## Climate science beats climate fatalism



The Paris climate agreement's goal of limiting global warming to 1.5C is in the headlines again. According to the latest projections from the World Meteorological Organisation, "There is a 66% likelihood that the annual average near-surface global temperature between 2023 and 2027 will be more than 1.5C above pre-industrial levels for at least one year." A supercharged El Niño cycle means that record-breaking temperatures are almost certain.

But, as concerning as these warnings are, it would be even more worrying if one year above 1.5C was taken as a sign that the 1.5C target has been missed. Drawing that erroneous conclusion would lead us to abandon the Paris agreement's goal just when we should be doubling down on it.

The 1.5C goal will not be lost with just one or a few years of extreme temperatures. The Paris goal refers to human-caused temperature increases that are measured over the course of

decades. We must keep this firmly in mind to stave off the dangerous climate fatalism that has been gaining momentum in recent years.

Yes, now that the planet has warmed roughly 1.2C above preindustrial levels, "once-in-a-century" heatwaves, forest fires, and floods are becoming more familiar to us. In some low-lying regions, rising seas are already forcing people to relocate. But there is still a massive difference between 1.2C and 1.5C — let alone between 1.5C and 2C — and the science shows that it is still possible to end this century at or below 1.5C.

Recent climate research has affirmed the importance and necessity of the 1.5C guardrail. As the Intergovernmental Panel on Climate Change warned last year, extreme weather events, ecosystem collapse, and planetary tipping points can happen at markedly lower levels of global warming than previously thought. Since the IPCC's last reporting cycle in 2014, we have amassed much more evidence to show that even a 1.5C warmer world would be immensely challenging, and that temperature increases above that level would be truly devastating.

With every additional tenth of a degree of warming, more people will be exposed to life-threatening heatwaves, water shortages, and flooding. Worse, various studies show that the likelihood of reaching tipping points, like the potential collapse of the West Antarctic ice sheet, increases exponentially above 1.5C. These represent red lines. The world would not fall off a cliff, but there would be a fundamental shift in which planetary systems start moving irreversibly down the path toward more ice melt, marine-ecosystem change, and rising sea levels.

The only sensible approach is to mitigate that risk by reducing greenhouse gas (GHG) emissions as fast as possible. Though we still might overshoot the 1.5C limit in the short term, we can return to it in the long run. But that will be possible only if we have cut fossil-fuel emissions to zero. This is the crucial first step toward achieving net-zero GHG

emissions.

It is no less important to preserve and restore the natural land and ocean systems that absorb and store carbon. And if we distort the Earth's carbon cycle (through the thawing of permafrost, for example), we will undermine our ability to reverse global temperature increases.

Limiting warming to 1.5C this century requires that we halve our emissions by 2030. This is not an arbitrary figure. Only if we halve our emissions this decade will we halve the pace of warming in the 2030s and bring it to a halt in the 2040s. Think of it as the difference between tackling climate change ourselves, or passing a civilisational time-bomb to our children.

Slowing the warming process also buys us precious time for adaptation. Even a rich country like the United States will be limited in how fast and fully it can adapt to the consequences of climate change. For those in more vulnerable places, the situation is incomparably worse. Disasters like the flooding in Pakistan last year can derail a country's economy and leave it in a downward spiral of rising debt and poverty — all of which will be compounded by future climate disasters for which it could not afford to prepare.

Moreover, many of the net-zero commitments made by governments, companies, and cities around the world are premised on the 1.5C limit. Phaseout plans for coal (such as those in Germany, Vietnam, and the United Kingdom) are based on 1.5C-aligned modelling, which shows that OECD countries need to stop using coal by 2030, and that non-OECD countries need to do so by 2040. Gas must follow shortly thereafter.

With the clock ticking down, these 1.5C-based models are telling us how to prioritise. We must decarbonise electricity first, then electrify as much transportation, buildings, and industry as we can, while also reducing demand. Beyond this low-hanging fruit, we also will need to scale up technologies for carbon removal.

Investments have been moving in this direction. Since the Paris agreement was concluded in 2015, the costs of solar,

wind, and batteries have plummeted. Electric vehicles and heat pumps are going mainstream. These are market-driven responses to government incentives. Public policy has been crucial for instilling confidence and supporting clean-energy growth.

To give up and start looking beyond 1.5C would let big emitters off the hook. Rather than instilling confidence, it would signal to everyone that they should expect less — and betray all those who live in places that lack the resources and possibilities to adapt to a warmer world.

If we don't keep pushing for the most ambitious science-based targets, those with vested interests in the status quo will exploit our fatalism. Following a massively profitable year, owing to Russia's war in Ukraine, BP recently signalled that it will divert much of its intended investments in decarbonisation toward oil and gas.

The best science we have tells us that 1.5C is still feasible, and it tells us how to get there. As the British climate-change diplomat Pete Betts puts it, "If we do go above 1.5C, the message is not to give up. It's to double down." — Project Syndicate

l Carl-Friedrich Schleussner is Head of Climate Science at Climate Analytics and an honorary professor at Humboldt University Berlin.

l Bill Hare is a founder and CEO of Climate Analytics.

l Johan Rockström is Director of the Potsdam Institute for Climate Impact Research and Professor of Earth System Science at the University of Potsdam.

