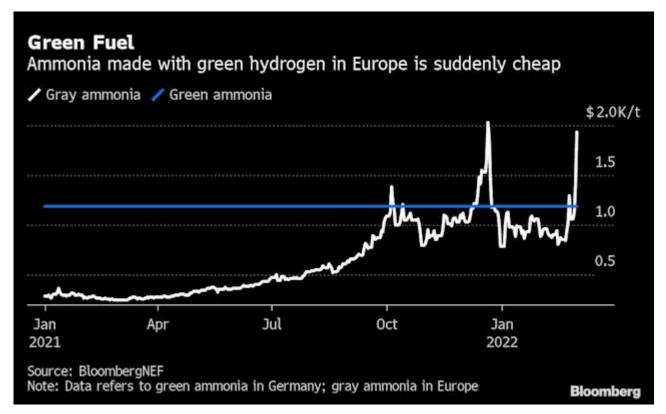
# Russia's invasion supercharges the push to make a new green fuel



Europe's push to ditch Russian natural gas is generating billions of dollars in new commitments to build a low-carbon hydrogen market.

A nearly 450% rise in gasoline prices in Europe last year made the green fuel of the future cost-competitive about a decade ahead of schedule, according to BloombergNEF. Now investment funds are joining governments and utilities in ambitious plans to make hydrogen a viable substitute for fossil fuels in manufacturing, transportation and heating.

"It's kind of a tipping point," said Phil Caldwell, chief executive of Ceres Power Holdings PLC, a UK-based hydrogen technology company. "You're going to see that capital coming in on a massive scale now. There is no going back."

Russia is ostracized on the world stage for invading Ukraine, but some of its harshest critics still need its oil and gas to keep their economies running. Europe is accelerating efforts to break that addiction, with Fortescue Metals Group Ltd. planning a \$50 billion hydrogen supply chain project with German energy giant E.On SE; Norway's Scatec ASA building a \$5 billion production facility; and the investment fund Hy24 that allocates \$1,600 million for infrastructure.

The case for hydrogen was already growing, mainly because of its climate benefits, but the war broadened investor interest by highlighting the need for energy security, Fortescue billionaire founder Andrew Forrest said in an interview.

"It has accelerated money flows," Forrest said in London. "After the tanks crossed the border, there is none of that awareness in people's minds. It is a physical, fiscal necessity."

Some 93% of hydrogen producers, users and investors who attended a BNEF roundtable last month said they hoped the war would boost the development of the green hydrogen industry. Support for domestic production and imports from reliable sources will be key, participants said.

Green hydrogen has long been more expensive to produce than the traditional kind, which is made from natural gas in a process that releases carbon dioxide into the atmosphere.

That is starting to change. BNEF analysts found that green hydrogen, made by machines called electrolysers powered by the wind and sun, would be cost-competitive today with the fossilfuel-based product.

A liquefied natural gas (LNG) facility in Porto Venere, Italy, February. The countries of the European Union have agreed to jointly buy and store gas, hydrogen and liquefied natural gas to meet the challenge of reducing energy dependence on Russia and protecting Europeans from spiraling energy costs. | CLARA

### VANUCCI / NEW YORK TIME

"Without a doubt, the case for renewable hydrogen has improved significantly," said Martin Neubert, chief commercial officer at Orsted A/S, which plans to produce green hydrogen for shipping giant AP Moller-Maersk A/S. Orsted is the largest developer of offshore wind farms.

Previously, that cost parity wasn't expected until around 2030 through a combination of cheaper electrolysers and massive growth in turbine and solar panel deployment, making production cheaper.

But rising gasoline prices changed the calculus, meaning green hydrogen costs don't need to fall that much to be competitive. Simply replacing current demand for hydrogen with the green kind in industries such as oil refining and fertilizer production could reduce the European Union's demand for gas by 12%, according to BNEF.

At the same time, the bloc's carbon price has nearly doubled in the last year, making emission-free gas more attractive.

"The economy is moving in favor of green hydrogen," said Ivan Pavlovic, chief executive of French bank Natixis CIB, which is working on financing the fuel's production. "The projects we're looking at now seem more bankable from a financial perspective."

However, the costs only cover part of the way. Gasoline prices could drop, returning the economy to where it was before. However, the war bolstered the political support essential to expanding the industry.

The European Union doubled its green hydrogen capacity target to 80 gigawatts by 2030, compared with less than 1 gigawatt today. The UK has just set a target of producing at least 5 gigawatts of hydrogen from electrolysers by 2030, the first time it has been so specific.

