NEWS ROUNDUP
19 DECEMBER 2024 [08:00 am]

- The controversial machine sending CO2 to the ocean and making hydrogen
- 7 energy projects cleared for system impact study
- 'Decarbonizing' PH a race against time – but 'we should do it properly'
- Bacolod City lauded for taking 'bold steps' to utilize solar power
- From Baku to The Hague, nations clash in fight vs climate change
- DENR 7: Spare the trees from campaign materials

CCC IN THE NEWS:

- Private Sector Key To Philippines' Low-Carbon Economy Transition
- 3 PH natural wonders among 5 Asean Heritage Parks

BBC

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PHILIPPINE DAILY INQUIRER

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By: Kathleen de Villa

Key players in the country’s energy sector are running against time to “decarbonize” the industry that continues to be a huge contributor to greenhouse gas (GHG) emissions. Climate-vulnerable countries, such as the Philippines, remain at the mercy of stronger rains, warmer oceans, and rising sea levels year after year due to global warming caused by such emissions.

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SUNSTAR

DENR 7: Spare the trees from campaign materials
By: Caludine Flores

Candidates in the May 2025 elections must refrain from posting campaign materials on trees.

CCC IN THE NEWS:

ONE NEWS PH

Private Sector Key To Philippines’ Low-Carbon Economy Transition

Implementing the country’s National Determined Contribution (NDC) to the global mission of attaining net zero by 2050 will require the critical participation and support of the private sector, with an estimated total investment requirement of around USD 72 billion.

THE MANILA TIMES

3 PH natural wonders among 5 Asean Heritage Parks

The Climate Change Commission (CCC) has welcomed the inclusion of three Philippine natural wonders — the Apo Reef Natural Park, Turtle Islands and Balinsasayao Twin Lakes — among the five newest Asean Heritage Parks, as announced by the Asean Center for Biodiversity.

Information and Knowledge Management Division

BBC

The controversial machine sending CO2 to the ocean and making hydrogen
By:Jocelyn Timperley

Equatic is among a wave of start-ups exploring how the ocean could be harnessed to capture and store carbon. But not everyone is sure it's such a good idea.

Many scientists now think at least some carbon capture and storage technology will be needed to prevent dangerous temperature rise.

A separate challenge, but just as relevant to climate change, is the scale up of green hydrogen, which is often viewed as the key to replacing fossil fuels in areas like industry, shipping and aviation – although current production is miniscule.

So LA-based start-up Equatic's claim to have created an ocean-based carbon removal machine that can tackle both these hurdles at once has an obvious appeal.

"We have a technology that does two things pretty well," says Edward Sanders, chief executive of Equatic. "One is we take CO2 out of the atmosphere and we store that permanently. The second thing we do is produce green hydrogen."

Many scientists now think at least some carbon capture and storage technology will be needed to prevent dangerous temperature rise.

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"We have a technology that does two things pretty well," says Edward Sanders, chief executive of Equatic. "One is we take CO2 out of the atmosphere and we store that permanently. The second thing we do is produce green hydrogen."

However, not everyone thinks ocean-based carbon removal is such a good idea. "Marine CO2 removal is simply too risky," says Mary Church, geoengineering campaign manager at the Center for International Environmental Law (Ciel), a non-profit environmental law firm based in Geneva, Switzerland. "It could alter ocean chemistry, causing changes in nutrient levels and species abundance, with significant consequences for ecosystems." Others are concerned about the feasibility of marine carbon removal, and whether it could really put a significant dent in emissions.

With tens of millions of dollars now pouring into companies like Equatic, marine carbon removal is rapidly moving up the climate agenda. Critics argue regulators, and the rest of us, need to catch up.

The ocean has already been a vast and often unacknowledged ally in protecting humans from climate change. It has absorbed more than 90% of the heat generated from our greenhouse gas emissions and absorbs at least a quarter of our CO2 emissions. How much more CO2 it will store naturally in the future is now a subject of intense scientific interest.

Unrelenting global emissions have led many scientists to believe we now need to intervene to take large amounts of CO2 back out of the atmosphere. So far, the bulk of attention for this has been focussed on land-based techniques, such as absorbing the CO2 using trees or other vegetation, or directly capturing it from the air, then burying it deep underground.

Ocean-based carbon removal would similarly attempt to store additional carbon in the ocean, but it has not yet been widely used or thoroughly tested. It is on the rise, however, with tens of millions of dollars pouring into the sector, including from some of the biggest names in tech, such as Microsoft and Shopify, as well as several airlines.

"The ocean is so vast, natural storage is a key advantage [over land-based techniques]," says Sifang Chen, a science and innovation advisor at Carbon180, a Washington-based non-profit which advocates for CO2 removal solutions. "It's more cost efficient to store the removed CO2, and we don't need the same infrastructure like pipelines that we do for direct air capture."