### QatarEnergy signs production

## sharing contract for Agua-Marinha block in Brazil



QatarEnergy, and its joint-venture partners TotalEnergies, Petrobras, and PETRONAS Petróleo Brasil Ltd (PPBL) signed the Production Sharing Contract (PSC) for the Agua-Marinha block, which was awarded to the consortium in December 2022 in the 1st Cycle Permanent Offer round, by Brazil's National Agency of Petroleum, Natural Gas, and Biofuels (ANP).

Under the terms of the PSC and associated agreements, QatarEnergy will hold a 20% working interest, alongside

TotalEnergies (30%) Petrobras (operator, 30%), and PPBL (20%). Commenting on this occasion, HE the Minister of State for Energy Affairs, Saad bin Sherida al-Kaabi, also the President and CEO of QatarEnergy, said: "We are pleased to sign the Production Sharing Contract with our partners and with Brazil's Ministry of Mines and Energy. This signing builds on QatarEnergy's sizeable upstream presence in Brazil, and we look forward to progressing with exploration activities on this highly prospective block. I wish to thank Brazil's National Agency of Petroleum, Natural Gas, and Biofuels and the Brazilian authorities for this opportunity and their ongoing support."

The Agua-Marinha block has a total area of 1,300sq km and is located in water depths of about 2,000m within the prolific Campos Basin. The work programme includes drilling one exploration well during the exploration period.

## Building a new, better SDR BY JAYATI



With much of the developing world teetering on the edge of a debt crisis, the calls for a new issuance of special drawing rights (SDRs, the International Monetary Fund's reserve asset), have grown louder and more urgent. But to have the desired effect, the International Monetary Fund (IMF) must modify its allocation criteria and clarify how SDRs can be used to support low- and middle-income countries through the current economic turmoil.

One proposal currently being considered is to expand SDR allocation beyond individual countries to include multilateral development banks and dedicated funds. The idea of channelling SDRs to multilateral institutions like the World Bank and regional development banks, which are uniquely equipped to assist emerging and developing countries, has become increasingly popular in recent years.

The Bridgetown Initiative, led by Barbadian Prime Minister Mia Mottley, has called for a new issuance of SDR500bn (\$650bn) "or other low-interest, long-term instruments" to support the creation of a multilateral agency that would accelerate "private investment in the low-carbon transition, wherever it

is most effective."

Similarly, the recent report by the High-Level Advisory Board on Effective Multilateralism (of which I was a member) recommends the "immediate, and thereafter regular" annual issuance of additional SDRs to aid countries facing foreign-exchange shortages. The report also suggests that IMF shareholders amend the organisation's Articles of Agreement to permit "selective SDR allocation." This proposed change aims to facilitate a more targeted and effective distribution that prioritises the most vulnerable countries over the world's largest economies, which receive the lion's share of SDR allocations under the current rules.

Another proposed amendment stipulates that "specific conditions" would automatically trigger SDR allocations to ensure a "swifter global response." Notably, the report emphasises that eligibility for SDR allocation should not be conditional on the recipient country adopting an IMF-supported fiscal consolidation program.

Unfortunately, these proposals were not even discussed during the Spring Meetings of the IMF and World Bank in April. But we must continue to pursue these reforms, because increased international liquidity, delivered in a timely and efficient manner, is needed more than ever.

By modernising the outdated system of SDR allocation, the international community could also narrow the climate-finance gap. But, first, the many developing countries currently at risk of a severe debt crisis must receive immediate budgetary support. Unless we create a global financial safety net, the United Nations Sustainable Development Goals stand little chance of being met.

The ongoing financial turmoil highlights the current system's inherent inequities. Over the past few weeks, governments that control global reserve currencies, such as the United States and Switzerland, have pumped massive amounts of liquidity into the banking sector to rescue private banks. In contrast, debtor countries that have applied for debt relief under the G20's Common Framework for Debt Treatments have been waiting

for years for a fraction of those sums.

The sovereign-debt crisis currently engulfing the world's poorest countries, which also happen to be the countries most affected by climate change, requires immediate action. At a minimum, low- and middle-income countries grappling with balance-of-payments challenges should be given the opportunity to bolster their foreign-exchange reserves through a new SDR allocation.

But even if a fresh allocation is eventually agreed upon, countries must understand how to make the most of it. Unfortunately, the IMF's vagueness on this issue has caused much confusion, with some asserting that SDRs belong to central banks, not governments, and others insisting that they are loans rather than assets distributed by the IMF.

Consequently, many recipient countries' newly allocated SDRs simply augment foreign-exchange reserves. While this can have a positive impact by increasing a country's perceived creditworthiness, it can also hinder more effective uses of SDRs, particularly in times of acute shortages and fiscal constraints.

