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**DENR**

# **NEWS ALERTS**

**STRATEGIC COMMUNICATION AND INITIATIVES SERVICE**



## ACB, South Korea Embassy explore partnership on marine debris pollution

BY BUSINESSMIRROR MAY 9, 2021



A clean-up vessel, which will be donated by the South Korean government under its Koica project, is projected to arrive in the Philippines next year.

The Asean Centre for Biodiversity (ACB) and the Embassy of the Republic of Korea in the Philippines are exploring areas for collaboration, including raising awareness on coastal and marine conservation in the country, where marine plastic pollution is causing environmental damage and posing health risks, an ACB and South Korean Embassy joint news release said.

The South Korean government's development cooperation agency, Korea International Cooperation Agency (Koica), has recently launched a marine litter management program in the Philippines in partnership with the Department of Environment and Natural Resources (DENR) and the Philippine Coast Guard.

The multi-year assistance from 2021 to 2025 is focused on establishing a marine litter monitoring system, stationing a clean-up vessel near Manila Bay, and enhancing marine litter management capacity in the Philippines.

"Korea is glad to be contributing to the marine environmental protection in the Philippines, a country widely known for its beautiful coral reefs and aquatic biodiversity," said South Korean Ambassador to the Philippines Kim Inchul.

"Korea hopes that the marine litter management assistance will help mitigate risks posed by the increasing marine debris problem that many experts claim is undermining the marine landscape of the Philippine archipelago," Kim said.

A clean-up vessel, which will be donated by the South Korean government under the Koica project, is tentatively projected to arrive in the Philippines late next year upon completion of necessary procurement procedures.

The clean-up vessel will be the first marine vessel dedicated to collect marine litter in the Philippines.

The DENR noted that there is evident presence of marine litters or plastics floating at the Manila Bay, that was exacerbated during the Habagat Season (wet season) or strong typhoons, that are washed ashore.

Meanwhile, as the World Bank Group recently published in March 2021, more than 75 percent of the material value of the plastics, equivalent to \$6 billion per year, is lost across three countries of Malaysia, the Philippines and Thailand due to absence of recycling.

Under a partnership between the South Korean government and the World Bank Group, the World Bank's study on the Philippines was funded by the Korea Green Growth Trust Fund in efforts to support the mainstreaming of green growth through the World Bank's lending operations.



“Korea will continue to take part in the global efforts to address environmental issues through various multilateral and bilateral cooperation, ranging from hosting the upcoming 2021 P4G [Partnering for Green Growth and the Global Goals] Summit and collaborating with various UN agencies and international organizations to bilateral development cooperation with the Philippines on the protection of marine environment and biodiversity,” Kim said.

South Korea will be hosting the P4G 2030 Summit on May 30 and 31, uniting heads of states, CEOs, investors and civil society leaders.

The South Korean government has also been in close cooperation with various international organizations to contribute to the preservation of marine environment in the region.

ACB Executive Director Theresa Mundita Lim said the possible partnerships with South Korea on marine litter management would be aligned with the priorities of the Asean, under the Asean Working Group on Coastal and Marine Environment.

“The Asean member-states have pledged to reduce and prevent marine debris as part of their commitments under the Bangkok Declaration Combating Marine Debris in the Asean Region. The region recognizes that marine pollution is a trans-boundary issue that requires integrated regional cooperation,” Lim said.

She emphasized that pollution is one of the threats to marine biodiversity as thousands of animals are killed after ingesting or getting entangled in plastic products.

The deterioration of ecosystems because of the waste pose tangible and negative impacts on the people’s health and livelihoods, she added.

Tackling the issue of marine debris is highly relevant today because of the growing concerns over the volumes of medical wastes generated by the Covid-19 pandemic response and the fear that some of these may end up in waterways and oceans.

In a study published by ScienceDirect in September 2020, the average number of face masks used in 49 Asian countries in a day as of July 31, 2020, was estimated at 2.2 billion.

“Innovative actions in properly disposing and managing waste, including those generated by the pandemic response, will help reduce marine litter that affects the health of our marine ecosystems and the capacity of our oceans to provide fisheries and food security, as well as to effectively serve as one of our natural solutions to climate change impacts,” Lim added. The ACB is set to conduct a study aimed at identifying entry points for regional action, such as support to cooperation for research and assessments, which may help in protecting and recovering marine biodiversity threatened by marine litter.

Lim likewise noted that South Korea’s continued efforts and leadership in green growth may be synchronized with ACB’s efforts to mainstream biodiversity into various sectors, including infrastructure and energy.

For more than a decade, South Korea has been promoting policies focused on green growth, a development paradigm that creates a growth engine and job creation based on “green technology and clean energy.”

South Korea’s Green New Deal that was announced last year, further elaborates on the areas of focus as the promotion of green transition of infrastructures, low-carbon and decentralized energy and innovation in the green industry, the news release said.



“We hope more businesses, through the help of the Embassy of the Republic of Korea, will be our partners in our endeavor of integrating biodiversity considerations into plans and business models,” Lim said.

Image courtesy of Korea Marine Environment Management Corp.



# Cebu's silent and extensive waste problem (Part 1)

By [Caecent No-ot Magsumbol](#)(The Freeman) - May 10, 2021 - 12:00am



More than 20 years later, Cebu's three highly urbanized cities are still scrambling to comply with some of the law's salient requirements.

CEBU, Philippines – The Ecological Solid Waste Management Act (Republic Act No. 9003) was enacted in 2000 with the goal of adopting a systematic, comprehensive, and ecological solid waste management program which shall, among others, ensure the protection of public health and environment.

More than 20 years later, Cebu's three highly urbanized cities are still scrambling to comply with some of the law's salient requirements.

Section 32 of R.A. 9003 mandates: "There shall be an established Materials Recovery Facility (MRF) in every barangay or cluster of barangays. The facility shall be established in a barangay-owned or leased land or any suitable open space to be determined by the barangay through its Sanggunian."

The law describes an MRF as a facility that includes a solid waste transfer station or sorting station, drop-off center, a composting facility, and a recycling facility.

But until now, the long-required institution of an MRF has eluded many of Cebu's barangays.

The three highly urbanized cities of Cebu, Mandaue, and Lapu-Lapu have 80, 27, and 30 barangays, respectively, or a total of 137 barangays. Yet among these 137 barangays in these three key cities, there are only six functional MRFs at the moment – four in Mandaue, a centralized MRF in Lapu-Lapu, and a makeshift one in Cebu City.

