









IN COMPLIANCE WITH 2022 EPR LAW

Twenty-five large businesses across various industries in Bataan province have signed a pledge to comply with a new law institutionalizing the principle of extended producer responsibility (EPR) on plastic packaging waste.

The Pledge of Commitment was made during the recent launch of Project Transform of the Department of Environment and Natural Resources (DENR) in Balanga City.

The companies represent 93 percent of prospective large businesses that are covered by the EPR law in Bataan. They come from different industries. such as manufacturing, food, construction, medical and hospital equipment, wholesale trade, retail, marketing and customer relations, transportation and retail trade.

The EPR Act of 2022, which lapsed into law in July last year, requires large companies to adopt and implement policies for the proper management of plastic packaging wastes.

Environment Secretary Antonia Yulo Loyzaga signed the law's implementing rules and regulations in January this year.

This law is a response to the growing clamor to regulate single-use plastics in their production, importation and disposal by industries. It advances circular economy, one that mitigates the effects of climate change and protects life-supporting ecosystems by avoiding or minimizing plastic pollution while maximizing the use of materials

By signing the pledge, the companies committed to register their respective EPR programs and submit the necessary documentary requirements with the DENR-led National Solid Waste Management Commission until June 4 this year, in compliance with Republic Act no. 11898, or the EPR Act.

Signatories

The signatories are Bahrain Fiberglass International Company Ltd., Bioteque Medical Philippines Inc., Bounty Fresh Food Inc., Charoen Pokphand Foods Philippines Corp. Aqua Plant, Concrete Stone Corp., DLX Bags Philippines Inc., Dunlop International (Philippines) Inc., Familyhealth and Beauty Corp., FBF Industrial Sales and Services, FBF Electric and Power Services Inc., GQ Horizon Manufacturing Corp., Integrated Meat & Poultry ProNatcorp Career Growth and Manpower Services Inc., NLEX Corp., Orica Philippines Inc., Perpetual Prime Manufacturing Inc., Philcement Corp., Puregold Price Club Inc., Qualitek-Delta Philippines Inc., San Miguel Foods Inc.-MPF Bataan, San Miguel Foods Inc., SM City Bataan, Vista Mall Bataan and Tang Long Plastics (Philippines) Corp.

Loyzaga lauded the companies for their commitment and support for the EPR implementation.

"The DENR advocates a whole-of-society approach for all investments and decision making, and the private and (civil society organization) sectors will be able to complete a multisectoral partnership that is based on evidence. We are their generous support through plastic packaging waste, recessing Inc., Mitsumi Phils. Inc., Project Transform, to the EPR,

and more," the secretary said.

Beginning to end

Under the EPR law, companies operating on a significant scale must create a system for efficient waste management until the "end-of-life stage" of their products. The law considers the nonregistration of covered companies as an offense.

It gives the DENR's Pollution Adjudication Board the jurisdiction for imposing fines and penalties for plastic pollution cases.

During a recent symposium co-organized by the Philippine Institute for Development Studies, lawyer Ivy Joyce De Pedro of the DENR's Environmental Management Bureau grateful to our partners for stressed that the law covers gardless of content.



The Manila Times

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Editorial

Treaty to reduce plastic waste elusive as ever

AST week, representatives from 175 nations and 2,000 green organizations gathered in Paris to lay the groundwork for an international, legally binding treaty on plastic pollution.

The conference, which involves the United Nations' Intergovernmental Negotiating Committee for Plastics, had its share of "nitpicking" and "delaying tactics," but in the end, a decision was reached to come up with a "zero draft" of the treaty before the committee meets again next year.

It's not much to show, but considering that the global campaign to reduce plastic waste has been moving at a glacial pace, the decision could be a breakthrough of sorts.

For the longest time, nobody cared about how much plastic waste the world has been producing. It took a while before we realized that throwaway plastic materials were filling up landfills, polluting beaches, and had even formed a floating artificial island of garbage in the Pacific Ocean.

The United Nations Environment Program (UNEP) estimates that the world produces more than 430 million tons of plastic annually, two-thirds of which are discarded as waste.

If the trend is not reversed, plastic waste will almost triple by 2060, and only a fifth of it will be recycled, warned the Organization for Economic Cooperation and Development (OECD).

The OECD also says plastic waste accounts for more than 3 percent of global emissions in 2019.

More recently, a new menace has been raising serious concern: microplastics.

Microplastics have been ingested by fish and sea mammals like the blue whale, which is said to consume up to 10 million pieces of microplastic every day.

Microplastics have also become a public health concern, having been detected in human blood, breast milk and placentas.

The Paris conference provides a glimpse of why it's so difficult to reach an agreement on tackling plastic waste.

"A large majority of the countries have expressed a need for binding specific obligations to end plastic pollution," one participant noted. The resistance comes from a bloc of large plastics producer nations — including Saudi Arabia, China and India — who want the treaty approved by consensus, not by voting.

The representative from Greenpeace said it was clear "that oilproducing countries and the fossil fuel industry will do everything in their power to weaken the treaty and delay the process."

There was also a deep division between countries calling for limits to plastic production and the petrochemical industry which advocates recycling as the solution to plastic waste.

A 55-nation coalition wanted a strong treaty that includes restrictions on certain hazardous chemicals and a ban on hard-to-recycle plastics products.

There was also a group espousing "circularity," or keeping already-produced plastic items in circulation as long as possible.

Key areas for action

Even before the conference opened, the UN Environment Program, which is hosting the talks, came up with a blueprint for cutting plastic waste by 80 percent by 2040. The UNEP identified three key areas of action: reuse, recycling and reorientation of plastic packaging to alternative materials.

Some green groups saw the blueprint as a concession to the global plastics and petrochemicals industry.

"Real solutions to the plastics crisis will require global controls on chemicals in plastics and significant reductions in plastic production," argued the advisor with the International Pollutants Elimination Network.

For Greenpeace, what the world needs "is an international plastic treaty, one that regulates production, one that addresses pollution from its very source."

It is safe to say that given the obstacles to be overcome, the world will not be looking at a treaty on plastic waste soon. Perhaps now is a good time to consider another paramount issue: many people do not realize — or choose to ignore — the impact of plastic waste on their lives.

Such an attitude surfaced in a recent consumer research study which found that many consumers in Southeast Asia consider recycling plastic bottles as an inconvenience, even though a significant majority agree that the bottles present a pressing environmental problem.