The captured carbon is also highly stable, she says, and both Equatic and Ebb Carbon, another ocean-based carbon removal company based in San Carlos in California whose technology also reduces ocean acidification, are "expected to be able to remove carbon durably for over a thousand years".

Equatic's process works like this: first, it pumps sea water into an electrolyser, a machine that uses electricity to split water into hydrogen and oxygen, which in Equatic's case is run on clean electricity such as wind, solar or hydro. This converts the seawater to hydrogen gas, oxygen gas, an acid stream and an alkaline slurry of calcium and magnesium-based materials. The alkaline slurry is exposed to air, pulling out CO2 and trapping it, then discharged into the sea. A last step is to neutralise the acid waste stream using rocks (in order to avoid ocean acidification) before this is discharged into the sea too.

The CO2 captured by Equatic ends up in the ocean as dissolved bicarbonate ions and solid mineral carbonates, forms in which the CO2 is immobilised for 10,000 years and billions of years respectively, the company says. "In electrochemical methods that convert CO2 into a stable carbon like solid carbonates, the CO2 is locked away permanently," agrees Chen. "Unless that carbonate is heated to a high temperature of around 900C (1,200K), that CO2 will not be re-released."

Other disagree, however. James Kerry, a marine and climate scientist at OceanCare, a marine conservation non-profit based in Switzerland, and James Cook University in Australia, says large-scale marine CO2 removal could harm the important role oceans play in climate, food security and oxygen production. Marine CO2 removal technologies pose "significant threats to human rights and the environment, especially at scale", he says.

Key to Equatic's process, says Xin Chen, senior scientist and co-founder at Equatic, is its development of a specific oxygen-selective anode which lets it do direct electrolysis of raw seawater to make hydrogen – without also producing chlorine gas. Chlorine is a toxic and corrosive gas usually created when seawater is electrolysed, meaning that normally seawater needs to be desalinated to remove its salt (sodium chloride) before it can be used in electrolysis. "It's like a holy grail for an electrochemist, how to do the direct seawater electrolysis without extra steps to clean up the seawater," he says.

The main focus in his lab now is to produce an electrode free of a rare and expensive collection of elements called platinum group metals. Limited supplies of these metals could disrupt the supply chain as Equatic scales up, he says. The team has already created a second-generation electrode free of these metals in lab conditions, but now needs to test it outside the lab, he says.

It's still early days for Equatic, but the company is scaling. In early 2023, it began operating two pilot plants on barges in Singapore and Los Angeles, each removing approximately 30-40 tonnes of CO2 a year (equivalent to the yearly emissions of around eight cars). It's now constructing what will be the world's largest ocean-based CO2 removal plant in Singapore. This will be 100 times larger than the pilots, removing 4,000 tonnes of CO2 and producing around 100 tonnes of hydrogen a year.

Equatic is also in the early stages of building a commercial-scale capture plant in Quebec, Canada running on hydropower, and planned to have the capacity to remove over 100,000 tonnes of CO2 and produce 3,600 tonnes of hydrogen. The plant, which will cover around 30 acres (12 hectares), will come online at the end of 2026 at the earliest, says Sanders.

Such scaling is essential for a carbon removal start-up because the pressure is on to bring down costs and prove their chosen method of carbon capture is really viable. Sanders says the company has designed its technology to comply with existing environmental regulations. The challenge, he says, has been to design a system that is robust, operates in existing planning permits and at a low enough price point for carbon credits to be affordable at scale.

Carbon credits are the big-ticket goal for companies like Equatic. They work by a scheme capturing a specific amount of CO2, permanently storing it (at least in theory), and selling this removal as a "credit" or "offset" someone else can buy.

The main customers for such credits are currently companies in the voluntary market aiming at carbon neutrality, says Asbjørn Torvanger, a researcher in climate economics and policy at the Centre for International Climate Research in Norway. But more incentives could be on the way through compliance markets, he says: the EU, for example, is developing a scheme for CO2 removal certificates.

There have been a wave of scandals about the extent to which many land-based carbon-credit projects really cut or absorb emissions, including investigations by The Guardian and Bloomberg. As a result, scepticism about carbon credits is increasingly high. This has led Equatic to do its entire process inside a closed system within its plant (it had initially planned to discharge an alkaline stream into the sea, which would in theory eventually capture carbon via air-sea gas exchange). This allows the company to more easily measure and validate how much CO2 it's really capturing, says Sanders. "[It] was another whole engineering challenge the team never envisaged they would have to do."

Equatic is targeting the goal of achieving CO2 removal at less than $100 (£79) per tonne by 2030, says Sanders. It aims to sell credits from the Quebec plant for around $200 (£158) a tonne. "We actually think pricing needs to be below $30 (£24) a tonne to properly stimulate market demand," he says. However, "we won't get there for many years", he says: at least the early 2030s.

