

NEWS ROUNDUP 26 APRIL 2023 [08:00 am]

- EXPLAINER: What is the heat index?
- These are the places most at risk from record-breaking heat waves as the planet warms
- Need to escape the summer heat? Here are the top 5 places with the coolest temperatures in PH
- PH to seek review of pacts with US
- Climate change, saving the planet
- Japan wins G-7 support for 'avoided emissions' climate concept
- The IPCC's calls for emissions cuts have gone unheeded for too long should it change the way it reports on climate change?
- Climate-induced tipping points
- NEDA chief cites need for resilient agri sector
- Balance needed between climate effort, agri devt
- [Opinion] Climate change response must be a development priority
- SEC celebrates Sustainability Week
- G7 agrees to accelerate phase-out of unabated fossil fuels. What you need to know about the global energy transition this week

CCC IN THE NEWS:

• Large-scale upgrade needed to decarbonize shipping industry

CNN

EXPLAINER: What is the heat index?

By: Raheema Velasco

The Philippines is currently experiencing scorching heat, with the state weather bureau logging on April 21 the highest computed heat index this year at 48 degrees Celsius — almost half of the boiling point of water.

These are the places most at risk from record-breaking heat waves as the planet warms Warms By: Laura Paddison

Dangerous, record-breaking heat waves are set to increase as the climate crisis intensifies, and they will be particularly devastating in countries and regions that are least prepared for them, according to a new study.

GMA NEWS

<u>Need to escape the summer heat? Here are the top 5 places with the coolest</u> temperatures in PH

By: Kimberly Tsao

Summer heat in the Philippines keeps on rising, with higher temperatures expected this May.

MALAYA BUSINESS INSIGHT

PH to seek review of pacts with US

By: Jocelyn Montemayor

President Marcos Jr. yesterday said he will seek a review and assessment of treaty agreements between the Philippines and its long-time ally the United States, including the 70-year-old Mutual Defense Treaty that binds the two countries to come to the aid of the other in case of an armed attack.

MANILA STANDARD

Climate change, saving the planet By: Glaiza Lee

These concepts have always been a contention in the social debate, and have always been part (or not part; depends on whether the leaders champion this advocacy) of the political agenda.

NIKKEI ASIA

Japan wins G-7 support for 'avoided emissions' climate concept

By: Sayumi Takke

Business groups are optimistic that "avoided emissions" will become more widely accepted as a criterion for measuring companies' decarbonization efforts after Japan persuaded fellow Group of Seven members to recognize the concept.

PHILIPPINE CANADIAN INQUIRER

The IPCC's calls for emissions cuts have gone unheeded for too long – should it change the way it reports on climate change? By: Ralph Sims

Emissions from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases CO₂, methane, CFCs and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface.

PHILIPPINE DAILY INQUIRER

Climate-induced tipping points

By: Rodel Lasco

We are all familiar with tipping points. The phrase describes a process that typically starts slowly, only to suddenly change and become irreversible at a critical moment.

PHILIPPINE NEWS AGENCY

NEDA chief cites need for resilient agri sector

By: Kris Crismundo

National Economic and Development Authority (NEDA) Secretary Arsenio Balisacan has reiterated the need to enhance the resilience of the domestic agriculture sector amid the risks being faced by farmers amid climate change.

THE MANILA TIMES

Balance needed between climate effort, agri devt

By: Niña Myka Pauline Arceo

Economies, particularly developing ones, need to make their agriculture sectors more resilient given the threats posed by climate change, a Cabinet official said on Monday.

[Opinion] Climate change response must be a development priority

By: The Manila Times Editorial Board

ONE of the key takeaways from the annual spring meetings of the World Bank earlier this month was the extent to which the world's largest multilateral development bank (MDB) intends to reconfigure its policies and operations to place an even greater emphasis on climate change response. The rationale is simple and obvious: Climate change affects everything, so any development aspirations must respond to it, even if they concern areas such as poverty reduction, public health, education or fiscal management that may not appear to be relevant to climate change adaptation and mitigation goals.

SEC celebrates Sustainability Week

By: Kelvin Lester K. Lee

I would like to recognize, and thank the Corporate Governance and Finance Department of the Securities and Exchange Commission (SEC) for spearheading the commission's very first Sustainability Week, with the theme "Sustaina-ALL: Accelerating the Leap to Sustainable Living," aimed at strengthening SEC's goal to set its own sustainability objectives and strategies.

CCC IN THE NEWS:

THE MANILA TIMES

Large-scale upgrade needed to decarbonize shipping industry

By: Genivi Verdejo

The Department of Transportation (DoTr) said green freight transport requires a largescale upgrade of existing sea vessels to achieve zero-level decarbonization.

Information and Knowledge Management Division

CNN

EXPLAINER: What is the heat index?

By: Raheema Velasco

The Philippines is currently experiencing scorching heat, with the state weather bureau logging on April 21 the highest computed heat index this year at 48 degrees Celsius — almost half of the boiling point of water.

Butuan City, Agusan Del Norte got the highest heat index this year followed by Legazpi City, Albay and San Jose, Occidental Mindoro with 47 °C.

But what is the heat index and why does it matter?

The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) defined the heat index as the "measure of the contribution that high humidity makes with abnormally high temperatures in reducing the body's ability to cool itself."

It is the discomfort that your body feels when relative humidity, combined with the air temperature increases.

According to the National Weather Service, when the body temperature gets too hot, it begins to perspire or sweat to cool itself off. But the body will not be able to regulate its temperature if perspiration does not evaporate quickly.

Humid conditions make sweating and evaporation less efficient. In other words, the heat index can be tolerable if the relative humidity is low.

Here's the Heat Index Chart as provided by the local state bureau:

https://www.pagasa.dost.gov.ph/climate/climate-heat-index

27 to 32 °C - Caution -Fatigue is possible with prolonged exposure and activity.

- Continuing activity could lead to heat cramps.

33 to 41 °C - Extreme Caution -Heat cramps and heat exhaustion are possible.

- Continuing activity could lead to heat stroke.