In the US, US President Joe Biden's administration has said the infrastructure needed to increase natural gas shipments to Europe will be ready for conversion to handle hydrogen.

These projects will take years to materialize and will require a huge increase in renewable sources, but government support still gives private money the confidence to move. under management, and FiveT Hydrogen, the world's first investor to focus exclusively on clean hydrogen.

"It's a growth issue, it's an ESG issue and it's renewables at scale in countries that need it," said Hy24 CEO Pierre-Etienne Franc. "Because of that, and because of greater certainty about the future, people are happy to make compromises."

Danish fund manager Copenhagen Infrastructure Partners K/S initially raised €800 million (\$880 million) for its first Energy Transition Fund, with plans to increase it to €2.3 billion. It recently acquired a stake in German electrolyser maker Sunfire GmbH and has agreed to buy 640 megawatts of the company's machines for its own green hydrogen projects.

The London-listed L&G Hydrogen Economy UCITS ETF has exposure to companies with a minimum market capitalization of \$200 million, including electrolyser manufacturers and hydrogen producers.

HH2E is seeking €2.7 billion to build 4 gigawatts of green hydrogen and green heat production capacity by 2030. Cofounder Andreas Schierenbeck, a former chief executive of German utility Uniper, said he is in talks with three financial investors to fundraising.

"There is a lot of money in the market," Schierenbeck said. "Private equity firms want to invest now with early start-ups."

### Rising food costs push Arab world's vulnerable to breaking point



Seated around the dining table, the family of four stares blankly at pictures of food sketched on the tablecloth. "Tonight," the father says, "we're coloring for dinner."

The scene in a cartoon in a Moroccan newspaper speaks to the predicament facing the kingdom's 37 million people and their peers across North Africa as the Muslim world marks Ramadan. Normally characterized by abstention broken by plentiful sunset feasts, the holy month for many this year is a confrontation with painful economic reality.

Global food costs are up more than 50% from mid-2020 and households worldwide are trying to cope with the strains on their budgets. In North Africa, the challenge is more acute

because of a legacy of economic mismanagement, drought and social unrest that's forcing governments to walk a political tightrope at a precarious time.

The Middle East and North Africa region's net food and energy importers are especially vulnerable to shocks to commodity markets and supply chains resulting from Russia's war on Ukraine, according to the International Monetary Fund. That's in countries where the rising cost of living helped trigger the Arab Spring uprisings a little over a decade ago.

"Just how much more do we have to take?" asked Ahmed Moustafa, a 35-year-old driver and father of three in Cairo. He already had to sell some appliances to keep food on the table and cover other expenses, he said. "We keep being asked to cut and cut and cut, but there's not much left to cut from."

Home to large, mainly urban populations and lacking oil wealth, governments in Egypt, Morocco and Tunisia are struggling to maintain subsidies for food and fuel that have helped keep a lid on discontent.

The World Food Programme has warned that people's resilience is at "breaking point," while the United Arab Emirates moved to help ally Egypt, the world's largest buyer of wheat, to shore up its food security and ward off potential instability. Egypt is also seeking IMF help.

Egyptian President Abdel-Fattah El-Sisi has tried to push ahead with reforms to revive the economy since coming to power in 2014 without fueling popular frustration. He sought last month to unite the nation behind inevitable sacrifices.

That includes shunning old habits of over-consuming — especially during Ramadan, which started on April 2. "People think that my dining table looks different," El-Sisi said at March 23 event, urging the country of over 100 million to scale back during the Iftar meal that breaks the day-long Ramadan fast. But, "I am responsible before God," he said.

Just weeks ago, Egyptian officials were quick to take pride in the fact that the economy of the Arab world's most populous nation had weathered the pandemic and posted solid growth. Inflation, too, was under control.

That changed after Russia's invasion of Ukraine on Feb. 24. Investors pulled billions of dollars from the country's debt market and the currency sank 15%. Egypt banned exports of key foodstuffs including flour, lentils and wheat.

By early March, the war had pushed up wheat-flour prices by 19% and vegetable oils by 10%, the government said. That's in a country where the average family income is about 5,000 pounds (\$272) a month — roughly 31% of which is spent on sustenance, according to the state-run statistics agency.

Hilal El-Dandarawy, a retired state employee in the southern city of Aswan, said he's now bracing for a surge in fuel prices and a tsunami of other increases. "We are living in a price crisis in goods and services, electricity, water and gas," he said.

A worse situation is playing out in Tunisia, the nation that gave birth to the Arab Spring revolts and which has been mired in political turmoil ever since. The pounding the economy took as a result of that infighting among officials is now amplified thanks to COVID-19 and Russia's war on Ukraine.

