The end of Europe’s clean-energy preaching

By Ana Palacio/ Madrid

Russian President Vladimir Putin’s war against Ukraine has served Europe a heaping dose of energy realism. While the European Union was touting a “no pain, all gain” transition to renewable energy, many of its industries – particularly in Germany – had developed a debilitating dependence on cheap Russian gas. This revelation should be the first step toward a more realistic – and less dogmatic – European approach not only to its own energy transition, but also to that in the Global South.

The EU has an action plan for weaning itself off Russian fossil fuels. But, while the details of REPowerEU are still being finalised, it is already clear that, like so many European “solutions,” the plan is an exercise in muddling through, exemplified by the fact that it will not be completed until 2030.

Though REPowerEU aims to accelerate the rollout of renewables and replace gas in heating and power generation, it also

depends significantly on the diversification of energy supplies. Already, energy producers in the Global South have received desperate pleas to help meet the EU's energy needs, which has probably prompted more than a few eye rolls. After all, countries across the developing world have endured years of European proselytising about the importance of rapid progress toward a carbon-free energy system.

If the EU cannot achieve this in the short term – in order to avoid funding an unjust war, no less – the Global South most certainly cannot. Europe is worried that economic growth and local livelihoods will suffer if it attempts to move too rapidly to renewables. Developing economies are worried that they will have no path to sustained economic growth and poverty reduction at all.

They are right to worry. The positive correlation between baseload power and prosperity clearly shows that a reliable energy supply is essential to economic progress. But, globally, 770 million people – mostly in Africa and Asia – lack access to electricity. In Sub-Saharan Africa, the pandemic worsened energy poverty, with 77% of the region's people now living without electricity, compared to 74% in 2019.

Given that future population growth – and, thus, growth in energy demand – will be concentrated in the Global South, this problem is set to get much worse. And, for now, renewables cannot solve it, because they do not represent a sufficiently reliable power supply. A scale-up in hydrogen fuel could change this, though this remains a stretch for emerging-market and developing economies.

United States Special Presidential Envoy for Climate John Kerry, for one, has now recognised the folly of attempting to force developing economies to go fully renewable. On March 7, following the Russian invasion of Ukraine, he acknowledged that gas would be crucial to economic development in African countries. Even the World Bank – without much fanfare – has reversed its moratorium on financing gas projects.

Yes, this new realism implies a near-term increase in African

emissions – but starting from a very low level. The 48 countries that comprise Sub-Saharan Africa (excluding South Africa) represent 0.55% of global carbon dioxide emissions. As a whole, Africa consumes less energy than any other continent – far less than Europe, especially if one takes into account historical consumption. Rich countries are well aware of this discrepancy, which is why developing countries have been increasingly critical of the developed world's climate hypocrisy: constant pressure to cut emissions coupled with prolonged refusal to finance climate mitigation and adaptation in the Global South.

The Green Climate Fund embodies this hypocrisy. At the United Nations Climate Change Conference in 2009, developed economies pledged to channel $100bn per year for mitigation and adaptation efforts in developing countries by 2020. As of January 2022, participating countries' pledges amounted to a measly $10bn.

Sustainability is vital to our planet's future. But the green transition must be just. And justice demands that the Global South receive the same opportunity to develop as the North had. That will be possible only with energy security for all.

That is why this week's Sustainable Energy for All Forum is so important. Stakeholders from both the public and private sectors will gather in Kigali, Rwanda, to find ways to accelerate progress toward UN Sustainable Development Goal 7: ensure access to affordable, reliable, sustainable, and modern energy for all.