42 to 51 °C - Danger

- Heat cramps and heat exhaustion are likely to occur.

- Heat stroke is probable with continued exposure.

52 °C and beyond - Extreme danger - Heat stroke is imminent.

In its five-day forecast heat index issued on Sunday, PAGASA said Tacloban City may reach a maximum of 47 °C heat index on Aril 25 and 48 °C on April 26.

The highest computed heat index on Sunday was in Legazpi City, Albay at 46 °C.

READ: PAGASA: Heat reaches dangerous levels around the country

Climate change

Shifts in extreme heat events are due to the increases in the overall temperature of the earth associated with climate change, according to the Centers for Disease Control and Prevention (CDC).

It said burning of fossil fuels, such as coal and gas, causes the earth's temperature to rise, like a blanket traps in heat.

"This extra trapped heat disrupts many of the interconnected systems in our environment," the CDC added.

In the Philippines, PAGASA noted there had been an average of 0.0108 °C per yearincrease in the temperature due to climate change.

What to do?

The World Health Organization said countries with high temperatures are likely to increase the risk of heat-related deaths and illnesses, as well as cardiovascular and respiratory disorders.

Here are some ways you can protect yourself from extreme heat according to PAGASA:

Limit the time spent outdoors.

- Drink plenty of water.

- Avoid tea, coffee, soda, and liquor.

- Use umbrellas and wear hats and sleeved clothing outdoors.

- Schedule heavy activities for the beginning or end of the day, when it's cooler.

Meanwhile, the WHO also advised:

- Move to the coolest room in the home, especially at night.

- If it is not possible to keep your home cool, spend 2 to 3 hours of the day in a cool place (such as an air-conditioned public building).

- Avoid going outside during the hottest time of the day.

-Avoid strenuous physical activity if you can. If you must do strenuous activity, do it during the coolest part of the day, which is usually in the morning between 4 a.m. and 7 a.m.

- Stay in the shade.

- Do not leave children or animals in parked vehicles.

These are the places most at risk from record-breaking heat waves as the planet warms

By: Laura Paddison

Dangerous, record-breaking heat waves are set to increase as the climate crisis intensifies, and they will be particularly devastating in countries and regions that are least prepared for them, according to a new study.

Scientists analyzed temperature data sets spanning more than 60 years, as well as climate models, to calculate the likelihood of unprecedented heat extremes occurring -- and where these might happen.

They identified Afghanistan, Papua New Guinea and Central America -- including Guatemala, Honduras and Nicaragua -- as "hot spots" for high-risk heat waves.

These regions are particularly vulnerable due to their fast-growing populations and limited access to healthcare and energy supplies, which undermine their resilience to extreme temperatures, according to the report, published Tuesday in the journal Nature Communications.

"There's evidence there that those regions may well be in for a big heat wave and they wouldn't be prepared for it," said Dann Mitchell, a professor in atmospheric sciences at the University of Bristol in the UK and a study co-author.

The threat facing Afghanistan is particularly stark, Mitchell told CNN. Not only is there high potential for record-breaking extreme heat, but the impacts will be intensified by the huge difficulties the country already faces, he said.

Afghanistan is struggling with dire social and economic problems. It also has a growing population which is increasingly exposed to the problems of limited resources, according to the report.

"When a really extreme heat wave does finally come along, then there are instantly going to be a lot of problems," Mitchell said.

Heat waves have a wide-ranging negative impact. They reduce air quality, worsen drought, increase the risk of wildfires and can lead infrastructure to buckle.

They also take a heavy toll on human health, and extreme heat is one of the deadliest natural disasters. Heat stroke or heat exhaustion can trigger a wide range of dangerous symptoms, including headaches, dizziness, nausea and loss of consciousness, among others. Heat stroke is the most serious heat-related illness, according to the Centers for Disease Control and Prevention, causing body temperature to skyrocket in a matter of minutes, and can lead to permanent disability or death.

Several regions have already seen unprecedented temperatures this year. In March, parts of Argentina grappled with temperatures up to 10 degrees Celsius, or 18 degrees Fahrenheit, above normal, while high temperature records were smashed across large parts of Asia in April.

"Heat waves and other extreme weather events will only become more intense as the world continues to burn fossil fuels," said Friederike Otto, a climate scientist at the Grantham Institute for Climate Change at Imperial College London, who was not involved with the study.

Nowhere is safe, noted the report, which found that "statistically implausible" heat waves -- those that fell well outside the historical norm -- occurred between 1959 and 2021 in around 30% of the regions assessed. These include the 2021 Pacific Northwest heat wave, where high temperature records were not just broken but completely smashed, killing hundreds of people.

In Lytton, British Columbia, temperatures peaked at just under 50 degrees Celsius (121 degrees Fahrenheit) in June 2021, breaking the previous record by almost 5 degrees. The village was almost completely destroyed by a wildfire just days later.

Scientists determined that the event would have been almost impossible without climate change.

Parts of China, including Beijing, and European countries, such as Germany and Belgium, also face a high risk, according to the report.

The millions of people who live in these densely populated regions could be badly affected by heat waves, even if these countries are more likely to have resources to mitigate some of the worst impacts.

The report calls on governments around the world to prepare for heat events that go far beyond current record temperatures, such as setting up cooling centers and reducing hours for those working outside.

Many policies exist that governments can implement to save lives, Otto said, including "preparing heat wave management plans, ensuring and testing they are implemented, informing the public about imminent heat waves, and protecting people who are vulnerable to the impacts of heat waves."

Unprecedented heat events are becoming more likely as the world continues to burn fossil fuels, said Lucas Vargas Zeppetello, a research fellow at Harvard University, whose 2022 research found that dangerous levels of heat are set to at least triple across the world by the end of the century.

"By definition, we don't know what could happen if large populations are exposed to unprecedented heat and humidity stress," Vargas Zeppetello told CNN, "but heat waves in the past few decades have already been extremely deadly and there is serious cause for concern in the future."