The central bank has warned that strong measures must be taken to reform the economy, but such efforts have been repeatedly blocked by the powerful UGTT labor union. Tunisia, too, is turning to the IMF amid warnings about the risk of default on its debt.

The dilemma for Ahmed Masoud, a 40-year-old merchant in the old city in the capital Tunis, brings those broader issues into sharper focus. He complained that the dearth of tourists, which had begun due to the pandemic, is now exacerbated by the Ukraine conflict.

Government assistance to offset the drop in business has barely made a dent and he can barely cover utility bills. "I think I'll close my shop and look for another job," Masoud said, with a resigned shrug.

Back in neighboring Morocco, things aren't any better. While it managed to avoid the political upheavals of the Arab Spring in 2011, it hasn't been spared on the economic front. Growth is expected to grind down to 0.7% this year, around a tenth its level in 2021. The central bank predicts inflation, meanwhile, will hit 4.7%, relatively modest compared with even parts of Europe, though still the highest since the 2008 financial crisis.

Managing the "exogenous shock" of the war may force Morocco to seek a precautionary liquidity line from the IMF, Governor Abdellatif Jouahri said. Morocco is facing "an unprecedented situation," he added. The war in Ukraine is threatening to stoke public anger over prices and send the state's financing needs to historic highs.

Grains merchant Mohamed Bellamine, whose shop in Rabat's Rahba market would normally be heaving with shoppers in the days before Ramadan, sees the impact clearly. He gestures to the empty street with a sigh: "Usually you wouldn't even be able to find a place to park."

### Why Japan will struggle to do without Russian energy



After reports of alleged war crimes in Ukraine by Russian forces, Japan said it will follow the European Union and Group of Seven countries and ban imports of Russian coal. Prime Minister Fumio Kishida said the country will secure alternative sources of energy in a speedy manner, although no time frame was given. But shifting away from Russian fuel will be easier said than done for resource-poor Japan.

### WHAT SANCTIONS HAS JAPAN IMPOSED ON RUSSIA?

Ever since the invasion of Ukraine in late February, Japan has joined the US and European countries in sanctioning Russia. It has imposed export controls, including on semiconductors and has sanctioned some oligarchs and their family members. Russia is barred from issuing government bonds in the country. Japan is also taking in Ukrainian refugees.

### WHAT ABOUT ENERGY?

Japan had drawn a line there, as it has few resources of its own. Russia supplies Japan with 13 per cent of its coal for power generation, known as thermal coal; 8 per cent of the coal used in steelmaking and 9 per cent of its liquefied natural gas. Japan has stakes in the Sakhalin-1 and 2 oil and gas projects in Russia, which Kishida has called "an extremely important project for energy security." But on Apr 8 trade

minister Koichi Hagiuda said Japan "will aim to stop importing coal from Russia" as a longer-term goal.

### WHY THE CHANGE?

Japan was standing with its G7 partners, who expressed outrage over reports of atrocities committed by Russian forces in Ukraine. "There needs to be accountability for such inhumane acts," Kishida said, adding that he believes Russia committed war crimes in Ukraine.

### WHAT ARE THE CHALLENGES FOR JAPAN?

The global market for thermal coal is already tight, and with the EU also phasing out Russian coal, competition from other countries will increase, said Ali Asghar, an analyst at BloombergNEF. That means prices could rise, which could then translate into even higher electricity bills. Energy-intensive industries such as chemical manufacturers would be especially hard hit, and some might look for other sources of fuel.

Longer term, a drive to cut Japan's dependency on coal could accelerate the transition to renewable energy and the restarting of nuclear power plants that were taken offline following the 2011 Fukushima disaster, said Isshu Kikuma, another analyst at BloombergNEF.

That said, neither offer immediate solutions. Hagiuda, the trade minister, said Japan will, over time, use energy conservation, other power generation and supplies from alternative countries to reduce its dependency on Russia.

### CAN OTHER SUPPLIERS REPLACE RUSSIAN COAL

Not exactly, as Japan will have to take into account the variety of coal grades. Some power plants and furnaces are most suited for Russian coal and can't easily replace it with supplies from Australia or Indonesia.

There are also logistical complications when it comes to quickly pivoting to new sources, as shipments may come from producers that are farther away or there may not be vessels readily available.

### WHAT ABOUT THE OTHER FOSSIL FUELS?

Japan is facing a pretty tight supply situation. Tokyo hasn't announced any intention to walk away from its energy projects in Russia, as UK oil majors BP and Shell have said they would do. It also has avoided any direct action on Russian oil and gas so far, in line with the EU.