In disposing of their wastes, all three HUCs rely on a private-owned landfill in Barangay Binaliw, Cebu City called the ARN Central Waste Management.

The justification raised by the LGUs for their failure to comply with the MRF requirement is mainly the lack of a suitable place for its establishment.

But it is really because of the lack of site or the lack of will?

## Cebu City

Depending on the occasion and time of the year, Cebu City produces 500 to 700 tons of mixed solid wastes daily, data from the Department of Public Services show.



When the pandemic hit Cebu City and lockdowns were imposed, the generated trash dwindled but only marginally to about 400-plus tons daily. The number does not include undocumented cases of mismanaged uncollected solid wastes that go into waterways and in the air when the trash is burned.

From 2020 to 2025, the Environmental Management Bureau projects that the Cebu City would generate 1.6 million tons of wastes.

For a city whose growth rate in producing trash is expected to continue, it remains baffling why virtually none of Cebu City's 80 barangays has an MRF.

Instead, what it has is a makeshift MRF of CCENRO at the Osmeña Shrine in Barangay Kalunasan with recyclables and composting done using the takakura method. It has one functional shredder for glass bottles.

In addition to not having a formal MRF of its own, the city has also yet to get approval for its 10-year solid waste management plan, according to reports from the Department of Environment and Natural Resources' Environmental Bureau and the Commission on Audit.

"The city's 10-year Solid Waste Management Plan (SWMP) did not bear the approval of the National Solid Waste Management Commission and was not fully updated contrary to Section 16 of RA 9003," a COA report stated in 2019.

Because Cebu City has not established an MRF, collection, sorting, segregating, composting, and recycling of wastes at the barangay level were not implemented, contrary to the mandate of Section 32.

This, the COA said, has cost the city a lot of money in terms of waste collection.

Cebu City Councilor Eugenio Gabuya once proposed for a centralized MRF since barangays do not have enough space for individual MRFs. However, it was opposed because the proposed site, the Inayawan Sanitary Landfill, was saddled with legal impediments after it was permanently closed in 2018.

Since then, no other area has been floated for consideration.

To be fair, there had been a few MRFs established in the city before, but the COA noted these were later found to be "more of composting sites."

Initiatives meant to minimize wastes before collection are launched in the barangays every now and then, but none has been sustained.

The current COVID-19 pandemic is also not making things any better. Even the Galing Pook awardee, Barrio Luz's "trash for cash" program and recycling efforts, got stopped early into the pandemic.

## MRF, a must

The Cebu City government is eyeing for waste-to-energy plant as a solution to the solid waste problem, but the opposition from various environmental groups and concerned citizens has been deafening.

Most of the opposition is anchored on the health hazards and high costs.



Yet even if Cebu City trudges the WTE direction, an MRF remains a must.

“MRF is necessary. Even if we have plans to put up a WTE, we cannot just collect everything and put it in a WTE facility. We still have to pay for the collection of these solid wastes...and still entails a lot of money,” said Engr. Glory Rose Manatad, a specialist at the Cebu City’s Environment and Natural Resources Office.

For 2021 alone, the city government has allocated P405 million for garbage collection, hauling and disposal via the ARN landfill.

But environmental advocates wish funds must also be devoted for composting biodegradable wastes or recover the recyclables to rescue them from being dumped in the landfill.

Several barangays, though, have already expressed interest in putting up their own MRF, according to City Councilor Philip Zafra.

However, as of this writing, it is only Barangay Kalunasan that has already mapped out concrete plans for it, thanks to the support of the EcoWaste Coalition and No Burn Philippines for a Zero Waste Barangay.

Barangay Carreta is also asking CCENRO’s help with its solid waste management plan.

## Kalunasan example

The zero-waste work in Kalunasan is an attempt to showcase compliance of a barangay with the provisions of R.A. 9003.

“If it succeeds, this is not the first time that a barangay in Cebu City becomes another benchmark on ecological solid waste management (here),” said Lito Vasquez, Visayas coordinator of Break Free From Plastic (BFFP)-Philippines.

Vasquez used the word “another” because Barangay Luz was also once hailed for its successful solid waste management.

The target MRF site of Kalunasan is the one utilized by CCENRO as makeshift facility, with barangay officials proposing for a co-management arrangement with the city government.

Barangay Captain Nunilon Monares Jr. endorsed to the city government the proposal to co-manage the Osmeña Shrine for tourism and environmental projects of the barangay.

The City Legal Office, in turn, said there is no legal impediment to the proposal once it clears with the City Council and Mayor Edgardo Labella.

Councilor Zafra said before he lobbies this to the council, he will first ask his consultant to review it and to check if an MRF would be feasible near the Osmeña Shrine area.

If this pushes through, this will be funded by the P55 million grant received by the city in 2012 to build MRFs in four barangays.

Kalunasan, if this happens, would be among the four beneficiaries of this continuing appropriation, according to City Councilor Jerry Guardo, chairman of the council committee on infrastructure.



According to Vasquez, the processing of wastes shall be done in phases, with the solid wastes of Kalunasan to be accommodated first.

“The barangay will start piloting several sitios and homeowners’ associations. A transition period will be agreed wherein solid wastes from other neighboring barangays will be accepted, making it as the MRF for a cluster of barangays,” Vasquez said.

If clustered, the likes of Guadalupe, Capitol Site and Lahug, the three other big waste generators of the city, also stand to benefit from the arrangement.

Despite the lofty and ambitious proposals to answer Cebu City’s waste problem, Vasquez still believes in the wisdom of an MRF.

“Coupled with waste avoidance measures such as the strict implementation of a ban on single-use plastics, the diversion of biodegradable and recyclable solid wastes away from landfills negates the urge to use false solutions such as the proposed WTE incineration projects,” he said.

“These sustainable measures shall spare residents, both living near the private landfill and along the route leading to the ARN landfill, from the daily health risks of foul smell and other hazards posed by transporting unsegregated wastes by more than 200 garbage trucks,” he added. **(To be continued) (FREEMAN)**



# Refill Revolution, a possibility in Cebu's Tricities?

By: Delta Dyrecka Letigio - CDN Digital Multi-Media Reporter | May 09, 2021 - 10:00 AM



Turned over containers from the Environment Management Bureau to Lapu-Lapu City for the Refill Revolution project. | Courtesy of Lapu-Lapu City PIO

CEBU, Philippines — The three highly urbanized cities at the heart of Metro Cebu produces an estimated 1,096 tons of garbage per day based on the collective records of the cities' environment offices.