GMA NEWS

<u>Need to escape the summer heat? Here are the top 5 places with the coolest</u> temperatures in PH

By: Kimberly Tsao

Summer heat in the Philippines keeps on rising, with higher temperatures expected this May.

So, where can Filipinos go to experience cooler weather in the country?

As seen on Maki Pulido's report on "24 Oras," Tuesday, the top five places with the coolest temperatures in the Philippines on Tuesday were Baguio; Malaybalay, Bukidnon; Basco, Batanes; Tanay, Rizal; and Mulanay, Quezon.

Baguio took the top spot with the coolest temperature in the Philippines. It reached 17.6 °C at 4:50 a.m.

For comparison, it was 26 °C in Metro Manila at the same time and on the same date.

Next on the list was Malaybalay, Bukidnon which was 20.5 °C at 6 a.m.

Baguio is touted as the Summer Capital of the Philippines while Bukidnon is known as the South Summer Capital of the Philippines.

While in Malaybay, Bukidnon, one can also visit the monastery of transfiguration of the Benedictine monks. According to DOT Region 10 Regional Director May Unchuan, the area is also known for its farms.

Basco, Batanes was the third coolest place in the country. It reached a temperature of 20.8 °C at around 2 a.m.

In Batanes, visitors can take in the cold breeze while stopping by the Ivatan Heritage Houses.

Tanay, Rizal came in fourth place for the coolest place in the Philippines. It had a temperature of 21 °C at 8 a.m.

In Tanay, Rizal, restaurant hopping, camping, trekking, and taking waterfalls can all be worthwhile options.

Rounding out the top five cold places in the Philippines was Mulanay, Quezon, which was 22.4 °C at 6 a.m.

Limestone tombs from the 10th to 14th centuries can be found in Mulanay, Quezon.

"Aside from the revenge travel, there's also that climate change makes people want to experience a bit more comfort as far as the weather is concerned," said Agnes Pacis from the Hotel Sales and Management Association.

In 2021, a UN Intergovernmental Panel on Climate Change report showed that global warming is "unfolding more quickly than feared and that humanity is almost entirely to blame."

It is projected that the Earth's average surface temperature may hit 1.5 or 1.6 degrees Celsius above preindustrial levels around 2030.

MALAYA BUSINESS INSIGHT

PH to seek review of pacts with US

By: Jocelyn Montemayor

President Marcos Jr. yesterday said he will seek a review and assessment of treaty agreements between the Philippines and its long-time ally the United States, including the 70-year-old Mutual Defense Treaty that binds the two countries to come to the aid of the other in case of an armed attack.

The President, who is set to go on an official visit to the US from April 30 to May 4, said there is a need to "evolve" some agreements as there has been a lot of developments in the world over the years.

Marcos said that during the visit, the Philippines will also request enhanced partnerships and assistance for climate change mitigation and post-COVID-19 recovery efforts.

It will be his Marcos' second trip to the US, with the first one in September last year when he attended the United Nations General Assembly in New York.

"Well, siyempre liliwanagin natin ulit ang talagang mga treaty agreement sa gitna ng Pilipinas at saka ng Amerika at titingnan natin (Well, we will seek clarity about the treaty agreement between the Philippines and America and we will review it)," the President said when asked about the agenda of his meeting with Biden.

Marcos, during an interview with "Erwin Tulfo on Air," said among the agreements to be discussed are the Mutual Defense Treaty (MDT) and the Visiting Forces Agreement (VFA).

"The Visiting Forces Agreement and the treaty that we have, the Mutual Defense Treaty, that we have with the United States... we have to evolve it... we need to adjust because there is an evolution, the situations are changing here in the South China Sea, the developments in Taiwan, in North Korea. All of these, the situation here is getting tense," he said in mixed Filipino and English.

Marcos' pronouncements followed the identification of four new areas that will be made accessible to the United States under the Enhanced Defense Cooperation Agreement (EDCA).

China's ambassador has linked the new EDCA sites to the welfare of Filipinos working in Taiwan which China claims as its own.

Experts say the US, China's power rival, sees the Philippines as a potential location for rockets, missiles and artillery systems to counter a Chinese amphibious invasion of Taiwan.

Two of the four new EDCA sites are in Cagayan province which is near Taiwan. There were originally five sites agreed on when the Philippines and the US signed the EDCA in 2014.

Marcos has given the assurance that the EDCA sites would not be used for offensive attacks on other countries.

China has also been consistently aggressive in its claims in the South China Sea, including the West Philippine Sea which is within Philippine territory.

CLIMATE CHANGE

The President said he would also raise climate change initiatives, including "green bonds" or financial instruments linked to climate change solutions and specific projects to help reduce carbon emissions.

He said the green bonds provide funds to rehabilitate areas affected by climate change as well as for climate change mitigation programs such as transfer of persons living in "no build zones" to safer areas, as well as the provision of "forest value" or funds for protection of forests.

Marcos said the country would also ask for assistance in the post-COVID recovery.

"There are any things to talk about. Not just military, not just economy but also cultural exchange, and the hot issue now which is climate change. We have to look at everything and other partnerships with the United States. President Joe Biden and I will talk about how to further our cooperation," he said.

The meeting of the two Presidents has been set for May 1 in Washington, followed by an expanded meeting with key Cabinet officials.

The Presidential Communications Office said the visit of Marcos will "reaffirm the bonds of friendship that give definition and significance to the many facets of the bilateral relationship, underpinned by the close affinity shared by Filipinos and Americans alike for many years" and "substantively progress efforts to further deepen relations and political ties, to bring about lasting socio-economic partnerships, as well as to enhance defense and security cooperation." During the visit, the President is also expected to advance the Philippines' socioeconomic and development priorities and harness closer partnership in such areas as agriculture, energy, climate change, digital transformation and technology, humanitarian assistance and disaster relief, supply chains, and infrastructure. The United States is a major bilateral trade and official development assistance partner, and maintains a shared commitment with the Philippines for more dynamic economic relations.

Apart from the US, Marcos is also expected to visit the United Kingdom and Indonesia next month to attend the coronation of King Charles and the Association of Southeast Asian (ASEAN) Summit, respectively.

