Russia’s Oil Resilience Faces Bigger Test as EU Ban Looms

Russia defied expectations of a collapse in oil production following its invasion of Ukraine. But Moscow will have to redouble its efforts to find new buyers if it’s to keep output from shrinking in the coming months.

After plunging in the immediate aftermath of its offensive in February, Russian production has rebounded over the past three months as domestic refining boomed and Asian customers stepped in to take shipments shunned by Western buyers. Yet a looming European Union ban on most Russian crude, as well as a gathering economic slowdown, will strike a blow to the country’s producers.

“Russian oil companies have been enjoying the beauties of the summer season — soaring domestic demand and the absence of EU sanctions have allowed them to ramp up production,” said Viktor Katona, head of sour-crude analysis at data firm Kpler.

“As we look into the immediate future, that is bound to change.”

Russian output of crude and condensate — a lighter type of oil — reached a wartime high of around 10.8 million barrels a day in July. Volumes may fall to about 10.5 million a day when the EU ban kicks in in December, Katona said. Analysts at Rystad Energy AS see some 10.1 million a day by year-end, while the International Energy Agency expects a slump of about 2 million a day by the start of 2023.

Russia’s Energy Ministry didn’t respond to requests for comment on its outlook for future production as the EU restrictions approach.

The embargo, which will apply to imports of seaborne crude and most piped supplies from Dec. 5, is set to remove some 1.3 million barrels a day from the European market, IEA estimates show. A ban on oil-product imports follows on Feb. 5, likely cutting a further 1 million barrels a day, the IEA said last week.

Many traditional buyers are already refusing to take Russian barrels, prompting Moscow to sell to customers in Asia, often at a substantial discount. Russia has this year raised its seaborne crude flows to the region by almost 800,000 barrels a day, according to vessel-tracking data compiled by Bloomberg.

But the country can’t count on Asia to mop up all the spare barrels once the EU ban comes into effect as the region is already saturated with Russian crude, according to analysts at Kpler, Rystad and Moscow-based BCS Global Markets.

“In the short term, Asia is already taking almost all that it can,” said Ron Smith, an analyst at BCS.

A loss of Russian production equal to all its current seaborne exports to Europe is a worst-case scenario and unlikely to materialize, said Sergei Vakulenko, an independent expert with

more than 25 years' experience in the Russian oil industry. He expects that traders globally will be eager to find buyers for the extra Russian volumes, given a dearth of spare production capacity elsewhere.

Vakulenko sees Russian output remaining roughly flat until year-end, a view shared by Kirill Bakhtin, a senior oil and gas analyst at Sinara Bank.

"We expect more or less stable production of Russian liquid hydrocarbons in the amount of 10.8 million barrels per day until February 2023," thanks to successful efforts to redirect oil from Europe to Asia, Bakhtin said.

In the first couple of weeks this month, Russia's daily crude oil and condensate output averaged about 10.47 million barrels a day, according to a Kommersant newspaper report Monday. The 3% drop from July is likely driven by seasonality and not by long-term factors such as sanctions, with much of the lower supply coming from a group of smaller producers, including gas giant Gazprom PJSC, according to the Energy Ministry's CDU-TEK data seen by Bloomberg.

Refinery Demand

Russia's seaborne exports have recently slid from their spring peaks, but oil producers have been bolstered by growth in domestic refining amid higher seasonal fuel demand at home and abroad.

Yet toward the end of the year, any attempt to process more crude domestically and increase output of lighter products — which may find a market in Europe before the February ban is enforced — would also mean production of heavier fuels that are harder to sell in the colder months.

In spring, Russian producers were able to find buyers for their fuel oil in the Middle East after the US imposed its own ban. But demand in that region may ebb as the weather cools,

limiting Russia’s ability to export the heavy product, said Mikhail Turukalov, chief executive officer of Moscow-based Commodities Markets Analytics LLC.

In the colder months, Russia also lacks the logistical capability needed for a major hike in fuel-oil exports, Turukalov said.

“This winter, oil-processing in Russia will hardly be able to grow enough to compensate for the expected oil-export declines,” he said.

— With assistance by James Herron, and Julian Lee

بارودي: مصلحة لبنان في استكمال المفاوضات بموقف موحّد

أكد الخبير الدولي في مجال الطاقة رودي بارودي أن “لا يزال هناك

أخذ وردّ في مسألة ترسيم الحدود البحرية مع إسرائيل، ومصلحة لبنان تكمن في الاتفاق الداخلي واستكمال المفاوضات بموقف موحّد”. واعتبر في حديث لـ”صوت كل لبنان”“93.3″ أن “الموقف اللبناني مرتاح ولدينا مصلحة بأن تنتهي الأمور في أقرب وقت”، لافتاً إلى أن الأجواء إيجابية ووصلنا إلى نهاية الشوط لنبدأ مرحلة الاستكشاف”“.

Cheaper, changing, crucial: the rise of solar power

AFP/Paris

Generating power from sunlight bouncing off the ground, working at night, even helping to grow strawberries: solar panel technology is evolving fast as costs plummet for a key segment of the world’s energy transition.