Still, by producing hydrogen that can be sold too, Equatic has another way of monetising its process, says Sanders. While the electrolyser itself is less efficient than a traditional electrolyser at actually producing hydrogen, it all helps, he says. Equatic already has a pre-purchase option agreement with Boeing for 62,000 tonnes of CO2 removal and 2,100 tonnes of hydrogen for the plane giant to use in aviation fuels. It is currently a semi-finalised, along with a range of other carbon removal companies, to sell

credits to the US government for $460 (£364) a tonne of removal as part of an incentivising project.

So how far could it go in really removing CO2 from the atmosphere? "We would be able to take down 20% of [current] global emissions with about 1,200 of these plants," says Sanders. That's, he adds, assuming far larger 1GW plants each removing some 3.6 million tonnes of CO2 per year, 36 times more than its planned commercial plant in Quebec.

He admits this is ambitious. In theory, though, Equatic would be able to scale up to this kind of level by the mid-2040s, he says. "From an infrastructure point of view… we've seen that sort of coastal deployment before," he says, noting there are more than 20,000 desalination plants dotted around coastlines across the planet.

But even as companies like Equatic are polishing off their processes and doubling down on huge scale-up plans, many are concerned that a rapid increase in the use of ocean carbon removal technologies is not such a great idea.

"At a scale to meaningfully impact the climate, marine CO2 removal would be inherently unpredictable and pose significant, new and unprecedented risks to the fragile ecosystems that sustain life on Earth," says Church. "It does nothing to address the root causes of the climate crisis. Instead, it creates the illusion of a quick 'fix', delaying real solutions to the climate crisis and prolonging reliance on fossil fuels."

Kerry is concerned that Equatic's process would "create 'dead water', killing marine life by processing seawater", noting that it would process at least 350 tonnes of seawater for each tonne of CO2 removed, according to Equatic's own estimates.

And even if the industry could scale up by a thousandfold, he argues, it would still play a negligible role in mitigating climate change, noting that even far more advanced land-based CO2 removal methods still capture only minimal CO2. "We cannot, and should not, rely on these types of technologies as a solution to the climate crisis," he says.

In 2023, the non-profit Ocean Visions published an open letter, which has now been signed by over 400 scientists, warning about the risks of ocean-based CO2 removal. "While [these] approaches have enormous potential, there are also risks," it says. "Society does not yet have nearly enough information about the effectiveness or impacts of any specific approach and so cannot make informed decisions about their use at scale." It called for "rigorous and transparent monitoring and evaluation frameworks" to be developed for these techniques.

While Torvanger says he finds Equatic's technology "interesting", he also cautions that a substantial up-scaling could have potential negative environmental impacts. "The ocean chemistry will be affected, as well as some environmental effects of mining the required amounts of rocks."

However, Sanders says process does not create "dead water", and restores the chemical balance of the sea water before discharge. He notes that Equatic comes in below globally established standards and local regulations for the concentration of discharges and will be monitoring discharge areas on an ongoing basis using buoys. It will also need to conduct marine ecosystem studies ahead of opening any plants, he adds. And while the process requires around a tonne of rock for every tonne of CO2 removed, he says, there are "significant quantities of waste rock… worldwide for this process", such as rock that has already been mined to access and ore body.

Another enormous barrier is resource and energy use, say Church, Kerry and Torvanger. Equatic estimates it would need 2.3MWh for each tonne of carbon removed, This means that drawing down 20% of the CO2 emitted globally in 2023 would use some 50% of the global electricity supply that year However, the hydrogen produced returns around a third of that energy, according to Sanders. It's also worth noting the system would be able to use flexible energy, he adds – for example, it could use extra wind or solar at times of excess.

Sanders says it is "incorrect to say Equatic does nothing to address the root cause of climate change" since it takes CO2 out of the atmosphere and stores it permanently, while also producing clean hydrogen which can replace high-emissions fossil fuels. "We need technologies that both remove CO2 and reduce CO2," he says. "Doing nothing is not an answer. We must remove legacy CO2 emissions from the atmosphere to reduce the climate-induced stress (heat, acidification) that is occurring in our oceans." Similar to industries such as solar, he adds, CO2 removal will take time to develop.
Ben Tarbell, co-founder and chief executive of Ebb Carbon, meanwhile, tells the BBC that work at its demonstration plant was designed to ensure that "every step we take, from research to deployment, is grounded in rigorous science."

"Critically, CO2 removal is not a substitute for emissions reductions," he added, pointing to scientific findings that both reduction emissions and CO2 removal will be needed. "If we're going to have a shot at keeping warming in check, we need carbon removal solutions that can meet the urgency of the climate crisis."

As Sifang Chen sums it up, there are four major challenges which need to be addressed on ocean carbon removal: insufficient governance, a small knowledge base,

underdeveloped monitoring and verification processes, and uncertain environmental and social impacts. "Good policies will be critically important to safeguarding our ocean's ecosystems and coastal communities," she says.