MANILA STANDARD

Climate change, saving the planet

By: Glaiza Lee

These concepts have always been a contention in the social debate, and have always been part (or not part; depends on whether the leaders champion this advocacy) of the political agenda.

But these topics are more apparent in the arts and culture sector. A growing number of artists, galleries, and arts institutions respond to environmental challenges and inspire creative collaborations to push this social issue.

Year after year, the Cultural Center of the Philippines makes sure that environmental issues are tackled as part of its programming. This year, the premiere art institution celebrated Earth Day with a series of public art installations made by visual artists who advocate the environment and its preservation.

Kintab Artists Group, Inc. (KAGI), a Bicol-based non-profit group of visual artists, writers, musicians, and other creative talents dedicated to expressing diverse identities through their unique artworks, created 'Surogpon Kita (We are Connected)'.

The expansive structure is made of bamboo, a symbolic material representing unity in diversity, promoting brotherhood and harmony within the installation art. The installation features papier-mâché masks and assemblages made from natural and indigenous materials sourced from Bicol such as abaca ropes, coco coir, palaspas, cogon grass, and balagon (local vines).

Through the installation, the group of artists highlights the importance of connectivity and self-identification with our planet in an organic and grounded manner. Selfproclaimed stewards of Mother Earth, KAGI emphasizes the need for the protection and cultivation of our planet's resources.

What I like about the art installation is, it engages the public through creative physical conversations. Viewers can walk through the exhibit, and look at the masks created by participants of the art workshops conducted prior to the installation of the artwork.

During the launch, there was a performance of Kawayanon, where seven performing artists drew inspiration from their personal experiences to unpredictably respond to the expansive art installation. The performance conveyed the idea of being present in the moment, fostering connection, and promoting the concept of "being connected" as members of one human family.

The Surogpon Kita art installation can be viewed until May 28. Complementing the art installation is a light show on the façade of the CCP Main Building. The façade is painted in earth colors and will be lit up from 6:30 to 9:00 p.m.

Meanwhile, Abdulmari "Toym" De Leon-Imao, a multimedia artist in both classical and contemporary styles, turned the Liwasang Kalikasan into a folklandia of sorts through the exhibit Tanod-Lupa (Nature Guardians).

Tanod-Lupa public art features Philippine mythical creatures, with illuminated lanterns to enhance their otherworldliness in the installation site. The designs draw inspiration from pre-colonial patterns and iconography to portray these creatures as essential parts of the natural ecosystem rather than just evil or demonic.

The figurative lanterns, made of welded steel, fibers, and fiberglass, are larger than life and internally illuminated by LED lights. The whimsical design ensures that the creatures do not appear frightening or stereotypical.

As of today, there are three "mythical creatures" on display at the Liwasang Kalikasan. And what's on display are still just frameworks. The exhibit will grow, adding more mythical creatures, as well as the reinvented panolong of Maranao Torogan houses.

The panolong is an architectural element representing the naga, a serpent or dragon protecting the perimeter of the nobleman's Torogan house. It visually elevates the Torogan above the ground, showing that the structure is unique and has an essential status in society.

Hopefully, by September, the Tanod Lupa will be completed and will be ready for the big launch. So, watch out for it.

NIKKEI ASIA

Japan wins G-7 support for 'avoided emissions' climate concept

By: Sayumi Takke

Business groups are optimistic that "avoided emissions" will become more widely accepted as a criterion for measuring companies' decarbonization efforts after Japan persuaded fellow Group of Seven members to recognize the concept.

Experts say the recent publication of guidelines for measuring and reporting the emissions a company has "avoided" by offering eco-friendly products and services, in addition to the G-7 backing, is lending momentum to the trend.

At a meeting on climate, energy and the environment hosted by Japan in April, G-7 ministers agreed in a 36-page joint statement that there was "value" in acknowledging avoided emissions.

The ministers' agreement came a day after the Japanese government invited Dominic Waughray of Switzerland-based World Business Council for Sustainable Development (WBCSD), a grouping of CEOs of over 200 global companies, to brief G-7 representatives about avoided emissions, including a related guideline the body had launched in March.

Simply pressuring companies to reduce emissions relative to historical levels does not create the "incentive" for them to innovate and decarbonize, according to Waughray.

Quantifying avoided emissions will "show who's moving fastest, quickest or being most successful" in offering more low-carbon products and give investors "a good signal" of the companies' efforts not only in reducing emissions but also in adapting and evolving to a more sustainable business model, he told Nikkei Asia on the sidelines of the G-7 meeting.

WBCSD's guidelines are aimed at addressing concerns that companies were using the undefined terms "avoided emissions" or "Scope 4 emissions" to overstate the positive impact of their climate efforts.

Under the guidelines, companies are allowed to report they have avoided emissions only if they have disclosed credible, science-based emission reduction targets, and only for products or services deemed to have the potential of having a "direct and significant decarbonizing impact." Japan has been attempting to take the lead in setting rules for avoided emissions, according to Teppei Yamaga, head of the net-zero strategy department at Nomura Asset Management.

"Evaluating corporate climate efforts only by the amount of emissions the company has reduced has its limitations," he said. A reduced carbon footprint could mean the company was merely selling fewer products, which would harm corporate value, while emissions could increase if it was selling more low-carbon products.

"Japanese companies are exhausted because they feel their activities aren't being communicated properly and are losing motivation," Yamaga said.

WBCSD guidelines, he said, indicated that momentum for the concept was building globally. They are supported by 19 members of the council, including Japan's Panasonic and Hitachi, Indian conglomerate Aditya Birla Group, and European companies like EDF and Siemens.

Waughray of WBCSD expects more members to follow the 19 "first-movers."

WBCSD is a co-founder of the widely acknowledged accounting standard for corporate emissions known as Scope 1, 2, and 3; and has adopted disclosure frameworks like the Task Force on Climate-Related Financial Disclosures and International Sustainability Standards Board.

"Avoided emissions may eventually also be incorporated into companies' disclosure items," Yamaga said.