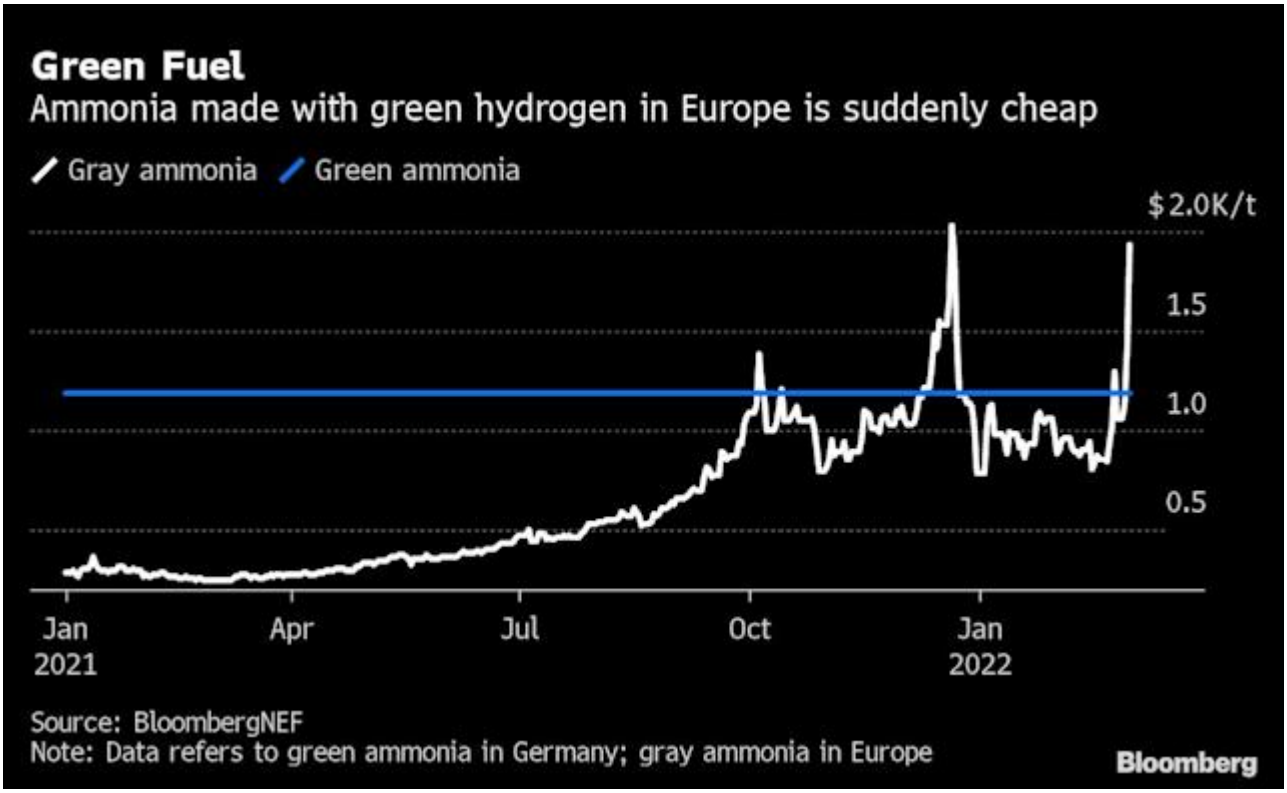
This year's Forum comes at a pivotal time in the global energy transition. Moreover, this is the first time since the Forum was launched in 2014 that it will be held in Africa. One hopes that the continent's centrality to the event – and the harsh realisations that the war in Ukraine has imposed on Europe – will be reflected in its conclusions, which, given the current crisis, will be more consequential than ever.

Europe has always prided itself on being a leader in the green-energy transition. This should not change. But, rather than allowing its vision to become clouded by idealism and

ideology, the EU must ensure that its energy ambitions – for itself and for developing economies – are firmly grounded in reality. Europe must support developing countries' efforts to adapt to climate change and achieve net-zero emissions. But it must also help them to achieve energy security. As one African minister succinctly put it, "We will decarbonise, but first we have to carbonise." – Project Syndicate

• *Ana Palacio, a former foreign minister of Spain and former senior vice president and general counsel of the World Bank Group, is a visiting lecturer at Georgetown University.*

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



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

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

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

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

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

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

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

sources will be key, participants said.

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

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

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

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

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

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

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

"The economy is moving in favor of green hydrogen," said Ivan Pavlovic, chief executive of French bank Natixis CIB, which is

working on financing the fuel's production. "The projects we're looking at now seem more bankable from a financial perspective."

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

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

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

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

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

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

The London-listed L&G Hydrogen Economy UCITS ETF has exposure to companies with a minimum market capitalization of $200

million, including electrolyser manufacturers and hydrogen producers.

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

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

Russia-Ukraine War Could Delay Europe’s Decarbonization Plans for a Decade “The Whole Situation is Very Sad” – Energy Expert

8 April 2022
Roudi Baroudi

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

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

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

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

If and when gas stops flowing through pipelines from Russia, Baroudi told the conference, “it cannot be replaced by simply ordering more liquefied natural gas from Qatar, the United States, and/or other producers. Europe doesn’t have enough receiving facilities to re-gasify such huge amounts, which is why efforts to expand capacity in Germany and the Netherlands are so urgent.”

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

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

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

“The whole situation is very sad,” he added. “Ever since the Paris Agreements of 2015, and especially since the Glasgow climate summit last year, Europe had been on the right track to be ready for a decarbonized economy. But now those plans are temporarily being pushed to the back burner. Apart from the lives being lost in the fighting, the energy and economic implications will mean severe hardships across the continent and even beyond, especially for lower-income people, who are the most vulnerable as rising energy prices cause the cost of food to spike as well. So there will be hunger, too. And much of the cause is due to repeated delays in the diversification of Europe’s sources of supply. Now it finds itself scrambling to prevent an economic disaster.”

‘Qatar, US recognise urgency climate change challenge’

Doha

The State of Qatar and the United States of America recognise the urgency of the challenge posed by climate change and the importance of accelerating global efforts on all aspects of the climate change agenda.

Qatar and the US also agree on the need to provide energy security and tackle the climate crisis together in light of current events and on the road to COP27 in Sharm el Sheikh. Rapidly reducing methane emissions is the most effective strategy to limit global warming in the near term and keep 1.5 degrees Celsius within reach.

Qatar’s endorsement of the Global Methane Pledge provides critical momentum to global efforts to urgently reduce methane emissions. There are now 111 country endorsements of the Global Methane Pledge, representing 70% of the global economy and nearly half of global anthropogenic methane emissions.