# GCC chemical industry to see 'planned, committed investments' of \$71bn up to 2024: GPCA

### Pratap John

The GCC region will see "planned and committed investments" totalling \$71bn up to 2024 in its chemical industry, according to Gulf Petrochemicals and Chemicals Association (GPCA).

This is despite considerable reductions in global investments, GPCA noted in its latest annual report.

However, there are concerns that petrochemical companies in the region may hold on from bringing additional capacity before the demand for chemical products completely recovers.

According to GPCA, GCC chemical revenue may have ranged between \$60bn and \$63bn in 2021.

Mena's chemical output is expected to rise by 3.6%, and by about 1.2% in the GCC.

GCC's lower than usual output growth last year was largely due to no major capacity coming onstream in 2021, GPCA noted in its latest annual report.

The GCC chemical industry appears to be on the recovery path and witnessed a rebound in growth in 2021, though at a gradual

pace.

The World Bank estimated GCC economies to return to an aggregate growth of 2.6% in 2021, buoyed by global economic recovery, due to stronger oil prices and the growth of non-oil sectors.

Brent crude prices rose to their highest levels in November 2021 since October 2018, reaching \$86.04 per barrel.

GPCA expects the current positive momentum to carry into 2022, thanks to stronger oil exports, public expenditure, and credit growth. This acceleration can be attributed to the phased-out Opec+ mandated oil production cuts.

Moreover, higher oil prices attract additional investment and improve business attitude due to favourable oil market conditions. However, the outlook in the medium-term is bound by risks from slower global recovery, potential new coronavirus outbreaks, and oil market instability.

According to GPCA, the Covid-19 pandemic caused an unprecedented blow to the GCC economy in 2020 due to measures associated with the pandemic, national lockdowns, and the collapse in crude oil prices.

The chemical industry in the region is closely linked to economic activity, demand and supply headwinds, fluctuations in feedstock prices, and growth in end-user industries. It, naturally, experienced the negative implications of the coronavirus pandemic and the overall economic situation.

The GCC chemical industry is one of the most important contributors to the manufacturing value added, in addition to the indirect and direct impact it has on other sectors of the economy.

Therefore, the performance of the chemical industry has a significant impact on economic development, especially the non-oil sector. It is also widely recognised as the cornerstone in the economic diversification drives of GCC countries.

The report also noted GCC chemical companies are pivoting towards renewable energy to secure clean, reliable, and competitive power sources.

To decarbonise the world, hydrogen can play a powerful role in enabling the energy transition. Green hydrogen produced by using renewable energy sources (wind or solar) with no carbon emissions is gaining attraction in the GCC region thanks to

# Russian oil exports forced to take longer journeys to find buyers



Russia's crude oil exports, a vital wellspring of income for Vladimir Putin's regime, are giving no indications that they are beginning to crumble in the midst of the vanishing of European purchasers. Shipments in the seven days to April 8 proceeded with a bounce back that started the earlier week, after reliably falling since Russia's Feb. 24 invasion of Ukraine. That is as per Bloomberg News' first tracker of all crude leaving the nation's export terminals on ocean-going

tankers. Week by week shipments hit very nearly 4 million barrels every day in the first full week of April, the most significant level seen up until this point this year. That was up by just about one quarter over the earlier week.

Boosted by a combination of higher export volumes and an increase in the duty payable per barrel in April, the Kremlin earned an estimated \$230 million from seaborne crude exports in the week to April 8, based on calculations of the amount payable on each cargo that left Russian ports that week.

And the same pattern holds for the export duty revenues that the Russian state receives on overseas shipments. In the week to April 8, they jumped back to equal their highest level this year, after falling in each of the two previous weeks.

But while overall export volumes are shrugging off import bans and self-sanctioning, there is one area where a clear impact is already being seen — the distances that cargoes are being shipped to find willing buyers.

At the same time, there are signs traders are starting to work on ways to get more crude to Asia, where buyers are willing to take advantage of big discounts on Russian oil. Increasing numbers of Very Large Crude Carriers, supertankers able to carry two million barrels, are loading Russian crude from smaller ships in the Mediterranean Sea and elsewhere.

European oil majors including Shell Plc and TotalEnergies SE, which normally run tanker loads of Russian crudes through their refineries every week, have said they will stop buying out of revulsion over the war in Ukraine. The U.S. has stopped buying all Russian oil and the U.K. will follow suit by the end of the year. The early data suggest it's having an impact.