The International Energy Agency says solar will have to scale up significantly this decade to meet the Paris climate target of limiting temperature rises to 1.5 degrees Celsius above pre-industrial levels.

The good news is that costs have fallen dramatically.
In a report on solutions earlier this year, the Intergovernmental Panel on Climate Change said solar unit costs had dropped 85 percent between 2010 and 2019, while wind fell 55%.
“There’s some claim that it’s the cheapest way humans have ever been able to make electricity at scale,” said Gregory Nemet, a professor at the University of Wisconsin-Madison and a lead author on that report.
Experts hope the high fossil fuel prices and fears over energy security caused by Russia’s invasion of Ukraine will accelerate the uptake of renewables.
Momentum gathered pace last Sunday with the ambitious US climate bill, which earmarks $370bn in efforts to cut greenhouse gas emissions by 40% by 2030.
An analysis by experts at Princeton University estimates the bill could see five times the rate of solar additions in 2025 as there were in 2020.
Nemet said solar alone could plausibly make up half of the world’s electricity system by mid-century, although he cautioned against looking for “silver bullets”.
“I think there really is big potential,” he told AFP.

Rapid changes

The “photovoltaic effect” – the process by which solar cells convert sunlight to electrical energy – was first discovered in 1839 by the French physicist Edmond Becquerel.
After decades of innovations, silicon-based solar cells started to be developed in the United States in the 1950s, with the world’s first solar-powered satellite launched in 1958.
The IPCC said of all energy technologies, small-scale ones like solar and batteries have so far proved quicker to improve and be adopted than bulkier options like nuclear.
Today, almost all of the panels glimmering on rooftops and spreading across vast fields are made in China using silicon semiconductors.

But the technology is changing quickly.
In a recent report, the IEA said these new solar cells have proven to be one-fifth more efficient in converting light to energy than standard modules installed just four or five years ago.
There are also a host of new materials and hybrid cells that experts predict could supercharge efficiency.
These include cheap, efficient and lightweight “thin film” technologies, like those using perovskites that can be printed from inks.
Experts say they raise the prospect of dramatically expanding where solar energy can be harvested – if they can be made durable enough to withstand a couple of decades of use.
Recent research has raised hopes that it could be possible.
In one study, published in the journal Science in April, scientists added metal-containing materials to perovskite cells, making them more stable with efficiency near traditional silicon models.
Other research mixes materials for different purposes.
One study in Nature used “tandem” models, with perovskite semiconductors to absorb near-infrared light on the solar spectrum, while an organic carbon-based material absorbed ultraviolet and visible parts of the light.
And what happens after sunset?
Researchers from Stanford said this year they had produced a solar cell that could harvest energy overnight, using heat leaking from Earth back into space.
“I think that there’s a lot of creativity in this industry,” said Ron Schoff, who heads the Electric Power Research Institute’s Renewable Energy and Fleet Enabling Technologies research.

Location, location

Generating more energy from each panel will become increasingly crucial as solar power is rolled out at greater scale, raising concerns about land use and harm to ecosystems.
Schoff said one efficiency-boosting design that is becoming

more popular for large-scale projects is “bifacial” solar.
These double-sided units absorb energy not just directly from the sun’s rays, but also from light reflected off the ground beneath.
Other solutions involve using the same space for multiple purposes – like semi-transparent solar panels used as a protective roof for strawberry plants or other crops.
India pioneered the use of solar panels over canals a decade ago, reducing evaporation as they generate power.
Scientists in California have said that if the drought-prone US state shaded its canals, it could save around 63bn gallons.
Construction on a pilot project is due to begin this year.

All shapes, sizes

Experts say solar will be among a mix of energy options, with different technologies more suitable for different places.
Schoff said ultimately those energy grids with more than 25% solar and wind need ways to store energy – with batteries or large-scale facilities using things like pumped water or compressed air.
Consumers can also play their part, said Nemet, by shifting more of their energy use to daytime periods, or even hosting their own solar networks in an Airbnb-style approach.
He said the modular nature of solar means it can be rolled out in developing countries with sparse access to traditional grids.
“You could have solar on something as small as a watch and something as big as the biggest power plants in the world,” he said.
“I think that’s what’s making people excited about it.” – Reuters

Coal giants are making mega profits as climate crisis grips the world

The globe is in the grips of a climate crisis as temperatures soar and rivers run dry, and yet it’s never been a better time to make money by digging up coal.

The energy-market shockwaves from Russia’s invasion of Ukraine mean the world is only getting more dependent on the most-polluting fuel. And as demand expands and prices surge to all-time highs, that means blockbuster profits for the biggest coal producers.

Commodities giant Glencore Plc reported core earnings from its coal unit surged almost 900% to $8.9 billion in the first half — more than Starbucks Corp. or Nike Inc. made in an entire year. No. 1 producer Coal India Ltd.’s profit nearly tripled, also to a record, while the Chinese companies that produce more than half the world’s coal saw first-half earnings more than double to a combined $80 billion.