Countries endorsing the Global Methane Pledge commit to take national-level, voluntary actions to support the collective pledge target of 30% reduction in anthropogenic methane emissions by 2030 from 2020 levels.

Qatar is a global leader in tackling methane emissions as it has achieved example-setting progress reducing methane intensity in the energy sector over the past decade. Qatar has an impressive track record of actions and commitments to monitor, report, verify, and reduce methane, including through reducing flaring and methane emissions in the energy sector.
QatarEnergy was the first national oil company in the Middle East to sign the Methane Guiding Principles, which support voluntary corporate efforts to reduce methane emissions across the natural gas supply chain.
QatarEnergy is also an active member of the Global Gas Flaring Reduction Partnership (GGFR) with a firm commitment to end routine flaring by 2030 and has joined the second phase of the Oil and Gas Methane Partnership (OGMP 2.0), which enables systematic and credible reporting on oil and gas methane emissions.
The Global Methane Pledge builds on Qatar’s status as a founding member of the Net-Zero Producers Forum, and its ongoing strong performance, and provides an exciting new platform for Qatar and the US to deepen cooperation on methane reduction efforts, including with third countries.

Airbus to test hydrogen engine on A380 jumbo jet

By Alex Macheras

Airbus this week announced it will modify a superjumbo A380 to test a hydrogen-powered jet engine as the European aerospace group prepares to bring a zero emissions aircraft into service by 2035.

The partnership is an agreement with CFM International, a 50/50 joint company between GE and Safran Aircraft Engines, to develop an engine that can run on hydrogen. The converted test aircraft, the A380, will fly by the end of 2026.

The programme's objective is to ground and flight test a direct combustion engine fuelled by hydrogen, which Airbus is betting on to enable the company to decarbonise in line with aviation's climate change goals. The A380 flying test jet will be equipped with liquid hydrogen tanks prepared at Airbus facilities in France and Germany. Airbus will also define the hydrogen propulsion system requirements, oversee flight testing, and provide the A380 platform to test the hydrogen combustion engine in cruise phase.

CFM International will modify the combustor, fuel system, and control system of a GE Passport turbofan to run completely on hydrogen. The engine itself will be mounted along the rear fuselage of the A380 test jet to allow engine emissions,

including contrails, to be monitored separately from those of the engines powering the aircraft.

“This is the most significant step undertaken at Airbus to usher in a new era of hydrogen-powered flight since the unveiling of our ZEROe concepts back in September 2020,” said Sabine Klauke, Airbus chief technical officer. “By leveraging the expertise of American and European engine manufacturers to make progress on hydrogen combustion technology, this international partnership sends a clear message that our industry is committed to making zero-emission flight a reality.”

The venture comes amid increasing pressure on the aviation industry to cut pollution and meet zero-emission targets by 2050. Before the pandemic led to the grounding of much of the world’s aircraft, aviation accounted for roughly 2.4% of global emissions. “To achieve these goals by 2050 the industry has to take action now and we are,” said Gael Meheust, chief executive of CFM.

“Is hydrogen harder? Yes. Is it do-able? Absolutely,” said Mohamed Ali, vice-president and general manager of engineering at GE Aviation.

Executives said the decision to use an A380, the world’s largest passenger airline jet that has been phased-out at many airlines around the world due to its inefficiencies, would allow engineers more room for things like the tanks and the testing equipment. A commercial product available to airlines over the coming years will be much smaller. Airbus is expected to initially produce a regional or shorter-range aircraft.

In today’s aircraft, wings are where the fuel is stored, and they are in no way large enough to store the hydrogen that would be needed for a long flight. Hydrogen planes of the future could have extra-large fuselages, but more likely they will be what’s called blended wing, in which the planes are shaped like large triangles. This would allow them to store more fuel, but also reduce fuel consumption to make the aircraft aerodynamics even better.

Planes using hydrogen would emit only water, and initial tests suggest they can be just as fast as traditional planes, carrying more than a hundred passengers per flight over thousands of kilometres.

Most of the world’s hydrogen today is produced by reforming

methane from natural gas – a fossil fuel – which produces carbon dioxide. Efforts are underway to develop green hydrogen by using an electric current from a renewable source to convert water into oxygen and hydrogen and reduce emissions in its production. If that is possible, along with no emissions from the planes themselves, aviation could become a green form of travel.

There are significant challenges that remain. If Europe were to fully achieve the environmental benefits of hydrogen-power – for example, for air travel, the production of clean – or green – hydrogen needs to be dramatically scaled up. Clean hydrogen is produced from water using an electric current from a renewable source, rather than from fossil fuels. Today only a tiny fraction of hydrogen used in Europe is categorically "clean."

Hydrogen is a high-potential technology with a specific energy-per-unit mass that is three times higher than traditional jet fuel. Airbus notes that, if generated from renewable energy through electrolysis, given the fact it emits no CO2 emissions, it will enable renewable energy to potentially power large aircraft over long distances but without the undesirable by-product of CO2 emissions.

For now, we are still years away from commercial hydrogen aircraft becoming a reality, though. The refuelling infrastructure doesn't exist yet and hydrogen is more expensive and difficult to store onboard than kerosene-based fuel.