The majority of this garbage bulk, ranging from 37 percent to 100 percent of garbage collected depending on the city, go to the local landfill in Barangay Binaliw in Cebu City.

This means that for the cities of Cebu, Mandaue, and Lapu-Lapu, the estimated garbage generated and thrown in Binaliw per day is at least 872 tons or approximately 26.16 megatons (26,160 tons) per month.

The value varies per day, per season, and per schedule as the tri-cities dispose of their garbage only on certain days.

The Tricities' City Environment and Natural Resources Offices (CENROs) has also reported decreased garbage production during the pandemic.

The three environmental offices all agree on one thing: solid waste management is one of the biggest challenges in highly urbanized cities.

The three cities have implemented various ways to reduce garbage production, increase diversion of trash away from the landfill, and reduce the amount of garbage thrown into the lone landfill of the area.

Yet Lapu-Lapu City has taken the step further in employing a revolutionary concept that it hopes will significantly reduce the garbage production starting from the individual households.

The Refill Revolution, a project of the Environment Management Bureau in Central Visayas (EMB-7) with the Lapu-Lapu City government, hopes to fund small-time businesses in transitioning to becoming minimal or zero waste stores.

Annabeth Cuizon, the City Social Welfare and Services (CSWS) head of Lapu-Lapu City, said that once implemented, the Refill Revolution should help change the mindset of both residents and tourists in terms of garbage production.

The CSWS will be implementing the project to the barangays and Cuizon hopes that as they begin

to plant the roots of the revolution, this will grow into a sustainable industry that would save Lapu-Lapu's most valuable resource, its beaches.

“Dako kaayo nig tabang kon magsugod ta sa kabalayan og mga tindahan kay kon gamay rag basura ang kolektahon, gamay rag malagpot sa atong landfill. Kung wala nay plastic, wala nay hugaw atong mga dagat,” said Cuizon.



Lapu-Lapu City Mayor Junard Chan checks the turned-over containers from the Environment Management Bureau to Lapu-Lapu City for the Refill Revolution project. | Courtesy of Lapu-Lapu City PIO

## Reduction

The goal of the Refill Revolution, Cuizon said, is to primarily reduce the use of plastic among households and establishments by allowing people to bring reusable containers when buying products such as shampoo, conditioners, soap, laundry detergent, cooking oil, condiments, or basically anything that is usually sold in plastic packs.

The first known Refill Revolution project in the country was implemented in San Fernando City, Pampanga, gaining popularity in the city for selling products 50 to 70 percent cheaper through refills than the original packed ones.

San Fernando City has been among the model cities in the country that has managed to garner an 81 percent diversion rate through different programs such as saving discarded resources through composting and selling in junk shops.

According to the Global Alliance for Incinerator Alternatives (GAIA), the Refill Revolution could have contributed to the increasing the diversion rate of the city as selling 100 liters of soy sauce through refills would be equivalent to avoiding the use of 100 1L laminate pouches or 500 200 milliliters (ml) laminate pouches.

Lapu-Lapu City is hoping to institutionalize the program and encourage more stores to employ zero-waste measures through the Refill Revolution movement.

The EMB-7's memorandum of agreement (MOA) with the Lapu-Lapu City government would grant P1 million in four tranches for the funding of refill stores in the city.

The CSWS is coordinating with the barangays for their women's organizations as the primary beneficiaries of the project.

As both the city government and the EMB-7 are still finalizing the MOA, the CSWS is still mulling how much will be allotted to each barangay.

“Atong idivide sa lima ka barangays ang first tranche, tag P50,000 each. Of course, dili pa ni final, but mao na atong direction ani nga project,” she said.

As of now, the project is at the information dissemination stage and the CSWS is identifying five viable barangays as pilot areas.

Lapu-Lapu City CENRO head, Engineer Roderico Tagaan, said the project will help the city further reduce its garbage production.

The city, with its 250 tons per day garbage production, throws at least 150 to 170 tons of garbage to the landfill. Of the average 250 tons of garbage collected per day, at least 10 percent are single-use plastics.

Since Lapu-Lapu is a resort city, Tagaan said that the majority of these single-use plastics are sachets, plastic bottles, plastic bags, and similar items.

“Naa man tay MRF (material recovery facility) sa Barangay Soong, nga mosort out sa recyclables pero kasagaran anang single use plastic, labay gyod di naman na marecycle. If mareduce nato ang single use plastic, dako kaayo nang tabang,” he said.



Employees clean up the remaining trash at the landfill located in Barangay Binaliw in this file photo.

## **Diversions**

Mandaue City and Cebu City are yet to accept the challenge of implementing a Refill Revolution in their localities.

Mandaue CENRO head, Architect Araceli Barlam, said that Mandaue City has already established barangay-based diversion programs that have significantly reduced the amount of waste thrown into the landfill.

Mandaue City records a diversion rate of 20 percent for residual wastes, which in turn constitutes 37 percent of the total garbage generated by the city.

This means, 20 tons per day is diverted away from the landfill from the average 276 tons of garbage produced per day in Mandaue City.

Biodegradable waste and recyclable wastes constitute the rest of the garbage collected in the city.

Barlam said that there are 13 barangays with a recycling facility of some kind that focuses on composting and recycling. This has become the livelihood for women in barangays like Subangdaku.

The city also has a partnership with a local recycling company in Tayud, Consolacion town that transforms certain plastics into materials used as cement adhesive.

“Amo na gyod na gischedule nga on certain days molabay ta sa Consolacion sa katong plastic nga ilang dawaton, dayon sa ubang adlaw molabay sa Binaliw,” said Barlam.

Barlam admits there is more to be done to significantly reduce the trash production in the city, but she said they have to be realistic to know that zero-waste would be impossible.

For one, she said that even with the massive cooperation of residents against the use of plastic shopping bags, she said the markets still need to use single-use plastic to pack wet food sanitarily.

This is why a project like Refill Revolution would come in handy if it could change the mindset of the public against using single-use plastic and opting for refilling and bringing their own packages.

“We have not heard much about the Refill Revolution, but if the EMB-7 would guide us, we know that it is possible. Ang mga tawo mosunod man gyod na basta klaro ang balaod og dili out of touch from reality,” she said.