The Ecuadorian economist Andrés Arauz has highlighted these concerns, arguing that there is no legal basis for central banks to appropriate SDR allocations. The IMF's own guidance says that members "enjoy a large degree of freedom in how to manage the SDRs allocated to them," including the extent to which "central banks are involved in their management and whether the budget can directly use them for budget support." According to the Fund, SDRs are "allocated and held by the member and instructions for its use come through the fiscal agency of the member" (emphasis added). In other words, governments can use SDRs as they see fit.

The confusion over the nature and status of SDRs stems, in part, from the IMF's own misclassification of these assets. As Arauz points out, prior to the release of the IMF's latest balance-of-payments manual (BPM6) in 2009, SDR allocations were treated as equity rather than as liabilities that recipient countries must repay. The BPM6, however,

reclassified them as liabilities, essentially treating them as debt. This change, which was made without clear reasoning or transparent discussion, must be contested, because it can deter the use, transfer, and recycling of SDRs, preventing allocations from fulfilling their potential.

Some countries, particularly in Latin America, have demonstrated creativity in their use of SDRs. Ecuador, for example, used them to finance its 2021 investment plan. The same year, Paraguay channelled its allocation to investments in health, education, housing, and other public expenditures, and Argentina used its \$4.6bn allocation to pay off maturing debt, fulfilling its obligations to the IMF.

In other countries, central banks' perceived role as the custodian of SDRs did not completely restrict alternative uses. Colombia, for example, used SDRs to facilitate a domestic debt swap between the government and the central bank and generate short-term liquidity. Although Mexico's central bank asserted its ownership of the country's SDRs, the Mexican government acquired international reserves from it through a currency exchange in late 2021.

The current crisis is an opportunity to construct a fairer, more sustainable international monetary system. A sensible reform agenda must include increased SDR issuance and the creation of more efficient and equitable distribution mechanisms. To achieve this, the G7 countries, as the IMF's largest shareholders, must demonstrate a modicum of wisdom and leadership. — Project Syndicate

l Jayati Ghosh, Professor of Economics at the University of Massachusetts Amherst, is a former member of the UN Secretary-General's High-Level Advisory Board on Effective Multilateralism.

## Qatar sees 'very big demand' forNorth Field expansion gas: Al-Kaabi



HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi said Qatar potentially will run out of gas for supplies from the North Field expansion by the year-end, because of "very big demand" for long-term contracts.

"We have signed a large contract with China. We have other deals that we are working on. With so many deals lining up, we will potentially run out of gas from the North Field — both North Field East and North Field South. There is very big demand. Additional gas from the North Field will be available by 2026; all contracts have been awarded," al-Kaabi said at a ministerial session at the Qatar Economic Forum Powered by Bloomberg in Doha Tuesday.

The expansion project will increase Qatar's liquefied natural gas (LNG) production capacity from 77mn tonnes per year (MTPY)

to 126 MTPY, through the North Field East (NFE) and North Field South (NFS) expansion projects, with first LNG expected by 2026.

Qatar will add 65mn tonnes per year of LNG to meet the growing needs of the world from its North Field expansion and its project in the United States, al-Kaabi said.

"We don't follow what others say we should do…we do what is technically possible with our fields. When it's the right time and technically we can do it, we'll definitely do more," the minister said.

Talking about the gas supply and demand situation in future, al-Kaabi said, "There is going to be a shortage in oil and gas in future, predominantly due to the push on (energy) transition. It is really aggressive without studying it. If you look at economic and environment stability, these are not mutually exclusive… we have to have both.

"And if you push some countries into doing that, that doesn't help humanity in general. The only thing that saved humanity and Europe this year was a warm winter and the slowdown in the economy worldwide. If the economy comes back in 2024, the worst is yet to come," said al-Kaabi.

"If you look at future, whether it is oil or gas, because of decade-long lack of investments, due to the push to transition of energy, there is going to be shortage for both."

Al-Kaabi emphasised the need to have a "mix" of all energy resources and said, "You need a mix of all energy sources and people need to realise that you need oil, gas and renewables. People talk about renewables as if it's a fix-all.

"If you look at renewables you can generate electricity from wind and solar, but you can't make plastics or any sort of such products. So by saying renewables generate electricity does not solve the problem, you need a proper energy mix. And it can't be driven by politics and politicians wanting to get in the seat to say this is the solution. It's a nice pitch to say energy transition, but when you dig down and look at the reality, it's not achievable."

Al-Kaabi said he was "thrilled" that the G7 final communique

spoke about the need for more LNG for the world and warned the world would face a shortage of oil and gas due to a lack of investment.

"I am thrilled that finally the G7 in their final communique said they need more LNG to be supplied to the world. We've been saying this for the last 10 years," al-Kaabi noted.

# Crippling Heat Deepens Asia's Reliance on Russian Energy



The extreme heat that's been scorching Asia in recent weeks has produced one clear beneficiary — Russia.

As countries across the region scramble to make sure they have enough coal, gas and fuel oil to keep the lights on and air conditioners running, Russian energy being shunned by the West is looking increasingly attractive.

