



NEWS ROUNDUP

22 MARCH 2023 [08:00 am]

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ABS CBN

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AL JAZEERA

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Humanity is on thin ice. Only rapid reductions in fossil fuel use, increased efficiency and deep reductions in greenhouse gas emissions in all sectors can mean we avoid the worst of climate change, according to a new report published by the United Nation's (UN) Intergovernmental Panel on Climate Change (IPCC).

CLIMATE HOME NEWS

[The IPCC's climate scientists have done their job – now we must do ours](#)

By: Robin Webster

Today's report from the IPCC's climate scientists is attracting headlines for issuing what's been called a 'final warning' on action on climate change and a “clarion call” to massively fast-track climate efforts across every timeframe and country. Buried within it is some crucial guidance for what this means in practice.

EURO NEWS

[How can IPCC's report be turned into action? Politicians and environmentalists weigh in](#)

By: Rosie Frost

The Intergovernmental Panel on Climate Change has just released its latest report from the world's leading climate experts.

PHILIPPINE NEWS AGENCY

[DOE eyes 11,160 MW green energy auction by 2026](#)

By: Kris Crismundo

The Department of Energy (DOE) is eyeing 11,160 megawatts (MW) of renewable energy (RE) under the Green Energy Auction Program (GEAP) from 2024 to 2026, Undersecretary Rowena Cristina Guevara said Monday.

RAPPLER

[Why green energy can't gain ground in the Philippines](#)

By: Elyssa Lopez

When industrial engineer Paul Baes returned from an official work assignment in France in 2020, he was determined to turn his first home in Imus, Cavite into a sustainable one. After spending two years in the four-season country, Baes saw the benefits of owning a solar-powered home in tropical Philippines. It simply made sense.

['Tag-init' is here: Philippines' warm and dry season begins](#)

By: Acor Arceo

The weather bureau announced the end of the northeast monsoon or amihan season and the start of the Philippines' warm and dry season on Tuesday, March 21.

THE PHILIPPINE STAR

[UN chief: Rich nations must achieve net zero carbon quicker, by 2040](#)

By: Agence France Presse

UN Secretary General Antonio Guterres called on wealthy countries Monday to move up their goals of achieving carbon neutrality as close as possible to 2040, mostly from 2050 now, in order to "defuse the climate time bomb."

THE WASHINGTON POST

[Earth's oceans are showing early and surprising record warming](#)

By: Scott Dance

Earth's ocean temperatures have risen so fast in recent weeks that one indicator shows surface waters have already reached their highest temperatures on record — a worrisome sign ahead of a predicted El Niño climate pattern that could further accelerate planetary warming.

CCC IN THE NEWS:

BUSINESS MIRROR

[Climate Change Commission: 1.2M farmers in PHL to benefit from 'Adapting Philippine Agriculture to Climate Change' project](#)

By: Samuel P. Medenilla

AT least 1.25 million poor farmers are expected to benefit from a \$39.3-million project that seeks to boost the climate change resilience and development of the country's agriculture sector.

DAILY TRIBUNE

[CCC calls for urgent delivery of climate action commitment](#)

By: Lade Jean Kabagani

The Climate Change Commission on Monday called on for urgent delivery of global commitment to climate action, particularly the funding for climate-related loss and damages.

GMA NEWS ONLINE

[‘Ultimate no-brainer:’ UN officials, top scientists renew call for strong political action to address climate change](#)

By: Jhesset O. Enano

Top officials and leading climate scientists from the United Nations renewed their call for strong political commitments and urgent climate action, as they echoed a warning over the rapidly closing window to address catastrophic climate change.

MANILA BULLETIN

[CCC urges delivery of global climate action commitments](#)

By: Argyll Cyrus Geducos

The Climate Change Commission (CCC) called for the urgent delivery of global commitment to climate action, particularly the funding for climate-related loss and damage, citing the role of governments to act on its mandates.

THE PHILIPPINE STAR

[Green groups call for end to fossil fuel addiction to avert catastrophic future](#)

By: Gaea Katreena Cabico

Staving off the worst impacts of the climate crisis requires governments to kick their fossil fuel habit as soon as possible and shift to renewable energy systems, climate and environment groups said following the release of a capstone report from the United Nations’ climate advisory panel.

Information and Knowledge Management Division

ABS CBN

First Gen unit inks special use deal with DENR for 120-MW Aya hydro project

The Department of Environment and Natural Resources signed a deal with a subsidiary of First Gen Hydro Power Corporation for the development of a 120-megawatt pumped storage hydroelectric facility in Pantabangan, Nueva Ecija while preserving the project site as part of a protected area, the firm said on Tuesday.

The Special Use Agreement in Protected Areas (SAPA) enables First Gen Hydro Power Corp (FGHPC) to use a 36-hectare portion of the 84,000-hectare Pantabangan-Carranglan Watershed Forest Reserve for the Aya Pumped-Storage Hydroelectric Power Project or Aya Project, First Gen said in a statement.

DENR issues SAPA to enable productive use of the Philippines' protected areas by providing access to economic opportunities. This also ensures that projects are consistent with the principles of sustainable development and biodiversity conservation, First Gen said.

"This is one of our most crucial permits. We are thrilled to be able to continue our work on the Aya Pumped-Storage Project, and we are grateful for the support of our partners in DENR. We are also thankful to the [LGUs] and our stakeholders for their vote of confidence in us and for choosing us as their newest partner in protecting the watershed forest reserve," First Gen Senior Vice President Dennis Gonzales said.

First Gen said the agreement is valid for 25 years, subject to renewal for another 25 years. FGHPC remitted to DENR a P69.1-million check as SAPA fee, it added.

The clean energy provider said the signing of the SAPA is in line with the Expanded National Integrated Protected Areas System (E-NIPAS) Act.

FGHPC's Aya Project is in support of the government's program to meet the country's growing demand for electricity while keeping carbon emissions low.

"Ito ang mag-boost ng ekonomiya sa bayan ng Pantabangan dahil it will generate employment especially when the pumped storage starts operations. Ang ating LGUs [local government units], may additional income na maibabalik din sa pangangalaga at proteksyon sa watershed," DENR's Assistant Regional Technical Director Forester Joselito Blanco.

“Our partner First Gen Hydro advocates biodiversity conservation. Doon sa mga areas na may footprint niyo, talagang makikita ang partnership ng private sector at government in terms of managing our natural resources,” he added.

(This will boost the economy of Pantabangan because it will generate employment... Our LGUs will have additional income they could use to protect the watershed... In areas with your footprint, you can see the partnership of the private sector and government.)

FGHPC also manages the 132-MW Pantabangan-Masiway hydroelectric power plant. Its hydro facilities form part of First Gen’s portfolio of power plants that run on clean and renewable energy sources.

First Gen is a subsidiary of Lopez-led First Philippine Holdings Corp, a conglomerate with a strong advocacy to protect the environment.

news.abs-cbn.com is also part of the Lopez group of companies.

AL JAZEERA

[Greta Thunberg, climate activists greenlighted to sue Sweden](#)

A Swedish court has given Greta Thunberg and hundreds of other climate activists the go-ahead to proceed with a class action lawsuit against the Swedish government for “insufficient climate policy”.

Thunberg and 600 other young activists in a group called Aurora sued the Swedish state in November, claiming it had to do more to limit global warming to 1.5 degrees Celsius (2.7 Fahrenheit) in order to live up to the European Convention on Human Rights.

On Tuesday, Nacka District Court said the lawsuit could go ahead after the group made adjustments to the claim.

“The district court has today issued a summons in a high-profile class action lawsuit,” the court said in a statement. “In the case, demands have been made for the district court to determine that the state has an obligation to take certain specified measures to limit climate change.”

The Swedish state has three months to respond to the lawsuit before the case could be heard or settled in writing, the district court said, adding it could not say when the suit might be decided.

Aurora wants the court to decide that Sweden needs to cut emissions by at least 6.5 to 9.4 million tonnes of CO₂ per year, starting from 2019.

“The health and future of the planet, and that of ours, is directly dependent on whether or not our politicians recognize the seriousness of the climate crisis, and so Aurora wants to do everything we can to get you to do so,” the group said in an open letter to the Swedish government last year.

‘Choices we make now’

On Monday, United Nations Secretary-General Antonio Guterres warned the “climate time bomb is ticking” as he urged rich nations to slash emissions sooner after a new assessment from UN scientists said there was little time to lose in tackling climate change.

“This report offers hope and it provides a warning,” chair of the Intergovernmental Panel on Climate Change Hoesung Lee said. “The choices we make now and in the next few years will reverberate around the world for hundreds, even thousands, of years.”