Zero waste store in Cebu City. | Delta Letigio

## Zero-waste

Cebu City generates 500 to 700 tons of garbage per day prior to the pandemic and all of these go to the landfill with insignificant diversion.

The city currently lacks an effective MRF, a consistent segregation program, and a clear diversion plan to reduce the garbage thrown into the landfill as compared to its neighboring cities.

Engineer Glory Rose Manatad, the solid waste management division chief of the Cebu City CENRO, said that they are in the process of building an MRF in Barangay Kalunasan, a step in the right direction.

Instead of government-led initiatives, the city’s residents have taken into their own hands the campaign of reducing garbage production.

AMGU, the first zero-waste store in Cebu, began the campaign in 2019 opening its first store in Barangay Kamputhaw at the heart of uptown Cebu City.

Its proprietor, Rangi Joy Magarang, told CDN Digital that the movement sprung from the desire to contribute to the solution to the growing waste problems of Cebu City.

The city has faced various challenges in its solid waste management including the closure of its primary landfill in Barangay Inayawan in 2018 and the opening of another controversial landfill in the Barangay Binaliw.

Magarang said she started AMGU to encourage customers to bring their own containers instead of relying on plastic packaging that “only ends piled up in landfills.”

She sells cleaning materials, hygiene products, spices, nuts, food, reusable containers, ecobags, and other items in her store.

Magarang said she has seen the zero-waste industry growing with other stores popping up in the city as well including the Green Shelf and Kilohan.

She said that putting up a refilling store may take more effort than just putting up another store because people may not be familiar with them yet, but on the business side, the store can be income-generating.

The capital can start as low as P2,000 to P5,000 but sustaining the store can be very minimal because instead of spending so much on packaging, the customers themselves have to bring in their own.

“Tuo man gud nila nga kung refill, di na pwede mopalit og ginagmay parehas sa sachet. Pwede ra gihapon kay pwede man by gram or by ml (milliliter) ilang paliton. Depende gyod na sa diskarte sa naninda,” said Magarang.

Magarang hopes that ordinary stores can slowly transition to refilling as well so that more people can choose to bring their own containers and reduce the garbage production of the city.

She said that even the Carbon Markets vendors can choose to put up refilling stations for cooking oil and other products for those bringing their own containers and providing discounts for customers doing so.

For the proprietor, the Refill Revolution through the support from the government can help vendors and business owners start their zero-waste stores.

“Malipay gyod ko nga modaghan mi, kung kita tanan atong paninguhaon nga magzero-waste ta hangtud sa atong mahimo,” she added.

Manatad said that a project like Refill Revolution is welcome in Cebu City as garbage reduction will be a domino effect in the overall solid waste management plan.

However, she said the priority of the city government must still be in proper segregation and the putting up of an MRF to ensure that whatever garbage ends up on the landfill will be significantly reduced from the collection.



Zero waste store in Cebu City. | Delta Letigio



### **A step in the right direction**

The Tricities' CENROs all believe that the Refill Revolution can be the movement that will involve the households in actively reducing the amount of garbage produced in the cities.

Lapu-Lapu City is determined to use this movement as a way to protect the seas that have brought its booming tourism industry to the forefront of Cebu's economy.

Mandaue City does not believe in absolute zero-waste but is open to establishing its own movement in order to reduce waste production.

While in Cebu City, the government does not have the time to implement such a large-scale project and is instead focused on finding a solution to its growing waste crisis through improving its segregation policies and building MRFs.

However, its residents are taking up the challenge themselves and putting up zero-waste stores hoping to make a difference.

For the part of Lapu-Lapu City, Cuizon and Tagaan said they are determined to show Cebu that it can be at the forefront of environmental protection because after all, the environment is what the city banks on. /rcg



## How you can really reduce plastic use in five simple ways

By [The Manila Times](#) May 10, 2021



*Surveys show moms agree to ban only plastics with existing alternatives.*

HERE are five simple things you can do to reduce your plastic carbon footprint:

Upgrade your barista's creation by using your own insulated tumbler. The next time you pop in for your Venti coffee, sip it from an ultra-cute tumbler, and get an extra buzz knowing you're doing your bit in saving the environment.

Bring your own bag. Make it a habit to pack reusable shopping bags and washable produce net bags the next time you head out for groceries. There are many cute designs from which to choose.

Break up with plastic you can live without. The next time you order take-out or have food delivered, ask to skip the plastic cutlery, plates and packets of ketchup. Doing this can personally save up to 466 items of unnecessary plastic a year.

Rethink diapers and period products. Make the switch to cloth diapers, which can cut down on disposable diaper costs and help speed up potty training. As for the monthly visitor, consider using a menstrual cup, a cloth napkin or pasador, or investing in a few pairs of period panties, which have a special layer.

Start the recycling process at home. Plastic has gotten a bad rap recently, but the truth is, plastic per se is not the issue. It's how we dispose of it. We can live with plastic. Most food products require plastic to keep the food fresh, safe from infestation, and traveling well.



# CDO villagers release sea turtle back into Macajalar Bay

By Ercel Maandig **May 9, 2021, 2:32 pm**



**SAFE RETURN.** The hawksbill sea turtle after it showed up in the coastal barangay of Bayabas in Cagayan de Oro City. Village officials and maritime police personnel made sure that the sea turtle returns back into the bay safely on Saturday (May 8, 2021). *(Photo courtesy of Knox Durano)*

**CAGAYAN DE ORO CITY** – Residents of Barangay Bayabas here have returned a hawksbill sea turtle earlier washed ashore in this coastal community back into the bay.

Village chief Eddie Abrogar on Saturday said this is not the first time they have seen this kind of sea creature since the Macajalar Bay facing their barangay remains rich in marine resources.

CDO Maritime Police Office personnel under Maj. Julie Buac went to the coastal barangay after they were alerted by village councilor Knox Durano who chanced upon the turtle Friday evening.

Officials and residents stayed in the area and made sure that the turtle returned to its habitat safely.

Abrogar said the barangay manages 12 hectares of fish sanctuary that has been declared as a marine protected area by the Bureau of Fisheries and Aquatic Resources and the Department of Environment and Natural Resources (DENR).

In addition, the village has a "Bantay Dagat", or a coastal community watch with barangay enforcers taking turns to be stationed in a floating observation deck in the middle of the sea.

Hawksbill sea turtles are considered to be a critically endangered species due to their dwindling numbers caused by illegal human activities like poaching and plastic wastes being thrown in the oceans, according to the World Wildlife Fund.

