



## NEWS ROUNDUP

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## DAILY TRIBUNE

### [PBBM urges global action on climate change, highlights PhI vulnerability](#)

By: Tiziana Celine Piatos

President Ferdinand Marcos Jr. on Wednesday reiterated the urgent need for global action on climate change, citing the Philippines' vulnerability to its devastating effects.

## FINANCIAL TIMES

### [UN environment chief warns on lack of climate engineering controls](#)

By: Kenza Bryan

The UN's top environmental agency chief has warned that a rush into experimental techniques to cool the atmosphere by partially blocking the sun risked harming wildlife, oceans, the ozone layer and crops, after a failure by governments to agree on how to control geoengineering.

## **GMA**

### **[Marcos reiterates PH's offer to host Loss and Damage Fund](#)**

By: Anna Felicia Bajo

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## **MANILA BULLETIN**

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By: Jonathan Vicente

Climate change is increasingly making its presence felt in areas with the coolest climate in Luzon environmentally and economically.

### **[Of drought, flood and landslides: Group says climate extremes causing geographical tragedies](#)**

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### **[PBBM pushes for PH-Australia partnership on climate change, clean energy](#)**

By: Raymund Antonio

President Marcos is hopeful to partner with Australian to address the impact of climate change and discuss the possibilities in the clean energy sector.

## **MANILA STANDARD**

### **[Australia invited as climate change partner; El Niño damage now at P1b](#)**

By: Charles Dantes

President Ferdinand R. Marcos Jr. on Wednesday invited Australia to partner with the Philippines in terms of climate change efforts and the renewable energy industry, as he laid out the country's comprehensive plans to boost the said sectors.

## **MONGABAY**

### **[Pollution poses big risks to global clean water supplies, study shows](#)**

By: Sean Mowbray

Scientists say that nitrogen pollution from agriculture and human waste could dramatically worsen clean water scarcity by 2050, according to a groundbreaking study recently published in the journal Nature Communications.

## **PCO**

### **[PBBM invites Australia to partner with PH on climate change, clean energy](#)**

President Ferdinand R. Marcos Jr. on Wednesday invited Australia to partner with the Philippines in terms of climate change efforts and in the renewable energy industry as he laid out the country's comprehensive plans to boost those sectors.

## **POLITIKO**

### **[Join Forces! Marcos Seeks PH, Australia Partnership On Climate Change, Clean Energy](#)**

By: Prince Golez

President Ferdinand Marcos Jr. has invited Australia to partner with the Philippines on climate change initiatives and renewable energy projects.

## **THE PHILIPPINE STAR**

### **[Marcos pushes Philippines-Australia partnership on climate change](#)**

By: Alexis Romero

President Marcos yesterday urged Australia to work with the Philippines on clean and renewable energy and measures aimed at addressing the effects of climate change that place food security and people's livelihood at risk.

### **[Women and rural poor hit hardest by climate change — UN](#)**

Heatwaves and floods inflict greater economic pain on rural women than men because climate change intensifies existing inequalities, the United Nations' food and farming agency said on Tuesday.

## DAILY TRIBUNE

### [PBBM urges global action on climate change, highlights Phl vulnerability](#)

By: Tiziana Celine Piatos

President Ferdinand Marcos Jr. on Wednesday reiterated the urgent need for global action on climate change, citing the Philippines' vulnerability to its devastating effects.

During his intervention for the ASEAN-Australia Special Summit Leader's Plenary Session here, Marcos Jr. underscored the Philippines' position as a frontline nation, constantly grappling with the destructive impacts of severe typhoons and rising sea levels.

"Our country remains at the forefront of the effects of climate change, constantly facing the harsh realities of devastating typhoons and rising sea levels," Marcos Jr. said.

"These realities compel us to take bold and decisive actions, both domestically and in international fora for climate justice," Marcos Jr. added.

The Chief Executive also extended a warm welcome to the outcomes of COP28 and reiterated the Philippines' offer to host the Board of the Loss and Damage Fund.

He emphasized that hosting the Board in the Philippines would demonstrate global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping urgent global climate policies.

Acknowledging Australia's efforts to boost clean energy financing and investment in ASEAN, Marcos Jr. expressed appreciation for its support for clean energy transition to meet climate action objectives.

He highlighted the Philippines' concrete actions in reducing emissions by catalyzing investments in renewable energy sources.