Ultimately, says her colleague Charlotte Levy, managing science and innovation advisor at Carbon180, we will need carbon removal at scale to come back from overshoot to 1.5C temperature rise. Ocean carbon removal is "one tool in our box" to do this, she says.
However, she adds, "no removal solution later is as good as mitigation now".

BUSINESS WORLD

7 energy projects cleared for system impact study

By: Sheldeen Joy Talavera

The Department of Energy (DoE) endorsed seven energy projects in November to undergo a system impact study (SIS) with the National Grid Corp. of the Philippines.

“In November 2024, the DoE issued seven SIS endorsements, which are composed of one amendment and six new applications,” the department said in a document posted on its website.
Such studies are conducted to determine the adequacy and capability of the grid to accommodate the new connection.

The power projects have a combined potential capacity of more than 800 megawatts (MW).

The department issued SIS endorsements for five solar power projects, one wind power project, and one biomass project.

For solar power, those endorsed for SIS are Embrace Nature Power1 Corp.’s 180-megawatt-peak (MWp) Agrovoltaic Solar Power Project and 192 megawatt-hour battery energy storage system; Fortune Renewable Energy Corp.’s 120-MWp Fortune Lal-lo Solar Energy Power Project; and Zamboanguita Solar Power Corp.’s 60.012-MWp Zamboanguita Solar Power Project.

The list also includes Upgrade Energy Philippines, Inc.’s 47-MWp Pontevedra Solar Power Project and Enfinity Philippines Renewable Resources Third, Inc.’s 11.22-MWp Butuan City 1 Solar Power Project.

The DoE also endorsed CleanTech Global Renewables, Inc.’s 187.20-MW Tayabas South Wind Energy Project and Pilipinas Renewable Energy Corp.’s 15-MW Panay Biomass Power Project in Iloilo.

This year, the department has issued 179 SIS endorsements, including 174 for renewable energy projects and five for energy storage systems.

PHILIPPINE DAILY INQUIRER

‘Decarbonizing’ PH a race against time – but ‘we should do it properly’

By: Kathleen de Villa

Key players in the country’s energy sector are running against time to “decarbonize” the industry that continues to be a huge contributor to greenhouse gas (GHG) emissions. Climate-vulnerable countries, such as the Philippines, remain at the mercy of stronger rains, warmer oceans, and rising sea levels year after year due to global warming caused by such emissions.

“The energy sector is one of the biggest contributors of carbon dioxide (CO2) emissions. And [there is a] need to decarbonize the power industry. Renewable energy is essential to meeting the global climate goals,” said Rene Fajilagutan, general manager of Romblon Electric Cooperative Inc.

Fajilagutan was one of the speakers at the second Inquirer ESG Edge Initiative forum held at the Ateneo de Manila University School of Law on Nov. 29.

Joey Ocon, an engineering professor and scientist at the University of the Philippines Diliman and cofounder of Nascent Batteries, a young firm that works on energy storage solutions, stressed the role of nonpollutant energy sources in cutting back carbon dioxide emissions.

“There are a lot of ways to remove carbon dioxide or at least reduce the pace of increasing carbon dioxide emissions in our atmosphere. One of the biggest weapons we have is renewable energy,” said Ocon, who also served as a resource speaker at the second installment of the Inquirer ESG Edge forum.

But while transitioning to renewable energy sources is the obvious solution to the worsening impact of climate change, the shift should be done “with the right mix of technologies,” the “right timing,” and in the “right context” for the Philippines, according to the forum speakers.

“We shouldn’t necessarily rush. I don’t think that they should take away from the sort of the emergency that is needed for the energy transition because we are very time-bound,” said environmental scientist John Charles Altomonte of the Ateneo School of Government. He was referring to the Philippine Energy Plan, which declares a target of getting 35 percent of renewable energy sources into the country’s total energy generation mix by 2030 and at least 50 percent by 2040.

But Altomonte recognized the sense of urgency to the climate crisis, with the yearly climate scenario in the country continuing to indicate that “we’re very much underestimating the impacts [of climate change.]”

“It’s a very complex system. It’s very hard to transition; it’s very hard to plan and to model, so we should do it properly. But we should also try to keep in mind these global timelines,” he added.

For one, renewable energy adoption policies for small players in the industry need to be revised to become “encouraging,” according to Fajilagutan.

“If I will build my local plant, an embedded power plant, in my franchise area, with a size of 1 megawatt, I will wait for several years to get the approval [of tariff rates] from the ERC (Energy Regulatory Commission),” he said.

ERC issues feed-in tariff rates to incentivize clean energy developers with a steady stream of cash flow into their power projects. But the rates vary per type of renewable energy source and require a minimum installation capacity target to be eligible.