Alex Rafalowicz, executive director of the Fossil Fuel Non-Proliferation Treaty Initiative, said the only way to prevent the “worst-case climate change scenarios” is to immediately constrain hydrocarbon production.

“The coal, oil and gas we already have under production will blow us past our climate goals,” he said.

“The summary for policymakers is simple: stop new fossil fuel projects, phase down existing polluting projects, put renewable energy access into hyperdrive. The science is unequivocal, the problem is the lack of political will that prevents us from acting boldly to reverse this crisis.”

AP NEWS

[Waste pickers collect food waste, help combat climate change](#)

By: Jennifer McDermott and Joael Calupitan

Marilene Capentes pushes a cart along the streets of Malabon city just north of Manila every morning except Sundays, collecting bags of segregated garbage.

She places the food waste in a designated container so it can be turned to compost at the local recycling facility. The rest of the waste goes into separate containers and the recyclables are later sold.

Capentes, who is 47, said the trash used to be all mixed together — and heavy — until a local environmental nonprofit started asking residents to separate it a few years ago. The Mother Earth Foundation in the Philippines, as a member of the Global Alliance for Incinerator Alternatives, is trying to prevent food waste from going to landfills, where it emits methane as it breaks down and rots. Methane is an extraordinarily powerful greenhouse gas responsible for about 30% of today's global warming.

Along Capentes' route, 50-year-old resident Vilma Mendoza now understands the importance of diverting organic waste from landfills to reduce methane emissions to try to limit future warming.

"If you mixed biodegradable to the non-biodegradable and throw it in the landfill, our environment will suffer," she said.

Preventing waste from going into landfills, incinerators or the environment is a proven, affordable climate solution, according to GAIA. The international environmental organization, which advocates for waste reduction, is supporting its members, including waste picker groups around the world, that are working with government officials to set up systems to segregate and collect organic waste and establish facilities to compost it.

This is happening mainly in the Global South where waste pickers are already working in many communities and cities. Millions of people worldwide make a living as waste pickers, collecting, sorting, recycling and selling materials such as plastics, paper, copper and steel.

The world needs better systems for dealing with waste because existing ways are contributing to climate change, said Kait Siegel, the waste sector manager on the methane pollution prevention team at the environmental nonprofit Clean Air Task Force.

She said organics diversion and treatment is “absolutely” an important way to reduce methane emissions.

“We’ve seen these solutions make a difference in countries around the world,” she said. “We’re all creating organic waste in our day-to-day lives. And that’s something that we can be engaging with, in working towards slowing the pace of climate change.”

There’s more interest in this strategy now because the Global Methane Pledge, launched in November 2021, has pushed countries to take a hard look at their sources of methane. More than 100 countries, including the United States, have agreed to reduce methane emissions by 30% by 2030, though other major methane emitters refused.

Methane is more potent at trapping heat than carbon dioxide, but doesn’t stay in the atmosphere nearly as long — around 12 years compared with centuries. Many see bringing down methane emissions as a crucial, quick way to curb further warming.

The largest anthropogenic source is agriculture, closely followed by the energy sector, which includes emissions from coal, oil, natural gas and biofuels, according to the International Energy Agency.

The waste sector is the third largest source of anthropogenic methane emissions worldwide, accounting for about 20% of the total. About 60% of waste in Global South communities is organic, according to GAIA. That’s 130 tons of waste per day in just Malabon city, population 380,000.

At a materials recycling facility in Malabon, organic waste collected from households is turned into compost that goes into a community garden to grow vegetables. Some of the food waste goes into a biodigester that breaks it down to turn it into biogas, which is then used to cook vegetables for waste workers to eat. It’s a complete cycle, said Froilan Grate, executive director of GAIA Asia Pacific. Workers typically each have a route of about 200 households, Grate added.

Grate, who is based in Manila, said there are challenges in establishing these systems in new places. It costs money upfront to set up a facility for composting, residents and local officials have to be educated on the importance of separating waste, bins have to be provided for households that can’t afford more than one, and sometimes it’s just not a priority. Also, unlike recyclables and metals, there isn’t a large market for organic materials so waste workers must be paid for the service they are providing for the system to work.

But Grate is confident these challenges can be overcome. More people are making the connection between reducing methane and addressing climate change, so there is more interest from cities and philanthropic groups that could help with startup costs, he said. And cities are seeing the benefits of sound waste management because it reduces vermin that cause disease, helps ensure cleaner drinking water, gives waste workers a sustainable livelihood and helps the planet, he added.

In the Philippines, cities pay waste workers with the money they save in tipping fees by sending fewer truckloads to landfills.

In Brazil, one of the world's five largest methane emitters, there is now interest in supporting waste pickers, investing in waste recycling and fighting climate change since President Luiz Inácio Lula da Silva took office in January, said Victor Hugo Argentino de Moraes Vieira, a zero waste adviser and researcher at Instituto Pólis.

A large composting site has been operating for years on the northeast coast in Bahia, an area popular with tourists. Waste pickers there developed a system themselves to collect organic waste from hotels and restaurants, but few other waste pickers collect food waste.

Jeane dos Santos in Salvador said she started working as a waste picker at the age of 7. She's now 41 and part of the National Movement of Waste Pickers of Brazil. She collects and sells recyclable waste, though a lot of it turns out to be either non-recyclable plastic or contaminated by food waste.

Dos Santos is part of a cooperative of waste pickers whose income derives solely from the recyclables they sell. She said she's interested in collecting organic waste if it could be segregated, because then the recyclable items won't be contaminated and the waste pickers could earn money if the state supports these efforts.

"I earn enough to survive. However, I would like to earn more if we had the proper state support," she said. "Currently, we provide a public service and we are not rewarded by that."

Local waste pickers could educate households, and society, about how to properly separate their waste, dos Santos added.

In South Africa, it's also not common to separate organic waste. But for the past two years it's been tested out at a large market in the port city of Durban.

“It can be a game changer for the continent,” said Niven Reddy, the African regional coordinator for GAIA. “It can be tested and tried. If it works in Africa in one place, it’s likely to work someplace else — 400,000 people go through that market a day.”

GAIA leaders like Reddy are looking to the systems established in the Philippines as a model.

“I do feel like it demonstrates the Global South’s leadership on issues like this of methane reduction,” he said. “I think it’s really impressive. And I feel like it’s highly implementable.”

BBC

[Climate change: Can we really take CO2 back out the air?](#)

By: Jocelyn Timperley

Humanity is on thin ice. Only rapid reductions in fossil fuel use, increased efficiency and deep reductions in greenhouse gas emissions in all sectors can mean we avoid the worst of climate change, according to a new report published by the United Nation's (UN) Intergovernmental Panel on Climate Change (IPCC).

The new report should serve as a "a survival guide for humanity", according to UN chief Antonio Guterres, who recommended an "everything, everywhere, all at once" approach to climate action.

Alongside measures to reduce the amount of carbon being emitted into the atmosphere, this approach will likely need include another action that scientists see as increasingly, if frustratingly, necessary: carbon dioxide (CO2) removal.

The term refers to a variety of mechanisms and technologies that would pull CO2 back out of the air and trap it so it cannot contribute to the greenhouse effect that is warming our planet. The idea is to actively reverse the emissions that humans have pumped into the atmosphere. Techniques on the table include everything from direct air capture or bioenergy with carbon capture and storage (CCS) to biochar or enhanced rock weathering.

But how feasible is it to scale the assorted proposed methods for removing CO2 to the levels that would make a meaningful difference to the climate? Are some options better than the others? And which schemes run the risk of simply being too crackpot to ever stand a chance?

Since the world has now failed for decades to curb the rise of greenhouse gas emissions, some form of CO2 removal is now seen by many scientists as essential to limiting dangerous climate change. (Read more about how the climate is faring in 2023).

Rob Bellamy, a lecturer in climate and society at the University of Manchester, says the IPCC report makes it clear that taking CO2 out of the air is "not just an option – but a necessity". However he warned carbon removal methods also bring significant risks to both people and the environment.

"We now need a wide-ranging societal conversation about which methods to take forward, how to incentivise them, and ultimately how to govern them. Make no mistake, we need to do carbon removal; but we need to do it responsibly."

In particular, the new IPCC report notes that CO₂ removal will be needed to counterbalance "hard-to-abate residual greenhouse gas emissions" in order to reach net-zero CO₂ or greenhouse gas emissions. Sectors with these hard-to-abate emissions include agriculture, aviation, shipping and industrial processes, it notes (these sectors are considered hard to reduce emissions in either due to a lack of technology or the high expense of decarbonisation).