"In the Philippines, we have taken concrete actions by implementing policies and initiatives to reduce emissions by catalyzing investments in our rich sources of renewable energy," Marcos Jr. said.

"We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures," Marcos Jr. added.

Marcos Jr. then emphasized the importance of collaboration and collective action in addressing the global climate crisis.

He urged nations to work together towards a sustainable future, ensuring the well-being of current and future generations.

## FINANCIAL TIMES

### [UN environment chief warns on lack of climate engineering controls](#)

By: Kenza Bryan

The UN's top environmental agency chief has warned that a rush into experimental techniques to cool the atmosphere by partially blocking the sun risked harming wildlife, oceans, the ozone layer and crops, after a failure by governments to agree on how to control geoengineering.

"To look at it purely as a risk-risk within climate, what happens if we do not decarbonise versus what happens if we deploy [climate engineering] . . . is a false narrative for the whole of the global environment," Inger Andersen, executive director of the UN environment programme, told the Financial Times.

Nations failed to back a proposal by Switzerland and Monaco for a scientific research group to examine technology to block the sun's rays, at a UN assembly in Nairobi last week.

The resolution was withdrawn after opposition from a group of African countries which fear it could legitimise methods that are experimental. Countries including Kenya argued any agreement should include a reference to calls for a pact not to use the technologies under examination, according to an amended draft seen by the FT.

Environmental groups and some countries are strongly opposed to an idea being piloted in the US of injecting sulphur dioxide into the atmosphere to create mists that deflect solar radiation. They also raise wider concerns about the potential unintended consequences of any attempts to change weather patterns artificially.

"It is known that it could likely impact biodiversity," Anderson said. "It is known that it could likely impact our oceans. It is known that it could likely impact our ozone layer."

Despite these fears, Anderson supported Switzerland's proposal in the hope it would lead to more formal discussions of the environmental risks posed by so-called geoengineering, she said.

A recent UNEP report acknowledged the concerns about so-called solar radiation management but described it as "the only known approach that could be used to cool the Earth within a few years".

The UN had too often been brought in “when technologies have already done damage”, Anderson had said in closing remarks at the UN’s environment assembly in Nairobi.

She cited cautionary examples including the partial destruction of the ozone layer by man-made chemicals, which were only addressed in the Montreal Protocol in 1987 after being widely used in the 1970s, and the harmful effects on human health of lead in petrol, which was not phased out globally until 2021.

A previous Swiss-led resolution on assessing geoengineering technologies also failed to receive backing at a previous UNEP assembly in 2019.

“We’re talking about planetary scale intergenerational pollution to fight planetary scale intergenerational pollution,” said Mary Church, geoengineering campaign manager at the Centre for International Environmental Law.

“It doesn’t address climate change at its root cause and does nothing to cut greenhouse gas emissions.”

## **GMA**

### **Marcos reiterates PH's offer to host Loss and Damage Fund**

By: Anna Felicia Bajo

President Ferdinand "Bongbong" Marcos Jr. on Wednesday reiterated the Philippines' offer to host the climate disaster fund called "Loss and Damage Fund."

"The Philippines welcomes the outcomes of the COP28 and I wish to take this opportunity to reiterate our offer to host the Board of the Loss and Damage Fund," Marcos said during his intervention at the Leaders' Plenary Session at the ASEAN-Australia Special Summit here.

"Hosting the Board in the Philippines would showcase global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping the most urgent of global climate policies," he said.

Marcos mentioned that the Philippine government has already taken concrete actions to address climate change "by implementing policies and initiatives to reduce emissions by catalyzing investments in our rich sources of renewable energy."

"We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures," he said.

Speaking before the Lowy Institute on Monday, Marcos noted that climate change poses a "deadly challenge" in the Pacific region and threatens the very survival of millions, especially those in the small island developing states in the Pacific.

The Philippine government in December last year secured a seat on the board of the Loss and Damage Fund, which seeks to help poor nations cope with costly climate disasters.

The country's Department of Environment and Natural Resources said the Philippines is "most qualified" to host the Loss and Damage Fund because it is a living testament to the effects of climate change.

## MANILA BULLETIN

### Climate change seen driving more landslides

By: Jonathan Vicente

Climate change is increasingly making its presence felt in areas with the coolest climate in Luzon environmentally and economically.

Among these areas is Baguio City, undoubtedly among the top destinations for those seeking respite from the humid climate of Metro Manila and other regions in Luzon, especially as the dry season approaches.