The respondents cite as reasons lack of easy access to recycling areas, insufficient storage space for recyclables and a habit of disposing rather than recycling.

Changing attitudes could be as big a challenge as hammering out a treaty. Maybe even bigger.







UPPER

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EDITORIAL CARTOO

06-05-23

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Solution to plastic pollution

E JOIN more than 150 countries today in marking the 50th anniversary of the UN-organized World Environment Day event under the campaign #BeatPlasticPollution.

The world, with nearly 7.9 billion people, including 114 million from the Philippines, is being snowed under by plastic, with 300 million metric tons of plastic waste generated each year.

A report by science journal, Nature, determined that currently, roughly 14 million tons of plastic make their way into the oceans every year, harming wildlife habitats and the animals that live in them.

Chlorinated plastic can release harmful chemicals into the surrounding soil, which can then seep into groundwater or other surrounding water sources, and also the ecosystem.

This can cause a range of potentially harmful effects on the species that drink the water.

Once the plastic is in the ocean, it decomposes very slowly, breaking into tiny pieces known as microplastics, which can enter the marine food chain and become incredibly damaging to sea life.

The main source of ocean plastic

There is urgency in the call to hold hands and save planet Earth

pollution is land-based – 80 percent of plastic in the ocean originates on land.

Ecologists and preservationists say the toxic chemical additives and pollutants found in plastics threaten human health on a global scale.

Scientifically-proven health effects include causing cancer or changing hormone activity, known as endocrine disruption, which can lead to reproductive, growth, and cognitive impairment.

It threatens ecosystems, animal and plant species, impeding their ability to deliver essential services to humanity. While the leakage of plastics into the ocean and the subsequent impacts of marine life has been most studied, plastic pollution also affect freshwater and terrestrial ecosystems.

Marine species ingest or are entangled by plastic debris, which causes severe injuries and death.

Plastic pollution threatens food safety and quality, human health, coastal tourism, and contributes to climate change.

There is indeed urgency in the call to hold hands and save planet Earth, with trees identified as the lungs of the world, and therefore planting more trees is required to help save Mother Earth so the oceans will be blue, the planet green, and the animals safe.

And we see the hands of the staff of the Manila Standard the other day as they stood to the environmental challenge by planting 350 saplings in the 2,659-hectare La Mesa Dam which contains the last remaining rainforest of its size in Metro Manila.

The young trees they planted assuredly will eventually help contribute to a clean environment by improving air quality through the process of photosynthesis, the process by which plants use sunlight, water, and carbon dioxide to create oxygen and energy in the form of sugar.





PAGE 1 STORY



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UN aims to deliver draft plastics treaty by year's end



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"by 2050 A CHALLENGE PILING UP A Chinese laborer sorts out sits." Mexia is Zepe Beijing, in this photo taken o sept. 17, 2015. Negotiations on a global treaty to combat

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letters

World Environment Day

Today, June 5, is World Environment Day, celebrated since 1973 led by the United Nations to encourage awareness of and action for the protection of our environment. This year is the 50th annual celebration, and it's quite disheartening to realize where we are in terms of taking care of our planet.

This year's focus is on plastic pollution, with the campaign #BeatPlasticPollution. This should hit close to home, as we (the Philippines) are among the top contributors of plastic pollution in the oceans – we produce over a third of oceanic plastic waste, about 0.75 million metric tons a year. Ouch!

The sando bags, the sachets of shampoo and toothpaste, the tetra packs, the plastic spoons and forks, the bottles of "mineral" water are all very convenient; grab one, use it, then throw it away. We should reverse the throw-away trend – bring your water jug (it doesn't have to be one of those expensive thermo bottles) that can be refilled, use utensils that can be washed and reused, bayongs or eco-bags that are stronger and can hold more. Substituting paper bags (supot) for plastic is not really the answer; supots are usually one-time use as well.

Today, as we acknowledge and celebrate the environment, is a good time to change our ways, not just about plastic usage, but about how we live. I particularly like what writer Henry David Thoreau said: "I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach and not, when I came to die, discover that I had not lived."

– MA. FILOMENA GO, San Juan City





STORY

D6-05-23

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vironmental initiatives show SM cares

By Linda B. Bolido

TITLE

M Supermalls have embraced fully the idea of responsible and sustainable retailing as the country and the entire planet seek to halt, if not fully reverse, centuries of environmental neglect.

Responding to the clamor for retailers to be more mindful of their ways and practices that of their ways and practices that are contributing to solid waste pileup, plastic pollution and marine resources degradation, SM Supermalls have adopted a multi-pronged strategy to re-duce their own footprint and help ease the pain on the environment caused by consumer habits. -While their efforts to help

reduce challenges to the envi-ronment are year-round, June is a particularly significant month for SM Supermalls to put into action their commitment to keeping the planet healthy and vibrant.

The giant retailer is joining the rest of the world in initiatives that will model simple, practical and sustainable ways that can be undertaken by everyone and anyone wanting to help Planet Earth. The initiatives involve working with communiies and engaging the youth and SM employees as volunteers in the massive and continuing ef-fort for sustainability.

SM Supermalls will partic-ipate in the global observance of World Environment Day on June 5, #BeatPlasticPollution. The day will be devoted to promoting the retail chain's efforts to reduce waste, particularly through their Plastic Waste Collection Program, Trash to Cash recycling market,the SM Eco Vendo, Responsibins and Coastal Clean-ups.

SM Eco Vendo is a reverse vending machine where customers can exchange PET (Poly ethylene terephthalate) plastic bottles that are clear, strong, lightweight and 100 recyclable; and aluminum cans. To encourage customers to use the machine for recycling, they get coupons from SM partner ven-







SM Supermalls is celebrating World Environment Day and World Oceans Day with the DENR through coastal clean up activities in



The Trash to Cash recycling market is available in SM malls every first Friday and Saturday of the month

dors, like SM Skating and SM

Bowling.

The machine is available during mall hours at the Mall of Asia and SM Megamall.

The Plastic Waste Collection program aims to reduce plastic waste in landfills and oceans through proper segregation and disposal. Collection booths



Clean, empty and dry bottles can be dropped off at Responsibins in partnership with Nature Spring



Waste collected in Plastic Waste Collections booths are pro-cessed for materials used in cement and eco pavers.