But not all scientists agree. Some are concerned about the feasibility of CO₂ removal on a large scale and say it would be a mistake to rely too heavily upon it. They also warn it could provide an unwarranted and risky excuse for governments to avoid the deep emissions cuts needed to tackle climate change.

"The IPCC reports show that we can prevent irreversible harm to people and the planet if we scale up proven solutions available now: replacing fossil fuels with renewables, increasing energy efficiency, and reducing energy and resource use are the surest path to limiting global warming to 1.5C," says Lili Fuhr, deputy director of the climate and energy programme, at the Center for International Environmental Law (Ciel), a non-profit environmental law firm based in Geneva, Switzerland.

"Building our mitigation strategies on models that instead lock in inequitable growth and conveniently assume away the risks of technofixes like carbon capture and storage and CO₂ removal ignores that clarion message and increases the likelihood of overshoot," says Fuhr. (See below for more on climate overshoot)

How much do we need?

Earlier this year, a report led by researchers at the University of Oxford gave the first ever full assessment of the current state of CO₂ removal by humans globally. It calculated this number at around two billion tonnes (GT) of CO₂ per year. This is equal to roughly 5% of the 36.6 GtCO₂ emitted into the atmosphere by the use of fossil fuels and cement in 2022.

But there are currently few plans by countries to scale up CO₂ removal above current levels, the report found.

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- What if polluters footed the climate bill?

In its own assessments, the IPCC looks at different pathways to achieving emissions cuts in line with various degrees of ambition. Most of these pathways now require some level of CO₂ removal techniques, and virtually all scenarios consistent with the Paris Agreement goals to limit warming to 1.5C or well below 2C include at least some CO₂ removal. The world is currently on track for 2.4C rise by 2100 if all UN country climate pledges are fully implemented, or 2.8C by 2100 if only the climate policies already in place are considered.

The exact amount of removal needed to reach this level, however, strongly depends on what cuts to emissions are made – making it hard to put an exact figure on it. Scenarios showing steep and rapid emissions cuts require the lowest amount of CO₂ removal.

Some of the IPCC scenarios also allow for "climate overshoot" – a period when the global temperature goals are temporarily exceeded before dropping back to the targeted value. Bringing temperatures down like this would require some kind of CO₂ removal, the IPCC says.

What are the options?

There are a huge variety of different ways we could potentially remove CO₂ from the air. It's worth noting, however, that no technological methods have been proven at scale.

The graph below shows the estimated emissions reduction potential of several different techniques from the University of Oxford CO₂ removal assessment.

Bioenergy with carbon capture and storage is the most prominent technological method in the IPCC report. Here, trees are grown to capture CO₂ before being burnt in a plant for energy. The emissions from the plant are captured and stored permanently underground, a practice known as carbon capture and storage (CCS).

Another much discussed technological method for removing CO₂ from the atmosphere is direct air capture (DAC). The technique uses machines to pull CO₂ directly out of the air. If this CO₂ is permanently stored underground using CCS, the overall emissions are negative. The vast majority of investment between 2020 and 2022 focussed on this form of CO₂ removal. (Read more about the device that reverses CO₂ emissions.)

Using biochar for CO₂ removal, meanwhile, would involve using biomass such as trees or plant matter, which has captured carbon while growing, being pyrolysed (heated in the absence of oxygen) to produce a black, coal-like substance which consists mainly of elemental carbon. This biochar can then be added to soils, in theory locking the carbon away.

Enhanced rock weathering has also been proposed as a way to remove CO₂ from the atmosphere. This would consist of spreading large amounts of finely ground silicate rock such as basalt onto land in an effort to mimic natural rock weathering, eventually leading to CO₂ being trapped in the ocean as bicarbonate or locked up on the sea floor.

Finally, ocean alkalisation is another proposed process which would involve adding alkaline materials to the ocean such as silicate or carbonate rocks to increase the amount of CO₂ it takes in. Similarly, ocean fertilisation would involve stimulating phytoplankton growth in the ocean to enhance carbon sequestration.

Despite being much hyped, these "novel" methods of CO₂ are also in reality still in their infancy. Steve Smith, executive director of Oxford Net Zero and CO₂RE at the University of Oxford and lead author of the CO₂ removal assessment, notes that even combined all of the above methods remove just two million tonnes of CO₂ per year (Mt CO₂/yr). That is an amount equal to 0.005% of global fossil fuel and cement emissions in 2022.

According to the CO₂ removal assessment, capture via these methods need to grow by four to six orders of magnitude by mid-century to meet the Paris Agreement temperature goals.

But there are other ways to capture and store carbon which are already in far wider use, the assessment noted. In fact, 99.9% of the 2Gt of anthropogenic CO₂ removal which takes place each year occurs via ways we manage land – in particular forest management, afforestation and reforestation. Restoration of other ecosystems which store a lot of carbon, such as peatlands and mangroves are also important sources.

Restoring these ecosystems also provides huge co-benefits as it is essential to increasing resilience to climate change impacts and tackling the biodiversity crisis.

The limits of negative emissions

Still, there are limits to how much these natural systems can capture carbon. Scientists have warned we must not place too much faith in trees to save us, and that they

certainly cannot reverse climate change on their own. There are also risks that restoration of these ecosystems might not prove permanent, especially as temperatures rise, so the CO₂ they have stored could end up being released back into the atmosphere.

And scientists warn there could be significant issues with scaling up many of the novel technologies too.

For example, many experts consider ocean alkalinisation and fertilisation too risky for the marine environment and think they may not work anyway.

A large-scale rollout of bioenergy with CCS, meanwhile, would require enormous areas of land to be turned over to bioenergy crops, which could in turn imperil food systems and conservation of ecosystems.

There are similar concerns for the large amount of land that would be needed for biochar production (the long-term impacts of wide-scale biochar use are also unknown), and the high temperatures needed to produce biochar require lots of energy.

Similarly, pulverising rock for enhanced rock weathering would also use lots of energy and could be very expensive.

Dac with CCS is also energy-intensive and could prove extremely expensive to deploy at large scales, although some scientists are working on new methods they hope could be cheaper.

There are increasing numbers of CCS facilities around the world, but carbon storage has not yet been achieved on a large scale and, the IPCC notes, is currently far below what is needed. However, the IPCC says that there is enough technical geological storage capacity globally for all CO₂ storage needed through 2100 to limit global warming to 1.5C.

Although scientists are settling on the need for negative emissions at some point in the future, the lion's share of the emissions gap to 2030 still ought to be closed by cutting emissions, says Smith.

In the absence of new policies to tackle climate change, however, we only get roughly to a flatlining of global emissions during 2020-2030. CO₂ removal then becomes crucial, he says – especially over the longer-run.

Responding to the new IPCC report, climate activist Greta Thunberg called the failure of those in power to act on the climate crisis an "unprecedented betrayal". Sadly, the world may now be entering the territory of having to undo the damage using methods that are far more difficult and risky than it would have been to stop emissions in the first place.

CLIMATE HOME NEWS

[The IPCC's climate scientists have done their job – now we must do ours](#)

By: Robin Webster

Today's report from the IPCC's climate scientists is attracting headlines for issuing what's been called a 'final warning' on action on climate change and a "clarion call" to massively fast-track climate efforts across every timeframe and country. Buried within it is some crucial guidance for what this means in practice.

The report states that "attention to equity and broad and meaningful participation" can build "social trust" and so "deepen and widen support for transformative changes."

To put that in non-IPCC language; in climate policy, people matter. The kind of radical social changes supported – demanded – by this report simply won't happen without the consent and participation of citizens around the world.

But reports, however brilliant, however terrifying, don't inspire action. That falls to us, as citizens, led by our governments around the world.

For many years, this critical part of the climate change response has been strangely ignored. Socially marginalised and economically vulnerable citizens, and those who are more impacted by changing temperatures, remain excluded from the conversation.

Rebellions against climate policies emerge as a result. Governments pay lip-service to the idea of communicating with and engaging citizens. But as the Committee on Climate Change has recognised in the UK, there's rarely a plan for how to do it.

Governments around the world actually have a formal duty – embedded in article 6 of the UNFCCC – to educate their citizens on climate change, involve them in policymaking and ensure they have all the necessary information.

The UNFCCC's Action for Climate Empowerment (ACE) is made up of six elements: education, training, public awareness, public participation, public access to information and international cooperation. These six principles are all core to public engagement, and most importantly to holding governments accountable.

States are legally obliged to implement many of elements of ACE, but many are not aware of it yet. It is vital that we continue to make the case to them about the importance of public engagement if we are to avert climate breakdown.

Governments are important not just as policymakers, but educators. Today's report specifically flags the importance of "education including capacity building, climate literacy, and information provided through climate services and community approaches" to "heighten risk perception and accelerate behavioural changes and planning".