Back in the 1970s and 1980s, construction went into full swing to make the three main access roads leading to Baguio—Kennon Road, Marcos Highway, and the longest but safest route Naguilian Highway—safe for travelers and motorists.

Kennon Road offers the fastest route for driving up to the summer capital and starts from Rosario, La Union province, winding through a narrow and steep valley. But it is perceived to be the most dangerous among the three routes, especially prone to landslides during the rainy season.

The Department of Public Works and Highways in the Cordillera Administrative Region, in coordination with local governments here, decided to close down this scenic route due to landslides that happen even when there's no typhoon. Landslides have become an all-year round occurrence, some locals told INQUIRER.net.

#### Nasa study

The National Aeronautics and Space Administration (Nasa) released a study in October 2022, highlighting a concerning trend as climate change continued to alter Earth's weather patterns—a rise in the frequency of landslides brought by heavy rain events.

The study, published in a feature article titled “Nasa Study Finds Climate Extremes Affect Landslides in Surprising Ways” on the Nasa website, focused on the dramatic impact of fluctuating rain patterns on the behavior of slow-moving landslides.

Climate change is making these cycles more common worldwide, with alternating periods of drought and strong storms, Nasa said.

The study showed that, contrary to predictions, landslides showed similar susceptibility to precipitation extremes in both wet and dry areas. Climate change is driving more volatile precipitation patterns around the world—very dry stretches punctuated by storms that drop large amounts of rain or snow in a short amount of time.

It also underlined the need to understand how landslides respond to extreme weather events, as well as the critical role of water in causing them. “Water triggers landslides, and knowing how landslides react to record droughts or extreme rainfall can help researchers better predict their future behavior, including whether any could collapse, or fail catastrophically,” according to the article.

### Effects are not immediate

The study also revealed that low-moving landslides may not immediately endanger infrastructure or people, but over time, they can damage or destroy buildings, roads, and other structures. Unexpected collapses can happen, presenting serious risks to residents.

According to another Nasa article, rising temperatures are predicted to increase the frequency and intensity of downpour events, which may worsen landslide activity in vulnerable areas. It warned that “more frequent and intense rainfall events due to climate change could cause more landslides...”

These findings have particularly concerning implications for regions that frequently see high levels of precipitation, such as those experiencing monsoon seasons from June to September. Such rainfall can cause landslides, which can have disastrous effects ranging from the devastation of entire communities to the interruption of vital utilities like transportation and drinking water supply.

The findings of Nasa’s study are a sobering reminder of the pressing need for preventive action to lessen the effects of climate change and safeguard vulnerable areas from landslide catastrophes.

### Kennon Road’s economy

Kennon Road presented a different appearance when INQUIRER.net visited Benguet at the start of this month. The rubble and debris may not be visible on the road but visitors were like “re-routed” back in time.

There is a long stretch of Kennon Road in Camp 6, Tuba, that is completely shut, prompting motorists to take the risk of driving off-road and traversing rivers.

The closure of Kennon Road to public transport, which is only open during specific hours and days, is adversely affecting local tourism. The picturesque Lion's Head, usually bustling with visitors seeking that perfect Instagram pose, and its souvenir shops no longer exude their former vibrancy.

National and local governments are suggesting the use of Marcos Highway and motorists face risks if they chose to use Kennon Road during the window hours. Even during the recent Panagbenga festival, no commercial transportation was allowed to pass Kennon Road.

There's a lot of debate about climate change, skeptics say it is just for political publicity while some insist it is real and it is here. However, science backed by satellite images is sharing tell-tale signs that changing climate is already happening.

## [Of drought, flood and landslides: Group says climate extremes causing geographical tragedies](#)

By: Aaron Recuenco

An environmental group has warned of the adverse effects of climate change in the country, citing a recent study conducted by the National Aeronautics Space Administration (NASA) that the global phenomenon is increasing the danger of landslides.

Makakalikasan national chairman Roy J. Cabonegro said the Philippines is already experiencing the extreme effects as a result of climate change, including drought, massive flooding and even landslides.

“One by one, we are moving beyond the point of no return on climate impacts,” said Cabonegro, whose group advocates for deep communitarian ecologism.

In presenting his viewpoint on the interconnectedness between environmental degradation and climate extremes as stated by a NASA study, Cabonegro highlighted the interplay between typhoon frequency and intensity and the compounding effects of climate extremes, such as the alternating effects of La Niña-driven heavy precipitation and El Niño-induced droughts.