The SM Eco Vendo, in partnership with Spurway Enterprise Eastwest Building Tech Inc., is a reverse vending machine that accepts PET bottles and aluminum cans and rewards customers

partnership with Friends of Hope Inc. are available dai-ly from 10am to 5pm in select branches. Collected plastic is

hauled to be processed into materials for cement, eco-paver blocks or planks.

Responsibins, in partner-

ship with Nature Spring, are also in 19 locations in SM prop-erties to collect clean, empty and dry PET bottles.

Trash to Cash is a recycling market held every first Friday and Saturday of the month across SM malls and select SM DC properties to encourage waste segregation and recy-cling among mall customers, tenants and the community as a whole.

Rivers for Life Clean-ups will involve community cleanup in river channels, with the Department of Environment and ivatoral Resources (DENK). in SM Cagayan de Oro Down-town Premier, as part of the World Environment Day cele-

bration on June 5.
On June 8, SM Supermalls will host coastal clean-ups to mark World Oceans Day, also in partnership with DENR. Par-ticipating branches are SM by the BAY at the SM Mall of Asia Complex, SM City Olongapo Downtown (Zambales) and SM Center Lemery (Batangas). Mall employees and partner schools and companies in the communities served by the stores are expected to join as volunteers.

SM City Cebu, with DENR, will close the week-long Rivers

for Life Clean-ups initiative. For the waterways clean-up, SM Prime, parent company of SM Supermalls will bring to-gether thousands of volunteers to help underscore the impor-tance of protecting the world's seas, oceans and other bodies of water, major sources of food, medicine and other essentials

to life, health and well-being. The clean-ups are undertaken in the tradition of bayanihan, the Filipino practice of working with all sectors to carry out an important activity. The mall chain will involve customers, tenants, employees, the general public, national and local government agency partners and NGOs in the massive effort.

The June environmental activities will be ushered in with the World Bicycle Day celebration on June 3 in support of sus-tainable mobility.





STORY

08-05-23

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abuse plastic, it's so

PARIS-Humanity uses abuses hundreds of millions of tons of plastic a year because "it's so cheap," despite the huge cost of the pollution it creates, the head of the UN Environment Programme told Agence France-Presse (AFP).

Inger Andersen, an economist by training, told AFP that a binding, "ambitious" global treaty would help fix the problem, ahead of the second round of UN-led negotiations that diplomats from 175 nations aim to conclude next year.

The interview has been edited for concision and clarity.

O: What are the main obstacles to an ambitious treaty?

A: Today, virgin raw polymer is cheaper than recycled polymer. So here's the question: What will allow us to move from that linear "we take it, we make it, we waste it" reality to a circular approach? Right now, it's so inexpensive you can just throw plastic away. But the cost to the environment and human health is huge, and it is not taxed anywhere.

Q: Less than 10 percent of plastic is recycled today-is that a credible solution?

A: We can't recycle our way out of this mess. But recycling is one of the many keys that we will need to make this work. Today, we simply throw plastic away because it has no value.

When I was a little girl growing up in Denmark with very limited pocket money, my brothers and I collected plastic bottles every Saturday because we could get two krone. It wasn't much, but it made



Inger Andersen -REUTERS



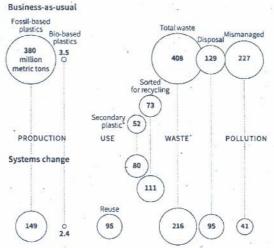
Awareness is step one. Which is not to say the burden falls entirely on consumers-at the end of the day, it's business and governments that have to take that responsibility

it worthwhile. Now imagine the day that this stuff has val--we would think about and treat that garbage very differently!

Q: What changes in attitude

The future of plastics: two scenarios

Modelled short-lived plastic flows in 2040



*small particles that resulted from the fragmentation of larger plastic items Source: UNEP, model data based on OECD and Pew Charitable Trust

or mentality do you think we need to see?

A: Awareness is step one. Which is not to say the burden falls entirely on consumers-at the end of the day, it's business and governments that have to take that responsibility.

But every consumer has a choice. Let's say we have a party. Do we need single-use cups and plastic bags? If that bag I use to carry home five tomatoes is a heavy polymer, it will sit in a landfill for hundreds of years, maybe a thousand. Why are supermarket bananas in a plastic bag? Nature already delivered them with their own packaging.

'Lean into it'

So there are choices we can make. Children get it, and are already holding their parents to account. But the bigger system shifts will come from agreements such as the one we are negotiating.

Q: Plastic pollution has not been a priority on the international agenda until quite recently. What changed?

solutions has become power- health. -AFP

ful, and it's coming across the board from left to right in most countries. I put it down to activism across a broad spectrum, and I am very, very grateful. I ask all those activists to keep the heat on to ensure that the treaty has ambitious and binding elements.

Q: Many green groups are worried that the plastics industry will have an undue influence in the talks.

A: For this second round of negotiations we have 2,800 participants-908 from government and 1,712 from nongovernmental organizations. There are 10 industry associations represented. They have a role to play.

Take ozone, which is probably our most successful treaty. We couldn't find a solution to the manufactured gases depleting the ozone layer without having industry at the table.

Here's what I say to business: this is coming to a movie theater near you soon. You might as well lean into it and be part of the change, because we will get a treaty and it will be ambitious. Once we make the enabling legislation, business will follow.

Q: Can the world do without plastics at all?

A: Plastic is everywhere. We're still going to need light switches, steering wheels, metro seats, whatever. But we need to think about the single-use dimension.

We are abusing plastic because it's so cheap. But this has consequences in the envi-A: The popular demand for ronment, in the oceans, to our







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D6-05-23

hampioning sustainability in the city

N CELEBRATION of World Environment Day this June 5, Monday, Manila Standard held its annual tree planting activity, dubbed "The Green Wave," on June 3, Saturday, at the La Mesa Dam in Quezon City. It marks the 12th tree planting initiative from the publishing company.

company.

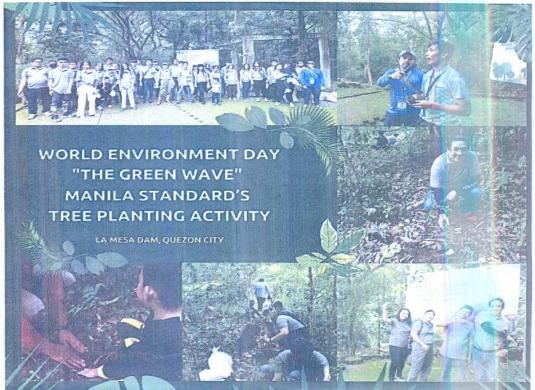
The event, held in partnership with SM Supermalls, Megawide, Meraleo, Citicore and Converge, commemorates Manila Standard's standing commitment, through its corporate social responsibility, to give back to society by participating in the bid to protect Earth and its resources.