What began as a push from the Kremlin to fund its invasion of Ukraine has now turned into a pull from Asian economies anxious about making sure their power generators are supplied with enough fuel in what could be the hottest year on record.

"The worst place to be right now amid these searing temperatures is South Asia, especially poorer nations like Pakistan or Bangladesh," said John Driscoll, director of JTD Energy Services Pte in Singapore.

"When you can't even take care of your people's basic needs, it's very hard to care too much about international affairs."

To get Bloomberg's Energy Daily newsletter direct to your inbox, click here.

Russian exports to Asia of thermal coal and natural gas, the two fuels most often used for electricity generation, have grown markedly this year, figures from data intelligence firm Kpler show.

Coal volumes jumped sharply to 7.46 million tons in April, about a third higher than a year earlier. Shipments of liquefied natural gas to Asia have also been growing in recent months after prices retreated from record highs that had made the fuel unaffordable for many poorer nations.

Meanwhile, Asian imports of Russian fuel oil, a dirtier and cheaper alternative for power generation, had the two highest months on record in March and April, according to Kpler.

The impetus for the region to buy more Russian energy is likely to increase due to an emerging El Niño weather pattern, which has already sent the mercury soaring in parts of the region. Vietnam's prime minister has warned of power shortages this month, while Myanmar is struggling with worsening blackouts.

Carbon dioxide emissions from burning fossil fuels are trapping heat in the atmosphere. That's warming the planet and is the primary driver of more extreme weather events, including heat waves.

In India, heat-driven power demand will likely be satisfied mostly by coal, said Aniket Autade, power fundamentals analyst for Rystad Energy.

Read More: A Billion Air Conditioners Will Save Lives But Cook the Planet

China and India — the most enthusiastic buyers of discounted Russian oil — are also purchasing the most coal, gas and fuel oil. They took more than two-thirds of Russian coal sent to Asia last month, according to Bloomberg calculations based on Kpler data. South Korea, however, scooped up 15% of the shipments, while Vietnam, Malaysia and Sri Lanka have also emerged as significant buyers.

For fuel oil, China and India were again the biggest buyers from Russia, with Saudi Arabia and the United Arab Emirates also major importers, the Kpler figures show.

Bangladesh, Pakistan and Sri Lanka will probably import more Russian fuel oil for power generation, according to Emma Li, an analyst with Vortexa. The Middle East has also recently increased its imports, and that's likely to continue over the summer, she said.

Pakistan said this month it was keen to pay for Russian oil imports with the Chinese yuan. The country has has placed an order for a single cargo of the crude, but is keen for a long-term deal to buy it in Chinese currency, its power minister said.

Even Japan, a close ally of the US and therefore reluctant to increase imports from Russia, might expand buying within contractual limits, according to Chris Wilkinson, senior

analyst for renewables at Rystad.

"Japan may consider purchasing more LNG from Russia under its existing long-term contracts, as it is more cost-effective than buying on the spot market," he said.

For JTD Energy's Driscoll, the increasing purchases of Russian energy by many Asian countries highlights both the White House's declining clout and the perilous situation many nations find themselves in.

"[They] are asking themselves: would I rather risk falling afoul of the US or forgo steep discounts on energy?," he said. "When there's a good deal on the table, how can poorer nations afford to say no?"

With assistance by Aaron Clark



ABU DHABI — Faced with mounting pressure over planet-heating pollution, Gulf Arab energy giants are turning to humble tech start-ups as they search for ways to remove emissions while keeping oil flowing.

Oil producers have for years touted capturing carbon before it goes into the atmosphere as a potential global warming solution, against criticism from climate experts who say it risks distracting from the urgent goal of slashing fossil fuel pollution.

With little investment and few projects in operation around the world so far, the technology is currently nowhere near the scale needed to make a difference to global emissions.

Now, major players from Saudi Aramco to the United Arab Emirates' state oil and gas firm Abu Dhabi National Oil Company (Adnoc) say that is about to change, as the UAE hosts climate negotiations this year with a message of cutting emissions rather than fossil fuels.

"For the industry and for countries as well to achieve net zero by 2050, I don't see us achieving this without embracing carbon capture," Mr Musabbeh Al Kaabi, Adnoc's executive director of low-carbon solutions, told Agence France-Presse.

"I would love to see more wind and solar energy, but to be practical and transparent, it's not going to solve the problem."

Carbon capture was a hot topic at a recent climate tech conference in Abu Dhabi, UAE's capital.

Start-ups displayed their advances in carbon capture and storage (CCS), which removes carbon dioxide (CO2) as it is pumped from power plants and heavy industry.

There were also companies presenting their plans for direct air capture, a newer technology that extracts CO2 directly

from the atmosphere.

The United Nation's Intergovernmental Panel on Climate Change (IPCC) says the existing fossil fuel infrastructure — without the use of carbon capture — will push the world beyond the Paris deal's safer global warming limit of 1.5 deg C above pre-industrial levels.

#### Industrial smokestacks

The debate between whether to primarily target fossil fuels or emissions is shaping as a key battleground at the COP28 climate talks, which will be held in UAE financial hub Dubai.