Before the war, Russia was the world's second-largest oil exporter, behind Saudi Arabia, shipping almost 5 million barrels of crude oil every day with a spot-market value of more than \$500 million. Some of that crude is delivered by

pipeline directly to refineries in Europe and China, but about 60% moves by sea. In the coming months, we plan to systematically track the flow of seaborne crude from Russia, providing week-by-week insight into how the war is affecting those flows, and showing the impact on Russia's petro-reliant economy.

### Disappearing Markets

Traditional markets in Northwest Europe for Russia's Baltic Sea exports are disappearing fast, as buyers self-sanction Moscow's crude. Half of the ships loading at the northwest Russian ports of Primorsk and Ust-Luga last week are either heading to Asia, or not showing final destinations. Most of that second group are signaling destinations such as Gibraltar or Malta, suggesting that they may either be heading to Asia via the Suez Canal or to conduct ship-to-ship transfers in the Mediterranean (see below). The Mediterranean is starting to become a preferred location for transfers of cargoes of Russian crude from smaller vessels onto giant intercontinental supertankers for shipment to Asia.

Exports from the Black Sea terminal at Novorossiysk soared in the past week, surging to just under 800,000 barrels a day, more than three times the volume shipped in the previous week, when a backlog of vessels waiting to load built up off the port. Most shipments from Novorossiysk are staying within the Mediterranean region, which includes the Black Sea ports of Bulgaria and Romania, where three of the seven cargoes have discharged.

Of 21 Urals cargoes loaded from Primorsk, Ust-Luga and Novorossiysk in the week to April 8, six are heading to India, four have unknown destinations and the remainder look set to deliver their cargoes within Europe, according to their destination signals. Shipments from the Arctic port of Murmansk are still finding outlets in northwest Europe, with all three cargoes that loaded in the week to April 8 heading

either to Rotterdam in the Netherlands or Wilhelmshaven in Germany, according to their destination signals.

Shipments from Russia's three Pacific Ocean terminals, dominated by exports of ESPO crude from Kzmino, are almost all now heading to China, with only occasional cargoes going elsewhere. Perhaps the biggest initial impact of the import bans and self-sanctioning of Russian crude is to be seen in the very long and unusual journeys that some cargoes are beginning to make.

Cargoes are being transferred from the ships that call at Russian terminals onto much bigger vessels in order to benefit from economies of scale on the long voyages to China and India. A supertanker, known in industry speak as a Very Large Crude Carrier, or VLCC, can be used to accumulate the cargoes from three smaller vessels, known as Aframaxes, that often load west Russian barrels. Vitol Group, the world's biggest independent oil trader, booked a supertanker, Searacer, to load from Denmark's Skaw, a popular location for ship-to-ship transfers of Russian cargoes.

Russia-Ukraine War Could Delay Europe's Decarbonization Plans for a Decade "The Whole Situation is Very Sad" — Energy Expert



8 April 2022 Roudi Baroudi

DELPHI, Greece: Russia's invasion of Ukraine could force Europe to delay key decarbonization efforts for up to a decade, a prominent regional energy expert warned on Friday.

"They don't have many choices left," said Roudi Baroudi, CEO of Doha-based Energy and Environment Holding, an independent consultancy. "Unless some European countries pull out all the stops, much of the continent could soon be looking at crippling shortages, prohibitively high prices, or both."

Now that Europe is moving to reduce imports of Russian oil and gas, he explained, some of the measures expected to reduce carbon emissions may have to be put off "for eight, nine, maybe ten years", as would planned shutdowns of nuclear generating stations.

"The European Union will need to provide the necessary permissions in some cases, plus financing in others," he said. "Eight to ten nuclear plants and as many as 30 coal stations slated for decommissioning will have to remain online to keep up with electricity demand, and several projects required to replace Russian gas will need to be accelerated with additional funding and/or guarantees."

If and when gas stops flowing through pipelines from Russia, Baroudi told the conference, "it cannot be replaced by simply

ordering more liquefied natural gas from Qatar, the United States, and/or other producers. Europe doesn't have enough receiving facilities to re-gasify such huge amounts, which is why efforts to expand capacity in Germany and the Netherlands are so urgent."

Coordinated releases of strategic oil reserves by the US and other countries are helping to contain upward pressure on crude and other energy prices, he said, but reasonable levels "cannot be maintained unless more supply makes it to market and that means oil producers —primarily OPEC but others as well — have to start pumping more."

On yet another front, "Spain has both spare LNG receiving capacity and an undersea pipeline for imports of gas from North Africa — but very little of that can reach the rest of Europe unless and until a new pipeline connects the Iberian Peninsula to the rest of Europe via France," said Baroudi, who has been advising companies and governments on energy policy for decades. "Paris has recently voiced new openness to that idea, but the EU can and should do more to facilitate it. It should also do more to establish an agreed route for another pipeline to carry gas from the Eastern Mediterranean to Greece and/or Turkey."