Manila Standard employees, with representatives from their partners, greeted the day bright and early as they went to the site with a shared goal of promoting sustainability, especially in the city. They planted 300 seedlings provided by the Department of the Environment and Natural Resources (DENR), "Engaging in greening programs has been the main component of our Corporate Social Responsibility efforts that began in June of 2010. We've done tree planting, mangrove planting, seedling propagation, and coastal clean-ups for the past 13 years. The aim is to promote sustainable development and protection of the environment," said Manila Standard's Circulation Department Chief Edgar Valmorida.

He added by actively participating in greening programs, Manila Standard continues to contribute, however small, in mitigating environmental concerns such as deforestation, climate change, pollution, land degradation and more.

World Environment Day is an annual global celebration, with 150 countries participating, to bring communities together to play their part in addressing inmediate environmental concerns. This year's theme is #BeatPlasticPollution to highlight the pressing issue of plastic pollution and finding pay solutions.

Manila Standard continues to recognize the relevance of creating relevant collaborations upholding its position as stewards of the Earth. This tree-planting activity aims to set the standard on how private-public partnerships can be the dadvents of change that create positive results for environmental preservation.



















ONMENT & SUSTAIN

#WED2023 #BEATPLASTICPOLLUTION Special Issue

Standard MONDAY, JUNE 5, 2023 | D1 RAY S. EÑANO, Editor

Manila,

Corporates, LGUs join hands to eliminate plastic pollutants

ME hundred years ago, plastics changed NOW NUMARS IVED and became a milestone in history that provided society with ease and accessibility.

Over the years, people have seen how plastic has become a dominant mate-rial in various industries because of its diversity, hence a radical increase in its production from the 1970s to the 1990s. But too much of something doesn't lead to good things.
According to the United Nations, the

world produces 400 tons of plastic waste annually, which is hard to manage. Single-use plastics, like plastic bottles and bags, are among the top contribu-tors to environmental pollution, harm-ing marine life and others. Unlike other materials, plastic takes a significantly long time to deteriorate. As a pollutant, it lasts longer in the environment and disrupts the Earth's natural ecosystems sit's not made from organic materials.

Of the seven billion tons of plas-

tic waste generated globally in recent years, less than 10 percent has been recycled. In the meantime, a million others were lost to the environment or shipped to destinations for burning or

Today, people from across the globe are coming together to celebrate World Environment Day, where everyone can take the opportunity to play their part in environmental preservation.

Celebrating 50 years of World Environment Day World Environment Day is a global

platform that inspires positive change and brings together people from over 150 countries to take environmental action, including the efforts of govern-ments, businesses, and individuals, to create a more sustainable world. The United Nations Environment Program (UNEP) has led the event since its inception in 1973. This year marks the 50th anniversary of the global celebra-

The first World Environment Day in 1973 was celebrated with the theme "Only One Earth," highlighting the need for society to protect the Earth. Since then, the event has taken on various environmental concerns as its subject to guide people towards a more positive outcome. In recent efforts, like last year, World Environment Day focuses on sustainability because it pro-motes inclusivity for present and future generations.

#BeatPlasticPollution, giving a more

targeted goal to its participants.

Despite the rising number of plastics in the environment, World Environment Day provides good news that society has science and solutions to address the problem. Although there have been green initiatives, the United Nations recognizes a public and political surge

Turn to D2



OBring reusable bags when out shopping

> Avoid using single-use plastic bottles and straws



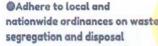


Explore sustainable alternatives to plastic products

> Join local government initiatives in promoting a robust waste management system



Recycle old plastic products







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Corporates... From D1

to expedite actions from governments, companies, and other stakeholders to solve the crisis. Through the #BeatPlasticPollution campaign, World Environment Day shows how stakeholders can learn to use plastic more sustainably, hoping to eradicate plastic pollution someday.

Côte d'Ivoire is hosting World Environment Day 2023 after setting an example of combatting plastic pollution. The West African country since 2014 has banned plastic bag use and shifted to reusable packaging. The country's largest city, Abidjan, has also become a hub for environmentally-minded start-ups.

Jean-Luc Assi, Côte d'Ivoire's Minister for the Environment and Sustainable Development, sees plastic pollution as a "visible threat that impacts every community." Nonetheless, the country is proud to champion various treatments to offer sustainable solutions.

The Netherlands supports World Environment Day 2023, being one of the nations taking ambitious steps along the plastic lifecycle. The Netherlands is a signatory of the New Plastics Economy Global Commitment and a Global Partnership on Plastic Pollution and Marine Litter member

Vivianne Heijnen, Netherlands' Minister for the Environment, stresses how plastic pollution is detrimental to various aspects and cannot be easily ignored. But thanks to several policies aimed at plastic pollution management, the Netherlands and the European community are fully committed to playing their roles in reducing single-use plastic production and consumption while promoting durable and sustainable alternatives.

Since plastic contamination is a global problem, much as pollution and climate change are, the idea of environmental preservation and protecting the planet appear to be difficult for an individual. But as World Environment Day emphasizes, everyone can play a part in the plastic crisis.

Every day Filipinos know how single-use plastics promote accessibility, but some are already conscious of their environmental impact and are eyeing more sustainable approaches.

For instance, major shopping centers and supermarkets in the country are embracing greener initiatives by lessening the use and distribution of single-use plastics by encouraging the use of reusable bags among their consumers. Meanwhile, other brands charge a small fee for plastic bags, while some switched to more biodegradable options. These collaborations spark significant change in society and bring about positive results.

Campaigns like these are not limited to private companies and their establishments, as local governments can implement similar practices. They can introduce local laws, support businesses and encourage sustainable consumer behavior through these advocacies.

While some clean-up drives or initiatives inspire Filipinos to take charge of their immediate surroundings and eliminate waste, some cities can build more robust waste management systems. Designating proper disposal bins or areas for plastics is one step in promoting waste segregation and ensuring that a significant chunk of plastic in the environment can undergo recycling.