What does that mean in practice? Providing more and more frightening information about the coming impacts of climate change can just as easily be overwhelming and despair-inducing as helpful.

So what we need instead are bold, positive campaigns that support feelings of 'efficacy' – giving people that feeling that it's possible to do something on climate change, and that that something has the potential to make a difference. This applies, for example, to campaigns around getting football fans talking about and pledging action on climate change, changing travel behaviours, or getting involved with Fridays for Future.

Climate change communications shows that people take action when they see their values, identities and concerns reflected in the story being told, and are able to observe and hear about their peers taking action.

Citizens who are going to change their lives need to be supported to do so in communities of collective action, whether that's with communities in big cities boosting access to green spaces or social housing tenants leading the conversation on housing retrofit.

Achieving this isn't easy. At the government level, doing this right means bringing together social science, communication and policy experts alongside businesses and citizens involved in tackling climate change in their lives and communities. It means making public engagement a core function of government, and funding it properly. It means introducing climate policy that treats everyone as they should be treated.

It's a big challenge. But attitudes towards – and concern about – climate change is changing rapidly. Climate Outreach's research shows that people are hungry for change and aware of the need for profound social transformation, but in many cases desperately seeking support and information about how they can be involved. Turbo-charging public engagement means pushing at an open door.

I'll end with some more words from IPCC: "Climate resilient development is advanced when actors work in equitable, just and inclusive ways to reconcile divergent interests, values and worldviews, toward equitable and just outcomes."

Pulling people together to take action on climate change requires a true bottom up, listening, participatory approach to working with different people across societies. Achieving this isn't the job of the scientists. They've done their job. Now governments and all of us need to do ours.

EURO NEWS

[How can IPCC's report be turned into action? Politicians and environmentalists weigh in](#)

By: Rosie Frost

The Intergovernmental Panel on Climate Change has just released its latest report from the world's leading climate experts.

They say that the reality of the crisis is bad and it is rapidly getting worse. Read our full article about the report here and an explainer on IPCC reports here.

But the IPCC's scientists have underlined that there is an enormous opportunity to change the course of the future - it is "now or never".

The Paris Agreement warming limit of 1.5C is still within reach. We have the solutions we need in this critical decade to cut emissions and exit from fossil fuels.

So how have politicians, conservationists and environmental groups reacted to the IPCC's "final warning" on the climate crisis?

COP28 will be crucial in this decade of action

The COP28 Presidency says that the report "underscored what we already know: the world is not on track to achieve the goals of the Paris Agreement".

It adds that the evidence is clear, emissions aren't falling fast enough and the most vulnerable who have contributed the least to climate change are experiencing the worst impacts.

"COP28, hosted by the UAE, will be crucial in this decade of action."

The Presidency will lead the response to the Global Stocktake - the first ever "report card" on countries' progress towards the Paris Agreement. Guided by the IPCC, it explains that this must be the moment to "usher in a complete and urgent response that accelerates all our efforts".

At COP28, the UAE will need everyone to work together on solutions while prioritising inclusivity, accountability and transparency. Big industries need to go further in their climate action. Trillions of dollars need to be unlocked to enable this immense transition.

“Let us work together, in solidarity, to deliver a plan that is based on the excellent work of the IPCC, and accelerated by truly global cooperation,” encourages the COP28 Presidency.

A basis for more ambition at COP28

The IPCC Synthesis Report will now be used by governments to set climate targets and policies for the future.

The European Commission’s Executive Vice-President for the European Green Deal, Frans Timmermans, said it should be the basis for more ambition at COP28 in the UAE later this year.

“The science is clear: the longer we wait with deep emissions cuts, the higher the risks, the more damage,” he wrote on Twitter.

Timmermans suggested that nations need to put forward updated Nationally Determined Contributions - climate promises from countries around the world.

“As soon as negotiations on #Fitfor55 are final, the EU is ready to update its NDC, as announced last year,” he added.

“We call on other parties to follow suit to ensure that we keep 1.5 degrees within reach, as they promised in Glasgow and Sharm el-Sheikh.”

Timmermans also said it shows the need for a global emissions peak by 2025, the phase-out of unabated fossil fuel use, and robust domestic policies that “get the job done”.

IPCC report is a ‘terrifying flood’ of evidence on the reality of climate change
Humanitarian organisation ActionAid says the major IPCC report needs to be “the trigger that moves the world from grudging acceptance to rapid action”.

Its global lead on climate justice Teresa Anderson explains that there is a “terrifying flood” of evidence showing that the climate impacts are already worse and harming billions more people than was predicted even just a few years ago.

“It proves the urgent need for the UN to make good on last year’s historic decision at COP27 to create a new fund to help communities affected by climate-induced loss and damage,” Anderson says.

For the NGO's country director in Vanuatu, Flora Vano, the report hits home. The island in the South Pacific Ocean faces regular and intense weather events.

"This report is important because it captures the dire state of the planet and forecasts a future dictated by ever-intensifying and frequent disasters," says Vano.

"But in Vanuatu, I only need to leave my home to witness the harsh realities of a warming world."

This month alone, it has experienced two cyclones in the space of a week and the situation is desperate. Vano says this is "the reality of climate change".

"We don't want to be told to move to another island or another country."

Nature is the climate's secret ally

Nature is climate's secret ally - IPCC science shows nature has absorbed around 54 per cent of human-related carbon dioxide emissions over the past decade, according to WWF.

In the wake of the report, scientists from the independent conservation organisation are calling on governments to accelerate action to phase out fossil fuels, slash emissions and restore nature.

"The evidence is crystal clear, the science is unequivocal - it's just the lack of political will that's holding us back from the bold action that's necessary to avert a climate catastrophe," says Dr Stephen Cornelius, WWF's Global Deputy Lead Climate and Energy.

"Leaders who ignore the science of climate change are failing their people. A rapid phase-out of fossil fuels is essential, as is protecting and restoring natural ecosystems."

Cornelius adds that we can't hope to limit global warming to 1.5C, adapt to climate change and save lives and livelihoods without acting to safeguard and restore nature.

"Nature is a non-negotiable part of the solution to the climate crisis."

PHILIPPINE NEWS AGENCY

[DOE eyes 11,160 MW green energy auction by 2026](#)

By: Kris Crismundo

The Department of Energy (DOE) is eyeing 11,160 megawatts (MW) of renewable energy (RE) under the Green Energy Auction Program (GEAP) from 2024 to 2026, Undersecretary Rowena Cristina Guevara said Monday.

During the opening of the Philippine electric power industry forum organized by the Independent Electricity Market Operator of the Philippines (IEMOP) at Diamond Hotel in Manila, Guevarra said the agency has proposed installation targets of 3,590 MW this year, 3,630 MW in 2025 and 4,390 MW in 2026.

“Compared to the first auction of GEA-1 last year, we are more aggressive this year and we are looking for RE developers who have ready capacity next year,” she said.

Of the 3,590 MW installation targets for next year, 2,400 MW is for the Luzon grid, 860 for Visayas and 330 for Mindanao.

These will involve RE resources, including ground-mounted solar, rood-mounted solar, onshore wind and biomass.

The DOE targets to hold the GEA-2 in June this year following the success of the first GEA in 2022 with 2,000 MW of clean energy involved in the bidding.

By 2025, installation targets will be 2,325 MW for Luzon, 940 MW for Visayas and 365 MW for Mindanao.

In 2026, these targets will be 2,990 MW RE installation in Luzon, 905 MW in Visayas and 495 MW in Mindanao.

The DOE conducts the GEAP to provide additional market for RE through competitive electronic bidding of RE capacities.

The program is also designed to attract more investments in the RE sector in the country.

Meanwhile, DOE’s GEAP-3 will involve geothermal and impounding hydro resources.

Guevarra said the agency is developing a specific auction policy for geothermal and impounding hydropower.

The DOE aims to conduct GEA-3 by the fourth quarter of 2023.

RAPPLER

[Why green energy can't gain ground in the Philippines](#)

By: Elyssa Lopez

When industrial engineer Paul Baes returned from an official work assignment in France in 2020, he was determined to turn his first home in Imus, Cavite into a sustainable one. After spending two years in the four-season country, Baes saw the benefits of owning a solar-powered home in tropical Philippines. It simply made sense.

“Most of my colleagues there (in France) were excited for the summer – not just for sand and seas – but because of the potential electricity savings,” he said. Most of Baes’ French co-workers have solar panels installed in their homes even though they only enjoy the most sunlight during the summer months.

Baes’ dream of a solar-powered home has since become reality. For over a year now, his electric bill has been zero.