Kahori Miyake, executive manager at Sumitomo Mitsui Trust Bank and member of a United Nations expert group that oversees net-zero pledges by nonstate entities, welcomed how the guideline "clearly separates" avoided emissions from other required disclosure like greenhouse gas emissions.

She expects, however, that the measurements will be used more for "internal purposes," such as motivating employees and supporting purpose-driven management.

"Of course, the bottom line is that you can't offset your carbon emissions with avoided emissions," said Miyake. "But if companies are able to report on avoided emissions without fearing greenwashing concerns by following the guideline, it would be a pleasant incentive to visualize the positive impacts of low-carbon products."

The IPCC's calls for emissions cuts have gone unheeded for too long – should it change the way it reports on climate change? By: Ralph Sims

Emissions from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases CO₂, methane, CFCs and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface.

Long-lived gases would require immediate reductions in emissions from human activities of over 60% to stabilise their concentrations at today's levels.

These are not statements from the latest report released by the Intergovernmental Panel on Climate Change (IPCC). They come from its first assessment in 1990.

Back then, the IPCC acknowledged there were uncertainties in the predictions due to incomplete scientific understanding of sources and sinks of greenhouse gases. But what has actually happened in the 30 years since largely matches the predictions:

an average rate of global sea level rise of 30-100mm per decade due to the thermal expansion of the oceans and the melting of some land ice

an increase of global mean temperature of about 0.3°C per decade under business as usual.

The IPCC also predicted the rise in temperature would slow as we ramped up efforts to cut emissions, but this scenario hasn't been tested because emissions reductions never happened.

In 1990, the IPCC also presented the first warnings about potential climate change impacts. It then repeated them in one form or another in the following five assessment reports. But emissions continued to rise each year, resulting in a global temperature increase of 1.1-1.2°C.

We know how to reduce emissions

On a more positive note, annual emissions from 18 countries have peaked during the past decades – but not always as a result of climate policies. For example, the UK's manufacturing capacity reduced significantly as companies moved off-shore. Nevertheless, global emissions kept rising.

Chapters in IPCC reports covering agriculture, land-use change, energy supply, transport, buildings, industry and urban settlements repeatedly provided clear guidance on emissions cuts, such as this section from 2001:

Hundreds of technologies and practices for end-use energy efficiency in buildings, transport and manufacturing industries account for more than half of the potential to reduce greenhouse gas emissions.

Details of how to reduce emissions from improved energy efficiency in all sectors have been repeated in all six IPCC assessments. But many opportunities to reduce energy demand, and save costs, have not been implemented. Although scientific knowledge has advanced since 1990 and a range of low-carbon technologies have evolved and improved, the key IPCC messages have remained the same.

Given the many repeated warnings, why have global greenhouse gas emissions continued to rise? Typical answers include population growth, the rise of the middle classes in many developing countries, increased consumerism, greater tourism, lobbying by the fossil fuel industry and higher consumption of animal proteins.

National and local governments have also struggled to implement strong climate policies because the majority of their citizens and businesses remain unwilling to change their behaviour. This is even the case when co-benefits are clearly evident, including improved health, reduced traffic congestion and lower costs.

A possible future for the IPCC

Having assessed thousands of published research papers over 33 years, what has the IPCC actually achieved since its inception in 1988? And what should be its future role given that many of its strong messages have largely gone unheeded?

Arguably, present and future climate impacts would have been even worse without the IPCC's work. With each report, the urgency to act on both mitigation and adaptation increased. Few climate deniers now remain. More people want their governments to act.

Although total global emissions continue to rise, energy-related carbon dioxide emissions may be reaching a plateau. According to the International Energy Agency, these emissions rose by under 1% in 2022 – less than initially feared after the COVID dip – largely because of the growth of solar, wind, electric vehicles, heat pumps and improved energy efficiency measures.

So there is hope. But after 25 years of personal involvement with six IPCC reports, my view is that it's time to review the role of the IPCC and its three main working groups before the next assessment cycle begins.

Since climate science continues to evolve, the IPCC's Working Group One on the science of the climate system should continue to assess and present the latest knowledge every five to six years.

The need for adaptation and resilience is finally receiving greater attention, mainly as a result of more extreme climate impacts and growing insurance claims. Therefore, Working Group Two should continue but report every two years so that both scientific analyses and local real-world experiences can be shared quickly between local and national governments.

Measures to cut emissions have evolved as newer technologies have been developed and refined. The present understanding of the policies and solutions to reducing emissions across all sectors is similar to 1990 knowledge – we just need to get on with implementing solutions by removing remaining barriers through regulation and advice.

Research to reduce and capture carbon dioxide emissions will continue, but given the urgency, it is too risky to hope that new low-carbon technologies and systems will one day prove to be commercially successful. Overall, the IPCC's Working Group Three on mitigation has done its job and should be replaced by a new working group on changing human behaviour.

Behavioural science has been included in various chapters within more recent IPCC reports. Without significant social change in the near term, the emissions curve will not bend downwards. Renewed emphasis on how to best achieve societal change across cultures as a matter of urgency is crucial.

PHILIPPINE DAILY INQUIRER

Climate-induced tipping points

By: Rodel Lasco

We are all familiar with tipping points. The phrase describes a process that typically starts slowly, only to suddenly change and become irreversible at a critical moment.

While numerous tipping points occur in nature and human experience, certain events have radically changed the arc of history. The recent pandemic is a case in point, as the spread of the COVID-19 virus breached a threshold and morphed into a global scourge. Humanity may face a cluster of tipping points as the earth careens toward average temperatures exceeding 2 degrees Celsius. Recent research is slowly unraveling how a warmer planet could trigger biophysical processes that could transform our world in ways that threaten the way we live.

In an article in the journal Science, Armstrong and cowriters (2022) state that "climate tipping points occur when change in a part of the climate system becomes self-perpetuating beyond a warming threshold, leading to substantial Earth system impacts." They then identified global and regional tipping points that could tilt because of a warming planet. The scary thing is that even if the Paris Agreement goal of not more than 2 degrees warming is met (which is quite unlikely), specific tipping points are projected to happen.