Meanwhile, the City Fisheries Division of the local government, together with the maritime police and village officials, is checking on the vicinity for possible hawksbill sea turtle visits. **(PNA)**





# Are seahorses going the way of pangolins?

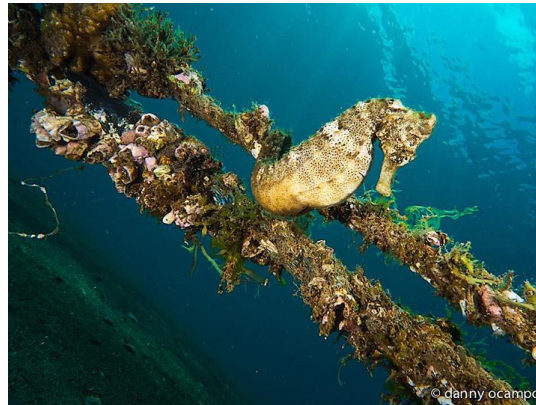
BY JONATHAN L. MAYUGA MAY 9, 2021



Live seahorse

In the 1970s and 80s, children would love to see the DC Comics' fictional superhero "Aquaman" riding a giant seahorse, communicating with the fabled creatures through mental telepathy in his epic adventures in the deep.

Depicted in Greek mythology as a sea monster with the head and body of a horse and a dragon-like tail, the hippocampus or hippocamp, also called hippokampos, is a fascinating sea creature. It is commonly called as seahorse.



Seahorses, however, are not mythical creatures as they are very real—and are actually endangered fish species.

## Flagship species

Project Seahorse, a marine conservation group dedicated to securing healthy and well-managed marine ecosystems, consider seahorses as a flagship species for a wide range of marine conservation issues.

There are 46 known seahorse species, 10 of which naturally occur in the Philippines. Of its total known species, 14 are threatened by fishing and habitat loss.

Project Seahorse estimates that around 70 million seahorses are caught globally in unmanaged fisheries activities each year.





## Quirky fish

Seahorses have an uncommon trait wherein only the males get pregnant. They are monogamous and form faithful pairs with lengthy parental care, live in temperate and tropical seas, and dwell on corals, seagrasses, mangroves and estuaries.

As such, they are important predators on bottom-dwelling animals.

While they are voracious predators, seahorses have no stomach or teeth. They feed by sucking their prey in through a tubular snout and pass it through an inefficient digestive system, the Project Seahorse said.

## Protected by law

Two laws protect seahorses in the country—the Republic Act (RA) 8550 of May 17, 2001, or the Fisheries Code of the Philippines, and its amendatory law, RA 10654, or the Amended Fisheries Code; and RA 9147, or the Wildlife Act.



A woman shows a couple of dried seahorses she is selling to tourists.

On the other hand, they may be protected by local ordinances, particularly, those within fish sanctuaries and marine protected areas.

On a bigger scale, the National Integrated Protected Areas System Act, which protects wildlife within declared protected areas and national parks in the country, provides seahorses stronger protection.

## Widely distributed, shrinking population

Seahorses are widely distributed throughout the Philippine marine waters either in mangroves, seagrass beds, sandy sediments and hard/soft corals, said Marivic Pajaro, executive director of Daluhay Daloy ng Buhay Inc. based in Baler, Aurora province.

Pajaro, whose nongovernment organization implements ridge-to-reef approach to environmental conservation, said many anecdotal accounts have indicated that the country had an abundant stock of seahorses, especially before the 1990s when the pressure from overfishing and habitat degradation took its toll on their population.

Pajaro was the project leader and later coordinator in Bohol when Project Seahorse evolved and scaled up its interventions at a national scale

Seahorses are extremely vulnerable from both natural threats and anthropogenic or environmental pollutants, Pajaro told the BusinessMirror via e-mail on April 22.

“Seahorses have low mobility, low population density, small home ranges, low fecundity or fertility,” she said.



### **Not food, but medicine**

Pajaro said seahorses can be edible. But interviews with fishers during her research revealed that they are not palatable as food because of their bony plates rather than fleshy meat. Nevertheless, seahorses are exploited as they fetch a good price.

They are exported either dried for use for traditional Chinese medicine (TCM), or curios/souvenirs, and caught live for ornaments or aquarium display.

“I have seen several fishers keep a couple of dried seahorses for use as folk medicine. They grill the dried seahorses and then pulverize them to be mixed in soup or water to treat ailments, especially asthma,” she said.

### **Prey and predator; ecosystem function**

Seahorses are mainly carnivores, who wait to ambush their prey, Pajaro said.

“As the prey comes close, they suck them with their long snouts. [Their] food are small crustaceans, fish fry and other planktonic invertebrates, small enough to fit into their snout,” she explained.

Since seahorse adults can camouflage and are unpalatable, they don't have many known predators, Pajaro added.

“They have been reportedly found in stomachs of crabs [just the tails], sea turtles and water birds. However, the juveniles are great targets for food by other fishes and marine animals that are planktivorous, or those that eat organisms that are carried by tides and currents,” she said.

As such, Pajaro noted, seahorses have strong relationships with their habitats.

As such, they are good icons to call attention to the marine conservation issues that need to be addressed. Hence, protecting them can benefit many other marine species and ecosystems, she added.

### **PHL a seahorse exporter**

In the Philippines, 1.7 million seahorses are captured every year, according to the 2019 Fisheries Centre Research Report on the catch and trade of seahorses in the Philippines, that was prepared by the Institute for the Oceans and Fisheries at the University of British Columbia, Canada.

The illegal trade of seahorses in the country continued, mostly for export to Asian countries, despite the blanket ban on the trade of rare, threatened and endangered species, including seahorses, imposed by the Department of Agriculture's Bureau of Fisheries and Aquatic Resources (DA-BFAR) with the passage of the Fisheries Code, along with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)-listed species. Last March, 15 kilograms of dried seahorses valued at P460,000 was confiscated by authorities in Bacolod City.

### **Targeted species**

Seahorses are targeted species like the pangolins, the most trafficked animal in the world that is hunted for its meat and scales.

In July 2020, wildlife trade monitoring network, Traffic, in a report titled, “Seahorse Trade Dynamics from Africa to Asia,” by Simone Louw and Markus Burgener, revealed the alarming scenario in the trade of seahorses.