“Aside from the economic savings, I think it’s also time to contribute something positive to the environment. We don’t want our child to suffer due to past and current neglect and carelessness,” said Baes, whose wife recently gave birth to their first child.

But Baes’ home is one in a million. As of October 2022, only 7,365 of the total 26.4 million households in the country have benefited from the government’s “net metering” program, more than a decade since it was introduced through the Renewable Energy (RE) Act.

Net metering customers can power their homes through solar panels, and when these panels produce more electricity than needed, they may sell the excess power to distribution utilities.

The slow take-up of net metering is only one of the many effects of the dismal, piecemeal, and problematic implementation of the landmark law, preventing many Filipinos from having homes like Baes’.

When the Renewable Energy Act, or Republic Act (RA) 9513, was passed in December 2008, the country was reeling from the effects of the global financial crisis. It was envisioned to drive investments in the country’s expanding renewable energy industry. In fact, by the time the law’s implementing rules and regulations were published in 2009, a third of the country’s energy already came from renewable energy sources.

These sources are available in abundance and are replenished by nature such as the sun, wind, and water, and emit little to no greenhouse gases or pollutants into the air. The passage of the law was meant to ride on this momentum, help spur the development of affordable and cleaner energy sources, and lessen the country's high dependency on fossil fuels.

But 14 years since the law was passed, high electricity prices prevail, no thanks to the high cost of imported fuel running most of the country's coal-fired power plants. From 30% in 2009, renewable energy sources now account for just 21% of the country's power mix. Coal continues to have the biggest share.

Stakeholders blame the "dilly-dallying" of the past administrations on the law's piecemeal implementation, as well as the problematic execution of some of its mechanisms. Environmental groups even had to file a case before the Supreme Court to push the Department of Energy (DOE) to implement the other mechanisms of the Renewable Energy Law.

RE law on the slow lane

"The impact of the full implementation of the Renewable Energy Law mechanisms is just starting...kasi talagang nag-dilly-dally sila (because they really dilly-dallied) in the last decade," said Gerry Arances, executive director of Center for Energy, Ecology and Development (CEED).

CEED is part of the Philippine Movement for Climate Justice (PMCJ), a network of environmental groups and individuals that filed a petition for mandamus before the Supreme Court in 2017 to compel the DOE and the Department of Environment and Natural Resources to implement their mandate as "vanguards of energy security and environmental sustainability."

The petitioners accused the two departments of allowing "coal plants to proliferate, making the country more, instead of less, dependent on fossil fuels."

One of PMCJ's petitions was for the DOE to implement mechanisms in RA 9513 to mainstream the adoption of renewable energy sources in the country such as the Renewable Portfolio Standards (RPS) and the Green Energy Option Program (GEOP).

The DOE did not contest the petition. By the end of that year, it released guidelines for the RPS, the mechanism forcing utility companies to tap renewable energy plants. But the GEOP guidelines, which allow commercial and industrial customers to source 100%

of their energy from retail renewable electricity suppliers, were promulgated only in 2021.

Another mechanism, the Green Energy Auction Program (GEAP), which aims to supplement the RPS requirements of distribution companies by auctioning certain capacities to renewable power generators, was only implemented in 2022.

“The problem with the DOE is it has circulars, but can they implement it?” a solar energy farm operator told PCIJ. “Policy is not enough.”

Scheme to scale up RE opposed

Before the 2017 Supreme Court case unlocked multiple Renewable Energy Law mechanisms, the DOE had already started implementing the Feed-in-Tariff (FiT) scheme, a widely used tool for developing renewable power.

In a FiT scheme, renewable energy producers receive guaranteed payment on a long-term basis, usually spanning 15 to 20 years. The cost of the tariff payments is typically shared with consumers. In Vietnam, the FiT scheme built a solar capacity of 4,460 MW in just two years. Now at least a tenth of its generated electricity comes from solar power.

But when the mechanism was introduced in 2010, it was met with criticism over the price and duration set by the government.

The Energy Regulatory Commission (ERC) set the FiT price by the kind of RE technology and the duration at 20 years. At that time, the country’s rates were at a premium compared with generation rates offered by fossil fuel plants and were also higher than those offered in the rest of the region.

“At the early part of the implementation of the feed-in tariff, there was a lot of opposition,” former energy undersecretary Jay Layug told PCIJ. “In fact, one of them even filed a case.... Foundation For Economic Freedom (FEF). They were complaining about renewables being expensive.”

FEF is an economic lobby group whose members include past and present Cabinet members. It is headed by former officials of the Marcos Sr. administration, namely Cesar Virata and Gerardo Sicat.

In 2011, FEF filed for a temporary restraining order against the hearings of the ERC, the agency in charge of setting the FiT rates, supposedly over its “questionable procedures.” The group argued that guaranteed payments to RE developers were subsidized by consumers and were reflected on their monthly electricity bills.

“It really does leave a bad taste since you see it as an additional charge in your bill,” Albert Dalusung III, adviser for the local think tank Institute for Climate and Sustainable Cities, told PCIJ. “But without it, we would have paid higher electricity prices.”

Aside from guaranteed payments, eligible RE developers under the FiT scheme were also assured of connection to and transmission from the grid. This is called the “priority dispatch policy.” As price takers in the wholesale electricity spot market or WESM, RE plants can then displace the more expensive energy resources like coal-fired power plants.

Perceived high cost of RE

The scheme did attract investments. The years 2014 and 2016 saw the highest year-on-year increases in renewable energy installed capacities in the past decade, as the applications on the two rounds of FiT were swarmed with interest from both local and international investors.

The later round also adopted a “first-to-build” policy, meaning, developers must have completed 80% of the project before a stated deadline for them to be eligible for FiT benefits. In a race to acquire these incentives, developers rushed to build plants.

“But we never got to fully transmit our capacity until 2021,” said a representative of an RE company that was awarded FiT benefits in 2016. “For years, we only sold 50% of our capacity.”

The source requested anonymity over concerns their future participation in RE programs could be affected.

This was common among renewable energy developers, which had renewable power produced but could not sell it because the electricity grid isn’t fully developed in areas where they are located.

Critics said FiT proved incapable of developing the renewable energy industry.

“The added capacity of FiT-eligible generating plants did not translate to a growing share of RE in the power generation mix with coal contributing 50% of the total mix,” a 2020 Ateneo paper on the economic effects of the FiT policy read.

“With the continuing increase in electricity prices, the FiT is turning out to be an additional short-term burden to the Filipinos.”

Dalusung said the FiT program managed to increase the country’s installed renewable energy capacity.

“But it was not enough. It was not enough to stem the huge uptake on coal-fired power plant generation,” he said.

PCIJ’s analysis of DOE data showed that from 2009 to 2021, the average annual increase in installed capacity of coal-fired power plants was 9%. From 4,277 MW in 2009 when the RE law was passed, it nearly tripled to 11,669 MW in 2021.

Renewable energy capacity, meanwhile, increased by just 3.42% over the same period, from 5,309 MW in 2009 to 7,914 MW in 2021.

The “perceived” premium cost of renewable energy technologies over other power generators also slowed down the implementation of the law, said Mylene Capongcol, director of the Renewable Energy Management Bureau (REMB).

For context, data from the International Renewable Energy Agency (IRENA) showed that in 2010, the average global cost of electricity from solar projects was \$0.417/kwh or P23. By 2021, it had dropped by 88% to \$0.048/kwh or P2.66.

“The concern before of distribution utilities was RE was expensive,” she said. “Without government subsidies, it would be consumers who would be shouldering the cost [of the technology].”

‘Non-existent’ RE policy under Cusi

It did not help that the former DOE secretary had expressed aversion toward the scheme meant to scale up green energy sources.

“In any race, there’s a winner and there’s a loser.... If you (renewable energy developer) don’t qualify (for the second round of FiT) then you should know your options, which are

either the spot market or bilateral contract,” former energy secretary Alfonso Cusi said in a 2016 interview with BusinessMirror.

For industry players, this stance turned off foreign investors and in effect limited their financing capacities.

“What was important [for developers] was the presence of a regulatory framework,” CleanTech CEO Salvador “Aboy” Castro said. “But for the past six years (of the Duterte administration), there was no incentive for us, no way for us to secure long-term offtake agreements.”

CleanTech secured the second round of FiT benefits for its first solar farm project in Bulacan, which was established in March 2016. Castro said the company had to partner with a foreign private equity firm to finance the project. When the farm was launched, Castro began talks for further expansion, in the hopes of joining another round of FiT incentives. But the non-launch of the incentives dashed expansion plans.

“Banks weren’t open to merchant solar farm projects. They want projects that had predictable cash flows and FiT provided that,” he said.