The massive profits are yielding big pay days for investors. But they will make it even harder for the world to kick the habit of burning coal for fuel, as producers work to squeeze out extra tons and boost investment in new mines. If more coal is mined and burned, that would make the likelihood of keeping global warming to less than 1.5 degrees Celsius even more remote.

It’s a remarkable turnaround for an industry that spent years mired in an existential crisis as the world tries to shift to cleaner fuels to slow global warming. Banks have been pledging to end financing, companies divested mines and power plants, and last November world leaders came close to a deal to eventually end its use.

Ironically, those efforts have helped fuel coal producers’ success, as a lack of investment has constrained supply. And demand is higher than ever as Europe tries to wean itself off Russian imports by importing more seaborne coal and liquefied natural gas, leaving less fuel for other nations to fight over. Prices at Australia’s Newcastle port, the Asian benchmark, surged to a record in July.

The impact on profits for the coal miners has been stunning and investors are now cashing in. Glencore’s bumper earnings allowed the company to increase returns to shareholders by another $4.5 billion this year, with the promise of more to come.

Gautam Adani, Asia’s richest person, capitalized on a rush in India to secure import cargoes amid a squeeze on local supply. Revenue generated by his Adani Enterprises Ltd. jumped more than 200% in the three months to June 30, propelled by higher coal prices.

US producers are also reaping bumper profits, and the biggest miners Arch Resources Inc. and Peabody Energy Corp. say demand is so strong at European power plants that some customers are

buying the high-quality fuel typically used to make steel to generate electricity instead.

The wild profits threaten to become a political lightning rod as a handful of coal companies cash in while consumers pay the price. Electricity costs in Europe are at record highs and people in developing nations are suffering daily blackouts because their utilities can’t afford to import fuel. Earlier this month, United Nations Secretary-General Antonio Guterres lashed out at energy companies, saying their profits were immoral and calling for windfall taxes.

Coal’s advocates say the fuel remains the best way to provide cheap and reliable baseload power, especially in developing countries. Despite the huge renewable rollout, burning coal remains the world’s favorite way to make power, accounting for 35% of all electricity.

While western producers cash in on the record prices — with companies such as Glencore committed to running mines to closure over the next 30 years — top coal consumers India and China still have growth on the agenda.

The Chinese government has tasked its industry with boosting production capacity by 300 million tons this year, and the nation’s top state-owned producer said it would boost development investment by more than half on the back of record profits.

Coal India is also likely to pour a large chunk of its earnings back into developing new mines, under government pressure to do more to keep pace with demand from power plants and heavy industry.

China and India worked together at a UN conference in Glasgow last year to water down language in a global climate statement to call for a “phase down” of coal use instead of a “phase out.”

At the time, few would have predicted just how expensive the fuel would become. Just a year ago, the biggest international mining companies — excluding Glencore — were in a full retreat from coal, deciding the paltry returns were not worth the increasing pressure from investors and climate activists.

When Anglo American Plc spun off its coal business and handed it over to existing shareholders, one short seller, Boatman Capital, said the new business was worth nothing. Instead the stock — known as Thungela Resources Ltd. — skyrocketed, gaining more than 1,000% since its June 2021 listing, with first-half earnings per share up about 20-fold.

Glencore itself snapped up a Colombian mine from former partners Anglo and BHP Group. The nature of the deal, and rising coal prices, meant Glencore essentially got the mine for free by the end of last year. In the first six months of this year, it made $2 billion in profit from that one mine, more than double its entire coal businesses earnings in the same period last year.

The earnings look set to keep rolling in, as analysts and coal executives say the market will remain tight.

“As we stand today, we don’t see this energy crisis going going away for some time,” Glencore Chief Executive Officer Gary Nagle said.

— With assistance by David Stringer, and Will Wade

Russian gas cuts will not

kill German economy

By Daniel Gros/Brussels

Much of the conventional wisdom about Europe's current natural-gas crisis – triggered by reduced deliveries from Russia – rests on two assumptions: that the German economy depends on cheap Russian gas, and that this bet has gone spectacularly wrong. But while German industry is strong, and the country imports a lot of natural gas from Russia, a closer inspection of the numbers and economics involved does not support the prevailing narrative.

For starters, natural gas does not play a large enough role to drive an industrial economy. In 2019, gas imports via pipeline cost Germany $30 billion, representing only 0.75% of its GDP, and the overall value of the country's gas consumption was below 2% of GDP. These modest ratios are similar across industrialised economies and suggest that cheap gas imports are highly unlikely to be a major growth factor. Moreover, even though gas consumption has stagnated in Germany and most of Western Europe over the past two decades, the economy grew, albeit slowly.

The argument that cheap Russian gas might have favoured

Germany more than other countries also is not backed up by the numbers. In 2019, Germany accounted for only about 2.3% of global natural-gas consumption, but 4.5% of world GDP. Germany's gas intensity per unit of GDP is thus about one-half of the global average, much lower than that of the United States and many other industrialised countries, including Japan and South Korea.

European economies tend to be thriftier in their energy use than the rest of the world. But even within Europe, Germany performs well, with lower gas consumption per unit of GDP than other large European economies, such as Italy and Spain. This is surprising since these two Mediterranean countries have much less need for heating in winter (and air conditioning in summer requires an order of magnitude less power than heating). Only France, with its large nuclear-power sector, is less dependent on gas.