Local cities can partner with institutions to make alternative packaging more appealing, consumer-friendly and cost-effective than single-use plastics. More progressive communities have already prohibited the public from using other single-use plastics, like straws, cups, and plates.

Another option is to install free public water fountains to encourage their communities to ditch plastic bottles and opt for reusable jugs.

On the other hand, government agencies and public servants can pass legislation that bans environmentally harmful practices, like openly burning waste, which is already in effect in bustling metropolitans.

#BeatPlasticPollution for World Environment Day 2023 marks yet another milestone for the United Nations and its efforts to preserve the Earth and its resources and protect the future of human society. For five decades, it has brought together countries from across the globe to share a common goal of environmental sustainability.





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MMDA urges public to properly dispose waste

Coinciding with the observance of World Environment Day today, the Metropolitan Manila Development Authority (MMDA) is asking the public to ensure proper waste management and disposal to mitigate flooding.

The MMDA said people should change their mindset on solid waste management to break the dumping-cleaning cycle.

"People should refrain from dumping garbage in waterways," acting MMDA acting Chairman Don Artes said yesterday.

Artes noted that about 600 kilos of trash are collected yearly from the Hagonoy creek in Taguig.

He said around 50 trucks, each carrying 12 tons of waste, are required for the cleanup operation near the Hagonoy pumping station.

Artes said solid waste management is not solely the responsibility of the government, but a shared duty of all citizens.

He underscored the importance of waste segregation and effective garbage collection.

Artes said 71 pumping stations under the supervision of the MMDA are operational.

Taguig Mayor Lani Cayetano thanked Artes for personally overseeing the cleanup operation in the city. She said the MMDA's cleanup

She said the MMDA's cleanup initiatives are not limited to seasonal events, but are continuous activities aimed at preventing flooding in Metro Manila.

— Mark Ernest Villeza







PAGE TITLE



#BeatPlasticPollution. A scavenger collects plastic bottles along Manila Bay on Sunday ahead of the 50th anniversary of World Environment Day today (Monday, June 5, 2023). More than 430 million tons of plastic is produced every year worldwide, half of which is designed to be used only once. Of that, less than 10 per cent is recycled, and about 20 million tons end up in lakes, rivers, and seas annually. Danny Pata







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DOLOMITE CLEANUP.
Members of the Manila Metropolitan Development Authority (MMDA) conduct a regular clean-up of the Manila Bay Dolomite Beach in Roxas Boulevard on the eve of World Environment Day along on June 4. Norman Cruz

















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DOLOMITE CLEANUP - Workers from the Metropolitan Manila Development Authority (MMDA) remove trash, mostly plastics, from the Dolomite Beach on Roxas Boulevard in Manila on the eve of **World Environment** Day on Sunday, June 4, 2023. World **Environment Day** is celebrated every June 5 to encourage awareness and action for the protection of the environment. (Juan Carlo de Vela)





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TIME FOR CLEANUP Piles of garbage are seen floating near Bulungan Market in Parañaque City, a portion of Manila Bay. Monday marks World Environment Day, with this year's campaign #BeatPlasticPollution calling for a concerted global effort against the problem. (See features on Pages A2-1 to A2-5.)—RICHARD A. REYES















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Fossil gas projects alarm green group

LUCENA CITY—Environmentalist group Protect the Verde Island Passage (Protect VIP) has expressed alarm over the gas-fired power plant projects recently completed in Batangas province. The group said these projects disregard "the thousands of affected communities who are still reckoning with the oil spill" from the MT Princess Empress which sank near Oriental Mindoro province on Feb. 28.—story by Delfin T. MALLARI JR.



FOR FUTURE GENERATIONS A fishing boat used by protesters sails on the waters of Batangas province in this photo posted on the Facebook page of Center for Energy, Ecology and Development (CEED) on April 22. The group calls for the protection of the Verde Island Passage as it provides livelihood to thousands of fishers. —CEED FACEBOOK PHOTO















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DOE's fossil gas projects in Batangas alarm green group

LNG plants in the province seen to bring more shipping traffic and toxic cargo to Verde Island Passage, warns Protect VIP

By Delfin T. Mallari Jr. @dtmallarijrINQ

LUCENA CITY—An environmentalist group has expressed alarm over the growing number of gas-fired power plant projects in Batangas following the completion of two more liquefied natural gas (LNG) facilities in the province.

The Protect the Verde Island Passage (Protect VIP) network was dismayed that the Department of Energy's (DOE) announcement on the two LNG terminals in Batangas "appears insensitive to the thousands of affected communities who are still reckoning with the oil spill in the Verde Island Passage (VIP)," said Fr. Edwin

Gariguez, lead convenor of the group, in a statement on Sunday.

According to Gariguez, the fossil gas projects in Batangas "goes against the need to protect this globally significant marine corridor blessed with incomparable beauty and biodiversity and whose marine wealth provides sustenance and livelihood to millions of Filipinos."

On June 2, the DOE announced that the completion of the two LNG facilities would "add to and secure the supply of natural gas for its power plants in Batangas."

The DOE said the first LNG plant, owned by Linseed Field Corp., has started supplying natural gas to the Ilijan Natural

Gas Power Plant, located in Barangay Ilijan in Batangas City.

Another facility built by FGEN LNG Corp. (FGEN LNG) in Batangas City would be delivering its first LNG cargo in the later part of this year, the DOE added.

The FGEN LNG terminal inside its First Gen Clean Energy Complex in Batangas aims to supply the power needs of gas-fired plants in the country, mainly within the Luzon grid.

Untapped energy sources

But Gariguez said the numerous fossil gas projects in Batangas could mean "more shipping lane traffic in the VIP and more toxic cargo plying our waters," endangering the re-

source-rich passage, similar to what happened on Feb. 28 when oil tanker MT Princess Empress, which was carrying 800,000 liters of industrial fuel, sank off the waters of Oriental Mindoro, which is within the VIP corridor, and caused a massive oil spill.

"DOE's pursuit of new energy sources must not come at the expense of our environment and people, specifically when we are teeming with abundant renewable energy sources waiting to be tapped," he emphasized.

VIP is a 1.14 million-hectare marine ecosystem located off the coastlines of Batangas, Romblon, Marinduque, Occidental Mindoro and Oriental Mindoro provinces. It has been recognized as the "center of global shorefish biodiversity" due to the high densities of marine resources in the area.