What are the most relevant to the Philippines? First is the collapse of the Greenland ice sheet in the north, and the West Antarctic ice sheet in the south. Such rapid melting of these ice masses will lead to an unprecedented rise of several meters in sea level that would submerge low-lying cities and towns. As a country of small islands, we should pay particular attention to and prepare for this. Second, the Science paper projected that coral reefs would die with temperature increasing even at around 1.5 degrees. Our coral reefs are among the most biodiverse ecosystems in the world, offering a habitat to countless marine organisms and providing food and livelihood to millions of Filipinos. Their loss would be an ecological and socioeconomic disaster of unimaginable proportions.

Aside from the above, there are other tipping points with above 2 degrees of warming, such as the dieback of tropical forests. As the Intergovernmental Panel on Climate Change (IPCC) Synthesis Report (2023) warned, the "likelihood of abrupt and/or irreversible changes and [their impacts] increase with higher global warming levels." It is worth repeating that tipping points are irreversible. Their impacts could be felt for hundreds, even thousands, of years.

Admittedly, the science of climate tipping points is still in its infancy. However, its initial findings are dire. What can we do as a nation? We must push hard for the United Nations Framework Convention on Climate Change parties to aim for net zero greenhouse gas emissions soon. At the same time, we must support scientific investigation on how our people and ecosystems can adapt to an increasingly uncertain climate. Finally, we must implement innovative measures to enhance the resilience of our country to what lies ahead.

PHILIPPINE NEWS AGENCY

NEDA chief cites need for resilient agri sector

By: Kris Crismundo

National Economic and Development Authority (NEDA) Secretary Arsenio Balisacan has reiterated the need to enhance the resilience of the domestic agriculture sector amid the risks being faced by farmers amid climate change.

In his keynote speech during the 2023 Asia-Pacific agricultural policy roundtable on Monday, Balisacan said balancing climate mitigation and productivity-enhancing interventions would help the agriculture sector withstand the impacts of climate shocks.

The country's top economist urged stakeholders in the agriculture sector to invest in measures that would reduce greenhouse gas emissions.

He cited possible synergies and interventions that raise agricultural productivity, which include crop rotation, intercropping, alternate wetting and drying, and precision agriculture.

Balisacan said these practices have the potential to cut emissions while simultaneously enhancing soil health, crop harvests, and profitability.

"Given the complexity and context-specific nature of the trade-offs and synergies between climate change mitigation and agricultural production, we must consider food security, rural livelihoods, and economic development in identifying and implementing mitigation strategies," he added.

Balisacan noted that to enhance the resilience and profitability of the agricultural sector, it is essential to consistently incorporate climate risks and sustainability into the development and implementation of measures to improve agricultural productivity.

This would involve regularly conducting climate risk and vulnerability assessments and integrating them into agricultural plans at the sectoral level, he said.

For the government, Balisacan said the administration has allocated resources to implement interventions for the adoption of profitable, climate-smart and resilient technologies through the Philippine Development Plan 2023-2028.

"To realize these strategies, the Philippines seeks to prioritize investment in research, development, and extension of climate-smart and resilient technologies, including

nature-based solutions. The country also aims to improve the marketability and profitability of low-carbon technologies and products by facilitating linkages and collaboration among innovators, entrepreneurs, and industries," the NEDA chief said.

THE MANILA TIMES

Balance needed between climate effort, agri devt

By: Niña Myka Pauline Arceo

Economies, particularly developing ones, need to make their agriculture sectors more resilient given the threats posed by climate change, a Cabinet official said on Monday.

A balance, however, should be sought between productivity enhancement measures and climate change interventions, Socioeconomic Planning Secretary Arsenio Balisacan told a hybrid Asia-Pacific roundtable discussion organized by the Global Agricultural Policy Institute.

"[G]iven the complexity and context-specific nature of the trade-offs and synergies between climate change mitigation and agricultural production, we must consider food security, rural livelihoods and economic development in identifying and implementing mitigation strategies," he said in a keynote speech.

The National Economic and Development Authority chief noted that agriculture — particularly at risk from rising sea levels and more volatile weather — was also a significant source of greenhouse gas emissions driving climate change.

"While beneficial in the long run, measures to reduce emissions in the agriculture sector have been met with hesitation, given its trade-offs with other development priorities and the significant investment requirements," Balisacan added.

"However, I remain optimistic about the potential synergies between mitigation and agricultural productivity. Existing crop management practices — such as crop rotation, intercropping, alternate wetting and drying, and precision agriculture — can reduce emissions while improving soil health and crop yields."

The Philippines, he told the gathering, was looking to prioritize investments in research and development, and the provision of climate-smart and resilient technologies. Plans also include raising the profitability and marketability of low-carbon technologies and the improvement of early warning and data systems.

"Given the limited fiscal space, the Philippine government will pursue policies and mechanisms to incentivize private sector participation and develop attractive financing schemes," Balisacan said. "The strategy includes establishing local carbon markets for the agriculture and forestry sectors to tap private sector financing, including foreign investments," he added.

Gatherings such as Monday's forum, Balisacan said, will allow economies to "identify better effective policy measures, technology and sustainable practices to mitigate emissions in agriculture while strengthening their resilience to climate change risks.

[Opinion] Climate change response must be a development priority By: The Manila Times Editorial Board

ONE of the key takeaways from the annual spring meetings of the World Bank earlier this month was the extent to which the world's largest multilateral development bank (MDB) intends to reconfigure its policies and operations to place an even greater emphasis on climate change response. The rationale is simple and obvious: Climate change affects everything, so any development aspirations must respond to it, even if they concern areas such as poverty reduction, public health, education or fiscal management that may not appear to be relevant to climate change adaptation and mitigation goals.

Masatsugu Asakawa, the president of our region's flagship MDB, the Manila-based Asian Development Bank (ADB), reinforced that message in a recent commentary for Project Syndicate. That commentary takes on added significance as it comes ahead of the ADB's own annual meetings in May, where a planned large-scale revamp of the organization — and by extension, its development and resource allocation priorities — are certain to dominate the agenda.