"Hydrogen combustion capability is one of the foundational technologies we are developing and maturing as part of the CFM RISE Programme," said Gaël Méheust, president & CEO of CFM. "Bringing together the collective capabilities and experience of CFM, our parent companies, and Airbus, we really do have the dream team in place to successfully demonstrate a hydrogen propulsion system."

Boeing has focused on more sustainable aviation fuels, which currently make up less than 1% of the jet fuel supply and are more expensive than conventional jet fuel. CEO Dave Calhoun said at an investor conference that he didn't expect a hydrogen-powered plane on "the scale of airplanes that we're referring to" before 2050.

Sustainable Aviation Fuel is a clean substitute for fossil jet

fuels. Rather than being refined from petroleum, SAF is produced from sustainable resources such as waste oils from a biological origin, or non-fossil CO2. It is a so-called drop-in fuel, which means that it can be blended with fossil jet fuel and that the blended fuel requires no special infrastructure or equipment changes. It has the same characteristics and meets the same specifications as fossil jet fuel.

Since the first commercial flight operated by KLM in 2011, more than 150,000 flights were powered by SAF. More than 45 airlines now have experience with SAF, and around 14bn litres of SAF are in forward purchase agreements.

Several airlines are driving forward the use of SAFs by signing multi-million dollar forward purchasing agreements. Others have invested in start-up support for SAF deployment, and some have promoted SAFs through test flights, research, and investigation of local opportunities. Five airports also have a regular SAF supply: San Francisco, Los Angeles, Oslo, Bergen and Stockholm.

However, scaling up the use of SAFs to a global market is challenging and requires substantial investment. The industry has called on governments to assist potential SAF suppliers to develop the necessary feedstock and refining systems – at least until the fledgling industry has achieved the necessary critical mass and prices drop thanks to economies of scale.*

The author is an aviation analyst. Twitter handle: @AlexInAir

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Renewable firms pinning hopes on Taro Kono winning race for Japan PM

Reuters / Tokyo

Renewable energy companies are betting that the leading contender in the race to become Japan’s next prime minister, Taro Kono, will unleash changes allowing more market access and a fairer playing field after years of neglect.

The 58-year-old has long championed more renewable supplies in Japan’s roughly $150bn electricity sector, the world’s biggest national power market outside China.

Investors have been buying renewable energy shares hoping the popular Kono wins the September 29 vote for the Liberal Democratic Party’s (LDP) next leader and – by virtue of its majority in the parliament – Japan’s next premier.

Japan’s energy mix is already undergoing change, with renewables on the rise, replacing fossil fuels which shored up power following the Fukushima nuclear disaster in 2011.

Kono, a former defence minister and scion of a political dynasty, is currently in charge of administrative reform and has clashed with the powerful industry ministry (METI), which like the steel federation, has supported a revival of the moribund nuclear sector.

“Kono has eagerly taken on deregulation over the past year, and a lot has changed. Japan’s energy shift will advance

further if Kono is elected," said Mika Ohbayashi, a director at Renewable Energy Institute founded by SoftBank Group Corp Chief Executive Masayoshi Son.

Renewable energy has also received a boost from outgoing Prime Minister Yoshihide Suga's pledge last year to align Japan with Europe and declare a 2050 carbon neutrality target.

"The attitudes of officials at METI have drastically changed. Their attitudes toward renewable energy startups used to be rather cold, but they can't afford to continue that stance," said Koki Yoshino, executive officer at Japan Renewable Energy, which operates nearly 50 wind and solar power projects.

In 2018 a panel convened by Kono, who was then foreign minister, caused controversy by wading into the energy debate, normally METI's preserve, supporting a call to get rid of nuclear power and coal while dramatically increasing renewables. Last year, Kono set up a taskforce to take down regulatory hurdles hindering Japan's shift to renewables.

The world's third-largest economy and fifth-biggest carbon emitter is heavily reliant on imported fossil fuels 10 years after the Fukushima catastrophe almost killed off its nuclear sector, the source of a third of Japan's electricity before 2011.

Renewable energy is fast catching up and accounted for 22% of Japan's energy supplies last year, meeting a recent government target a decade ahead of schedule and even contributed more than coal in one quarter.

Despite that growth, critics say METI has introduced rules that make it easy to force solar plants to shut down, known as curtailment, when supplies are abundant.

Connections for renewable projects are also being withheld at the whim of entrenched companies, Kono says on his home page where he outlines his polices.

Rules governing the use of a major transmission line that connects Japan's main island to Hokkaido in the north need to be revised to allow more renewables into the mix, Kono says.

Electricity transmitted through the line has to be declared a

day ahead of the actual transmission, making it difficult for weather-dependent renewables to use the line, which is currently underutilised, to transmit power to Tokyo, he says. METI has increased the target for renewables to produce 36-38% of Japan’s electricity by 2030, up from 22-24%, and has set auction rules for offshore wind, one of the fast growing sectors in other parts of the world.