Fragile marine corridor

Protect VIP described the fragile marine corridor as also the "epicenter" of fossil gas and LNG developments in the country, as eight of 27 proposed new plants and seven of the nine planned LNG terminals in the country are located in Batangas.

The group warned that by allowing fossil gas facilities to be built and operated, it will expose the VIP to the frequent entry of LNG barges, and inadvertent oil spills or disposal of shipboard liquid wastes and bilge water.

"The VIP is also currently

grappling with an oil spill catastrophe, now nearing its third month with still no clear accountability and liability from responsible actors," the group emphasized.

Large amounts of oil sludge from MT Princess Empress found their way into the coastal waters and shores of Oriental Mindoro and had even reached as far as Caluya Islands in Antique, Taytay in Palawan and some parts of Batangas.

Protect VIP has been designanding that the government should include VIP in the list of protected areas under the Expanded National Integrated Protected Areas System Act of 2018 to shield it from "destructive human exploitation." INQ





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EDITORIAL

Need for coherent climate agenda

oday is World Environment Day.

Let us take a moment to remember the coral reefs, mangroves, and other marine life that perished in the recent oil spill off Oriental Mindoro; the damaged environments and numerous deaths due to irresponsible mining; the environmental and land defenders who have been killed in their line of duty; the lives, crops, and infrastructures that are lost every time the country is hit by a calamity.

There will be more casualties and damage in the form of human lives, property, and natural resources if the Philippine government fails to address with more urgency the risks posed by these man-made and climate-related disasters. The World Bank (WB) estimates that the effects of climate change will reduce the country's GDP by as much as 13.6 percent by 2040.

This year's focus for World Environment Day is plastic pollution, a major environmental issue globally. WB describes the situation in the Philippines—the third largest contributor to marine plastics—as "staggering" due to an insufficient waste management system exacerbated by a high dependence on single-use plastics. The Philippines generates 2.7 million tons of plastic waste annually and because it lacks an efficient recycling system, it also loses around \$890 million to unrecycled products. Last year's passage of Republic Act No. 11898 or the Extended Producer Responsibility Act, which places the responsibility of waste reduction, recovery, and recycling of plastics on the producers, is meant to address this problem and, by 2028, companies are expected to recover 80 percent of their plastic products. But only if the law is implemented efficiently and strictly.

The country's plastic problem extends to microplastics that worsen air quality. A recent study confirmed for the first time that suspended atmospheric microplastics-tiny plastic particles measuring less than five millimeters in diameter-contribute to Metro Manila's air pollution with polyester as the most prevalent. Then there are the fumes coming from vehicular emissions as well as the burning of fossil fuels such as coal and oil, with the lack of access of more than half of the population to clean fuels and technology for their domestic needs such as cooking only exacerbating the problem. But this should not be blamed on the poor-big industries and businesses contribute more to the pollution that they dump on the environment with impunity, and should be made to take responsibility.

Studies have warned that if plastic pollution is not curbed, the number of plastics in the ocean may even surpass the fish population by 2050. This outcome is certainly alarming for a country surrounded by bodies of water and is dependent on its marine resources for exports and food. An estimated 20 percent of the country's plastic waste finds its way to the ocean and ends up destroying marine life, eaten by fishes and other marine animals, or choking them to a slow death. The microplastics that these animals ingest can also find their way to our tables through the food that we eat. Call it the life cycle of plastic—or worse, karma for inhabitants of a planet that have failed in their responsibility to take care of their environment.

President Marcos talked about this responsibility in his first State of the Nation Address (Sona) last year: "We all have the responsibility to preserve this Earth, for we are but custodians, and we will pass on this great treasure to future generations." The then-newly installed president talked about alleviating the country's vulnerability and building the capacity for resiliency through disaster-proof planning. He also made two important points: the country's excellent environmental laws ("But we have to guarantee that these laws are properly enforced") and corporate responsibility ("Companies who exploit our natural resources must follow the law").

Over the past year, however, the Marcos administration has been criticized for its doublespeak (for example, advocating for renewable energy but approving the renewal of a fossil gas project) and the lack of a coherent, holistic climate change agenda. In his Sona next month, the President should present an overall government climate change strategy-after all, this issue is not just under the purview of the Department of Environment and Natural Resources but concerns other agencies as well. This time, he must speak with clarity and present a timeline on what the government intends to do to fulfill its commitment to the Paris Climate Change Agreement and to the Filipino people, because as he said so himself: "If we cannot mitigate climate change, all our plans for the economy, all our plans for our future, will be for naught."













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'PEDAL FOR PEOPLE AND PLANET'

MINDANAO BIKERS CALL ATTENTION TO CLIMATE CRISIS

CAGAYAN DE ORO CITY— Hundreds of bikers in Cagayan de Oro and Davao cities hit the road on Sunday for the "Pedal for People and Planet" campaign to bring attention to the climate crisis and the need for governments and businesses to institute proactive measures to stem the worsening impact of climate change.

The event, which was also held in major cities in the country and in Asia, was timed for the World Environment Day on Monday, and the holding of the intersessional meetings in Bonn, Germany, of the United Nations Framework Convention on Climate Change.

With zero carbon emission, cycling is the most sustainable means of transportation, symbolizing the climate activists' urgent call for "real and just solutions" to transforming the country's current fossil-dependent energy system.

"We are hosting this activity to raise awareness of the issues of climate change, global warming and sea level rise caused by the excessive use of fossil fuel for transportation and energy," said Lenin Amidala Corrales of the group Youth for Climate Justice in Cagayan de Oro, where more than 300 bikers registered for Sunday's ride.

In Davao City, over 300 bikers from various groups carried messages that demand prompt resolution of various environmental challenges in the city.

They also urged local officials to reject dirty energy, oppose waste-to-energy incineration, invest in true zero-waste solutions, expand green spaces,



MESSAGE Bikers in Davao City on Sunday hit the road carrying signs calling for prompt action against the worsening impact of climate change. —PHILIPPINE MOVEMENT FOR CLIMATE CHANGE

build conducive infrastructure for nonmotorized vehicles, and preserve natural resources such as heritage trees, urban wetlands and watersheds.

Rara Ada, Philippine Movement for Climate Justice (PMCJ) campaign coordinator, stressed the importance of cities like Davao to commit to building renewable and clean energy sources: "We need a decisive shift away from fossil fuels. Such action would not only benefit Davao but also serve as an example for other highly urbanized cities in the Philippines and the world."