“How can we achieve the aspiration of 35 percent (by 2030) if we don’t change the policy?” asked Fajilagutan. “I think it’s a matter of developing a helpful policy for these small players in the industry.”

For Fajilagutan, an engineer with over 30 years of experience in rural electrification, “it’s a matter of changing the mindset.”

Net-zero company

Ayala-backed ACEN Corp. has vowed to become a “net-zero GHG emissions company” by 2050 by divesting its coal assets and reinvesting them into cleaner energy sources.

“As a result, we have grown our renewable portfolio from 70 megawatts in 2016 to 6.8 gigawatts of capacity today,” said Irene Maranan, ACEN senior vice president and head of corporate communications and sustainability.

“ACEN aspires to manage 20 gigawatts of renewables capacity by 2030, and net zero GHG emissions by 2050. And aside from scaling up renewables, the company has been pioneering initiatives in their early coal retirement,” she added.

Any impacts of the planned shutdown of the 246-megawatt South Luzon Thermal Energy Corp. coal plant in Batangas would be “negligible,” said Maranan, because it would be replaced by a 400-megawatt integrated renewables energy storage system.

“It’s a combination of solar or wind with battery storage to address the intermittent issues of the renewable [energy] plan,” she noted, adding that the replacement capacity would “ensure that the foregone coal plant output is matched 100 percent.”

“The impact on the grid is negligible given that renewables intermittency is mitigated by the energy storage system, and the output is reliable and dispatchable,” she explained.

In addressing the climate crisis in developing nations like the Philippines, it is crucial to focus more on adaptation rather than mitigation, according to Pedro Maniego Jr., chair of the Institute of Corporate Directors and senior policy adviser of the Institute for Climate and Sustainable Cities.

“We should concentrate on adaptation because that’s our problem. Sea levels are rising; typhoons are getting stronger. We have more rains… and the [occurrence] of El Niño, La Niña… All of this needs adaptation,” said Maniego.

For Ocon, vulnerable countries should continue to lobby countries responsible for the billions of tons of CO2 emissions.

“We’re very vulnerable. We have limited capital… Billions of dollars should be invested in countries like the Philippines that are undergoing transition and also will be affected by the stronger typhoons and other natural hazards,” he said.

The climate talks at the 29th Conference of the Parties (COP29) in Baku, Azerbaijan, ended on a dismal note after wealthy nations, including the United States and those from the European Union, pledged to raise $300 billion a year for climate financing.

PHILIPPINE NEWS AGENCY

Bacolod City lauded for taking 'bold steps' to utilize solar power

By: Nanette Guadalquiver

The move of this city to harness solar power to energize the Government Center and other public structures here is a "monumental step towards Bacolod's energy future".

This was stated by Frederic Tesfay, who leads the Urban Act and Renewable Energy Projects in the Philippines for GIZ, the main German development agency, during the switch-on of 400-kilowatt (KW) solar power system at the Bacolod City Government Center led by Mayor Alfredo Abelardo Benitez on Wednesday afternoon.

"Today marks a significant milestone as the switch-on for the solar energy of government buildings happens. With this initiative, you are not just switching on lights – Bacolod is switching on opportunity, progress and independence for the people of this city," he added.

Tesfay said that "while other cities hesitate, Bacolod has taken bold steps forward".

"This project is proof that Bacolod leads the way in innovation. The revolution has now started and this project is a strong foundation for growth. Imagine, as more people and organizations invest in renewable energy, costs can be reduced and together can create an energy source and sustainable future to drive industrial development and economic growth," he said.

Benitez said the city government allocated more than PHP20 million to install the solar power system at the Government Center.

"We bought the whole system and we're the one using it," the mayor said.

He added that by utilizing solar power for the government buildings, the city government is expected to reduce its electricity costs by about 50 percent.

"We are projecting at least 50 percent. The electricity bills at the Government Center amount to PHP2 to PHP 3 million so we're expecting about PHP1.5 million savings per month," Benitez said.

Under its solar power program, the city government is eyeing to harness a total capacity of 1,340 KW in solar power to energize not only the Government Center, but also other public buildings in several villages.

The list of projects showed the areas and solar power capacity as follows: Barangay Taculing-- 150-KW, City Disaster Reduction and Management Office and the village gym; Barangay Sum-ag -- 140KW, barangay hall and public market; Barangay Vista Alegre -- 120KW, evacuation center and youth home; Barangay Granada -- 80KW, public market; and Barangay Villamonte -- 50KW, gymnasium.

Other identified villages will be provided a solar power facility with a capacity of 40KW each, including Barangay 16, which will be installed at Rizal Elementary School, along with Alijis, Singcang-Airport, Tangub, Estefania, Pahanocoy, Handumanan, Punta Taytay, Cabug, and Felisa.