In his commentary, Asakawa expresses concern that the region and the world is headed for a "doom loop," in which ever-increasing amounts of effort and resources are needed to address the effects of climate change, diverting attention from addressing its causes, and therefore making the problem worse. "Billions of dollars are being invested to avoid this fate, but trillions are needed. Where will it come from?" he writes. "I believe that MDBs must do more, and faster, with the substantial resources that we manage. Simply placing climate action at the top of the development agenda is not enough. The climate crisis demands a dramatic shift in our mindset as development professionals."

The "shift in mindset" is more important for this region than for any other part of the world, Asakawa asserts. "The stakes are highest in Asia and the Pacific. In addition to accounting for more than half of the world's greenhouse-gas emissions, the region is warming faster than anywhere else and is acutely vulnerable to rising sea levels, extreme weather events and biodiversity loss," he explains. "These trends will only escalate if MDBs continue to pursue business as usual."

MDB shift in mindset

For countries like the Philippines, where many of the large-scale development goals such as expanding utility and transportation infrastructure, access to health care, transitioning to sustainable energy, and poverty reduction are necessarily dependent on a substantial level of external support, the ADB chief's message makes a clear point: That support is going to be prioritized for projects and programs that are aligned with the new mindset of the MDBs and other development partners. Every goal the country has must also have the goal of responding to climate change, in whatever manner is applicable to the circumstances, if the government is to receive any help.

And to be clear, the government will need help. As just one example, the "Patubig sa Buong Bayan at Mamamayan" initiative recently introduced by the Local Water Utilities Administration (LWUA) and which aims to expand water and sanitation service to up to 2.4 million more households by 2028 will require an investment of almost P25 billion. The LWUA does not have P25 billion, and as a matter of fact, as a government-owned and -controlled corporation, does not actually receive a budget in the annual General Appropriations Act. Funding from MDBs or other official development assistance (ODA) is going to be necessary, and in order to obtain that funding, the climate change response features of the program will need to be emphasized — and if it doesn't already have them, or have strong enough ones, the program will need to be redesigned accordingly.

The government under President Ferdinand Marcos Jr. has indeed raised the profile of climate response in key policy areas, so the warning, if it can be regarded as such, from the shift in the thinking of the MDBs should not be read as a criticism. But as ADB's Asakawa said, much more can be done. And it has to be, if we are to have any hope of leaving a livable planet for future generations.

SEC celebrates Sustainability Week

By: Kelvin Lester K. Lee

I would like to recognize, and thank the Corporate Governance and Finance Department of the Securities and Exchange Commission (SEC) for spearheading the commission's very first Sustainability Week, with the theme "Sustaina-ALL: Accelerating the Leap to Sustainable Living," aimed at strengthening SEC's goal to set its own sustainability objectives and strategies.

I am excited to see how it would evolve and further improve the way we live and work here at the SEC. The commission has been at the forefront of promoting policies toward sustainability and in furtherance thereof been issuing guidelines on sustainable finance and sustainability reporting. The aim is to encourage companies to contribute to building a sustainable business community and take an active part in dealing with climate change and environmental issues.

Thus, this Sustainability Week initiative is very important because as the country's primary corporate regulator, we want to lead by example. Through the SEC's annual celebration of Sustainability Week, we seek to enhance everyone's awareness and commitment to the SEC's sustainability objectives and strategies. We want to promote sustainability from within, which the companies can emulate as the chairman said, "We must walk the talk."

In this regard, SEC employees are enjoined to actively take part in activities that promote sustainable practices like the use of tumblers on Mondays, the use of tote bags on Tuesdays, which aim to encourage employees to minimize single-use items. Other activities are Waste Watch Wednesdays, incentivizing carpooling and going meatless on Fridays, because according to studies, meat production accounts for nearly 60 percent of all greenhouse gases from food production. Waste watch and carpooling, on the other hand, targets the commission's E-Waste Zero initiative, or the reduction of electronic wastes, and the reduction of greenhouse gases emission, respectively.

Taking also into consideration the commission's digital transformation, that is why SEC commits to streamlining processes with technology, through paperless transactions and reduction of energy consumption by simply turning off lights during lunch break and unplugging appliances when not in use, though small, makes a big difference.

While this event is only for a week, the SEC hopes that it will serve as a catalyst for our shared goal to adopt sustainable practices considering that no act is too small when it comes to saving the planet and dealing with environmental concerns. By acknowledging that our lifestyle choices impact everything around us and by adopting sustainable living, we can make a gradual change through our collective efforts in saving our environment.

On a side note, my wife, Dot Bangayan Lee, is a participating artist in Convergence (A Watercolor Show) that opened last April 12 at the Renaissance Art Gallery, 4th floor, Building A, SM Megamall.

The exhibit, which will run from April 12-26, brings together a group of Bisaya-speaking artists from Davao, Cebu and Manila who have come together from different parts of the Philippines to showcase their watercolor art, thus the title, Convergence.

WORLD ECONOMIC FORUM

G7 agrees to accelerate phase-out of unabated fossil fuels. What you need to know about the global energy transition this week By: Robert Bocca

1. G7 agrees to accelerate phase-out of unabated fossil fuels

The G7 group of wealthy countries has committed to a faster phase-out of unabated fossil fuels. The move has been welcomed as a potential step towards a global deal for all countries to do the same, but the G7 members are facing criticism for not matching the pledge with firm action.

In a joint statement after a meeting in Sapporo, Japan, the G7 countries' climate ministers agreed "to accelerate the phase-out of unabated fossil fuels so as to achieve net zero in energy systems by 2050 at the latest". However, they did not set a firm date for doing so.

"This is an important step forward," said French Energy Transition Minister Agnès Pannier-Runacher, noting that no deal was reached on this topic at the COP27 summit at the end of last year.