Reeling in a deal to save the ocean

By Helen Clark, Arancha Gonz?Lez, Susana Malcorra, And James Michel Auckland/Madrid/Victoria/Anse Royale

The ocean covers more than 70% of our planet’s surface, produces half of the oxygen we breathe, feeds billions of people, and provides hundreds of millions of jobs. It also plays a major role in mitigating climate change: over 80% of the global carbon cycle passes through the ocean. But this

precious natural resource is not invincible. Despite all the benefits it affords us, the ocean today faces unprecedented man-made crises that threaten its health and its ability to sustain life on Earth.

The greatest threat to marine biodiversity is overfishing. More than one-third of global fish stocks are overfished and a further 60% are fully fished. Each year, governments around the world encourage overfishing by providing $22bn in harmful fisheries subsidies. Although these subsidies are designed to help support coastal communities, they instead prop up unsustainable and unprofitable fishing activity, depleting the very resource on which local populations' livelihoods depend.

This problem is not new. In fact, the World Trade Organisation's members have been trying to negotiate a deal to curb these damaging payments since 2001. World leaders reiterated their commitment to tackling the issue when they agreed in 2015 to the Sustainable Development Goals (SDGs). Under SDG 14, which aims to put a healthy ocean at the heart of the global sustainable-development agenda, leaders promised by 2020 to reach an agreement at the WTO that would reduce fisheries subsidies. But they missed the deadline, as negotiations slowed during the worst of the Covid-19 pandemic.

Research shows that if WTO members were to eliminate all harmful fisheries subsidies – the most ambitious scenario – global fish biomass could increase by 12.5% by 2050. That's an additional 35mn metric tonnes of fish, or more than four times North America's annual fish consumption in 2017. And this is a conservative estimate. Removing destructive subsidies really will mean more fish in the sea.

The aim is not to remove support from fishing communities, but rather to redirect it in a more meaningful and less damaging way. Even if a deal does not eliminate all harmful subsidies, it would create a global framework of accountability and transparency for subsidy programmes. That, in turn, would spur dialogue between governments, fishing communities, and other stakeholders to spur the development of redesigned policies that better support fisherfolk while protecting our global

commons.
Moreover, an agreement is within reach – if the political will is there to deliver it. The most recent lapse of the negotiations resulted from differences over how to structure flexibility in subsidy regimes for developing countries, as well as how to define and enforce rules on illegal fishing and sustainable stocks. But after numerous proposals and discussions, the comprehensive draft now on the table combines measures to curb harmful subsidies with specific exceptions for developing countries.
With the start of the WTO's 12th Ministerial Conference in Geneva just days away, now is the moment for a deal. Failure to conclude one would not only harm the ocean and the livelihoods of those who depend upon it, but also would diminish the global rules-based system and damage the pursuit of the 2030 Agenda for Sustainable Development. In contrast, ending harmful fisheries subsidies would reduce the cumulative pressures on the ocean and increase its resilience in the face of climate change.
In the wake of the UN Climate Change Conference (COP26) in Glasgow, governments must demonstrate their willingness to use every tool at their disposal to tackle the climate crisis. The stakes at the upcoming WTO Ministerial Conference have perhaps never been higher. The future of multilateral trade co-operation is at risk; but, above all, jobs, food security, and the health of our global commons are on the line.
That is why 33 former government leaders and ministers from around the world have joined forces with nearly 400 scientists in urging WTO members to "harness their political mandate to protect the health of the ocean and the well-being of society."
Governments have given their word that they will curb destructive fisheries subsidies. Next week's meeting in Geneva will test the credibility of that pledge.
This commentary is also signed by: Axel Addy – Minister of Commerce and Industry of Liberia (2013-18); Mercedes Araoz – Prime Minister of Peru (2017-18) and Vice-President of Peru

(2016-2020); Hakim Ben Hammouda – Minister of Economy and Finance of Tunisia (2014-15); Herminio Blanco – Minister for Trade and Industry of Mexico (1994-2000); Maria Damanaki – European Commissioner for Maritime Affairs and Fisheries (2010-14); Eduardo Frei Ruiz-Tagle – President of Chile (1994-2000); Michael Froman – US Trade Representative (2013-17); Tim Groser – Minister of Trade of New Zealand (2008-2015); Enrique V Iglesias – President of the Inter-American Development Bank (1988-2005); Hilda Heine – President of the Marshall Islands (2016-2020); Ban Ki-moon – UN Secretary-General (2007-2016); Ricardo Lagos – President of Chile (2000-06); Pascal Lamy – Director-General of the WTO (2005-2013); Roberto Lavagna – Minister of Economy of Argentina (2002-05); Cecilia Malmstrom – European Commissioner for Trade (2014-19); Peter Mandelson – European Commissioner for Trade (2004-08); Sergio Marchi – Minister of International Trade of Canada (1997); Heraldo Munoz – Minister of Foreign Affairs of Chile (2014-18); Pierre Pettigrew – Minister for International Trade of Canada (1999-2003), Minister of Foreign Affairs of Canada (2004-06), Tommy Remengesau, Jr. – President of the Republic of Palau (2001-09, 2013-2021); Jose Luis Rodríguez Zapatero – Prime Minister of Spain (2004-2011); José Manuel Salazar – Minister of Foreign Trade of Costa Rica (1997-98); Susan Schwab – US Trade Representative (2006-09); Juan Somavia – Director-General of International Labour Organisation (1999-2012); Alberto Trejos – Minister of Foreign Trade of Costa Rica (2002-04); Allan Wagner – Minister of Foreign Affairs of Peru (1985-88, 2002-03, 2021); Andres Velasco – Minister of Finance of Chile (2002-06); Ernesto Zedillo Ponce de León – President of Mexico (1994-2000); and Robert Zoellick – US Trade Representative (2001-05). – Project Syndicate