A similar picture emerges from related metrics, such as the value of energy imports as a percentage of GDP, or gas usage for industrial purposes as a share of industrial value added. All these indicators show that the German economy uses energy less intensively than most others.

The idea that German industry gained an advantage from access to cheap Russian gas ignores the reality that there is a European gas market with, up to now, only small differences in wholesale prices across countries. One could of course argue that Russia sold its energy cheaply to Germany to make the country dependent. But the data challenge the common perception that Germany receives cheap gas.

Over the past decade, German industry has paid about 10% more for natural gas than its competitors in other major European economies. Supplies from North Sea fields have enabled British industrial firms to pay even less than their continental peers, but this does not appear to have helped them much.

The implication is that Russia obtained a non-economic benefit (German dependence on its gas supplies) for almost no cost. The inverse of this is that Germany experienced a loss of energy independence without gaining a noticeable economic

advantage.

The one large economy that is both energy-intensive and has cheap natural gas is the United States. The average US citizen uses more than twice as much natural gas as a European – 25 megawatt-hours per year for the US, compared to about 10MWh for European countries. Moreover, US natural-gas prices have been somewhat lower than German or EU prices for most of the past two decades, and are now only a fraction of the European price, as European prices have increased by a factor of five, whereas US prices have changed little. Despite this cost advantage, however, the manufacturing industry of the US – and that of the United Kingdom – has not grown particularly strongly.

Adjusting to a world without Russian gas is of course a major problem for Europe. Yet, although Germany seems more vulnerable because it used to receive a large share of its gas from Russia, this can change quickly. Germany is building new regasification capacity in record time to allow the country to import the quantities of liquefied natural gas needed to fill the gap between lower Russian supplies and domestic demand, which is already falling because of high prices.

Once this import capacity has been constructed, Germany will be in the same situation as its European neighbours, which also have to bid for LNG. Prices are likely to stay high for some time. But with an energy intensity below the EU average, Germany should be able to bear the burden slightly better than Italy, Spain, and some Eastern European countries. France, of course, will be much less affected, at least if its nuclear reactors can resume full production.

We should also not forget the global picture. Bottling up a large percentage of Russian gas (which is what will happen if Europe no longer buys from Russia) increases the global gas price, which affects Asian countries as well, because they compete with Europe on LNG. South Korea and Japan have a higher energy intensity than Europe, and even China imports large quantities of LNG, at a price similar to what European countries pay.

Expensive energy, particularly natural gas, poses a difficult economic and political challenge for all energy-importing industrialised countries. Only the US and some other smaller energy producers such as Norway, Canada, and Australia benefit from this situation. But the data suggest that Germany is better placed to weather this crisis than most of its main competitors. – Project Syndicate

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

بارودي: الجهود الأميركية بدأت تتسم بالإيجابية ما سيمكّن لبنان خلال شهر من بدء التنقيب عن النفط والغاز

، "الجهودرودي بارودي ثمّن الخبير الدّولي في مجال الطّاقة،

الخارجية ولا سيّما الولايات المتحدة الأميركية الّتي تقوم بها ، عبر الوسيط آموس هوكستين، من أجل تسوية النّزاع الأميركية ”، لافتًا إلى أنّ “هذه إسرائيل ولبنان الحدودي البحري بين الجهود بدأت تتّسم بالإيجابيّة، ما سيمكّن لبنان في خلال شهر على النفط عن التنقيب أبعد تقدير من الدّخول فعليًّا في عمليّة ، ولا سيّما في البلوكات الجنوبيّة، وتحديدًا البلوك رقم 9 والغاز ”. قانا حيث حقل

وأشار، في تصريح، إلى أنّ “الطّرح الإسرائيلي للمرور بالبلوك اللّبناني رقم 8، هو مجرّد مناورة ذكيّة لهدف آخر، ذلك أنّ اتفاقيّة الغاز بين إسرائيل وقبرص واليونان، الّتي تمتدّ إلى إيطاليا وكانت قد وُقّعت في 3 كانون الثّاني من العام 2020، لن ترى النّور، باعتبار أنّ لا جدوى اقتصاديّة منها، لأنّه مهما كانت كميّة الغاز المنتَجة حاليًّا، فلن تكون مبرّرًا لإنفاق من 12 إلى 14 مليار يورو، لبناء خطّ أنابيب بقطر 48 إنشًا لمسافة 1125 ميلاً”.