Wealthy countries have still not met a promise to deliver \$100 billion per year, starting in 2020, to help poorer countries cut emissions and cope with climate change. That amount falls far short of their actual needs, but has become symbolic of wealthy countries' failure to deliver promised climate funds.

While a global deal to gradually quit fossil fuels may not be legally binding, it would create a powerful "north star" to guide future climate negotiations, government policies and investments towards clean energy and industries.

2. US goes big on DAC in carbon removal push

The US government has offered \$3.5 billion in grants to build factories that will use Direct Air Capture (DAC) to remove carbon dioxide from the atmosphere and permanently store it. This is the largest such effort globally to help halt climate change through the use of DAC.

The sums involved dwarf the funding available in other regions. Britain which has pledged up to £100 million pounds (\$124 million) for DAC research and development.

Worsening climate change and inadequate efforts to cut emissions have thrust carbon removal to the top of the agenda, and UN scientists now estimate that billions of tonnes of carbon will need to be sucked out of the atmosphere annually to reach a goal of capping global warming at 1.5°C.

While much of that will come from natural solutions such as planting more trees or increasing the ability of soil to sequester carbon, permanent carbon removal like DAC will also be needed. But the biggest operational plant captures only 4,000 tonnes a year and costs are high. At the same time, the talent pool is fledgling and corporate buyers for the credits largely remain on the sidelines.

The role of oil companies in the space has also raised eyebrows, and developers must muster support for hubs from communities that have often been damaged by big energy projects.

3. News in brief: More energy stories from around the world

Chile's president plans to nationalize the country's lithium industry. The South American country is the world's second-largest producer of the metal, which is essential in electric vehicle (EV) batteries. The move poses a fresh challenge to EV manufacturers scrambling to secure battery materials.

The EU and Norway aim to work together to develop infrastructure to capture and store CO2 emissions and scale up renewable hydrogen production in Europe, according to a draft "alliance" plan. It also signals a similar intent to team up on hydrogen produced from renewable energy.

The shutdown of Germany's last remaining nuclear reactors in mid-April means the country's power producers have no option but to further accelerate their ongoing energy system overhaul. Germany's natural gas supplies are still severely constrained following Russia's invasion of Ukraine. The government has approved a bill banning new oil and gas heating systems from 2024.

Europe's most powerful nuclear reactor has begun operations in Finland. The 1,600MW Olkiluoto 3 reactor will help the country reach its carbon neutrality targets and increase energy security. However, it has come online 14 years later than first planned.

At the same time, Greenpeace and other campaign groups are taking the European Commission to court as they seek to overturn EU rules that class nuclear energy and natural gas as climate-friendly investments. The groups are targeting the EU's "taxonomy", a list of investments that can be labelled and marketed as sustainable in Europe.

Bangladesh is being forced to cut power to millions of people, as a relentless heatwave leads to a surge in demand for power. Greater use of irrigation pumps by farmers and an increase in commercial activity during Ramadan have also contributed to increased power demand, officials say.

The EU has record levels of natural gas in storage after a warmer-than-expected winter, boosting hopes that it can keep reducing its gas imports from Russia. Natural gas use in the bloc fell by around 18% in the eight months to March because of the weather, The Financial Times reports.

Oil loadings from Russia's western ports in April will rise to their highest since 2019 at above 2.4 million barrels per day, despite Moscow's pledge to cut output, trading and shipping sources told Reuters. India and China have bought the vast majority of Russian oil so far in April.

Abu Dhabi National Oil Company (ADNOC) is teaming up with Japan's Mitsui to verify the greenhouse gas emissions of a clean ammonia project in the UAE. ADNOC is also working with other Japanese companies to strengthen the hydrogen value chain between the UAE and Japan.

A microbe discovered in a volcanic hot spring in Italy can absorb carbon dioxide "astonishingly quickly" and could become an efficient way of removing the greenhouse gas from the atmosphere, scientists say. The idea of using bacteria to capture CO2, potentially enhanced by genetic engineering, is an active research area.

4. More on energy from Agenda

In the past year, the global economy – and peoples' lives – have been convulsed by an energy crisis that shows no signs of abating. Six global leaders from the public and private sectors share their views on bolstering energy security and the global green transition.

When it comes to offsetting carbon footprints, an increasing number of sustainability leaders are considering contribution models instead of or in addition to commitments that revolve around compensation, such as carbon credits. What's the difference between compensation and contribution models?

Billions of dollars of investment are being put into clean energy, but the world also needs a sustainable supply of new leaders to oversee the green transition. Here's how energy companies can build their teams and meet the talent challenge head-on.

CCC IN THE NEWS:

THE MANILA TIMES

Large-scale upgrade needed to decarbonize shipping industry

By: Genivi Verdejo

The Department of Transportation (DoTr) said green freight transport requires a largescale upgrade of existing sea vessels to achieve zero-level decarbonization.

Leonel Cray de Velez, assistant secretary for Planning and Development at DoTr said, "For us to move the decarbonization to zero form, is to adopt the solutions that are on scales. We need to complete, think-replacement, think-upgrades through upgrading our vessels at scale. We're looking at high-risk vessels, thousands of trucks, thousands of public utility vehicles, and that's the only way we can make a difference."

DoTr on Tuesday joined the International Transport Forum (ITF), and representatives from local government units, public agencies and international organizations in a forum that discussed the "Decarbonizing Pathways for Freight Transport in the Philippines."

DoTr supports ITF's push for decarbonizing freight transport in the country. This global effort will combat climate change by adopting low-carbon fuels and technologies and improving the efficiency of freight transport through regulation, multi-modality vehicle technology, digitalization and innovation. ITF is building capacity among stakeholders to create a more sustainable and resilient transport system in the future.

ITF is an intergovernmental organization with 64 member countries that acts as a think tank for transport policy. Its goal is to foster a better understanding of the role of transport in economic growth, environmental sustainability and social well-being.

Present at the event were ITF Secretary-General Dr. Kim Tae Kim, the DoTr, Climate Change Commission Senior Science Research Specialist Ellaine Borejon, and Asian Development Bank Chief of Transport Sector Group James Leather.

=END=