RAPPLER

From Baku to The Hague, nations clash in fight vs climate change

By: Iya Gozum

The universality of climate change prompts a spate of global efforts. Ideally, countries unite to combat the climate crisis, leave their interests at the door coming into international climate talks, and hopefully, save the planet.

But the commitment of nations is continuously tested in gatherings where the world needs to decide on the next steps.

How much should rich countries pay for exacerbating climate impacts in poor nations? Should we phase down or phase out fossil fuels? How do we reduce plastics?

From November to December, leaders and negotiators went to Azerbaijan to decide on a new climate finance deal. In South Korea, countries attempted to cement a deal on how to address plastic pollution. In the Netherlands, nations once again came together to argue on the legal obligation to fight climate change.

Following their conclusions, what should the public take away from these international proceedings that might appear, at times, as if to take one step forward and three steps back in climate action?

The ebbs and flows of climate negotiations

This year, the world set a new climate finance goal of $300 billion at the United Nations Climate Change Conference (COP29) in Baku, Azerbaijan — short of a trillion dollars that vulnerable countries were demanding.

Even before COP29 started, delegates and civil society from developing countries were demanding at least $1.3 trillion. The first draft negotiating text that the COP29 presidency came out with set the number at $250 billion. As expected, many protested. The crowd was disgruntled until the gavel came down at $300 billion. That's more than what countries set in 2009, incredibly less than what countries said they needed to deal with the climate crisis.

While many delegates walked away disappointed, COP29 was not the worst since the states started gathering annually for the climate summit, said Tony La Viña, a human rights and environmental lawyer.

La Viña, who was a former lead negotiator at the COP for the Philippines, said the process is cyclical. One year there's no deal or it's not enough. Another year the world

strikes gold. He said that what happened in Baku meant “staying put” or maintaining the status quo.

He recalled the COP in Copenhagen in 2009, when states failed to come up with a binding commitment to reduce emissions. Then the following year in Cancun, states created the Green Climate Fund.

“Sometimes we move forward, sometimes we move backward,” La Viña said in an interview for The Green Report. “What we want to make sure is that when we move backward, the next opportunity, we move two steps forward.”

The relevance of COP has always been put into question, especially because progress largely rests on the voluntary commitments of countries. Is it useful in making sure we are on track in cutting emissions? Some climate leaders say it’s time for reform.

La Viña maintained that COP remains crucial to galvanize global action.

“The reason why you have a convention is because you need it for global action because it’s not enough for countries to do whatever they think is right to do,” La Viña said. “You have to coordinate all your actions so that it adds up to the impact that you want.”

After Azerbaijan, all eyes are now on Brazil. President Luiz Inacio Lula de Silva recently urged leaders of major economies to speed up climate targets.

No compromises, no deal
This same year, delegates left Busan without a global treaty on plastic pollution.

The negotiations in Busan, South Korea, held at the heels of COP29, was supposed to be the last of the talks in a series of sessions that started in 2022.

What delegates expected was that by the end of 2024 there should have been an ambitious deal that is as historic as the 2015 Paris Agreement. It was to be a legally binding agreement that covers the full life-cycle of plastic.

Among other important provisions, it would mandate plastic-producing corporations and countries to dramatically scale down production.

But the impasse at Busan may be read as a commitment of certain countries to not settle for a half-baked deal.

The extension of the negotiations, non-profit organization Environmental Justice Foundation (EJN), said is not ideal but it “avoids a premature compromise that would have failed to address the scope and scale of the plastic crisis.”

“This extension of INC-5 is important for achieving a strong treaty, but this delay is a reminder that a few ‘like-minded’ countries have prioritized the fossil fuel and petrochemical industries over a safe, sustainable future,” said Steve Trent, EJN’s founder, in a statement on December 2.

The negotiations on the plastics treaty will continue in 2025. By the next session, EJF campaigner Salisa Traipipitsiriwat said they hope it will not be a repeat of the shortcomings in Busan.

“We need transparent and inclusive negotiations, we must resolve the problematic text that could obstruct meaningful solutions, and most importantly, we need a voting mechanism to move forward when consensus cannot be reached,” Traipipitsiriwat said.

Youth and the fountain of hope

In the first two weeks of December, the World Court heard the pleas and legal arguments of more than 100 countries and economic organizations concerning this question: What are states actually legally obligated to do with climate change?

It should be well remembered that this was a question first raised by young students from Pacific island nations. (READ: What’s the climate change case at the ICJ all about?)

One of the first people who spoke during the public hearings was Cynthia Houniuhi, youth climate activist from the Solomon Islands, who urged the top court to help humanity “course correct.”

Houniuhu is the president of youth organization Pacific Islands Students Fighting Climate Change (PISFCC).

The hearings ended on December 13. The World Court is expected to release an advisory opinion in 2025.