وجدّد بارودي الإشادة بـ”إيجابيّة المفاوضات الجارية حاليًّا، وبالجهود المبذولة لحماية حقوق لبنان على الصّعيد الدّولي”، الدولة مركّزًا على أنّ “أكثر الأخبار إيجابيّةً، هي أنّ أركان متّفقون على التوجّه ذاته”. وأعرب عن تفاؤله بأنّ اللبنانية ”. “الاتّفاق سيصل إلى خواتيم مشجّعة ترضي جميع الجهات

How Europe Became So Dependent on Putin for Its Gas

Russian gas is attractive to Europe because it’s usually cheap, easy to transport and almost always available. Some European Union countries depend on it because they are shutting coal plants, and Germany is even planning for the end of nuclear power. Russia’s dominance has been enhanced by the

depletion of North Sea fields controlled by the U.K. and the Netherlands. Gazprom PJSC supplies about a third of all gas consumed in Europe and, before the Russian invasion of Ukraine, was on track to become even more important as the continent shrinks its own production. In March, however, Russia threatened to cut supplies, and the European Union began mapping out a path to reduce its dependence.

1. How did Russia become so significant?

With its vast Siberian fields, Russia has the world's largest reserves of natural gas. It began exporting to Poland in the 1940s and laid pipelines in the 1960s to deliver fuel to and through satellite states of what was then the Soviet Union. Even at the height of the Cold War, deliveries were steady. But since the Soviet Union broke up, Russia and Ukraine have quarreled over pipelines through Ukrainian territory, prompting Russian authorities to find other routes.

2. How vulnerable is Europe?

A supply crunch in late 2021 provided a vivid insight into Europe's reliance on gas flows from Russia. Storage tanks in the EU fell to their lowest seasonal level in more than a decade after longer-than-usual maintenance at Norwegian fields and Russia rebuilding its own inventories. Benchmark gas prices more than tripled. The EU vowed a decade ago to reduce its dependence on Russian energy, and continuing purchases by member nations have been a contentious issue within the economic bloc and caused rifts with the U.S.

3. What role does Ukraine play?

About a third of Russian gas flowing to Europe passes through Ukraine. Even as the crisis in the region escalated into war, analysts said Russia, with a history of supply disruptions over price disputes, probably would strive to be seen as a reliable supplier. Gazprom's shipments to Europe and Turkey were about 177 billion cubic meters in 2021, according to

calculations by Bloomberg News and BCS Global Markets based on the company's data. When Ukraine and Russia reached a five-year gas transit deal in December 2019, assuring supplies until 2024, Ukrainian President Volodymyr Zelenskiy said the nation would earn at least $7 billion from transit fees.

4. How has Russia disrupted the market before?

In 2006 and 2009, disputes with Ukraine over pricing and siphoning of gas led to cutoffs of Russian supplies transiting through the country. The second shutdown lasted almost two weeks in the dead of winter. Slovakia and some Balkan countries had to ration gas, shut factories and cut power supplies. Since then, the most vulnerable countries have raced to lay pipelines, connect grids and build terminals to import liquefied natural gas, a supercooled form of the fuel that can be shipped from as far as Qatar and the U.S.

5. What supply networks are there?

Outside supplies, mostly from Russia, Norway and Algeria, account for about 80% of the gas the EU consumes. Some of the biggest economies are among the most exposed, with Germany importing 90% of its needs — much of it via a pipeline under the Baltic Sea called Nord Stream, which has been fully operational since 2012. (This was the supply line Russia on March 7 suggested could be cut as part of its response to sanctions imposed over the invasion of Ukraine.) Belgium, Spain and Portugal face the problem of low storage capacity, as does the U.K., which no longer is part of the bloc and closed its only big gas storage site. The continent has a mass of pipelines, including Yamal-Europe, which runs from Russia through Belarus and Poland before reaching Germany, and TAG, which takes Russian gas to Austria and Italy. Many cross several borders, creating plenty of possible choke points.

6. What about the Nord Stream 2 pipeline?

It was against this background that Nord Stream 2, a new

Russian pipeline alongside the first, was completed in late 2021. But it has become entangled in politics and a lengthy regulatory process. There was strong opposition from the U.S., which imposed sanctions that delayed construction. Following the eruption of the war in Ukraine, Germany suspended its certification process for Nord Stream 2, and the EU's executive arm readied a revised energy strategy for the bloc to "substantially reduce our dependency on Russian gas this year."

More stories like this are available on bloomberg.com

Russia cuts gas flows further as Europe makes savings plea

Reuters/Berlin/Frankfurt

Russia delivered less gas to Europe yesterday in a further escalation of an energy stand-off between Moscow and the European Union that will make it harder, and costlier, for the bloc to fill up storage ahead of the winter heating season.

The cut in supplies, flagged by Gazprom earlier this week, has reduced the capacity of Nord Stream 1 pipeline – the major delivery route to Europe for Russian gas – to a mere fifth of its total capacity.

Nord Stream 1 accounts for around a third of all Russian gas exports to Europe.

On Tuesday, EU countries approved a weakened emergency plan to curb gas demand after striking compromise deals to limit cuts for some countries, hoping lower consumption will ease the impact in case Moscow stops supplies altogether.

The plan highlights fears that countries will be unable to meet goals to refill storage and keep their citizens warm during the winter months and that Europe's fragile economic growth may take another hit if gas will have to be rationed.

Royal Bank of Canada analysts said the plan could help Europe get through the winter provided gas flows from Russia are at 20-50% capacity, but warned against "complacency in the market European politicians have now solved the issue of Russian gas dependence."