Citing the IPCC, the COP28 president-designate, Sultan Ahmed Al Jaber — Adnoc's chief executive and his country's climate envoy — last week said it was time to "get serious about carbon capture".

But environmentalists are sceptical about the central role that big energy companies are seeking in climate solutions, saying they have a vested interest in maintaining fossil fuel sales.

Greenpeace Mena (Middle East and North Africa) programme director Julien Jreissati labelled it a "distraction".

Adnoc's Mr Kaabi, however, argued that the oil giant's engineering capabilities and deep pockets make them best placed to propel climate tech.

"The world has two options: We could leave it to the small players or have the big players accelerating this decarbonisation," Mr Kaabi said.

In 2016, Adnoc launched the region's first commercial-scale CCS project, Al Reyadah, which has the capacity to capture 800,000 tonnes of CO2 per year.

Globally, there are only around 35 commercial facilities using carbon capture utilisation and storage globally, according to the International Energy Agency, which says even those planned until 2030 would capture only a fraction of the emissions needed.

#### 'We need to move quicker'

The entrepreneurs at the UAE conference included Omani company 44.01, a winner of Britain's Earthshot Prize for its technology that permanently removes CO2 from the air by mineralising it in peridotite rock.

"Climate change is an urgent challenge and for us to be able to tackle that challenge we need to move quicker," said 44.01 CEO Talal Hasan.

"The oil and gas partnerships help us move quickly," he told AFP.

Mr Hasan's 44.01 has partnered Adnoc to develop a carbon capture and mineralisation site in Fujairah, one of the UAE's seven emirates — the first such project by an energy company in the Middle East.

"In one tonne of peridotite, you could probably mineralise 500 to 600 kilograms of CO2... this means that with the rocks just in this region, you could potentially mineralise trillions of tons," he said.

For Mr Hasan, energy companies are good partners because "we use a lot of the same equipment, infrastructure, people and resources".

"That will help us accelerate scaling," he said, arguing that the speed of execution is "very important".

State-owned Saudi Aramco, one of the world's richest companies, has invested in Carbon Clean, a British-based

company that has developed compact technology that captures carbon from industrial smokestacks.

The company, which has 49 sites around the world, will deploy its latest technology in the UAE this year — its first project in the Middle East.

When asked about the logic of working with big oil, Carbon Clean CEO Aniruddha Sharma said: "If I were a fireman and there was a fire — a big fire and a small fire — where would I go first? Obviously, the big fire." AFP

# Will Europe Be the World's Biggest Loser?



Russia's war against Ukraine, the Sino-American rivalry, and the rise of new middle powers is spurring a profound reorganization of the international order that will leave Europe at a distinct disadvantage. To thrive in a world dominated by large states with growing military budgets, Europe has no choice but to become a real power, writes Joschka Fischer, Germany's foreign minister and vice chancellor from 1998 to 2005, was a leader of the German Green Party for almost 20 years.

The post-1945 era of global stability is over and gone. From the bipolar world of the Cold War to the American-dominated unipolar world that replaced it, we have long benefited from a sense of strategic order. Though there were many smaller wars (and even some larger ones), from Korea and Vietnam to the Middle East and Afghanistan, the international system remained generally stable and intact.

Since the beginning of the new millennium, however, this stability has increasingly given way to a renewed rivalry between major powers, chief among them the United States and China. Moreover, it has long been clear that India, Brazil, Indonesia, South Africa, Saudi Arabia, Iran, and other emerging economies' political and strategic influence will increase, as will their role within the global system. In the context of a deepening conflict between China and the US, these rising powers will have many opportunities to play one of the twenty-first century's two superpowers off against the other. Indeed, many of these opportunities seem too good to miss.

Under President Vladimir Putin, Russian policy has increasingly been aimed at reversing the legacy of the immediate post-Cold War era. But the broader danger for the international system stems not from the war in Ukraine, but from the deterioration of US-China relations...

Some of the biggest losers in this confrontation are likely to be Japan and Europe. Chinese firms have built massive production capacities in the automobile industry — especially in electric vehicles (EVs) — and are now poised to outcompete the European and Japanese automakers that have long been globally dominant.

Making matters worse, America's own response to Chinese competition is to pursue an industrial policy that will come at European and Japanese manufacturers' expense. Recent legislation such as the Inflation Reduction Act, for example, provides large subsidies for cars produced in the US. From the US perspective, such policies kill two birds with one stone: protecting large domestic manufacturers and providing them with incentives to pursue EV development.

Not only must Europe take great pains to preserve its economic model during this reorganization of the global economy. It also must manage high energy costs, the growing digital technology gap vis-à-vis the two superpowers, and the urgent need for increased defense spending to counter the new threat from Russia. All these priorities will grow even more urgent as the next US presidential election approaches, given the distinct possibility that Donald Trump could return to the White House.