Using data extracted from the CITES Trade Database that documented volumes of seahorse trade and the countries involved, the report revealed that 11,259,098 seahorses have been exported over a 10-year period from 2008 to 2018.

In the same 10-year period, 15,722,838 is the estimated total global number of imported among the species.

Meanwhile, the top five countries or territories, accounting for 99 percent of the global reported exports in dried seahorses, were Thailand (71 percent), followed by mainland China (15 percent), Senegal (10 percent), Malaysia (2 percent) and Hong Kong (1 percent).

## **Fast disappearing**

In the Philippines, seahorses are fast disappearing in the wild.

“When was the last time the average diver saw a wild seahorse in the Philippines? Stocks have been severely depleted by illegal fishing,” Gregg Yan, founder of Best Alternatives, said. Seahorses, according to Yan, have been targeted by TCM trade in at least 500 years.

“As many as 20 million seahorses and pipefish are plucked out of the world’s seas yearly, with up to 4 million coming from the Philippines, which was a top exporter to China,” he lamented.

Documenting various coastal fisheries throughout the country, Yan told the BusinessMirror via Messenger on April 29 that many small-scale fishers passively collect seahorses, which have two things going against them—they swim slowly and they are attracted to light, which make night fishing simple and effective.

## **Best alternatives available**

Yan believes there are better, if not best alternatives, even to the “alternative medicine” that are pushing iconic animals around the world to the brink of extinction.

Best Alternatives, an environment group, advocates for science-based medicinal alternatives to ground-up seahorses.

“We’re not here to contest the effectiveness of [TCM], which has been evolving for hundreds of years,” Yan pointed out.

“What we’re saying is that because the raw materials needed to make certain TCM products, like tiger bones, pangolin scales or dried seahorses are both legally protected and are fast running out, then we logically must start switching to sustainable and usually more affordable alternatives before these animals disappear completely,” he explained.

## **Protecting seahorses; trade regulations**

To protect and conserve the seahorses, and address illegal wildlife trade, the DA-BFAR said it promotes the protection of coral reefs, seagrass beds and mangrove forests through collaborations with the DA’s Biodiversity Management Bureau.

“One of the priorities of DA-BFAR is the development of seahorse-specific management measures through the assistance of scientific authorities and the Philippine Aquatic Red List Committee, subject to the availability of funds,” the DA-BFAR told the BusinessMirror via e-mail on May 5.

Some conservation actions for seahorses include the no-take Marine Protected Areas and the voluntary adoption of a 10-centimeter minimum size limit by fishers.



Meanwhile, the Aquatic Wildlife Regulatory Section of DA-BFAR's Fisheries Regulatory and Licensing Division that is responsible for CITES-listed species regulates the scientific researches involving aquatic wildlife.

DA-BFAR added that it implements strict border control measures in airports, seaports and land-based checkpoints to regulate the trade of aquatic wildlife and fishery products. For its part, Daluhay's Pajaro said saving seahorses from extinction needs an integrated management approach that will require the help and support of stakeholders.

She agreed with DA-BFAR on the need for the no-take marine protected areas and the setting of limits to the size and volume by using selective fishing gear.

Thus, the stakeholders—the fishers, buyers, BFAR, local government agencies, academe/experts—need to be on board in the policy and decision-making, and in the monitoring, evaluation of these policies and their enforcement, she said.

Pajaro warned that while seahorses may appear unimportant, if they become locally extinct it will upset the balance of nature, and can cause other organisms to suffer.

“Several studies have indicated that a species richness in an area enhances ecosystem productivity and stability. The extinction of any species is an irreversible loss of the Earth's biological richness, which the future generations will no longer enjoy,” she said.

Thus, Pajaro said the extinction of seahorses will mean that its use to traditionally treat human ailments and its potential for new cures and drugs will be gone forever.

Hence, seahorses can no longer contribute to important sources of income for subsistence fishers

As they are related to mythical stories, unless their trade regulations are observed, they may soon become nothing but a myth.

Images courtesy of Danny Ocampo, Daniel M. Ocampo and Gregg Yan



The DOE has partnered with the World Bank Group and the UK Embassy to develop specific policies and regulations for offshore wind projects, DOE-Renewable Energy Management Bureau director Mylene Capongcol said in a text message to The STAR.

STAR/File

## DOE formulates policy on development of offshore wind farms

[Danessa Rivera](#) (The Philippine Star) - May 10, 2021 - 12:00am

MANILA, Philippines — The Department of Energy is working on a policy on the development of offshore wind farms to further improve renewable energy (RE) technologies in the country.

The DOE has partnered with the World Bank Group and the UK Embassy to develop specific policies and regulations for offshore wind projects, DOE-Renewable Energy Management Bureau (REMB) director Mylene Capongcol said in a text message to The STAR.

The agency held a kick-off meeting with the World Bank Group and the UK Embassy last Thursday.

“For UK, its more on capacity/knowledge sharing by UK government/practitioners, to cover around six sessions/focus group discussions-webinars. For the World Bank Group, they will assist the DOE in developing roadmap for the Philippine offshore wind,” she said.

So far, the Triconti Windkraft Group—a partnership among Filipino, Swiss and German companies—secured contracts from the DOE to build offshore wind energy projects in the country.

The awarded contracts, located in the Aparri Bay up north and in the Guimaras Strait in the central Philippines, have a combined potential output of over 1.2 gigawatts (GW).

With the DOE service contracts in hand, the Triconti Windkraft Group now holds the exclusive rights to study and develop the very first offshore wind projects in the country.

Meanwhile, the agency will not draft a similar policy for floating solar. It is working with the Laguna Lake Development Authority (LLDA), which is formulating a policy for large-scale floating solar projects over the Laguna Lake.

“As of now, [we don’t see a] need [for a policy on floating solar] but we are in coordination with LLDA because most floating solar are in LL. We are studying though the synergy between food security and energy through floating solar (demo project) in Magat,” Capongcol said.



She was referring to SN Aboitiz Power's 200-kilowatt (kw) floating solar project over Magat Dam, the company's first non-hydro RE project.

Switched on in June 2019, the 200-kw facility provides internal power to SNAP-Magat's facilities.

Because of the pilot project's success, SNAP's board of directors approved to proceed to engineering design for a floating solar plant with up to 67 MW in capacity.

The company is now conducting a feasibility study (FS) to validate the initial results and confirm the viability of a commercial-scale project. The FS phase is expected to run for about 10 to 12 months.