According to Cabonegro, climate extremes are unheard-of weather events that exceed historical indices and cause unpredictable, permanent effects.

He said the Philippines is experiencing various forms of extremes, such as the disproportionate impact of rapidly rising sea levels on coastal communities and the rapid degradation of ecosystems and biodiversity, which jeopardizes ecological balance and food security.

"Climate extremes refers to a phenomenon that our current immediate future generations have the misfortune of experiencing," said Cabonegro.

"This means that we are feeling the impacts of weather conditions and its repercussions going beyond the indices in a relatively short time. This means, what is happening is unprecedented, and our experience does not have enough reference for the changes that are happening, and therefore there is a lot of uncertainty of what we need to have to be prepared sufficiently for what might happen," he added.

Cabonegro stressed that extreme weather conditions are already a grim reality in the Philippines.

"The repercussions are undeniable, ranging from quickly rising sea levels to increased typhoon intensity and frequency. "Our sea level rise is in many areas; including Bulacan and Pampanga near NCR is 4-5x higher compared to the rest of the world," said Cabonegro.

"Biodiversity collapse is an impact of extreme climate change, and its impact on the balance of our ecosystem and impacts on our food source are poorly understood and happening too fast," he added.

Forest fires too

Cabonegro explained how harsh weather conditions lead to the occurrence of natural disasters, citing the forest fires in Cordilleras as another example.

He said this is directly caused by extreme weather as well because the periods of extreme dryness are extended and in tandem with extreme weather results in triggering more forest fires.

"And burned forests that kill the trees will contribute to land degradation and, in turn, will cause erosion. Erosion, especially during the coming of the extreme rains and stronger typhoons, will complete the process, leading to landslides," said Cabonegro.

Reflecting on previous tragedies such as the Guinsaugon landslide in Leyte and the recent event in Brgy. Masara, Davao de Oro, Cabonegro acknowledged the role of climate change in the severity of such disasters.

A Call to Embrace Holistic Solutions and Green Governance

Cabonegro supports a comprehensive strategy that combines mitigation and adaptation measures.

The restoration of sustainable forest cover, he said, is central to this strategy, particularly in crucial habitats such as wetlands and mangroves, which provide resistance to sea-level rise and harsh weather events.

He also underlined the importance of comprehensive local climate action plans and strong governance structures for coordinating climate funds with adaptation priorities, and called on authorities and legislators to take immediate action.

"It is time for a green government in the country. No other socio-economic-political and ideological alternative is more logical and necessary in these times than the greens," he said.

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## [PBBM pushes for PH-Australia partnership on climate change, clean energy](#)

By: Raymund Antonio

President Marcos is hopeful to partner with Australian to address the impact of climate change and discuss the possibilities in the clean energy sector.

During his speech at the leaders' plenary session of the Association of Southeast Asian Nations (ASEAN)-Australia Special Summit in Melbourne, the Chief Executive laid out the Philippines' comprehensive plans to boost the renewable energy industry and acknowledged Australia's aim to boost clean energy trade, financing, and investment in the region.

"We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures," Marcos said in his country statement.

Noting the Philippines' vulnerability to the harsh effects of climate change, the President stressed that his administration is taking the necessary steps both domestically and in international fora for climate change.

He also took the change to welcome the outcomes of the 28th Session of the Conference of Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) in Dubai last year and reiterated the offer to host the Board of the Loss and Damage Fund in the Philippines.

"Hosting the Board in the Philippines would showcase global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping the most urgent of global climate policies," he said.

The Philippines already secured a seat in the inaugural Loss and Damage Fund Board at the COP28 for the years 2024 and 2026, and will serve as an alternate for 2025.

As a member, the country now has a voice in the management of funding available around the world to mitigate the effects of climate change.

In his statement, Marcos also urged Australia to continue supporting the ASEAN Centre for Biodiversity (ACB) beyond 2024.

"As we develop the ASEAN-Australia Plan of Action 2025-2029, let us take into account the pressing need for an effective and inclusive implementation of the Kunming-Montreal Global Biodiversity Framework, and establishment of its goals and targets on

biodiversity conservation, climate action, ecosystems and--- ecosystems restoration and its management,” he remarked.

“The ACB is also implementing the Mainstreaming Biodiversity into the One Health Capacity development project, a partnership among ASEAN, Food and Agriculture Organization (FAO), and the Australian Government,” he added.