The lack of a regulatory framework was also seen as one of the reasons banks were reluctant to extend loans to renewable energy developers. Some stakeholders observed that the banks preferred to lend to fossil fuel projects due to a lack of expertise and understanding of the renewable energy industry.

Green energy auction prices too good to be true?

In 2022, the DOE started implementing the GEAP, which allows renewable energy developers to bid for a specified energy generation capacity. This auction was meant to help distribution utilities comply with the Renewable Portfolio Standard (RPS) requirement to obtain at least 1% of their power from renewable sources.

Industry players had high hopes for the program. In August 2022, the DOE increased the RPS requirement to 2.52%. For the first round, it allocated 2,000 MW, distributed to solar, wind, hydro, and biomass. Like FiT, the auction winners were guaranteed profits under a fixed price.

“We were excited about it,” said a representative of a renewable energy company who participated in the auction. “But the DOE bastardized that auction.”

For the developer, who has three solar farms, the green energy auction reserve (GEAR) price set for solar energy developers was “not realistic nor representative of a price that allows companies to recover costs.”

The GEAR prices set by DOE were more than double or triple the global levelized cost of electricity.

The ERC, then headed by Agnes Devanadera, said in a statement that the GEAR prices were set “using the Discounted Cash Flow Model with 46 parameters and assumptions for each technology.”

One of the assumptions in setting the GEAR prices, for example, was that the US dollar to peso exchange rate was P53.145, the average forecasted exchange rate for the fourth quarters of 2022 and 2023. By the end of October 2022, the exchange rate had jumped to P58.28.

“Based on the latest exchange rates, I doubt those that won the project can manage to build the plants,” the solar operator said.

The ERC also said the prices were within the range of the rates reflected in power supply agreements or PSAs with renewable plants. GEAR prices are not subject to escalation or adjustment, therefore, the prices are fixed during the entire lifespan of the project. Rates in PSAs, however, are subject to price adjustments.

The case of Leviste’s Solar Philippines

For example, Solar Philippines, which cornered 91% of the GEAP auction capacity made available for solar projects, has had a history of applying for rate adjustments. Solar Philippines is owned by Leandro Leviste, son of Senator Loren Legarda.

Leviste had been partnering with conglomerates to fund his projects. In 2020, Solar Philippines signed a joint venture with Enrique Razon-led Prime Metroline Infrastructure Holdings Corporation to build a solar farm in Tarlac. In 2021, a subsidiary of Solar Philippines went public. The company initially started as a rooftop solar builder in 2013, but it has since pivoted to developing solar farms.

The company made headlines in 2017 when it signed a PSA with the country’s largest distribution utility, Meralco, at a rate of P2.999/kwh. At that time, it was the lowest rate offered by a solar developer in Southeast Asia.

In 2019, however, the company secured approval from ERC to raise the agreed rate by 2% annually. Some groups contested this move. By the end of the 20-year period, the rate would be P4.457/kwh, still much lower than the rate offered in the second round of FiT.

PCIJ reached out to Solar Philippines for comments in January 2023. We have not received a response as of publication.

For the solar farm operator, such moves limit companies like his, which had previously relied on FiT incentives to expand.

Castro of CleanTech echoed the sentiment, saying the competitive selection processes of distribution utilities were usually “restrictive” for independent renewable energy developers, especially with the “competitive rates” demanded by the procedure.

“We all have our own investment thresholds... and we are looking for something more palatable,” he said.

Broader participation of more companies in the auction would have also inspired more confidence that the auctioned capacities would be delivered on time, especially with the imminent energy supply crunch, Dalusung added.

“Here, you’re depending on one corporate entity to deliver 1,350 MW. Just one. I’ll be more comfortable if there were like 10 of those companies building the plants,” he said. “The delivery time of the projects is also by 2025...if we had quote-unquote expensive solar coming in quicker, it may have addressed our near-term power requirements.”

While the GEAP managed to secure lower power rates for consumers, consumers must remain vigilant, said Marlon Apanada, Southeast Asia engagement lead for energy and climate at World Resources Institute.

“What needs to be done is to be vigilant again, that those auctioned capacities are actually built,” he said. “Because there were instances (in other countries) when developers bid so low that they weren’t able to build.”

In an interview with PCIJ in December 2022, Capongcol of REMB said the DOE had already forfeited the 100MW awarded to one company during the auction because the firm failed to submit the required performance bond on time. The company will also be barred from offering the same facility in future auctions.

“The company asked for an extension, but we decided not to grant them,” she said.

Capongcol admitted that the current macroeconomic situation caused by the continuous lockdowns in China, the source of major hardware components of RE technologies, might affect the financing options of winning bidders in the GEAP.

“We’ll see how it goes.... But we have a performance bond and we are ready to call them out,” she said.

In Brazil, for example, of the 17 auctions conducted for wind projects since 2009, only 10 had met the implementation deadline, according to a 2019 study by the International Renewable Energy Agency. More than a tenth of the projects were ultimately canceled.

Aside from supply constraints, wind power projects in the country were mostly delayed due to transmission problems of the plants, the organization said.

“Grid connection was stated as the principal reason for the delays in early rounds, with little coordination between the expansion of renewable energy and that of transmission grids,” IRENA said in the report.

The story is the same for the country’s renewable energy developers.

“In the Philippines, it takes two to three years to build a solar plant, and that [delay] is just because of NGCP (National Grid Corporation of the Philippines),” a solar developer said. “If you solve that, we can build a plant in 6 to 12 months, depending on the size.”

'Tag-init' is here: Philippines' warm and dry season begins

By: Acor Arceo

The weather bureau announced the end of the northeast monsoon or amihan season and the start of the Philippines' warm and dry season on Tuesday, March 21.

The amihan season, which began in October 2022, lasted for five months. It brought cool and dry air to the country.

Meanwhile, the warm and dry season, which Filipinos often refer to as "summer," will last until May. The country technically does not have summer as it only has two seasons: rainy and dry.

"In the coming months, warmer temperatures are expected, and rainfall across the country will be influenced mostly by easterlies and localized thunderstorms," the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) said in a statement on Tuesday.

The weather bureau is releasing daily heat index records to warn the public of rising temperatures.

The heat index refers to the temperature that people feel, based on the air temperature and relative humidity in an area.

For 2023, the town of San Jose in Occidental Mindoro province has seen the highest heat index so far, with 46°C recorded last Friday, March 17.

"The public is advised to take precautionary measures to minimize heat stress and optimize the daily use of water for personal and domestic consumption," PAGASA said.

THE PHILIPPINE STAR

[UN chief: Rich nations must achieve net zero carbon quicker, by 2040](#)

By: Agence France Presse

UN Secretary General Antonio Guterres called on wealthy countries Monday to move up their goals of achieving carbon neutrality as close as possible to 2040, mostly from 2050 now, in order to "defuse the climate time bomb."

Introducing a capstone report by the Intergovernmental Panel on Climate Change on the impacts and trajectory of global warming, Guterres delivered a blunt assessment of the challenge to prevent climate catastrophe.

"Humanity is on thin ice—and that ice is melting fast," the United Nations chief said in a video message as the IPCC experts group issued its latest report, which he likened to "a survival guide for humanity."

Guterres said the world still has time to limit average temperature increases to 1.5 degrees Celsius (2.7 degrees Fahrenheit) compared to pre-industrial times but this requires "a quantum leap in climate action" by all countries in all sectors.

"It starts with parties immediately hitting the fast-forward button on their net zero deadlines," Guterres said, but he acknowledged countries have different levels of responsibility and ability to change course.

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THE WASHINGTON POST

[Earth's oceans are showing early and surprising record warming](#)

By: Scott Dance

Earth's ocean temperatures have risen so fast in recent weeks that one indicator shows surface waters have already reached their highest temperatures on record — a worrisome sign ahead of a predicted El Niño climate pattern that could further accelerate planetary warming.

Around mid-March, ocean-temperature monitoring data shows that average surface water temperatures surpassed 21 degrees Celsius (about 70 degrees Fahrenheit) around the globe. The ocean temperature observations coincide with the release Monday of a definitive report from the United Nations Intergovernmental Panel on Climate Change asserting that drastic action is needed to slow global warming that has already irrevocably harmed ecosystems and communities. Earth's temperatures are on a clear upward trajectory, already rising by at least 1.1 degrees Celsius (2 degrees Fahrenheit) since humans began burning fossil fuels to power industry.

This visual shows how climate change will affect generations

The ocean data comes from a network of buoys, ships and satellites from which the National Oceanic and Atmospheric Administration collects daily data on the first few meters of ocean depth. The database — known as the NOAA 1/4° Daily Optimum Interpolation Sea Surface Temperature — shows a steady warming trend in sea surface water since the 1980s, with each of the past several years of data ranking well above all older data, excluding polar waters, for the first time since at least 1981, when the data set originated. That is warmer than what scientists observed at this time of year in 2016, when a strong El Niño drove the planet to record warmth.