Apart from SNAP, several other companies are looking to develop floating solar projects in the country.

Meralco Powergen Corp. (MGen), the power generating arm of Manila Electric Co. (Meralco), is also eyeing to develop more floating solar plants over the Laguna Lake.

MGen, through subsidiary MGEN Renewable Energy, Inc. (MGreen), formed Lagunasol Corp. in September 2020 to house its floating solar investments.

It is securing lake lease rights for six strategic locations of 100-hectares within the Laguna Lake, based on a regulatory filing.

In 2019, MGreen also acquired 70 percent of Nortcsol III Inc., a local firm engaged in the development, construction and operation of power plant and related facilities using renewable energy system and hybrid energy system. Nortcsol is a subsidiary of SunAsia Energy.

Nortcsol is currently developing a 110-MW dc/90-MW ac floating solar facility in Laguna de Bay and waiting for the LLDA leasing policy.

Former National Renewable Energy Board (NREB) chair Monalisa Dimalanta said there is still a huge space for investments in solar and wind which remains unavailable and untapped for investors.

"I wouldn't say inaccessible because SNAP is there and we are able to attract still, despite the difficulty. There are very diligent investors who still want to participate in our economy. There are ways, avenues available for that," she said.

The former NREB official said new technological limits in RE are among the challenges that need to be hurdled in the solar and wind space.

"That is one of the questions that we were grappling with at the NREB. The Department of Science and Technology, which also sits as an observer at the NREB, was actually quite helpful in this regard. Technology has advanced so much," Dimalanta said.

10 MAY 2021, MONDAY



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# **NEWS ALERTS**

# **COVID-19 NEWS**

**STRATEGIC COMMUNICATION AND INITIATIVES SERVICE**





# DOH logs 7,174 new COVID-19 cases, total at 1.1 million

(Philstar.com) - May 9, 2021 - 4:01pm



Members of the Manila Police District Station 5 round up more than 100 individuals at the Ferguson basketball court in Ermita, Manila on May 6, 2021 for violating the curfew and health protocols.

MANILA, Philippines — Health authorities on Sunday tallied 7,174 new coronavirus cases, pushing the total to 1,101,990.

The numbers today came a week before government decides if 'NCR Plus' will stay under modified enhanced community quarantine, or shift to the less stricter GCQ.

Active cases decreased by 2,082 from yesterday's 63,376. The Department of Health said all laboratories were operational and submitted testing results.

- Active cases: 61,294 or 5.6% of the total
- Recoveries: 9,197, bringing the number to 1,022,224
- Deaths: 204, or now 18,472 in total

## What's new today?

- The Department of Health reported 48,318 additional cases in total last week, or from May 2 to May 8.
- Vice President Leni Robredo urged officials to use only COVID-19 vaccines with [emergency use approval](#) from the Food and Drug Administration. Her comment came after President Rodrigo Duterte was inoculated with the Sinopharm, which has yet to be cleared by local regulators.
- OCTA Research said Metro Manila cases continue to be on the decline, but three cities outside the region are now seen as "[areas of concern](#)" due to a rise in infections.
- The Quezon City Police District said it will [intensify](#) enforcement of health protocols in the city. It vowed to deploy cops 24/7 particularly in public areas.

Source: <https://www.philstar.com/headlines/2021/05/09/2096993/doh-logs-7174-new-covid-19-cases-total-11-million/amp/>



## 2 milyong AstraZeneca dumating na sa Pinas

By [Ludy Bermudo](#) (Pilipino Star Ngayon) - May 9, 2021 - 12:00am



Ang COVAX facility ay ang international partnership na itinatag upang matiyak ang patas na distribusyon o pamamahagi ng COVID-19 vaccines sa buong mundo.

AFP/Alain Jocard

MANILA, Philippines – Dumating na kahapon sa Pilipinas ang mahigit dalawang milyong doses ng AstraZeneca COVID-19 vaccine mula sa COVAX facility ng World Health Organization.

Ang naturang shipment ay karagdagan sa kalahating milyong doses na unang idineliber noong Marso.

Bahagi rin ito ng 4.5 million na naipangako sa Pilipinas mula sa COVAX.

Ang COVAX facility ay ang international partnership na itinatag upang matiyak ang patas na distribusyon o pamamahagi ng COVID-19 vaccines sa buong mundo.

Ang naturang bakuna ay para sa mga nabakunahan ng first dose, ngunit hindi pa nabibigyan ng kanilang second dose, gayundin sa iba pang target populations.

Kung maaalala, sinuspinde ng DOH at Food and Drug Administration noong nakaraang buwan ang pagtuturok ng AstraZeneca vaccines sa mga edad 59-anyos pababa.

Kasunod ito ng mga naitalang insidente ng “blood clotting” at mababang platelet count sa ilang nabakunahan sa Europa at Estados Unidos.

Sa ngayon wala pa naman daw naitatalang kaso ng Vaccine-Induced Thrombosis and Thrombocytopenia (VITT) o blood clots mula sa mga nabakunahan ng AstraZeneca dito sa bansa.

Batay sa datos ng DOH, may 70.4% efficacy rate ang AstraZeneca laban sa mga symptomatic COVID-19 cases. Umaakyat pa ito ng 100% sa mga may severe infection.

Source: <https://www.philstar.com/pilipino-star-ngayon/bansa/2021/05/09/2096924/2-milyong-astrazeneca-dumating-na-sa-pinas/amp/>



# Another Side Effect of COVID-19: The Surge in Plastic Pollution

BY [CAROL KONYNASIA](#) [EUROPE](#) JUL 6TH 2020



Single-use plastic is one of the greatest threats to the environment. According to the Hong Kong-based NGO [OceansAsia](#), approximately **300 million** tons of plastic is produced worldwide every year, with more than **8 million** entering oceans annually- ultimately threatening the ecosystems of marine wildlife. The COVID-19 pandemic threatens to further exacerbate the scourge of plastic pollution.

## Plastic Pollution Amidst COVID-19

Naturally, the priority over the past few months has been mitigating the contagion of the virus, which includes the implementation of [collaborative protective measures](#). Essential components to controlling the spread include the wearing of surgical face masks and the frequent disinfection of hands. Although these two measures alone cannot stop the pandemic, they play an important role in preventing infection and are therefore vital to controlling and eliminating COVID-19.