While Moscow has blamed various technical problems for the supply cuts, Brussels has accused Russia of using energy as a weapon to blackmail the bloc and retaliate for Western sanctions over its invasion of Ukraine.

Kremlin spokesman Dmitry Peskov said Gazprom was supplying as much gas to Europe as possible, adding that sanctions-driven technical issues with equipment were preventing it from exporting more.

Yesterday, physical flows via Nord Stream 1 tumbled to 14.4mn kilowatt hours per hour (kWh/h) between 1000-1100 GMT from around 28mn kWh/h a day earlier, already just 40% of normal capacity.

The drop comes less than a week after the pipeline restarted following a scheduled 10-day maintenance period.

European politicians have repeatedly warned Russia could stop gas flows completely this winter, which would thrust Germany into recession and send prices for consumers and industry soaring even further.

The Dutch wholesale gas price for August, the European benchmark, jumped 9% to 205 euros per megawatt hour yesterday, up around 412% from a year ago.

German finance minister Christian Lindner said he was open to the use of nuclear power to avoid an electricity shortage.

Germany has said it could extend the life of its three remaining nuclear power plants, accounting for 6% of the country's overall power mix, in the face of a possible cut-off of Russian gas.

Klaus Mueller, head of Germany's network regulator, said the country could still avoid a gas shortage that would prompt its rationing. Germany, Europe's top economy and its largest importer of Russian gas, has been particularly hit by supply cuts since mid-June, with its gas importer Uniper requiring a 15bn euro ($15.21bn) state bailout as a result. Uniper and Italy's Eni both said they received less gas from Gazprom than in recent days.

Mueller issued another plea to households and industry to save gas and avoid rationing.

"The crucial thing is to save gas," Mueller said. "I would like to hear less complaints but reports (from industries saying) we as a sector are contributing to this," he told broadcaster Deutschlandfunk.

German industry groups, however, warned companies may have no choice but cut production to achieve bigger savings, pointing to slow approval for replacing natural gas with other, more polluting fuels.

Mercedes-Benz chief executive Ola Kaellenius said a mixture of efficiency measures, increased electricity consumption, lowering temperatures in production facilities and switching to oil could lower gas use by up to 50% within the year, if necessary.

Germany is currently at Phase 2 of a three-stage emergency gas

plan, with the final phase to kick in once rationing can no longer be avoided.

No net zero without nature

By Nigel Topping And Mahmoud Mohieldin/ London

Businesses, investors, and governments that are serious about fulfilling net-zero emissions pledges before 2050 should be rushing to protect, conserve, and regenerate the natural resources and ecosystems that support our economic growth, food security, health, and climate. Yet there appear to be worryingly few trailblazers out there.

Worse, we are quickly running out of time. The science makes clear that to avoid the most catastrophic effects of climate change and to build resilience against the effects that are already inevitable, we must end biodiversity loss before 2030. That means establishing lasting conservation for at least 30% of land and sea areas within eight years, and then charting a

course toward living in harmony with nature by 2050.

Though the challenge is massive, ignoring it makes no sense from a business perspective. A World Economic Forum white paper estimates that nature-positive policies "could generate an estimated $10tn in new annual business value and create 395mn jobs by 2030." Among other things, such policies would use precision-agriculture technologies to improve crop yields – diversifying diets with more fruit and vegetables in the process – and boost agroforestry and peatland restoration.

A nature-positive approach can also be more cost-effective. For example, the Dasgupta Review (the Final Report of the United Kingdom's Independent Review on the Economics of Biodiversity) finds that green infrastructure like salt marshes and mangroves are 2-5 times cheaper than grey infrastructure such as breakwaters.

Nonetheless, private-sector action is lagging, including in economic sectors where the health of value chains is closely tied to that of nature. That is one key finding from an analysis just released by the UN Climate Change High-Level Champions, Global Canopy, Rainforest Alliance, and others.

Out of 148 major companies assessed, only nine – or 6% – are making strong progress to end deforestation. Among them are the Brazilian paper and pulp producer Suzano and five of the largest consumer goods companies: Nestlé, PepsiCo, Unilever, Mars, and Colgate-Palmolive.

Unilever, for example, is committed to a deforestation-free supply chain by 2023, and thus is focusing on palm oil, paper and board, tea, soy, and cocoa, as these contribute to more than 65% of its impact on land. Nestlé has now made over 97% of its primary meat, palm oil, pulp and paper, soy, and sugar supply chains deforestation-free. And PepsiCo aims to implement regenerative farming across the equivalent of its agricultural footprint by 2030, and to end deforestation and development on peat.

These are positive steps, but they represent exceptions, rather than any new normal. Moreover, the financial sector has also been slow to turn nature-positive. Since the COP26

climate-change conference in Glasgow last year, only 35 financial firms have committed to tackle agricultural commodity-driven deforestation by 2025. The hope now is that more firms will join the deforestation commitment by COP27 this November. Under the umbrella of the Glasgow Financial Alliance for Net Zero, 500 financial firms (representing $135tn in assets) have committed to halving their portfolios' emissions by 2030 and reaching net zero by 2050. And now, the Alliance has issued new net-zero guidance that includes recommended policies for addressing deforestation.