Baroudi also argued that the EU would be wise to ensure adequate capital flows into renewables such as wind and solar. "We might have to retain fossil fuels longer than we had planned, but that's no reason to stop funding a cleaner future," he said. "In fact it's a reason to move as quickly as possible."

"The whole situation is very sad," he added. "Ever since the Paris Agreements of 2015, and especially since the Glasgow climate summit last year, Europe had been on the right track to be ready for a decarbonized economy. But now those plans are temporarily being pushed to the back burner. Apart from the lives being lost in the fighting, the energy and economic

implications will mean severe hardships across the continent and even beyond, especially for lower-income people, who are the most vulnerable as rising energy prices cause the cost of food to spike as well. So there will be hunger, too. And much of the cause is due to repeated delays in the diversification of Europe's sources of supply. Now it finds itself scrambling to prevent an economic disaster."

### World electric vehicle fleet to surpass 20 million in June



According to Bloomberg New Energy Finance estimates, the global EV fleet is set to reach 25 million by the end of the year and 20 million as soon as June. This is a huge leap in numbers from the 17,000 EVs on the road in 2010.

The speed of adoption is also running 10 years ahead of schedule. In BP's 2016 report, it estimated that there would be 71 million battery and plug-in hybrid EVs on the road by 2035, but according to Bloomberg, this is now set to be achieved by 2025.

These figures come as part of a consistent pattern of growth: in its 2020 Global EV Outlook report, the International Energy Agency (IAE) showed that between 2018 and 2019 there was an astronomical 40% year-on-year increase in electric car sales.

Even though interest in EVs has been swirling since the early seventies — NASA's 1971 Luna Rover ran on electricity — it's only since 2010, when the first commercially available plug-in hybrid went on sale, that EVs have begun to grow in popularity.

This makes BNEF's 20 million figure even more astonishing. Today there are 23 plug-in electric vehicles and 36 hybrid models available. BNEF also predicted that over the next five years passenger EVs are set to increase from 3.1 million to 14 million.

However, Europe and China are driving a lot of this progress, which slightly skews the reality of the international take-up of EVs. According to Bloomberg, of the EV sales so far, China makes up 46% of total sales, Europe 34% while North America accounts for just 15%.

But with over 1 billion cars in the world, the world's 20 million electric vehicle fleet is just a drop in the ocean. It means that despite the astonishing increase in sales, more needs to be done to meet the ambitious climate plans that have been set out across the globe over the last year in particular.

In the UK, for example, there is now a target in place to make sure all new heavy goods vehicles are zero-emission by 2040. At COP26 in November 2021, there was also a group commitment

laid out to accelerate the transition to 100% zero-emission cars and vans.

"Despite the expected rapid rise in EV sales, most countries are still not on track to bring road transport emissions to zero by mid-century," said the BNEF report.

Nevertheless, despite further global take-up of EVs being necessary, BNEF projections still look extremely positive. Already, EVs are displacing the demand for 1 million barrels of oil every day. By 2050 this figure is set to rise to as many as 21 million barrels of oil every day.

### Is Putin's war driving up commodity prices?



By Daniel Gros/ Florence

• Understanding why prices are high is essential to devise the

### right policy response

Sky-high commodity prices have the world reeling. Inflation has reached 7% in both the United States and in Europe — a level unseen for decades — with European consumers facing losses of purchasing power equivalent to those caused by the oil shocks of the 1970s. The economic recovery from the pandemic is now at risk of stalling, and the spectre of stagflation looms over developed countries from the European Union to Japan.

One might assume that Russian President Vladimir Putin's war in Ukraine is the primary cause of spiking energy and commodity prices. Russia is, after all, the world's largest exporter of oil and petroleum products, and, together with Ukraine, it accounts for a third of global wheat and barley exports. But there are two compelling reasons to doubt this explanation.

First, the war has not led to large-scale interruptions in the supply of oil, gas, or other important commodities (at least not yet). Of course, the mere expectation in markets that a shortage is imminent can be enough to drive up prices. But such an expectation so far seems to have little basis.

Yes, wheat deliveries from Ukraine have been halted, and this year's harvest is in doubt, because Ukrainian farmers cannot work their fields. But Ukraine produces only about 3% of the world's wheat. Russia, meanwhile, produces 11%, and both production and exports remain uninterrupted. Moreover, while Russia has threatened to cut off gas supplies to "hostile countries" unless they pay in roubles — an ultimatum Europe has so far rejected — there is little indication that Russian oil or other commodities will be withdrawn from the market. For most commodities, the war should not affect supply.