• *Helen Clark is a former prime minister of New Zealand (1999-2008). Arancha González is a former foreign minister of Spain (2020-21). Susana Malcorra is a former foreign minister of Argentina (2015-17). James Michel is a former president of*

the Republic of Seychelles (2004-2016).

Where is the money? Climate finance shortfall threatens global warming goals

Rich nations under pressure to deliver unmet $100-billion pledge

* More ambitious climate plans hinge on international funding

* Eyes on U.S. to boost finance at U.N. gathering next week

KUALA LUMPUR/BARCELONA, Sept 16 (Thomson Reuters Foundation) – F or a storm-prone developing country like the Philippines, receiving international funding to protect its people from wild weather and adopt clean energy is not only an issue of global justice – the money is essential to deliver on its climate plan.

Without promised support, many vulnerable poorer nations – battered by the economic impacts of COVID-19 and surging climate disasters – say they simply cannot take more aggressive action to cut planet-heating emissions or adapt to a warmer world.

The Philippines, for example, has pledged to reduce its emissions 75% below business-as-usual levels by 2030.

But only about 3 percentage points of that commitment can be delivered with its own resources, its national climate plan says. The rest will require international finance to make sectors like farming, industry, transport and energy greener.

“Environmental groups say our (target) is unambitious because it’s highly conditional. What they don’t see, however, is what we submitted is what is doable for the Philippines,” said Paola Alvarez, a spokesperson at the Department of Finance.

“Our economy is not doing well because of the pandemic and we have back-to-back typhoons every now and then,” which means national resources need to be prioritised for social programmes, she told the Thomson Reuters Foundation.

As leaders prepare to attend the United Nations General Assembly in New York next week, wealthy nations are coming under ever-greater pressure to deliver on an unmet pledge, made in 2009, to channel $100 billion a year to poor countries to tackle climate change.

With budgets worldwide squeezed by the COVID-19 crisis and U.N. climate talks postponed for a year, the original 2020 deadline to meet the goal was likely missed, analysts have said.

But as November’s COP26 climate summit approaches fast, time is running out to convince developing countries – both big and small emitters – that any efforts at home to raise their climate game will be met with solid financial backing, analysts say.

Alden Meyer, a senior associate in Washington for think-tank E3G, focused on accelerating a low-carbon transition, said the $100-billion promise is well below what is actually needed by emerging economies to mount an adequate response.

But delivering on it is key to spurring them on, he added.

Right now, they can say, “the developed countries aren’t doing what they said they would do in terms of support, so why should we ramp up ambition (to cut emissions)?” Meyer said.

Government officials in India – the world’s fourth-biggest

emitter of planet-heating gases – have said, for example, that any further commitment to reduce its carbon footprint will depend on funding from rich countries.

National pledges to cut emissions so far are inadequate to keep global temperature rise to "well below" 2 degrees Celsius above preindustrial times, and ideally to 1.5C, as about 195 countries committed to under the 2015 Paris Agreement.

The U.N. climate science panel warned in a report in August that global warming is dangerously close to spiralling out of control and will bring climate disruption globally for decades to come, in wealthy countries as well as poor ones.

'BARE MINIMUM'

Some big greenhouse gas emitters, including China, Russia and India, have yet to submit more ambitious plans to the United Nations, as they committed to do by 2020 under the Paris pact.

But of the roughly 110 plans delivered by other countries ahead of an adjusted U.N. deadline in July, nearly all hinge on one key condition: money.

According to the World Resources Institute (WRI), a U.S.-based think-tank that tracks national climate pledges, "well over half" of those updated emissions goals include actions that can only happen with the support of international finance.

"This underscores why it's so critical for developed countries to deliver on their $100-billion pledge. It's the bare minimum," said Taryn Fransen, a climate policy expert at WRI.

In the latest submissions, a growing number of developing nations have stepped up with emissions goals they can implement on their own, she added, including Argentina, Chile and Colombia, which have dropped requests for support entirely.

But honouring the $100-billion annual commitment – which

covers the five years until 2025, when a new yet-to-be-negotiated goal is set to kick in – is key to fostering trust within the global climate talks and facilitating a faster green transition, she stressed.

The latest available figures from the Organisation for Economic Co-operation and Development show that in 2018, a little under $80 billion was delivered to vulnerable countries.

An analysis by aid charity Oxfam last year put the real figure – when counting only grants and not loans that have to be paid back – much lower, at $19 billion-$22.5 billion.

