks to make it easier for European countries to participate.

He has said he wanted the legislation to be a "win-win" and that it had not been "designed to hurt China."

But Biden's law and the EU's initiatives are partially seen as a response to China. Their aim is to redirect global supply chains for clean-energy products away from China so that

Beijing can't abuse its dominant position in some key raw materials.

This would be a radical shift for the EU especially, as it relies on China for 98% of its rare-earth minerals and magnets.

While greater funding for clean energy production and green technologies is essential, a fight over subsidies runs the risk of focusing too much on geography and not enough on the bigger picture.