While not legally binding, countries see the Court’s opinion to carry significant legal weight and influence courts around the world trying cases related to climate change.

Rich nations argued that the basis of climate obligations is the Paris Agreement, which mandates countries to set emission reduction targets, but does not legally bind them to meet these.

“This is about the state obligations, not just under the Paris Agreement, not just under the UNHCR [United Nations High Commissioner for Refugees], but under all of the international law,” said Vishal Prasad, a Fijian climate activist and PISFCC director, in a press conference in The Hague on December 13.

The Philippines took a similar stance when Solicitor General Menardo Guevarra argued that the World Court should look at all international environmental treaties and documents on human rights law to decide on the issue.

Although some countries made “outrageous” arguments that “questioned climate science and human rights,” Prasad said the experience had given them a “remarkable chance” and highlighted the efforts of the youth.

Prasad emphasized that climate change is an inherently intergenerational issue: “We had a very remarkable chance to address directly to speak about the reality of climate change to young people of the Pacific and why young people five years ago took this campaign on. Why did we bring this climate change to the world’s highest court? Essentially, if you condense it, it’s all about the injustice generations have faced and will face if we do not address climate change.”

While the judges in the World Court let countries air their legal arguments, their job differs from delegates in international conventions like COP in that there is no negotiating in their decision.

The court and the convention are both opportunities for states, said Lea Guerrero, executive director of Greenpeace Philippines.

“Both are also valuable for campaigners and activists in the climate justice movement, as these are international proceedings that significantly impact international and domestic climate policies,” Guerrero told Rappler.

Whether or not the arc of the climate movement bends towards justice, the proceedings had been a testament to what the Global South-led climate movement can do.

“We all felt it was an extremely important moment for nations to stand before the world’s highest court, and assert their rights and the rights of future generations,” said Guerrero.

SUNSTAR

DENR 7: Spare the trees from campaign materials

By: Caludine Flores

Candidates in the May 2025 elections must refrain from posting campaign materials on trees.

In a statement released on its Facebook page, DENR 7 reminded the candidates that putting up streamers and tarpaulins on trees-especially using iron nails-could severely damage their health.

“Doing such will impair the vigor and structural integrity of a tree as it invites attack by harmful insects, fungi, and diseases,” reads a portion of the DENR 7’s post.

DENR 7 cited Section 3 of Republic Act (RA) 3571, which prohibits the cutting, destroying, or injuring trees, shrubs, and plants of scenic value in public areas such as roads, plazas, parks, and school premises.

RA 3571, which was signed into law on June 21,1963, prohibits the cutting, destroying, or injuring of planted or growing trees, flowering plants, shrubs, or any plants of scenic value along public roads, in plazas, parks, school premises, and other public spaces.

Under Section 4, individuals who cut, destroy, or injure trees, flowering plants, shrubs, or plants of scenic value along public roads, parks, plazas, or school premises without proper authorization shall be punished by prisión correccional in its minimum period to prisión mayor in its minimum period.

Under Section 9 of RA 9006 or the Fair Election Act, the Commission on Elections (Comelec) may authorize political parties and party-list groups to erect common poster areas for their candidates in not more than 10 public places such as plazas, markets, barangay centers and the like, wherein candidates can post, display or exhibit election propaganda.

DENR 7 reminded the public that trees are not to be used as surfaces for posting campaign materials, advertisements, or public announcements.

It also encouraged citizens to be more mindful of environmental conservation during the election season.

“Let us be responsible citizens not only in the upcoming elections by exercising our right to vote, but also in helping in the conservation of our nature.” the DENR 7 said.

With the official campaign season approaching, DENR 7 called on candidates and their supporters to comply with this directive and use designated posting areas for their propaganda.

CCC IN THE NEWS:

ONE NEWS PH

Private Sector Key To Philippines' Low-Carbon Economy Transition

Implementing the country's National Determined Contribution (NDC) to the global mission of attaining net zero by 2050 will require the critical participation and support of the private sector, with an estimated total investment requirement of around USD 72 billion.

"Our country is well-positioned to benefit from the transition to a low-carbon economy, and the private sector has a crucial role to play in driving this transformation," said Secretary Robert E.A. Borje, Vice Chairperson and Executive Director of the Climate Change Commission, at the Philippines' first-ever annual Net Zero Conference.

The landmark event was organized on the third year of the Net Zero Carbon Alliance (NZCA), the pioneering consortium of businesses and enterprises in the Philippines convened by Energy Development Corporation (EDC), the all-renewable energy arm of the Lopez Group's First Gen Corporation.

Borje further urged the private sector to recognize the opportunity to invest in a green economy. "The private sector possesses the capital, technology and innovation necessary to drive low-carbon and climate-resilient development pathways," he said.