Meanwhile, the 46 least-developed countries between 2014 and 2018 received just $5.9 billion in total for adaptation, a level that would cover less than 3% of the funds they need this decade, found a July study from the International Institute for Environment and Development.

U.S. FALLS SHORT

Climate and development experts argue industrialised countries built their prosperity by burning fossil fuels, making them responsible for a large part of the losses happening in countries on the frontlines of worsening floods, droughts, storms and rising seas, many of them in the southern hemisphere.

A 2020 study in The Lancet Planetary Health journal estimated that, as of 2015, nations in the Global North were responsible for 92% of carbon emissions beyond safe levels for the planet, while the Global South accounted for just 8%.

Diann Black-Layne from the Caribbean nation of Antigua and Barbuda, which is battling sea level rise and more frequent hurricanes, said climate action for developing countries “has to be conditional, because we can’t get the money”.

Black-Layne, lead climate negotiator for the 39-member Alliance of Small Island States, questioned why wealthy governments continued to fund the fossil fuel industry while failing to meet their $100-billion-a-year pledge.

“That money is available,” she said. “There is no shortage of money to get us to the 1.5C (temperature goal).”

Ahead of the COP26 summit, which starts on Oct. 31, host nation Britain has tasked Germany and Canada with coming up with a delivery plan for the elusive $100 billion a year, but observers believe that is unlikely to land until next month.

A major question is whether U.S. President Joe Biden will unveil a bigger U.S. finance commitment at the U.N. General Assembly next week, as concerns grow that the world’s biggest economy is failing to cough up its fair share.

At an April summit he hosted, Biden said the United States would double its climate finance to about $5.7 billion a year by 2024 — but that level is still seen by many climate finance experts as far below what it owes to developing countries.

A recent analysis from the Overseas Development Institute said the United States should be stumping up more than $43 billion a year based on cumulative carbon emissions, gross national income and population size.

It called the United States the biggest offender among 23 donor states in terms of falling short of its responsibilities.

On Wednesday, the European Union pledged to boost the $25 billion per year it provides in climate funding to poorer countries by 4 billion euros ($4.7 billion) through 2027, and called on the United States to step up too.

Laurence Tubiana, CEO of the European Climate Foundation and a key broker of the Paris Agreement, said this week that

“serious pledges” were now needed from Washington given that some European nations had already raised their commitments.

“The U.S. must step up solidarity,” she said, adding she understood Washington was working hard to do so. ($1 = 0.8462 euros) (Reporting by Beh Lih Yi @behlihyi and Megan Rowling; Editing by Laurie Goering. Please credit the Thomson Reuters Foundation, the charitable arm of Thomson Reuters, that covers the lives of people around the world who struggle to live freely or fairly. Visit news.trust.org)

Scoping out corporate carbon neutrality

By Geoffrey Heal/New York

In the run-up to this year’s United Nations Climate Change Conference in Glasgow (COP26), a growing number of companies hopped on the sustainability bandwagon, declaring commitments

to achieve carbon neutrality – net-zero carbon-dioxide emissions – by mid-century. And among the many ambitious announcements to come out of COP26 is that almost 500 financial-services firms have "agreed to align $130 trillion – some 40% of the world's financial assets – with the climate goals set out in the Paris agreement, including limiting global warming to 1.5°C."

But many commentators have been sceptical about such proclamations, suggesting that they amount to greenwashing. Critics point to corporations' heavy reliance on "offsetting," which has become an increasingly important – and controversial – issue in the broader climate debate. So great is the confusion about what is real and what is not that the Taskforce on Scaling Voluntary Carbon Markets, led by UN Special Envoy for Climate Action and Finance Mark Carney, has established a new governance committee to review corporate emissions pledges.

The sceptics are right to be concerned about the use of offsets. The world needs to get to net-zero by mid-century, and it cannot do that with offsets. Companies buy offsets precisely so that they can continue emitting greenhouse gases (GHGs) while claiming that their emissions are zero, net of the offsets. The very existence of an offset means that the purchaser's emissions are not zero.

But not all offsets are alike. The critics focus on offsets in which one company or country pays another to reduce emissions and then claims the reduction as its own. This is the kind of offset that cannot be allowed if the world as a whole is to get to zero emissions. There is a place, however, for offsets generated by removing GHGs from the atmosphere, for example by direct air capture or forest growth. If a company emits 100 tons of CO_2 and then removes the same amount, its net emissions really are zero. If all companies do this, the world as a whole will achieve net-zero emissions.

True, the recourse to forestry requires a cautionary note. Growing trees raises issues of both additionality and permanence – additionality because it is hard to be sure that

the forest growth would not have occurred anyway, and permanence because there is a risk that the forest will burn, a problem that has grown more visible and severe in recent years.

Still, offsets can play a positive role. The costs of reducing GHG emissions, and the willingness and ability to pay for such reductions, vary greatly from country to country, depending on the sources of its emissions and its stage of development. Some countries may not be willing or able to pay for an expensive reduction in emissions at home but could still pay for less costly reductions abroad. When this happens, an offset market can facilitate a reduction in emissions that would not otherwise have occurred, or that would not occur without a policy that penalises CO2 emissions.