The conditions are surprising and alarming to some meteorologists and climate scientists, although they say it is far too early to assume that a record year of oceanic or planetary warmth is ahead.

The data suggests, at least, that the planet, already beset with extreme warmth, is entering an expected stretch of accelerating heat.

And it shows that 2023 is on pace at least to be yet another year among the warmest on record for the oceans. (Sea surface temperatures can vary according to weather, but

across all depths, Earth's oceans are gradually warming each year as they absorb more and more of the planet's heat.)

"Global sea surface temperatures just reached uncharted territory in modern records and likely much longer," Mika Rantanen, a researcher at the Finnish Meteorological Institute, wrote on Twitter.

Sea surface temperatures are predicted to rise further, at least in the Pacific Ocean, as forecast models suggest El Niño is more likely than not by late summer or early fall. El Niño is associated with higher-than-average sea surface temperatures in the equatorial Pacific.

El Niño can accelerate the steady rise in global temperatures because those warm Pacific waters translate to increased evaporation, which leads to increased cloud cover, which blocks sunlight from reaching Earth's surface and encourages the trapping of heat in the atmosphere. It is known for discouraging Atlantic hurricane development but triggering extreme droughts and floods elsewhere.

The recent trend of rising ocean temperature is "probably the beginning of" a transition to El Niño from the relative cooling influence of La Niña, said Gavin Schmidt, a climatologist and the director of the NASA Goddard Institute for Space Studies. La Niña, which is marked by cooler-than-normal equatorial Pacific surface waters, had persisted for the past three years but ended last month.

But Boyin Huang, a NOAA oceanographer who focuses on sea surface temperature analysis, said that even if El Niño brings warmer Pacific waters, other oceans can counterbalance that trend. That means it's too early to draw any conclusions about record sea surface warmth.

"There are other factors in other regions," Huang said.

It also remains to be seen what other data sets show about conditions so far this year, including ones that also factor in the rapidly warming polar regions. Other observations are reported only monthly.

"I wouldn't necessarily expect that this means 2023 will be a record-breaking year," Schmidt said, although he added that it will "obviously be in the top 10" for sea surface warmth.

If “a fully fledged El Niño” arrives this year, however, climate scientists expect that a record-setting 2024 could follow.

As sea surface temperatures have ticked up in recent months, so has the temperature averaged over the Earth’s entire surface. The planet’s average temperature has increased from around 0.2 degrees Celsius above the 1991-2020 average in January to around 0.6 degrees above that level in mid-March. Conditions have been especially warm in Asia, eastern North America and Greenland.

Climate scientists expect that 2023 will be among the planet’s warmest years on record and think there is a 65 percent chance it ranks in the top five. Last year was Earth’s sixth-warmest year on record.

CCC IN THE NEWS:

BUSINESS MIRROR

[Climate Change Commission: 1.2M farmers in PHL to benefit from 'Adapting Philippine Agriculture to Climate Change' project](#)

By: Samuel P. Medenilla

At least 1.25 million poor farmers are expected to benefit from a \$39.3-million project that seeks to boost the climate change resilience and development of the country's agriculture sector.

The Climate Change Commission (CCC) said in a statement that the bulk or \$26.3 million of the fund for the "Adapting Philippine Agriculture to Climate Change (APA)" will come from the Green Climate Fund (GCF).

The remaining \$12.98 million of the initiative will come from domestic resources.

The APA was approved by the GCF board at its 35th meeting in Songdo, Korea, held from March 13 to 16, 2023.

"We welcome the decision of the GCF Board to approve the APA Project, which will be instrumental in building the capacity of our farming communities, as well as of the government and private sector, to understand and manage climate risks and adopt climate resilient agriculture practices," Climate Change Commission Vice Chair and Executive Director Robert E.A. Borje said.

The project was proposed by the Food and Agriculture Organization of the United Nations and the Department of Agriculture.

It will be implemented by the the Department of Science and Technology (DOST) and the Philippine Atmospheric, Geophysical, and Astronomical Service Administration (Pagasa) starting this year until 2030.

APA aims to develop climate-resilient agriculture (CRA) services and information through the use of low-emission technologies and then mainstream them so they can be adopted by local farmers.

Upon the completion of the initiative, it is expected to help reduce 1.86 metric tons of carbon dioxide equivalent (MtCO₂e) over 20 years.

It will cover at least nine provinces in Regions 2, 5, 10, 12, and the Cordillera Administrative Region.

“High impact, climate-resilient agriculture initiatives such as the APA, have the potential to significantly contribute to the country’s socio-economic development, while enhancing adaptive capacities of our agricultural systems to climate change,” Borje said.

DAILY TRIBUNE

[CCC calls for urgent delivery of climate action commitment](#)

By: Lade Jean Kabagani

The Climate Change Commission on Monday called on for urgent delivery of global commitment to climate action, particularly the funding for climate-related loss and damages.

At the 18th Meeting of the Warsaw International Mechanism Executive Committee in Manila over the weekend, CCC vice-chairperson and executive director Robert Borje emphasized the need to further fast-track the “loss and damage agenda” for climate resilience.

“There is still a lot of work ahead of us; we need to deliver on our mandates and our roles more urgently and collectively to transform developing countries’ vulnerabilities and loss and damage to greater climate resilience,” he said.

During the WIM EXCOM, the funding arrangements for loss and damage as well as the enabling mechanisms to fully operationalize the Santiago Network were discussed along with the committee’s second five-year rolling work plan.

Borje said it is crucial for the WIM EXCOM to advance further the gains achieved in Sharm el-Sheikh regarding separate funding facilities for loss and damage.

He added: “The EXCOM is expected to provide input to the work of the Transitional Committee. This, to us, provides the Committee with the singular opportunity and the great responsibility to ensure the mainstreaming of action of support strategies under the second 5-year rolling work plan adopted by the parties at COP27.”

As a participating member, the Philippines will be included in crafting EXCOM’s work plan, the comprehensive risk management approaches, and the facilitation and cooperation on action and support for developing countries.

Hence, Borje highlighted the need to utilize the “best available science and best available technology” to guide the work on averting, minimizing, and addressing loss and damage amid climate change.

“It is through the best available science and technology, governance, and investments that we can advance our transformation towards becoming climate-smart and climate-resilient nations,” he said.

The CCC sees the essential use of state-of-the-art methodologies for comprehensive risk assessments, which will ensure that climate actions are science- and evidence-based and fit-for-purpose.

Borje underscored the Santiago Network for Loss and Damage “must be immediately and fully operationalized.”

Santiago Network aims to catalyze the provision of technical assistance, knowledge, and resources for developing countries, in addition to developed countries’ commitments to support climate action adaptations.

The CCC, in coordination with other relevant government agencies and stakeholders, is working on formulating and updating national positions on critical issues, including loss and damage for the approaching COP28, which will take place from 30 November to 12 December this year in Dubai.

GMA NEWS ONLINE

['Ultimate no-brainer:' UN officials, top scientists renew call for strong political action to address climate change](#)

By: Jhesset O. Enano

Top officials and leading climate scientists from the United Nations renewed their call for strong political commitments and urgent climate action, as they echoed a warning over the rapidly closing window to address catastrophic climate change.

In its synthesis report released on Monday, the UN-backed Intergovernmental Panel on Climate Change (IPCC) said that the knowledge, technology, and financing for climate adaptation and mitigation are already available, but are hampered by the lack of political will and the need for effective climate governance.

“We already know how to proceed on many fronts,” said IPCC chair Hoesung Lee in a press briefing in Interlaken, Switzerland, where representatives from nearly 200 governments approved the findings in a weeklong session.

“The report identifies tried and tested policies that can work in diverse contexts to reduce emissions and advance climate resilience,” said Lee. “But they need to be scaled up and applied more widely.”

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Monday’s report is the culmination of the IPCC’s work in its Sixth Assessment Cycle, summarizing key points from six major reports it has released since 2018. These have served as definitive handbooks on climate change, drawing from extensive global

studies on climate science and bringing together thousands of climate scientists and experts around the world.

In a recorded address, UN secretary-general Antonio Guterres called the synthesis report a “survival guide for humanity” to defuse the ticking climate time bomb.

He urged developed countries that are historically responsible for climate change, such as the United States, to commit to reaching net zero by 2040 — a target earlier than the rest of the world. Reaching net zero means striking a balance between the anthropogenic emissions pumped into the atmosphere and those removed in a specific time period.