A second reason to doubt that the war is responsible for today's high commodity prices is that most of the price increase happened before the invasion. The International Monetary Fund's commodity-price index remains below its 2008 peak, standing close to levels seen in 2012-13. And spot

prices for gas are in line with their "pre-war" level from the end of last year, when few expected a full-scale invasion of Ukraine.

While oil prices have risen since the start of the war, the increase has been a modest 20%. Although natural-gas prices have been attracting more attention, because they directly affect household heating bills, oil prices are much more important for Europe, because the value of its oil imports is traditionally about five times higher.

If the Ukraine war is not to blame for high energy and commodity prices, what is? One contributing factor might be what economists call the "hog cycle." The term stems from a phenomenon observed in the Danish hog industry: farmers would rear more animals when prices were high, thereby producing a glut, which reduced prices the following year, causing farmers to rear fewer animals, which then sold for higher prices.

Likewise, when commodity prices are high, there is a larger incentive to invest in exploration and mining. But when they are relatively low — as they have been in recent years — the profitability of such investment declines, leading to reduced production and higher prices in later years. And, indeed, the International Energy Agency has provided powerful evidence that years of under-investment in exploration have reduced production capacity.

The fall in demand in 2020, caused by the Covid-19 recession, masked this development. But when Europe, Asia, and the US began to recover strongly, there was not enough spare capacity to meet rising demand. This put upward pressure on prices throughout 2021.

Another factor contributing to high energy and commodity prices might have been the rise of environmental, social, and governance (ESG) investing, which has increasingly led investors to refuse to finance fossil-fuel exploration and development. They hope that denying the fossil-fuel industry capital will discourage production and spur progress toward a green economy based on carbon neutrality.

This phenomenon has been concentrated in the West. While

upstream investment by the major Western oil and gas firms fell by nearly half between 2015 and 2020, such investment remained stable among Middle Eastern producers and rose in China. All of these producers have the same price incentives, but Western firms are the ones that are subject to ESG guidelines.

Understanding why prices are high is essential to devise the right policy response. If the war was responsible for high prices, it would be politically difficult to refuse price caps and generous compensation to help consumers and enterprises cope. Moreover, one could hope that prices would fall when the war ends.

But if high commodity prices are the result of a hog cycle and ESG pressures, they are sending an appropriate signal to markets; in fact, ESG rules are supposed to lead to higher prices. In this case, the economy needs to adjust to a new level of scarcity — and consumers should not be compensated for their lost purchasing power.

Of course, these explanations are not mutually exclusive; all three factors — the hog cycle, ESG standards, and the war — are probably contributing to higher commodity prices. But price trends before the invasion suggest that the war is a minor factor.

This is not the most politically convenient explanation: if the war is the culprit, it absolves consumers and government of the responsibility to adjust, with the former receiving compensation and the latter running higher fiscal deficits. But it is the more economically sound explanation, and thus the one that should dictate a responsible policy response, despite the pain that adjustment might bring. — Project Syndicate

• Daniel Gros is a member of the board and a distinguished fellow at the Centre for European Policy Studies.

## US and EU reach LNG supply deal to cut dependence on Russia



Bloomberg / Brussels

The US and the European Union will push to boost supplies of liquefied natural gas to European countries by the end of 2022 in a bid to displace Russian gas, a political framework that now leaves companies to sort out the details.

Under the agreement, Europe will get at least 15bn cubic metres of additional LNG supplies by the end of the year, though it's not clear where it will come from. Member states will also work to ensure demand for 50bn cubic metres of American fuel until at least 2030. The aim is to work with international partners to help the continent wean itself off Russian gas, which accounts for about 40% of Europe's needs.

"We're coming together to reduce Europe's dependence on

Russian energy," US President Joe Biden said at a joint press conference with European Commission President Ursula von der Leyen, who added that 15bn cubic metres this year "is a big step in that direction."

Europe is trying to diversify its energy sources in a bid to starve Russia of the revenues it needs to fund the war in Ukraine. But that's a mammoth task. Russia ships about 150bn cubic metres of gas to Europe via pipelines every year, and another 14bn to 18bn cubic metres of LNG. That means any disruptions to flows of pipeline gas from Russia would hard to cope with.

"It's a start, but relatively small compared to the overall supplies from Russia," said Jonathan Stern, a research fellow at the Oxford Institute for Energy Studies. "All contributions will be welcome but the task is huge."