Europe thus finds itself especially disadvantaged. It resides in an increasingly dangerous region, yet it remains a confederation of sovereign nation-states that have never mustered the will to achieve true integration — even after two world wars and the decades-long Cold War. In a world dominated by large states with growing military budgets, Europe still is not a real power.

Whether that remains the case is up to Europeans. The world will not wait for Europe to grow up. If Europe is going to confront today's global reordering, it had better start soon — or, preferably, yesterday.

# Climate crisis won't solve on its own: need to walk the talk



We need all governments to step up and agree to phase out unabated fossil-fuel use. We need reforms to make our financial institutions and systems fit for purpose. And we need to take climate action seriously

Last year in Berlin, the great Kenyan long-distance runner Eliud Kipchoge broke the world marathon record, clocking 02:01:09 and beating his previous time by 30 seconds. His success has made him a legend not only in Kenya but globally. It offers a useful lesson for everyone involved in the fight against climate change. Kipchoge's winning strategy is rooted in the science of running (as well as 120 miles of hard work every week), and our own approach to the climate crisis must involve the same level of commitment and focus.

As temperatures keep rising and emissions soar, the planet, too, continues to break (dangerous) new records. But with determination and follow-through, we — together with institutional partners and other governments — can start to run faster to get ahead of the climate crisis. Success will depend on following the latest science and mobilising a joint, broad-based effort of governments and citizens.

In March, the world's top climate experts and governments signed off on the latest Intergovernmental Panel on Climate Change synthesis report. Once again, the IPCC's message was stark: Humans have permanently changed the planet, and global warming is already killing people, destroying nature, and making the world poorer. Though African countries have contributed the least to the problem, they are bearing the brunt of the damage.

According to the International Energy Agency (IEA), Africa accounts for less than 3% of the world's energy-related carbon dioxide emissions, and 600mn Africans — an outrageous figure — still do not have access to electricity.

Climate change is a shared problem that the global community must solve by working together, especially given the disproportionate burden being placed on those who are least responsible. During his recent visit to Kenya, German Chancellor Olaf Scholz and I held talks on ways to address the climate crisis. Through the Germany-Kenya Climate and Development Partnership, our two countries have committed to deepen our collaboration on climate-resilient development and renewable energy, including by supporting green-hydrogen production and sustainable agriculture.

We are currently a long way from limiting global warming to 1.5C or even 2C, as envisaged by the Paris climate agreement. The climate crisis will not solve itself. On the contrary, we must ensure that global greenhouse-gas (GHG) emissions peak before 2025 at the latest, and then fall by at least 43% by 2030.

This is the year to drive that transformation. The United Nations Climate Change Conference this November-December

(COP28) offers an opportunity to accelerate the energy transition, supercharge the growth of renewables, and commit to phase out all fossil fuels — starting with coal.

Kenya is on track to meet these goals. We already generate 92% of our power from clean sources and we have committed to achieving a 100% clean electricity network by 2030. Similarly, renewables generated 46% of Germany's electricity in 2022 and the government has committed to increase that to 80% by 2030. Critically, these commitments will not only ensure clean power and a safer environment; they will also create jobs, attract investment, and make our economies more secure and resilient in the face of volatile oil and gas prices.

But it is important that we run this race as a team. According to the IEA, the global ratio of clean-energy investments to dirty-energy investments must increase sixfold by 2030 (from 1.5:1 to 9:1).

With a strong partnership between Africa, Europe, and the rest of the international community, Kenya, with its abundant resources, can make significant contributions to decarbonisation and the global transition to a net-zero economy. We must unlock climate finance and investment, so that we can harness our potential for green economic growth. But to do that, we will need to fix the current international financial system, which has proven inadequate for dealing fairly with multifaceted global crises, from the Covid-19 pandemic and the climate emergency to debt distress across the Global South.

Next month's Summit for a New Global Financial Pact, in Paris, provides an opportunity for Europe to galvanise support for reforming the international financial system. The international community must recognise our potential to help solve global problems and take steps to ensure win-win outcomes. That means providing access to affordable, adequate, and sustainable financing that is delivered in a timely manner.

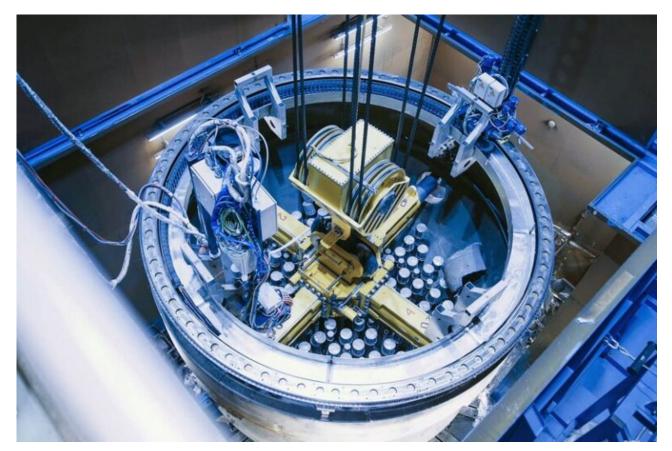
As we reduce emissions, we also need to prepare our people and our housing, agriculture, and food systems for rising

temperatures and extreme weather events. Meeting the 2021 COP26 commitment to double global climate-adaptation financing by 2025 remains crucial for protecting people and nature. The latest IPCC report is clear: climate change and insufficient adaptation and mitigation efforts are reversing development gains and undermining economic stability.