Solutions within reach

The IPCC report said the decisions to be made within the next 10 years will spell out whether the world can still meet its ambitious target of limiting global heating to 1.5C above pre-industrial levels.

Findings show the world has already warmed more than 1.1C. Without drastic emission cuts from all nations, the planet could be on track to more dangerous levels of warming, which would translate to more extreme climate impacts that would push humanity to the brink.

But the solutions are already within reach. The IPCC said the systemic change needed to achieve rapid emissions reduction and transformative climate adaptation is unprecedented in scale, but not necessarily in terms of speed.

Among the responses outlined in the report are the substantial reduction in fossil fuel use, promotion of widespread electrification in energy and transport, redesign of cities to become more climate-resilient while producing lesser emissions, advancement of sustainable agricultural practices, and the conservation and protection of ecosystems.

These would also have other benefits to other sectors and systems, not just on climate action. For instance, the promotion of public transport and active mobility, such as walking and cycling, could also benefit public health and safety.

“ This synthesis report... tells us we already have the technology and know-how,” said UN Environment Programme executive director Inger Andersen during the briefing. “It’s the ultimate no-brainer.”

Guide for PH climate action

Scientists said social and climate justice should be at the center of these adaptation and mitigation strategies, ensuring that the decisions and actions are inclusive and would benefit the most vulnerable.

“Climate resilient development is advanced when actors work in equitable, just, and inclusive ways to reconcile divergent interests, values, and worldviews, toward equitable and just outcomes,” the report read.

Rachel Herrera, a commissioner of the Climate Change Commission who joined the Philippine delegation in the IPCC session, said the latest report will “provide the impetus for urgent climate action” in the Philippines.

“As knowledge gaps remain, these IPCC reports serve as critical reference points for our policymakers to heed the science on the gravity of climate change,” she said in a statement sent to reporters on Tuesday.

Local climate and environmental groups called on the Philippine government to heed the IPCC’s call to shift away from fossil fuel use. Coal, oil, and gas continue to dominate the Philippine energy mix.

“This report underscores how climate action — and demands for climate reparation — needs to be front and center of Philippine government policy in order for future generations of Filipinos to have a chance to survive,” said Greenpeace senior campaigner Virginia Llorin.

More national and local climate studies are also needed to make communities more resilient to climate change, said climatologist Lourdes Tibig, a lead author of IPCC reports on climate and the oceans and cryosphere and a climate science advisor to the Institute for Climate and Sustainable Cities.

“We have to act on climate change with far more urgency and ambition to protect millions of lives,” she said. “It is high time that world leaders heed the science for us to have a fighting chance to survive and thrive.”

MANILA BULLETIN

[CCC urges delivery of global climate action commitments](#)

By: Argyll Cyrus Geducos

The Climate Change Commission (CCC) called for the urgent delivery of global commitment to climate action, particularly the funding for climate-related loss and damage, citing the role of governments to act on its mandates.

CCC Vice Chair and Executive Director Robert Borje said this during the 18th Meeting of the Warsaw International Mechanism Executive Committee (WIM EXCOM-18) in Manila over the weekend, following the 27th Meeting of the Conference of Parties (COP-27) to the United Nations Framework Convention on Climate Change (UNFCCC).

During the meeting, Borje recognized the effort of the WIM but encouraged the EXCOM and observers to further fast-track the work on the loss and damage agenda.

"There is still a lot of work ahead of us," he said.

"We need to deliver on our mandates and our roles more urgently and collectively to transform developing countries' vulnerabilities and loss and damage to greater climate resilience," he added.

According to Borje, it was important for the WIM EXCOM must provide input to the work of the Transitional Committee to ensure the mainstreaming of action of support strategies under the second five-year rolling work plan adopted by the parties at COP27.

In a statement, the CCC said the WIM EXCOM convened to discuss the milestone decision on funding arrangements for loss and damage, the enabling mechanisms to fully operationalize the Santiago Network, and the EXCOM's second five-year rolling work plan.

The Santiago Network aims to connect vulnerable developing countries with providers of technical assistance, knowledge, and resources they need to address climate risks comprehensively.

Among the Philippines' observations during the meeting were on the work of the WIM with other UNFCCC constituted bodies and operating entities of the financial mechanisms, the EXCOM's work plan, the comprehensive risk management

approaches, and the facilitation and cooperation on action and support for developing countries.

In particular, the CCC highlighted the need for the best available science and the best available technology to guide the work on averting, minimizing, and addressing loss and damage.

"It is through the best available science and technology, governance, and investments that we can advance our transformation towards becoming climate-smart and climate-resilient nations," Borje said.

The CCC likewise stressed that using state-of-the-art methodologies for comprehensive risk assessments is crucial as these assessments ensure that climate actions are science- and evidence-based and fit-for-purpose.

The Philippines has been actively engaged in the international discussion on loss and damage.

It is one of the countries pushing for dedicated space to discuss funding arrangements for loss and damage – now the COP27 breakthrough agreement.

In the lead-up to COP28, the CCC, in coordination with other relevant government agencies and stakeholders, is working on formulating and updating national positions on critical issues, including loss and damage.

The COP28 will take place from Nov. 30 to Dec. 12, 2023, in Dubai.

THE PHILIPPINE STAR

[Green groups call for end to fossil fuel addiction to avert catastrophic future](#)

By: Gaea Katreena Cabico

Staving off the worst impacts of the climate crisis requires governments to kick their fossil fuel habit as soon as possible and shift to renewable energy systems, climate and environment groups said following the release of a capstone report from the United Nations' climate advisory panel.

In a report released on Monday, the Intergovernmental Panel on Climate Change (IPCC) painted a stark picture of where the world is heading — heavier rainfall, more intense heatwaves, other weather extremes and collapse of ecosystems — unless radical actions are taken.

“The latest IPCC report affirms that dangerous climate change has already set in, judging from the increasingly severe impacts of extreme events and rising losses and damages from slow onset events,” said Lourdes Tibig, a climatologist and lead author of two IPCC reports.

“No one is spared, but the poorest and most vulnerable continue to bear the brunt. It is high time that world leaders heed the science for us to have a fighting chance to survive and thrive,” added Tibig, who is also the climate science advisor of the Institute for Climate and Sustainable Cities (ICSC).

The 36-page report is a synthesis of six major assessments since 2018. UN Secretary General Antonio Guterres likened the IPCC report to “a survival guide for humanity.”

End fossil dependence

To secure a liveable and sustainable future for all, the IPCC stressed there must be “rapid and far-reaching transitions” across all sectors and systems.

“This synthesis report takes every excuse to keep burning fossil fuels down the drain. Any company, any government that promotes new coal, gas, or other fossil fuel projects are dealing a death sentence to the 1.5°C global warming threshold and the survival of millions,” the Center for Energy, Ecology, and Development said in a statement.

“Science is clear: the only option we have is to urgently shift to energy from renewables, which is now cheaper than ever. Yet the transition we need is not happening fast enough; in fact, many developed nations are even seeking to prolong the life of fossil

fuels through unproven or detrimental technologies falsely labeled as solutions,” it added.

Asian Peoples’ Movement for Debt and Development (APMDD) also criticized wealthy countries for pushing massive oil and gas development instead of slashing their planet-warming emissions.

“We vehemently object to the plans for, and the continued promotion of, new fossil fuel infrastructures in the Global South financed by wealthy countries — the big polluters that, due to their historical and continuing emissions, have an obligation to swiftly end reliance on fossil fuel, deliver adequate climate finance, and just transition to renewables,” APMDD coordinator Lidy Nacpil said.

‘Impetus’ for climate action

The Philippines is one the countries most at risk from the impacts of climate change.

“For countries like the Philippines, inaction means deadlier typhoons and heat waves, plummeting agricultural and fisheries production, and so much more,” said Jon Bonifacio, national coordinator of Kalikasan-People’s Network for the Environment.

“Yet, our own government has insisted on unjust transition policies like the jeepney phaseout, land reclamation and mining that decimates climate-critical ecosystems and the communities living in them, and widespread persecution of climate and environmental advocates,” he added.

Environment Undersecretary Analiza Rebueta-Teh, who headed the country’s all-women delegation to the 58th session of the IPCC, said the panel’s synthesis report serves “provides a clear and substantive analysis” on climate science that would accelerate the pace of co-creating policies and designing programs.

Climate Change Commissioner Rachel Anne Herrera said the report will provide the “impetus for urgent climate action in the Philippine context.”

During the week-long approval sessions, the Philippine delegation intervened on several sections of the report by highlighting the need to pursue evidence-based adaptation planning, and supporting the value of emissions avoidance as a recognition of risk-based and outcomes-based approaches to curb greenhouse gas emissions.

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