In this case, offsets may be useful at least in moving the world closer to net-zero emissions. But to reach the finish line, they will have to be phased out at some point. There ultimately is no place for offsets in a zero-emissions world.

In the meantime, policymakers and business leaders would do well to attend to a related issue that has been neglected: the failure to distinguish between so-called scope-one, scope-two, and scope-three emissions. Scope one refers to emissions that arise from a company's own operations, whereas scope two applies to those associated with the production of electric power purchased by the company, and scope three to those arising from other parts of the supply chain, particularly from the consumption of the product.

Clearly, there is potential for massive double counting here if one adds up all the emissions across companies. If my company purchases electricity from a local utility, the associated emissions are scope two for me and scope one for the utility. If Exxon sells jet fuel to American Airlines for use in Boeing aircraft, the emissions are scope three for Exxon and Boeing, and scope one for American Airlines. These emissions are counted three times, which is anathema to any competent accounting system. Every scope-two or -three emission is someone else's scope-one emission.

Fortunately, such confusion is avoidable. If every company has reduced its scope-one emissions to zero, aggregate corporate emissions will be zero. It therefore makes sense for every company to focus only on this factor. If scope-one emissions are brought to zero, scope-two and scope-three emissions will take care of themselves.
This should help to simplify the general policy guidance and instructions given to companies: Focus on reducing your scope-one emissions. Plan on phasing out offsets over the long run. And continue to look for opportunities to remove GHGs from the atmosphere, as these reductions can still be counted against your own scope-one emissions. – Project Syndicate

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Electrification and urbanisation will drive growth in copper

The long-term growth drivers of copper

The green transformation will electrify the global economy as cars go electric and more homes in colder areas will switch from natural gas as heating source to that of air to water heat pumps. In warmer parts of the world we will continue to see an acceleration in air conditioners to cool homes. The main usage of refined copper is for electrical applications, but it is also used in housing (pipes and fittings), cars, telecommunication and industrial machines. Copper has the second highest thermal conductivity at room temperature among pure metals and is thus the preferred metal used in electrical applications. As the world electrifies in the name of the green transformation and rapid urbanization continues in Asia, Africa, and South America, copper will continue to enjoy strong annual growth rates.

How to get exposure to copper?

Copper has been rebranded as a *green metal* because of its importance for the green transformation and investors are increasingly asking us how to invest in copper. The most direct way is of course to invest in high grade copper futures on COMEX (part of CME Group) with the current active contract

being the Mar 2022 contract (Saxo ticker: HGH2), but the contract has a contract value of around $106,537 at current level making it inaccessible to most retail investors. One could also invest through CFD on futures (Saxo ticker on the Mar 2022 is COPPERUSMAR22) where the investor could buy 100 pounds of copper instead of 25,000 pounds in the futures reducing the contract size to $425. However, getting exposure through CFDs and futures the investor must regularly roll the contract to the next active contract, and the investor could also incur financing cost increasing the drag on performance. The chart below shows the continuous futures contract on high grade copper since 2002.

Few miners offer pure exposure to copper

Another way to get exposure to copper that removes the difficulties of rolling futures or CFD contracts is to invest in mining companies that extract or refine copper. The table below shows 16 mining companies with exposure to copper with Codelco, the largest copper producer in the world, absent from the list as the Chilean miner is only listed in Chile and thus not investable for our clients. The copper mining industry has delivered a median total return in USD of 132.6% over the past five years beating the global equity up 105% in the same period. The rising copper prices the past year driven by investors positioning themselves in *green metals* (defined as metals that will play a key role in the green transformation) which in turn has pushed up revenue in the industry by almost 40%. Sell-side analysts are generally bullish on copper miners with a median upside of 16% from current levels. In our view investors should select one or two copper miners to get exposure and avoid the ETFs on the industry as they are too broad-based and lack the pure exposure profile needed to play the copper market.

As the table also show, there is no such thing as pure exposure to copper except for futures, options and CFDs on the underlying copper. The miner with the highest revenue exposure

to copper is Antofagasta with 84.8% revenue share from copper extraction and refining. Most copper miners also extract gold and silver as part of their copper operations. Out of the 16 copper miners in our list, only 6 of these miners have more than 50% of revenue coming from copper extraction and refining.

Outlook and risks

High grade copper futures have been range trading for more than half a year as slowing demand out of China due to a slowdown in housing construction has weighed on the demand side. On the positive side inventories have been tight in copper which has helped support the copper price and the global pipeline of new copper mines, but also potential tax charges in Chile and Peru (roughly around 40% of global supply) could negative impact supply and keep copper prices high. The annualized growth rate in global refined copper demand has been around 3% in the period 2009-2020.

China has for many years been the key driver of demand growth for copper, but going forward electrification (electric vehicles and air-to-water heat pumps and urbanization in India will begin to play a bigger marginal role on demand creating a more steady and diversified demand picture. In 2022, demand outside China will be driven by construction, grid infrastructure, and transport. Another risk to copper demand is significantly higher interest rates next year as that would curtail growth in construction which is interest rate sensitive.