In September 2023, Marcos and Australian Prime Minister Anthony Albanese signed the Joint Declaration on Strategic Partnership (JDSP), bringing the Philippines’ and Australia’s partnership from comprehensive to strategic.

Under the strategic partnership, both countries will have deeper cooperation in climate action, education, development, and people-to-people exchanges.

## MANILA STANDARD

### [Australia invited as climate change partner; El Niño damage now at P1b](#)

By: Charles Dantes

President Ferdinand R. Marcos Jr. on Wednesday invited Australia to partner with the Philippines in terms of climate change efforts and the renewable energy industry, as he laid out the country's comprehensive plans to boost the said sectors.

This developed as the National Disaster Risk Reduction and Management Council reported that the effects of the El Niño phenomenon have caused more than P1 billion in agricultural damage across the country.

Last week, a reinsurance firm said the Philippines is the country suffering the highest annual economic losses from the impact of four major weather perils studied—floods, tropical cyclones, winter storms, and severe thunderstorms—at three percent of its gross domestic product (GDP) or about \$12 billion (P673 billion).

The country is also “exposed to hazard intensification in the future,” according to reinsurance giant Swiss Re, a Zurich-based group, which acts as an insurer for insurers.

“We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures,” President Marcos said during the leaders’ plenary session at the ASEAN-Australia Special Summit.

Mr. Marcos also reiterated the offer to host the Board of the Loss and Damage Fund in the Philippines before the assembled leaders, emphasizing the importance of inclusivity and ensuring that the voices and experiences of the most affected countries are central in shaping urgent global climate policies.

The President emphasized the Philippine government’s proactive stance, both domestically and internationally, on climate change, recognizing the nation’s vulnerability.

He outlined the Philippines’ comprehensive plans to bolster these critical areas.

President Marcos underscored the concrete measures taken by the Philippines to reduce emissions through policies and initiatives that catalyze investments in the country’s abundant renewable energy sources.

He also welcomed the outcomes of COP28, held in Dubai the previous year, underlining the Philippines' commitment to addressing climate change on a global scale.

President Marcos further urged Australia to continue its support for the ASEAN Centre for Biodiversity (ACB) beyond 2024.

In its latest situation update, the NDRRMC has logged damage worth P1.06 billion in 17,718.11 hectares of crop areas in the regions of Ilocos, Calabarzon, Mimaropa, Western Visayas, and Zamboanga Peninsula.

Western Visayas has so far sustained the biggest amount of damage at P687.7 million, followed by MIMAROPA with P319.7 million, Ilocos with P54.4 million, Calabarzon with P2.75 million, and Zamboanga Peninsula with P717,527.

A total of 23,086 farmers and fisherfolk have so far been affected.

## MONGABAY

### [Pollution poses big risks to global clean water supplies, study shows](#)

By: Sean Mowbray

Scientists say that nitrogen pollution from agriculture and human waste could dramatically worsen clean water scarcity by 2050, according to a groundbreaking study recently published in the journal Nature Communications.

Researchers from Germany and the Netherlands modeled the impact of nitrogen pollution on water quality in more than 10,000 river basins planetwide. They found that as of 2010, there were just 984 river basins thought to be facing water scarcity based on “classic” water quantity estimates. But factoring in the impact of nitrogen pollution saw this figure jump to more than 2,500 basins that year.

Projecting forward to 2050, a worst-case pollution scenario found more than 3,000 river subbasins facing clean water scarcity, covering an additional 40 million square kilometers (around 15.4 million square miles) of basin area and potentially impacting 3 billion more people than their estimate of 2.9 billion people impacted by water quantity scarcity alone in 2010, the researchers stated.

Using this pollution-inclusive scenario, the study identified nitrogen pollution hotspots in China, India, Europe, North America and Africa.

The wide divergence between estimates is attributable to the fact that water scarcity assessments often only track the quantity of water coming down a river, says Benjamin Bodirsky, study co-author and senior scientist at the Potsdam Institute for Climate Impact Research. “What we added to this [analysis] is clean water scarcity. We were looking at which rivers have sufficient water quality to support biodiversity and ecosystem functioning.”

“Water pollution is becoming a very important cause of water scarcity,” notes Mengru Wang, lead author of the paper and a research associate at Wageningen University in the Netherlands. “You may have enough water, but if the quality is poor, then it cannot be safely used by humans or nature.”