"The transition to net zero represents one of the largest economic shifts of our time," added Orkhan Mustafayev, Senior Advisor to the High-Level Champion on Business Engagement for COP29. He cited the International Energy Agency (IEA) in estimating that the global net zero journey will require clean energy investments to grow to USD 4 trillion annually by 2030.

Other special guests included Representative Jose Manuel F. Alba of the 1st District of Bukidnon, who is a member of the House Committee on Climate Change and co-author of House Bill 7705 or the Low-Carbon Economy Bill, which aims to engage the private sector toward decarbonization through viable and cost-competitive, low-carbon investments.

Amid the undeniable reality of climate change, "there is no other way to go but net zero," affirmed Federico Lopez, Chairman and Chief Executive of EDC parent First Philippine Holdings Corporation, in his keynote message opening the event.

“While addressing the climate crisis feels such a daunting task, we remain optimistic and encouraged as we see a myriad of sectors of society coming together and taking collective action,” said Lopez.

“Our mission [at the Lopez Group] to forge collaborative pathways to a decarbonized and regenerative future continues to guide our path, and we reaffirm our commitment to work together with all stakeholders, including the Net Zero Carbon Alliance to rally more businesses and organizations across all sectors to achieve our net zero ambition,” he added.

The event brought together an estimated 400 participants from businesses, policy-making bodies, financial institutions and other stakeholders. It also included activities in commemoration of NZCA’s third anniversary, such as signing the new partners’ pledge of commitment toward net zero, launching its Net Zero Stages of Progress, and the release of its current partners’ decarbonization accomplishments.

As of the conference, NZCA has counted 34 partner-members from various industries and enterprises such as manufacturing, real estate, hospitality, information technology, mobility, finance, and the academe, as well as five partner-enabler organizations.

Its new partners include Calibr8 Systems, Coca-Cola Beverages Philippines, Inc., Container Living PH, Control Union, De La Salle-College of Saint Benilde, Inc.,First Philec, Fluor Daniel Inc., GHD Pty. Ltd., Hocheng Philippines Corporation, InterCharge Corporation, OCS Philippines, SLB, and Weave Solutions Inc.

THE MANILA TIMES

3 PH natural wonders among 5 Asean Heritage Parks

The Climate Change Commission (CCC) has welcomed the inclusion of three Philippine natural wonders — the Apo Reef Natural Park, Turtle Islands and Balinsasayao Twin Lakes — among the five newest Asean Heritage Parks, as announced by the Asean Center for Biodiversity.

This latest milestone brings the total number of Philippine Asean Heritage Parks to 14, with unique habitats that serve as sanctuaries for endangered species and vital resources for local communities.

The Apo Reef Natural Park, the largest contiguous coral reef system in the Philippines and the second-largest in the world is home to more than 482 fish species and 63 coral genera, along with rare marine invertebrates and iconic species, such as dugongs and whale sharks.

The Turtle Islands Wildlife Sanctuary, recognized as the only major nesting habitat of the Green Sea Turtle in Asean and the 11th-largest nesting site globally, plays a pivotal role in conserving this endangered species. Various national and international legal frameworks recognized its critical importance for biodiversity conservation, ensuring its long-term protection.

Balinsasayao Twin Lakes Natural Park, with its mountainous landscape and diverse ecosystems, is a vital source of clean water and supports a wide range of wildlife, making it essential to both biodiversity and local livelihoods.

Ocean ecosystems, such as coral reefs and mangrove forests, play a crucial role in mitigating climate change. They absorb vast amounts of carbon dioxide from the atmosphere, acting as natural carbon sinks. Healthy marine environments also help regulate global temperatures and protect coastal communities from extreme weather events.

"We must integrate climate change considerations into the management of these protected areas. By prioritizing sustainable practices, such as reducing pollution and overfishing, we can enhance the resilience of our marine ecosystems and safeguard their contributions to climate change mitigation," CCC Vice Chairman and Executive Director Robert EA Borje said in a news release on Tuesday.

The CCC also highlighted the connection between the newly recognized Asean Heritage Parks and the two recently designated Ramsar Wetlands of International

Importance — the Sibugay Wetland Nature Reserve and Del Carmen Mangrove Reserve.

These Ramsar sites, like the Asean Heritage Parks, also play critical roles in climate change mitigation and adaptation by providing vital ecosystem services, such as flood control and biodiversity protection.

"Their protection and sustainable management are key priorities as we implement the National Adaptation Plan and our Nationally Determined Contribution Implementation Plan," Borje added.

Amid the escalating impacts of climate change, these protected areas contribute to climate adaptation and mitigation efforts.

The CCC remains committed to supporting these areas' protection and sustainable management in collaboration with local communities, stakeholders and government agencies.

The CCC said including these parks in the Asean Heritage Parks network reaffirms the Philippines' leadership in biodiversity conservation and climate action within the Asean region.

It urged continued cooperation and investment in safeguarding these critical ecosystems for future generations.

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