PMCJ had recently posed a strong objection to the plan by San Miguel Power to build a power plant in Zamboanga City that runs on liquefied natural gas—which could be the first such facility in Mindanao—citing pollution and safety concerns.—RYAND. ROSAURO INQ







06-05-23

HARNESSING COCOA SHELLS

How chocolate could counter climate change



HAMBURG-At a red-brick factory in this German port city, cocoa bean shells go in one end, and out the other comes an amazing black powder with the potential to counter climate change.

The substance, dubbed biochar, is produced by heating the cocoa husks in an oxygen-free room to 600 degrees Celsius (1,112 Fahrenheit).

The process locks in greenhouse gases and the final product can be used as a fertilizer, or as an ingredient in the production of "green" con-

While the biochar industry is still in its infancy, the technology offers a novel way to

remove carbon from the Earth's atmosphere, experts say.

According to the United Nations' Intergovernmental Panel on Climate Change (IPCC), biochar could potentially be used to capture 2.6 billion of the 40 billion metric tons of CO2 currently produced by humanity each year.

Biochar factory

But scaling up biochar's use remains a challenge.

"We are reversing the carbon cycle," Peik Stenlund, CEO of Circular Carbon, told Agence France-Presse (AFP) at the biochar plant in Hamburg.

The factory, one of the largest in Europe, takes delivery of the used cocoa shells via a network of grey pipes from a neighboring chocolate factory.

The biochar traps the CO2 contained in the husks in a process that could be used for any other plant.

If the cocoa shells were disposed of as normal, the carbon inside the unused byproduct would be released into the atmosphere as it decomposed.

Instead, the carbon is sequestered in the biochar "for centuries," according to David Houben, an environmental scientist at the UniLaSalle institute in France.

One metric ton of biocharor bio coal-can stock "the equivalent of 2.5 to 3 [MT] of CO2," Houben told AFP.

Boosting crops

Biochar was already used by indigenous populations in the Americas as a fertilizer before being rediscovered in the 20th century by scientists researching extremely fecund soils in the Amazon basin.

The surprising substance's sponge-like structure boosts crops by increasing the absorption of water and nutrients by the soil.

In Hamburg, the factory is wrapped in the faint smell of chocolate and warmed by the heat given off by the installation's pipework.

The final product is poured into white sacks to be sold to local farmers in granule form.







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'REVERSING THE CARBON CYCLE' Peik Stenlund, CEO of Circular Carbon, is shown at the company's plant in Hamburg where cocoa shells (right) are converted into biochar, a process that could help'ease the world's CO2 content now affecting its climate.—AFP

One of those farmers is Silvio Schmidt, 45, who grows potatoes near Bremen, west of Hamburg. Schmidt hopes the biochar will help "give more nutrients and water" to his sandy soils.

For 'tropical climates'

The production process, called pyrolysis, also produces a certain volume of biogas, which is resold to the neighboring factory.

In all, 3,500 MT of biochar

and "up to 20 megawatt hours" of gas are produced by the plant each year from 10,000 MT of cocoa shells.

The production method nonetheless remains difficult to scale up to the level imagined by the IPCC.

"To ensure the system stores more carbon than it produces, everything needs to be done locally, with little or no transport. Otherwise it makes no sense," Houben said.

And not all types of soil are well adapted to biochar. The fertilizer is "more effective in tropical climates," while the raw materials for its production are not available everywhere, he added.

Carbon certificates

The cost can also be prohibitive at "around 1,000 euros (\$1,070) a ton—that's too much for a farmer," he added.

To make better use of the

powerful black powder, Houben said other applications would need to be found.

The construction sector, for example, could use biochar in the production of "green" concrete.

But to turn a profit, the biochar business has come up with another idea: selling carbon certificates.

The idea is to sell certificates to companies looking to balance out their carbon emissions by producing a given amount of biochar.

With the inclusion of biochar in the highly regulated European carbon certificates system, "we are seeing strong growth in [the] sector," Stenlund said.

His company is looking to open three new sites to produce more biochar in the coming months.

Across Europe, biochar projects have begun to multi-

According to the biochar, industry federation, production is set to almost double to 90,000 MT this year compared with 2022.—AFP



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MWSS plans to implement P12 B new water source project

By DANESSA RIVERA

The Metropolitan Waterworks and Sewerage System (MWSS) plans to implement the P12 billion Kanan-Agos project, which was proposed by a private company to provide an alternative water source for Metro Manila and nearby areas.

"The unsolicited proposal is still under review by the National Economic and Development Authority (NEDA), so we're still waiting for its approval before we implement the project," MWSS division manager Patrick Dizon said.

He declined to identify the project proponent, but said it is a local company.

Dizon said MWSS and the project proponent have completed the submissions required by NEDA as the proposal was submitted way back in 2019.

"In the last quarter of this year, we have submitted the additional requirements to NEDA. We're just waiting for the approval. We keep on following up with NEDA," he said.

The Kanan-Agos project will augment the long-term water supply of MWSS from the Kaliwa Dam project, which is still under construction.

The new project, with an estimated cost of P12 billion, will have two phases of 800 million liters per day (MLD) and 3,000 MLD for a total capacity of 3,800 MLD.

The massive project will tap the Kanan River to provide water security, reliability and additional supply for Metro Manila and nearby provinces, Dizon said.

The Kanan River forms part of the Kaliwa-Kanan-Agos River Basin in Quezon province.

"These water sources will be shared by Maynilad (Water Services Inc.) and Manila Water (Co. Inc.), so around 17 million customers will benefit from this project," Dizon said.

If completed, the project will lessen MWSS' sourcing from Angat Dam, which is a multipurpose dam serving water supply and irrigation needs in Luzon.

Angat Dam supplies more than 90 percent of Metro Manila's potable water needs and provides for the irrigation needs of 25,000 hectares of farmlands in Bulacan and Pampanga.

"We want to have an additional source so we won't just rely on Angat Dam, because the dam is a multipurpose dam, it is being used by the National Irrigation Administration (NIA) and MWSS," Dizon said.

"We want to have our main source

of water. Even if we don't request a raw water allocation of 52 cubic meters per second (CMS) higher, we can still supply water to consumers," the MWSS official said.

The MWSS is seeking raw water allocation from the National Water Resources Board (NWRB).