But we also must remember that adaptation has limits, and that climate change is already threatening millions of peoples' lives today. As the IPCC shows, reducing GHG emissions by 43% this decade and stabilising global warming at or below 1.5C is still our best chance to keep the problem at a manageable scale. Kenya's climate summit in September will provide a key opportunity to showcase the continent's commitment, potential, and opportunities to deal with the climate crisis. We need all governments to step up and agree to phase out unabated fossilfuel use. We need reforms to make our financial institutions and systems fit for purpose. And we need to take climate action seriously. In the words of Eliud Kipchoge, the key to success is to "walk your talk." — Project Syndicate

• William Ruto is President of Kenya.

## The Russian Nuclear Company The West Can't Live Without



When European countries want to decommission aging nuclear plants, they often call Nukem. There's only one catch.

By Jonathan Tirone and Petra Sorge
May 13, 2023 at 9:00 AM GMT+3
Cutting the heart out of a nuclear power plant is a surgical procedure that only a few specialists are equipped to handle.

The process begins by launching plasma-torch-wielding robots into an empty pool surrounded by thick concrete walls. From there, the remote-controlled machines make circular cuts, as if slicing pineapple rings, through a 600-ton steel vessel that contains radiation generated over decades of splitting atoms. These rings are then diced into meter-long pieces and transported via secure convoy to radioactive waste repositories, where they are left to cool down — indefinitely.

Behind the scenes, scores of nuclear engineers, radiation safety experts and state regulators monitor this operation, which can cost upwards of a billion dollars and take years to plan and execute. The expertise needed to pull this off without error is why "there are only a handful of players" in

the high-radiation decommissioning business, said Uniper SE's Michael Baechler, who is supervising the dismantling of Sweden's Barsebaeck Nuclear Power Plant.

Among the oldest and most experienced is Germany's Nukem Technologies Engineering Services GmbH, which for decades has offered its unique services in Asia and Africa and across Europe. Nukem engineers helped contain radiation from the destroyed reactors in Chernobyl and Fukushima. They helped lead the clean-up of an atomic-fuel factory in Belgium. In France, the company devised ways to treat waste from the International Thermonuclear Experimental Reactor.

With researchers predicting that cleaning up after aging nuclear power plants will evolve into a \$125 billion global business in the near future, Nukem should be ideally positioned to capitalize on the moment.

Except for one thing: the company is wholly owned by Rosatom Corp., the Kremlin-controlled nuclear giant, putting it in the center of an uncomfortable standoff.

While Germany has been vocal in urging EU countries to stop importing Rosatom's nuclear fuel, a highly specialized commodity used for power plants, of which Rosatom is the world's biggest exporter, authorities do not want to prevent Nukem from doing business in Germany, according to three government officials who asked not to be identified in return for discussing private deliberations. As sanctions have not been implemented, doing so would violate EU competition laws, they said.

Located in the rolling hills and orchards just east of Frankfurt, Nukem is a niche player in Rosatom's global empire. At the same time, it exposes the fault line running through the EU's approach to nuclear power. Unlike Russia, which has cultivated expertise across all of the industrial processes needed to convert and enrich uranium atoms into forms usable

for generating energy, Europe's hodgepodge development of nuclear technologies has left states dependent on outside providers to fill gaps in production and services. Experts estimate it would take at least four or five years before the EU could match Rosatom's fuel-manufacturing capacity, but even if that process were sped up, it would require more time still to replicate its global reach and array of services.

Pressure to cut Rosatom out of European supply chains has mounted since Russian forces seized Europe's biggest nuclear power station outside the Ukrainian city of Zaporizhzhia and sent in Rosatom engineers to run it. The fact that it or Nukem, a subsidiary, haven't been sanctioned, "should raise some serious questions," said Darya Dolzikova, a researcher at the Royal United Services Institute. But more than a year later, it's still up to individual companies to decide whether to continue doing business with the energy giant. So far, many are proceeding as usual: Rosatom saw exports surge more than 20% in the year after Russia invaded Ukraine.

Unlike Germany's seizure of Russian storage and refining assets after the war, Nukem doesn't have as much fixed infrastructure to go after. If sanctions were to be imposed, Rosatom might simply close shop or move Nukem's headquarters to a friendlier jurisdiction.

This has left Nukem stuck in a strange kind of limbo, as customers interested in tapping its expertise are now faced with the choice of whether to work with a Kremlin-controlled company. Its experience is particularly valuable as its 120 mostly German engineers can work across the nuclear supply chain, a huge advantage in light of the fact that more young nuclear engineers study to build new installations than tear down existing ones. The International Atomic Energy Agency in Vienna has warned of an acute shortage of decommissioning workers.