## Why is Plastic Relevant to the Pandemic?

Both face masks and hand sanitiser production include the use of plastic. Face masks typically contain polypropylene (PP), which, due to the microfibers' hydrophobic composition, acts as a protective layer against bodily fluid droplets. Other more intricate and expensive face masks include polyurethane (PUR) and/or polyacrylonitrile (PAN).

## PPE Litter in Oceans

Plastic has a lifespan of approximately [450 years](#), and never fully degrades but rather shrinks into smaller pieces of plastic called microplastics.

Joffrey Peltier, member of the environmental organisation Opération Mer Propre in France, came across large quantities of latex gloves, face masks and bottles of hand sanitiser in the Mediterranean sea upon exploration. Regarded as '[COVID waste](#)', Peltier worries that this discovery indicates a new kind of pollution that adds to the already existing plastic problem, further threatening the environment. The organisation has urged the French public to use reusable face masks, and to substitute gloves with more frequent hand washing.



## United Kingdom

A UK-based charity, [Keep Britain Tidy](#), fears a littering crisis amidst the [relaxation of lockdown regulations](#) and [social distancing rules](#). With an increase in the number of people visiting beaches and parks, and gathering in public spaces, large amounts of rubbish have accumulated. [Thames21](#), a charity that aims to maintain healthy waterways in London, suggests that people are socialising in a way that is different to before lockdown: mainly congregating outdoors. This has led to carelessness in behaviour displayed through littering, for example. [Thames21](#) reports that the main type of rubbish found is [single-use plastic](#), such as fast-food packaging, confectionary wrappers and drink bottles.

[Keep Wales Tidy](#) campaigners stress that significant amounts of personal protective equipment (PPE) are being littered across the country. In addition to being an environmental hazard, says [Jemma Bere](#) policy and research manager for the [organisation](#), the littering of PPE poses a contamination risk to others: many samaritans that would typically collect litter when encountering some are no longer doing so to avoid the risk of coming into contact with contaminated PPE.

## Disruption to 'Business as Usual'

With the economy and 'business as usual' put on standby as a consequence of the pandemic, rubbish and recycling collection has been disrupted in many places. In a field experiment conducted by [Cialdini and colleagues \(1990\)](#) it was observed that participants were susceptible to the littering behaviour of those around them, and that people tend to litter more when in an already littered environment. The researchers explained that the littering state of an environment establishes the norm of behaviour later exhibited in said environment, such that others will tend to conform or adapt to this perceived norm. They concluded that the more litter present, the more people are likely to litter, causing a positive feedback loop. As human beings are social animals and susceptible to conformity, a way to tackle this issue is to enforce correct attitudes towards the environment through education and raising awareness.

[Shadi Moqbel](#), a civil engineer and waste researcher at the University of Jordan, noted that some of the patterns observed with COVID-19 are not novel, and rather mirror a similar trend observed in previous outbreaks, such as the H1N1 (swine flu) virus. As a result of the pandemic, people are gravitating towards disposable items rather than reusable ones in attempts of being hygienic. Moqbel also stated that people are using more single-use plastic plates and packaging material due to a rise in food deliveries and takeout meals.

## Hong Kong

Having previous experience tackling a coronavirus outbreak, SARS, Hong Kong citizens were quick to take health precautions after the outbreak began in China. This primarily included wearing face masks in public and communal areas, frequent hand washing and regular temperature checks.



## OceansAsia

[OceansAsia](#) reported a stark increase in [marine debris](#) and [microplastics](#) build-up in Hong Kong since January, and found large quantities of face masks littered along beaches and rural suburbs. On a beach in Lantau Island, the organisation reported finding [70 face masks](#) disposed across an area just 100 meters long, with an additional [30 washed up](#) on shore. This raised concern among members as the area is relatively uninhabited and is difficult to access, providing insight into potential larger littering figures across more popular beaches.

## Conservancy Association (CAHK)

Another local environmental organisation, the [Conservancy Association Hong Kong \(CAHK\)](#), has expressed similar uneasiness about this new type of pollution caused by [careless behaviours](#) with face masks. CAHK stresses the importance of raising awareness and educating the public on how to correctly dispose of face masks, as well as to inform on the health risks associated with incorrect disposal. Although the common consensus among [medical professionals in Hong Kong](#) is that single-use face masks are effective in mediating the spread of COVID-19, they have noted that correct disposal after use is important. [The Centre of Health Protection \(CHP\)](#) guidelines state that soiled tissues and used surgical face masks must be [discarded in lidded bins](#) to control the spread of the virus.

## Greeners Action

In an attempt to tackle the plastic pollution problem amidst Covid-19, the environmental group [Greeners Action](#) in Hong Kong has urged restaurants to encourage customers to bring their own tupperware when ordering takeout. The group surveyed over [2 000 participants](#) in early April and found that people are ordering food at a rate more than twice as high as last year, indicating a surge in single-use plastic consumption, most probably due to [social distancing measures](#).

[Jac Lun](#), project officer of Greeners Action, suggests opting out of receiving disposable plastic materials when ordering takeout, and for consumers to pick up their food directly from the restaurant or cafe. Lun further elaborated by saying that tupperware is potentially safer than single-use plastic in terms of hygiene, and that restaurants should offer rebates to customers that bring their own food containers. The ideal solution would be to cook at home, Lun says, as this way there is less fear regarding risk of contamination and less contribution to the already troubling plastic pollution problem.

## Solutions

[Short-term solutions](#) include fines, labels on disposable items, making information on littering and how to recycle more available to the public and potentially designing more eye-catching and 'fun' refuse bins to encourage interaction.

As a silver-lining, [Joubert and colleagues \(2020\)](#) believe the environmental emphasis on plastic pollution will return to the limelight once the COVID-19 crisis is under control. In the meantime, the researchers suggest recycling single-use plastic utensils and containers, limiting food deliveries and ordering from grocery suppliers that offer more



sustainable delivery packaging.

Wearing reusable face masks, disposing of single-use face masks correctly and buying hand sanitiser contained in ecologically sustainable packaging are also here-and-now factors to consider.

With the [European Green Deal](#) underway, there is a great appeal for companies to invest in innovations that can help alleviate the plastic crisis in the long-term. Similar to the way in which '[banning plastic straws to save the turtles](#)' started an influential [trend](#), many brand owners should implement similar measures to regulate their use of plastic and to further establish environmentally sustainable products as 'trendy'.

Furthermore, academia should aim to best educate society, manufacturers and policymakers on how to make more [environmentally-friendly decisions](#).

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
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