The NWRB recently approved an allocation of 52 cubic meters per second (CMS) from June 1 to 15, and 50 CMS from June 16 to 30 from Angat Dam.

Unless the MWSS and Maynilad successfully implement mitigating measures, consumers in the west zone may face water interruptions due to the lower allocation starting June 16.

However, implementing the Kanan-Agos project would take years after getting approval due to securing of permits. "For Kaliwa Dam, it took us a long time before we started implementing the project. There's the challenge in permits, particularly from the National Commission on Indigenous Peoples (NCIP). We reached around seven years before we secured that permit," Dizon said.

The MWSS is targeting to deliver the Kaliwa Dam project by end-2026. Currently, the overall project is now 22 percent completed.

The P12,2-billion Kaliwa Dam project was originally scheduled for completion five years from 2019 or in November last year.

The delay was due to restrictions brought by the pandemic, which further lengthened the years-long negotiations with the Dumagats for a FPIC, a requirement under the Indigenous Peoples' Rights Act of 1997.









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DEAR PRESIDEN **BONGBONG MARC** EASE

AN URGENT APPEAL TO DISMANTLE WATERSHED SYNDICATES AND SUPPORT THE MASUNGI INITIATIVE

We write to you as citizens concerned about the conservation of our environment and natural heritage. We strongly oppose the apparently orchestrated attempt to stop the Masungi Geopark Project, a path-breaking conservation initiative in the Marikina and Kaliwa protected areas, the two watersheds with the greatest impact to the country.

We call upon our esteemed leaders to intervene and help address the real problem at hand: the continued deforestation of the watershed exacerbated by the unabated operation of syndicates.

With a mere 11-20% of the forest cover left in the Upper Marikina Watershed, the contribution of the Masungi Geopark Project is invaluable:

- o Masungi rescued some 2,000 hectares of abused forestland previously held by syndicates not farmers or tribes as falsely trumpeted by syndicates — and returned it to the watershed where it rightfully belongs.

 o Together with the watershed coalition, it achieved the cancellation of large quarries threatening irreparable damage to the ecosystem. o It vehemently opposed encroachments by swimming pool resorts and other land speculators, preventing further degradation of the water-
- shed. o It thwarted at least five major forest invasions in the last few years, which was widely covered by the national media and vigilant citizens.
- By convincing a private claimant to return 165 hectares for conservation, Masungi expanded the available reforestation area.
 The initiative rescued the ancient Masungi limestones a national geological and biodiversity treasure and transformed it into a glob-
- ally-acclaimed conservation model, bringing recognition and honor to our country. o Only in September 2022, it received the United Nations Sustainable Development Goals Action Campaign "Inspire Award" out of 3,000
- nominees globally. The Masungi Geopark Project is spearheading the revival of the forgotten National Park, Wildlife Sanctuary, and Game Preserve established by President Ferdinand Marcos in 1977 through Presidential Proclamation 1636, a national park so close and so vital to the capital.

All of the above were accomplished at no cost to the government nor compensation to the Masungi Georeserve Foundation.

Verily, the DENR's moves to discredit, undermine or altogether scrap the Masungi Geopark Project goes against our national agenda and international commitments.

As a signatory to the Global Biodiversity Framework, the Philippines committed to "ensure that by 2030 at least 30 percent of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration."

The same is enshrined in the Philippine Development Plan to promote "collaboration among the government, private sector, academe, civil society, and representatives from marginal sectors [...] to (a) secure sustainable production, (b) accelerate rehabilitation and conservation efforts, (c) strengthen enforcement of environmental rules and regulations, and (d) boost the contribution of ecosystems in climate change adaptation and mitigation." A recent news report said the DENR wants to cancel the Memorandum of Agreement alleging that its provision for perpetual land trust for

conservation is unconstitutional. However, that provision is meant to prevent the land from being converted, quarried and exploited in the future. Moreover, the constitutional prohibition is directed against commercial use of nature (invariably resulting in its destruction), which is the complete opposite of the conservation purpose of Masungi. We believe our laws must be applied liberally towards conservation and not towards destruction. We hope that a resolution will be made in a

constructive way and not through strong-arming faithful sustainable development partners. We condemn the attacks against Masungi's environment defenders in the form of disinformation, political and legal harassment, and physical violence. These heroes deserve the nation's gratitude, not oppression.

May our environment defenders be defended by our government just as they defend our forests and our collective future. In pursuance of the President's call for private sector and civil society participation in conservation and climate action, let us fan the spark of hope they started, rather than snuff it.

From concerned citizens:

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Taal Volcano show creased activ

By BELLA CARIASO

State volcanologists are closely monitoring Taal Volcano in Batangas, which has been showing increased activity since Saturday night.

The Philippine Institute of Volcanology and Seismology (Phivolcs) said Taal released at least 5,831 tons per day of sulfur dioxide and an upwelling of hot volcanic fluids has been occurring at the main crater.

In a bulletin issued at 1 p.m. yesterday, Phivolcs said the volcano's plume emissions

reached 3,000 meters high.

"Since 10:30 p.m. of June 3, the volcano showed increased degassing activity and produced voluminous steam rich plumes that rose 3,000 meters above the Taal Volcano Island," Phivolcs said.

The plumes produced volcanic smog or

vog over the Taal caldera, it said. The vog blanketed the towns of Agoncillo, Balete, Batangas and Laurel yesterday morning, Phivolcs said.

Experts said the vog, which contains fine droplets of volcanic gas, could irritate the eyes, throat and respiratory tract.

People with asthma and lung and heart diseases as well as the elderly, children and pregnant women should limit their expo-

"They should stay indoors and shut doors and windows to block out the vog," Phivoles said, adding acid rain and volcanic gas

emissions can occur in areas where plumes

disperse.
Phivolcs said the 5,831-ton average per day of sulfur dioxide emissions from Taal is higher than last month's average of 3,556

Experts noticed a short-term inflation on the northwestern sector of the volcano as well as a long-term deflation of the caldera.

It said steam-driven or phreatic explosions, volcanic earthquakes, minor ashfall and lethal accumulations or expulsions of volcanic gas could occur anytime.

Entry into the volcano island's permanent danger zone, especially at the main crater and Duang Kastila fissures is prohibited as Alert Level 1 remains hoisted over Taal.

Flying of aircraft close to the volcano's crater is also not allowed.