#### Implications for planetary health

Nitrogen is released into the environment via human waste and by fertilizers spread on agricultural lands. A boom in synthetic nitrogen fertilizer production (now heavily sourced from fossil fuels) began with the invention of the Haber-Bosch process in 1913. Though that industrial process phenomenally boosted crop yields, feeding much of the

world, it also allowed for a massive influx of nitrogen into waterways, leading to toxic algae blooms, hypoxia, fish kills and fishery collapse and human health impacts.

The disruption of Earth's natural nitrogen cycle by human activity is counted among the nine planetary boundaries — limits that when transgressed threaten the “safe operating space of the Earth system.” The nitrogen planetary boundary was transgressed in 1970. Since then, activation has increased 160%, though notable differences have been observed between countries and watersheds depending on intensity of fertilizer use.

In the future, nitrogen hotspot river basins identified by the study could be at much greater risk of eutrophication with potential consequences for the environment, economies and possibly even human health. Bodirsky states that such high levels of pollution could lower fish harvests, reduce water quality to the point that it is not suitable for recreation and “destabilize ecosystems more generally.”

Jan Semenza, a public health expert at Sweden's Umeå University, who was not involved in the current study, calls the findings “pretty bad news. ... It's not just water quantity, it's also quality that's plummeting, and it's devastating for not only human health but also for planetary health in general,” he says.

Nitrogen pollution “has huge ramifications for all kinds of ecosystems that we depend on. We need those ecosystem services, as do a lot of other living organisms,” Semenza says.

The research team stated that a multitude of other “newly emerging pollutants” — including microplastics, heavy metals, pathogens and pharmaceuticals — emitted into waterways via sources such as human wastewater will likely cause “severe water degradation in the future.” It is estimated that in some regions of the world, up to 80% of wastewater flows into the environment untreated, causing concern for fragile freshwater ecosystems and human health.

The team did not assess the impact of other pollutants on water quality but plans to conduct similar modeling to identify more future hotspots. “How those pollutants will change the [geographic] picture of water scarcity, we don't know,” Wang says, adding that future research is needed to delve deeper into pollution's potential economic and health implications at regional and local scales. “Maybe the hotspots will shift from one region to another, and it [also] depends on how these pollutants are used and treated.”

Emergent pollutants — counting in the hundreds of thousands of synthetic chemicals humanity has added to the environment — are included within the novel entities planetary boundary, which scientists found to be transgressed in 2022.

Climate change — another planetary boundary — is also expected to impact both water quantity and quality. Last year, researchers reviewed 965 case studies and found that river water quality “generally deteriorates” because of intensifying droughts, heat waves, rainstorms, floods and other long-term climate change consequences. Climate change can increase pollution impacts, with high temperatures worsening algal blooms and extreme droughts raising water pollutant concentrations.

“Because of the seasonality of water availability, and [climate] impacts ... water quality has become more important,” says Katrina Charles, professor of environmental health risks and chair of the Oxford Water Network, who was not involved in the recent pollution study. “If you have a longer period of low flow in a river, you’ve got more concentration of those pollutants and a longer time that people are being exposed to them.”

Semenza says he worries that public health will worsen globally due to the interplay between climate change and pollution. “We do know that there is an increased risk for waterborne disease outbreaks under water scarcity scenarios,” he says, as this can limit access to clean water for other purposes such as hygiene. Both long-term drought and extreme precipitation events can lead to waterborne disease epidemics.

“It is concerning to see the convergence of pollution, climate change and inequities and how they exacerbate the situation when it comes to clean water resources for humans, but also for other living beings and nature in general,” Semenza says.

The paper offers some overarching solutions, noting that alongside measures to address water quantity, more action is needed to prevent and clean up pollution. Specifically, the authors suggest better management and more efficient use of fertilizers and improvements to wastewater treatment facilities. In many parts of the developing world, such facilities are nonexistent or lag behind the technology found in the industrialized world.

“Another very important opportunity is to look into how we can reduce the consumption of meat to improve the nutrient use efficiency of agriculture in general,” adds Wang.

Concerningly, the authors’ most optimistic modeling scenario, which assumes the realization of a raft of positive global changes (including sustainable socioeconomic

development, ambitious nitrogen reduction policies, low-meat dietary shifts, improved sewage connection and treatment, sustainable water withdrawal and climate mitigation), still sees clean water scarcity hotspots in regions such as China, India and Europe.