Nature functions as a kind of global capital, and protecting it should be a no-brainer for businesses, investors, and governments. The World Economic Forum finds that "$44tn of economic value generation – over half the world's total GDP – is moderately or highly dependent on nature and its services." But this profound source of value is increasingly at risk, as demonstrated by the current food crisis, which is driven not just by the war in Ukraine but also by climate-related disasters such as drought and India's extreme heatwave, locust swarms in East Africa, and floods in China.

Businesses increasingly have the tools to start addressing these kinds of problems. Recently, the Science Based Targets initiative released a methodology for targeting emissions related to food, land, and agriculture. Capital for Climate's Nature-Based Solutions Investment platform helps financiers identify opportunities to invest in nature with competitive returns. And the Business for Nature coalition is exploring additional moves the private sector can make.

Governments have also taken steps in the right direction. At COP26, countries accounting for over 90% of the world's forests endorsed a leaders' declaration to halt forest loss and land degradation by 2030. And a dozen countries pledged to provide $12bn in public finance for forests by 2025, and to do more to leverage private finance for the same purpose. They can now start meeting those commitments ahead of COP27 in Sharm El-Sheikh, by enacting the necessary policies, establishing the right incentives, and delivering on their

financial promises.
Meanwhile, the UN-backed Race to Zero and Race to Resilience campaigns will continue working in parallel, helping businesses, investors, cities, and regions put conservation of nature at the heart of their work to decarbonise and build resilience. The five strong corporate performers on deforestation are in the Race to Zero, and the campaign's recently strengthened criteria will pressure other members to do more to use biodiversity sustainably and align their activities and financing with climate-resilient development.
The world is watching to see if the latest promises of climate action are robust and credible. By investing in nature now, governments and companies can show that they are offering more than words. – Project Syndicate

• *Nigel Topping is the United Kingdom's High-Level Climate Champion for COP26 in Glasgow. Mahmoud Mohieldin is Egypt's High-Level Climate Champion for COP27 in Sharm El-Sheikh*.

Natural gas soars in Europe, becoming driving force in the new cold war

One morning in early June, a fire broke out at an obscure facility in Texas that takes natural gas from US shale basins, chills it into a liquid and ships it overseas. It was extinguished in 40 minutes or so. No one was injured.

It sounds like a story for the local press, at most – except that more than three weeks later, financial and political shockwaves are still reverberating across Europe, Asia and beyond.

That's because natural gas is the hottest commodity in the world right now. It's a key driver of global inflation, posting price jumps that are extreme even by the standards of today's turbulent markets – some 700% in Europe since the start of last year, pushing the continent to the brink of recession. It's at the heart of a dawning era of confrontation between the great powers, one so intense that in capitals across the West, plans to fight climate change are getting relegated to the back-burner.

In short, natural gas now rivals oil as the fuel that shapes geopolitics. And there isn't enough of it to go around.

It's the war in Ukraine that catalyzed the gas crisis to a new level, by taking out a crucial chunk of supply. Russia is cutting back on pipeline deliveries to Europe — which says it wants to stop buying from Moscow anyway, if not quite yet. The scramble to fill that gap is turning into a worldwide stampede, as countries race to secure scarce cargoes of liquefied natural gas ahead of the northern-hemisphere winter.

The New Oil?

Germany says gas shortfalls could trigger a Lehman Brothers-like collapse, as Europe's economic powerhouse faces the unprecedented prospect of businesses and consumers running out of power. The main Nord Stream pipeline that carries Russian gas to Germany is due to shut down on July 11 for ten days of maintenance, and there's growing fear that Moscow may not reopen it. Group of Seven leaders are seeking ways to curb Russia's gas earnings, which help finance the invasion of Ukraine — and backing new LNG investments. And poorer countries that built energy systems around cheap gas are now struggling to afford it.

"This is the 1970s for natural gas," says Kevin Book, managing director at ClearView Energy Partners LLC, a Washington-based research firm. "The world is now thinking about gas as it once thought about oil, and the essential role that gas plays in modern economies and the need for secure and diverse supply have become very visible."

Natural gas used to be a sleepy commodity that changed hands in fragmented regional markets. Now, even though globalization appears to be in retreat across much of the world economy, the gas trade is headed in the opposite direction. It's globalizing fast — but maybe not fast enough.

Many countries have turned to natural gas as part of a

transition to cleaner energy, as they seek to phase out use of dirtier fossil fuels like coal and in some cases nuclear power too. Major producers — like the US, which has quickly risen up the ranks of LNG exporters to rival Qatar as the world's biggest — are seeing surging demand for their output. Forty-four countries imported LNG last year, almost twice as many as a decade ago. But the fuel is much harder to shift around the planet than oil, because it has to be liquefied at places like the Freeport plant in Texas.

And that's why a minor explosion at a facility seen as nothing special by industry insiders — it's not the biggest or most sophisticated of the seven terminals that send LNG from American shores — had such an outsized impact.