"In Europe," said Mark Hibbs, an analyst at the Carnegie

Endowment for International Peace who has been tracking the company for more than three decades, "Nukem presides over a large pool of know-how."

But even without sanctions, traditional markets such as Lithuania and Finland have stopped working with Nukem and Rosatom, respectively. Others, including the Czech Republic, Slovakia and Bulgaria are diversifying away from Russian suppliers. On a day-to-day level, it's gotten trickier to do business since the Russian invasion, said Nukem Chief Executive Officer Thomas Seipolt. Money transfers take longer, as does securing the authorizations needed to ship technologies across borders, and some customers have been hesitant to sign contracts, he said. A consulting arrangement "was paused and then cancelled following the start of the Ukraine conflict," said Boris Schucht, chief executive officer of the fuel consortium Urenco. Due to the political situation, Nukem's Seipolt noted, "the further development of the company" has "become uncertain."

## The Climate Elephants in the Room



May 19, 2023PINELOPI KOUJIANOU GOLDBERG

As tempting as it is to rely on multilateralism to solve a shared global problem like climate change, the world simply does not have the time for such an approach. A far more pragmatic and effective strategy is to focus on the biggest polluters that contribute disproportionately to total greenhouse-gas emissions.

NEW HAVEN — Now that the falsehoods and obfuscation of climate denialism have finally been silenced, addressing climate change has become the world's top priority. But time is running out, and the International Monetary Fund warns that any further delays on implementing policies to mitigate global warming will only add to the economic cost of the transition to a low-emissions economy. Worse, we still lack a concrete, pragmatic strategy for tackling the problem. Although economists have made a robust case for why carbon taxes are the best solution, this option has proven politically infeasible, at least in those countries that account for some of the highest emissions (namely, the United States).

Commentators have also stressed that climate change is a shared problem involving important cross-border externalities that must be addressed through a multilateral approach to global coordination. But, as with carbon taxes, this argument

has fallen on deaf ears. And, given the current geopolitical climate and the increasing fragmentation of the global economy, there is little hope that the message will get through anytime soon.

Having committed to assisting developing economies as they confront climate change, the World Bank finds itself limited by the country-based model underlying its financing operations. It is earnestly weighing its options and considering how it could coordinate climate-related financing across borders. But while such efforts are well meaning and consistent with the spirit of multilateralism, they inevitably will delay concrete action. World Bank financing would have to be completely restructured, and coordinating action across multiple countries that have limited financial resources and often conflicting interests seems an impossible task. For example, while some developing economies are rich in fossil fuels, others are starved for energy sources.

Given these limitations, pragmatism dictates focusing on the biggest polluters. Global carbon dioxide emissions are concentrated among only a handful of countries and regions. China, the US, the European Union, Japan, and Russia collectively account for 63% of the total, and none of these top polluters is a low-income country anymore. China, the poorest of the group, represents around 30% of all emissions, making it by far the world's largest current polluter in absolute terms. But its government is taking steps to accelerate the transition to green energy — a winning strategy, given the country's abundance of rare earth metals.

India, the third-largest emitter, currently accounts for approximately 7% of global  $CO_2$  emissions, and its size and growth trajectory imply that it could easily surpass China as the leading polluter, barring stronger climate policies. In fact, when it comes to helping developing countries decarbonize, considerable progress could be made simply by

targeting India alone. The big advantage of this strategy is that it would avoid the paralysis associated with attempts to adopt a multilateral approach in an increasingly fragmented world.

This does not mean that we should eschew projects aimed at climate mitigation or adaptation in other countries. But we would not need to wait until everyone is on board before doing anything. Those insisting on a multilateral approach should learn from the experience of the ultimate multilateral institution: the World Trade Organization. Its requirement that every single provision in every multilateral agreement gain unanimous support has left it increasingly paralyzed, prompting demands for institutional reform.

Of course, India is not low-hanging fruit. It is rich in coal and has little incentive (beyond the health of its citizens) to hasten the transition to green energy. In focusing on India, we would need to employ the carrot, not the stick.

Since the stick generally takes the form of pressure to implement carbon taxation, it is a non-starter. A tax would be ineffective, because it would incite massive domestic opposition (as has been the case in the US). It would also be morally objectionable, because it is unfair to ask a lower-middle-income country to bear the burden of reducing  ${\rm CO_2}$  emissions when rich countries (like the US) have failed to do the same. Moreover, even if China and India are now two of the world's biggest polluters, they bear little responsibility for the past, cumulative emissions that led to the current climate crisis.

That leaves the carrot, which would come in the form of tax incentives or subsidies to support green energy. When paired with other policies, these can ease firms into adapting to higher environmental standards (such as those associated with a cap-and-trade program). But such policies are expensive, which means that tackling climate change will require richer

countries to help finance them. Whether or not India becomes the new China, it is still in our power to ensure that it does not become the new outsize polluter.

https://www.project-syndicate.org/commentary/climate-change-prioritize-top-emitters-over-multilateralism-by-pinelopi-koujianou-goldberg-2023-05