The issue is critical as Russia is the EU's biggest gas supplier. The EU also relies on the country for the biggest share of its coal and oil imports, and has struggled to shift its energy policy away from Moscow. The details of how the plan works is now in the hands of energy companies, with American LNG shippers and German buyers set to meet next week in Berlin to hash out possible deals.

The US has already been providing more LNG to Europe, with shipments doubling to record 4.4bn cubic metres in January and a similar level in February. Supplying another 15bn cubic metres could be feasible as long as Europe continue to pay a premium to cargoes compared to Asian buyers. A significant boost to global LNG supplies will only come from 2025, when new projects are scheduled to come online.

It's also unclear whether the supplies would be coming from additional production or from cargoes being redirected from other regions. A senior US administration official who briefed reporters on the plan Friday couldn't say how much of the additional 15bn cubic metres would be provided by US suppliers versus suppliers in Asia or elsewhere.

Currently, European buyers are competing with Asian countries for the world's limited supply of LNG cargoes.

Germany also unveiled its own plan to dramatically reduce Russian fossil fuel imports and make the country almost completely independent of Russian gas by the middle of 2024. Critics say the plan is impossible to achieve as Germany is Europe's biggest buyer of Russian gas.

The US-EU aspirational pact is light on detail. The senior US administration official said permitted US projects can meet the 50bn cubic metres of demand, and added that Europe's pledge to try to meet that demand might nudge planned US facilities toward a final investment decision.

The US worked with partners in Asia this winter to secure supply but is now working to build up stocks for next winter. The effort will require a lot of diplomacy, another official told reporters.

The European Union wants to replace this year nearly two-thirds of its total gas imports from Russia after the war waged by President Vladimir Putin forced an unprecedented rethink of the bloc's energy strategy. The new energy strategy, outlined by the European commission earlier this month, aims to replace 101.5bn cubic metres of Russian gas in 2022 by tapping alternative supply sources, building up renewables and boosting energy security. It also seeks to ensure 50bn cubic metres in LNG from new suppliers.

Europe's ability to import more LNG is constrained by the current regassification capacity, number of terminals and interconnectors, according to an EU official, who asked not to be identified commenting on private talks.

Still, the continent is in a much better place than earlier this year, with mild weather and more LNG imports helping bring inventories level back within the 5-year range, after falling to the lowest in more than a decade. European gas prices have fallen more than 60% since reaching a record earlier this month.

Qatar will stand in solidarity with Europe, won't divert gas contracts to other customers: Minister of State for Energy Affairs



Doha: Minister of State for Energy Affairs HE Saad bin Sherida Al Kaabi stressed that Qatar will stand "in solidarity with Europe" and will not divert gas contracts to other customers, even if it means losing on possible financial gains.

The Minister told CNN that even though Qatar's LNG contracts with Europe and the UK were divertible ones, Qatar's commitment to Europe means "we're not going to divert contracts and will keep them in Europe, even if there is financial gain for us to divert away, we would not do that,"

before adding "that's in solidarity with what's going on in Europe."

On the possibility for Europe to replace Russian gas, Al Kaabi said that replacing Russian gas is "not practically possible." He highlighted that Russia supplies 30 to 40 percent of Europe's gas needs, something the continent cannot replace.

The Minister of State rejected imposing sanctions on Russia's energy sector, adding that Qatar was not choosing sides in the Ukrainian crisis. He added that it was to keep the energy sector out of politics, due to the negative ramifications doing so would have on development. He added that doing so could affect prices the way it did and cause a lot of volatility.

He noted that the Ukrainian crisis had a negative impact on energy transition, highlighting that the use of coal has reached its highest levels ever, as all parties involved are prioritizing their energy security ahead of any long-term gains they are trying to reach. HE the Minister maintained however that the energy sector could do that in a responsible manner.

Commenting on the role the US could play in the future of energy production, he said that the US is certainly one of the biggest suppliers, given the abundance of LNG the country has.

On the prospects of Europe buying fuel jointly from large suppliers, the Minister said that he is yet to see a decision regarding that, noting that this never happened in the past. His Excellency added that many parties in Europe were speaking with Qatar and other large LNG producers because they want to diversify their supply.

On whether Qatar could turn its back on its Asian partners, the Minister of State for Energy Affairs said that QatarEnergy was the biggest company in terms of signing long-term contracts with partners in Asia, with many of those agreements signed over the past three years.

He also told CNN that there is a desire to diversify the buyers of Qatari gas, revealing that the plan is to have half of the customers of the Qatari gas be located to the East of the Suez Canal, with the other half to its West. Currently, 80-85% of Qatar gas buyers are in Asia, with 15-20% of customers located to the West of the Suez Canal.