'The Current Crisis'

Gas prices in Europe and Asia surged more than 60% in the weeks since Freeport was forced to temporarily shut down, a period that's also seen further supply cuts by Russia. In the US, by contrast, prices for the fuel plunged almost 40% — because the outage means more of the gas will remain available for domestic use.

There were already plenty of signs of extreme tightness in the market. War and Covid may be roiling every commodity from wheat to aluminum and zinc, but little compares to the stomach-churning volatility of global gas prices. In Asia, the fuel is now about three times as expensive as a year ago. In Europe, it's one of the main reasons why inflation just hit a fresh record.

Natural gas remains cheaper in the US — but even there, futures had more than doubled this year before the Freeport shutdown. With key political allies from Germany to Ukraine desperate to buy American gas, US manufacturers warn that more sales abroad will mean higher costs at home. The market reaction to the Freeport fire illustrates a "clear connection

between LNG exports and the inflationary impacts to domestic prices for natural gas and electricity," says Paul Cicio, president of the Industrial Energy Consumers of America.

To meet all the new demand will require a massive wave of investment in supply. That's already under way, and it got a boost at last week's meeting of the Western world's biggest economies, where G-7 leaders vowed to back public investments in gas projects — saying they're "necessary in response to the current crisis."

Among the urgent infrastructure needs:

Export facilities: The rush for LNG is accelerating projects in North America and beyond. Last month, Cheniere Energy Inc. greenlighted a terminal expansion in Texas. In April, a Canadian LNG project backed by Indonesian tycoon Sukanto Tanoto got the go-ahead to begin construction. In Qatar, Exxon Mobil Corp. and Shell Plc are among energy giants with stakes in a $29 billion project to boost LNG exports.

"You have global gas prices so high that they incentivize the signing of new long-term contracts," says Samantha Dart, head of natural gas research at Goldman Sachs. "We are seeing those announcements coming left and right, with a lot of US proposed liquefaction facilities."

Import terminals: In Europe, plans for about 20 terminals have been announced or sped up since the Ukraine war began. Germany, which has no LNG terminals, has allocated about $3 billion to charter four floating ones and connect them to the country's network. The first one is supposed to go online around the end of this year. Emphasizing the need for speed, Vice-Chancellor Robert Habeck pointed out that Tesla Inc. managed to build a factory near Berlin in just two years, and said it's time to cut through German red tape. "First, dig the trench where the pipe is to go in," he said. "Then, the permit

comes.”

China, the world’s top LNG buyer last year, is in the midst of one of the largest buildouts the industry has ever witnessed. Ten new import terminals are slated to come online in 2023 alone, and capacity will roughly double in the five years through 2025, according to BloombergNEF.

Pipelines: Even with more capacity to receive shipments of LNG and turn it back into gas form — a process known as regasification — Europe lacks infrastructure to move it where it might be needed. Spain, for example, has Europe’s biggest regasification facilities — but it only has two pipeline connections to France via the Pyrenees, capable of carrying little more than one-tenth of those volumes, according to Bloomberg Intelligence.

Tankers: Shipyards in South Korea, where most of the world’s LNG tankers are built, are seeing a surge in orders that’s leaving them short of skilled labor. They’ve been forced to look outside the country to places like Thailand for welders, electricians and painters, raising their quotas for migrant workers.

In some cases all of this means a U-turn away from policies aimed at combating climate change -— especially in Europe. Government-backed lenders like the European Investment Bank and the European Bank for Reconstruction and Development, which had been focused on financing renewable energy, have signaled a shift and said they’re now more willing to back gas projects.

But Europe’s breakneck efforts won’t be enough, according to Bloomberg Intelligence, which calculates that LNG imports could meet 40% of the region’s gas needs by 2026 — double last year’s figure, but still far short of the volumes that Russia has been supplying.

‘Never More Evident’

That’s why warnings of a gas-driven slump in Europe’s economies are escalating.

Last week, Germany’s government said it’s in talks to bail out utility Uniper SE, which is losing some 30 million euros ($31 million) a day because it has to cover the missing Russian gas at soaring spot-market prices. Companies like chemicals giant BASF SE say they may have to cut output. Deutsche Bank cited growing risks of an “imminent German recession on the back of energy rationing,” and pointed to soaring power prices in Italy and France too. Morgan Stanley predicted the whole euro area will be in a downturn by year-end.

For some emerging economies — which increasingly have to compete with rich countries like Germany in bidding for LNG cargoes, as gas goes global — the consequences have already been disastrous.

In Pakistan, which built its energy system on cheap LNG, planned blackouts are plunging regions into darkness during the sweltering summer months. Shopping malls and factories in major cities have been ordered to shut early, and government officials are working shorter hours.

Thailand is curbing LNG imports due to surging prices, potentially putting the country at risk of fuel shortages. Myanmar, which is grappling with political instability, stopped all LNG purchases late last year when prices started to rally. India and China have also cut back imports.

“Where once natural gas markets were largely regionally siloed, we now have a globalized spot market that has connected the world’s exposure to the fuel that has become critical to many economies,” said James Whistler, Singapore-based managing director at Vanir Global Markets, an energy and environmental brokerage. “This has never been more evident than in the past few months.”