“I think this paper is adding to this message that we need to take this issue more seriously,” says Charles, “and really think about the impact that pollution is having on our water systems and how we can protect them for ecosystem health and for our own health.”

## PCO

### [PBBM invites Australia to partner with PH on climate change, clean energy](#)

President Ferdinand R. Marcos Jr. on Wednesday invited Australia to partner with the Philippines in terms of climate change efforts and in the renewable energy industry as he laid out the country's comprehensive plans to boost those sectors.

Speaking during the leaders' plenary session at the ASEAN-Australia Special Summit in Melbourne, President Marcos said that the Philippines has taken concrete measures by implementing policies and initiatives to reduce emissions by catalyzing investments in the country's rich sources of renewable energy.

President Marcos also welcomed Australia's aim to boost clean energy trade, financing, and investment in ASEAN and its support for clean energy transition to meet climate action objectives.

"We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures," President Marcos told Australia and the ASEAN leaders.

In his country statement, the President said the Philippine government is taking bold and decisive actions both domestically and in international fora for climate change as it remains vulnerable to the harsh effects of climate change.

He also said the Philippines welcomes the outcomes of the COP28, or the 28th Session of the Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Dubai last year.

President Marcos reiterated before the leaders the offer to host the Board of the Loss and Damage Fund in the Philippines.

"Hosting the Board in the Philippines would showcase global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping the most urgent of global climate policies," he said.

In terms of ASEAN Centres of Excellence, President Marcos has urged Australia to continue its support for the ASEAN Centre for Biodiversity (ACB) beyond 2024.

"As we develop the ASEAN-Australia Plan of Action 2025-2029, let us take into account the pressing need for an effective and inclusive implementation of the Kunming-

Montreal Global Biodiversity Framework, and establishment of its goals and targets on biodiversity conservation, climate action, ecosystems and— ecosystems restoration and its management,” President Marcos said.

“The ACB is also implementing the Mainstreaming Biodiversity into the One Health Capacity development project, a partnership among ASEAN, Food and Agriculture Organization (FAO), and the Australian Government,” he added.

President Marcos and Prime Minister Anthony Albanese signed the Joint Declaration on Strategic Partnership (JDSP) in September last year, elevating the bilateral ties between the Philippines and Australia from comprehensive to strategic partnership.

Facilitating deeper cooperation in a range of areas including climate action, education, development and people-to-people exchanges are among the agreements covered under the strategic partnership between the Philippines and Australia.

## POLITIKO

### [Join Forces! Marcos Seeks PH, Australia Partnership On Climate Change, Clean Energy](#)

By: Prince Golez

President Ferdinand Marcos Jr. has invited Australia to partner with the Philippines on climate change initiatives and renewable energy projects.

In his country statement during the leaders' plenary session at the ASEAN-Australia Special Summit in Melbourne, Marcos said the Philippines has taken concrete steps to reduce emissions by promoting investments in the country's rich sources of renewable energy.

"We thus invite Australia to partner with the Philippines in our clean, green, and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures," the President told Australia and the ASEAN leaders.

Marcos Jr. stressed that the government is taking bold and decisive actions both domestically and in international fora as the country continues to be vulnerable to the harsh effects of climate change.

He also mentioned the offer to host the Board of the Loss and Damage Fund, a major outcome of COP27 in Egypt in 2022, in the Philippines.

"Hosting the Board in the Philippines would showcase global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping the most urgent of global climate policies," the chief executive said.

In terms of ASEAN Centres of Excellence, Marcos Jr. urged Australia to continue its support for the ASEAN Centre for Biodiversity (ACB) beyond 2024.

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## THE PHILIPPINE STAR

### [Marcos pushes Philippines-Australia partnership on climate change](#)

By: Alexis Romero

President Marcos yesterday urged Australia to work with the Philippines on clean and renewable energy and measures aimed at addressing the effects of climate change that place food security and people's livelihood at risk.

Speaking during the leaders' plenary of the Association of Southeast Asian Nations (ASEAN) – Australia Special Summit here, Marcos said the Philippines remains at the forefront of the effects of climate change and is constantly facing the “harsh realities” of devastating typhoons and rising sea levels.

Such realities continue to threaten the Philippines' biodiversity and ecosystems, and, in turn, its agriculture, food security and livelihood sources.

“These realities compel us to take bold and decisive actions, both domestically and in international fora, for climate justice,” Marcos said.

Marcos said the Philippines, which is visited by about 20 typhoons annually, welcomes Australia's aim to boost clean energy, financing and investment in ASEAN and its support for clean energy transition to meet climate action goals. The Philippines, the President added, has taken concrete actions by implementing policies and initiatives to cut emissions by catalyzing investments in its rich renewable energy sources.

“We thus invite Australia to partner with the Philippines in our clean, green and renewable energy industry and other emerging technologies, and introduce energy efficiency and conservation measures,” the Chief Executive said.

Marcos also hailed the outcomes of the 28th Session of the Conference of Parties to the United Nations Framework Convention on Climate Change (COP 28) in Dubai last December, where countries agreed to form a loss and damage fund that would bankroll climate change-related projects.

“I wish to take this opportunity to reiterate our offer to host the Board of the Loss and Damage Fund,” Marcos said.

“Hosting the board in the Philippines would showcase global commitment to inclusivity, ensuring that the voices and experiences of the most affected countries are heard and considered in shaping the most urgent of global climate policies.”

The Philippines has obtained a seat in the inaugural Loss and Damage Fund Board, giving it a say in the management of the funding for climate initiatives.

Marcos also urged Australia to keep on supporting the ASEAN Centre for Biodiversity beyond 2024.

In the same event, Marcos reported that the Philippines has signed the second protocol to the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA). The protocol, which was signed by the trade department last February, seeks to respond to the “evolving multidimensional challenges” in the business environment and complement region-to-region efforts to enhance supply chain resilience, sustainable development and inclusivity.

The protocol contains new chapters on government procurement, trade and sustainable development and micro, small and medium enterprises.

“The protocol will indeed benefit micro, small, and medium enterprises inasmuch as it facilitates their participation in international trade by improving their access to markets and participation in the global value chains, as well as promoting the use of e-commerce,” Marcos said.

“With the momentum from the CEO Forum yesterday, and AANZFTA together with the Regional Comprehensive Economic Partnership Agreement, we are confident that we will usher in even more robust economic cooperation within our region and provide a legal framework for a more prosperous future.”

Marcos said the Philippines also welcomes Australia’s Southeast Asia Economic Strategy to 2040, describing it as an elaborate plan that aims to broaden and deepen the economic ties between ASEAN and Canberra.

“The Philippines especially looks forward to expanding our collaboration on agriculture on food security, digital economy, infrastructure, tourism, and healthcare, sectors that are key to achieving a strongly rooted, comfortable, and secure future for Filipinos and ASEAN citizens,” he said.

## Women and rural poor hit hardest by climate change — UN

Heatwaves and floods inflict greater economic pain on rural women than men because climate change intensifies existing inequalities, the United Nations' food and farming agency said on Tuesday.

Scientists say the effects of rising temperatures are already being felt most acutely by the poorest and most vulnerable people on the planet.

"Failure to address the unequal impacts of climate change on rural people will intensify the already large gap between the haves and have-nots, and between men and women," the Food and Agricultural Organization (FAO) said in a new report.

The report said rural, women-led households in low- and middle-income nations already face more financial burdens than men when disaster strikes.

If these "significant existing differences" in wages are not addressed, the gap will worsen, the FAO added.

It estimated that if average temperatures increase one degree Celsius, women would face a 34 percent greater loss in total income compared to men.

Scientists estimate current global temperatures are around 1.2C hotter overall than they were in the late 1800s, causing a relentless increase in destructive extreme weather such as floods, storms and heatwaves.

Women are more vulnerable to changes in the climate than men, the FAO said, because of deep rooted "social structures, and discriminatory norms and institutions."

That leaves women bearing a much larger domestic and childcare burden than men, which limits their opportunities to study and find a job, it said.

It also makes it harder for them to migrate or make money from non-farming activities when climate change affects their crops.

### Wide gap

The FAO analysed data from 109,341 households in 24 low- and middle-income countries, cross-referenced with rain, snow and temperature data over 70 years.

In rural areas, poorer households have limited access to resources, services and jobs, which can make it harder for them to cope with climate change.

On average, they lose five percent more income than wealthier households due to heatwaves, and more than four percent due to floods, according to the study.

Women-led households are even harder hit.

Compared to men-led households, they lose around eight percent more of their income due to excessive heat and three percent more due to floods.

This amounts to an average drop in income per person of \$83 due to heat stress and \$35 due to floods.

Extrapolating this across all developing countries, these losses totalled \$37 billion and \$16 billion respectively, the report said.

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