



A similar initiative called the Federal Land Consolidation and Rehabilitation Authority (FELCRA) grouped together small Malaysian farmers and established community farming centers, focusing on productivity that, in turn, resulted in higher levels of farmers' incomes. In fact, during the peak of the FELDA/FELCRA implementation during the leadership of former Prime Minister Mahathir, Malaysia reduced its rural poverty from 62% to 11%.

Here we have a clue to how we can attain a 9% poverty incidence by the end of the present Administration, as targeted by the National Economic and Development Authority (NEDA). Today, Malaysia's poverty incidence

is close to zero percent, thanks to an optimum combination of industrialization and rural/agricultural development which was attained, among other factors, by land consolidation.

Learning from the experiences of the two Southeast Asian countries most successful in reducing rural poverty — Malaysia and Thailand — Dr. De Vera came out with the following very relevant recommendations, borne out of both his research and professional experience as an agribusiness entrepreneur:

**1. Create incentives for investments and loans into agribusiness.** Now that Foreign Direct Investments have been significantly liberalized through the amendment of the Public Service

Act and the Foreign Investments Law, there should be a concerted effort to replicate the success story of Lionheart Farms that is owned and operated by a foreign business man.

It is fortunate at this time that the President is also the Secretary of Agriculture. He can focus much of his effort to attract foreign investors to large-scale investments in agribusiness, replicating our success stories with the likes of Del Monte and Dole in the past. Actually, I find it providential that the President chose to be Secretary of Agriculture. Increasing agricultural productivity requires very close coordination among several government departments like the Department of Agriculture, (DA) the Department of



Agrarian Reform (DAR), the Department of Environment and Natural Resources (DENR), and the Department of the Interior and Local Government (DILG). More often than not, these departments act as islands and have very little coordination with their respective policies and programs.

The big challenge of farm consolidation needed for us to follow the example of Malaysia cited above would need the close cooperation among those departments. The DA will identify the crops in which economies of scale are indispensable for high farm productivity, such as coconut, palm oil, mangoes, sugar, cacao, coffee, avocado, and many other high-value fruit trees. The DAR will have to make sure that its policies do not go against the ease of consolidating small farms. The DENR will be needed to identify public lands that can be leased to foreign direct investors who may want to be the government's partner in implementing the FELDA solution to grow certain crops using the nucleus estate approach that worked so well in palm oil and rubber in Malaysia.

Only the President can wield the necessary executive power to put these agencies together, to find ways and means of removing the many legal and administrative obstacles that are standing in the way of farm consolidation.

In my opinion, the President should continue to be Secretary of Agriculture for as long as necessary for him to shepherd these different departments to have a united approach towards tackling the key problem of reaching economies of scale to increase agricultural productivity. In fact, as an extreme measure, he may even consider abolishing the DAR and assigning to a division of the Agriculture department the responsibility of helping the farmer beneficiaries make certain decisions towards farm consolidation, whether by forming cooperatives or being part of a nucleus estate approach. ■

*(To be continued.)*

BERNARDO M. VILLEGAS has a Ph.D. in Economics from Harvard, is professor emeritus at the University of Asia and the Pacific, and a visiting professor at the IESE Business School in Barcelona, Spain. He was a member of the 1986 Constitutional Commission.



**bernardo.villegas**  
@uap.asia



## *editorial*

# Biotechnology's impact on PHL's food security

SINGAPORE, a city-state in Southeast Asia, imports virtually all of its food requirements. Because it does not have large tracts of land where it can grow crops and other food items, it has relied on other countries to feed its population. The Singapore Food Agency noted that its local farms produced only a fraction of the city-state's food requirements in 2018—13 percent of all vegetables, 9 percent of all the fish and 24 percent of all the eggs.

As countries all over the world continue to compete for shrinking resources, Singapore is embracing technological advances that would allow the small island nation to beef up its food supply. Bloomberg reported that Singapore is the only place in the world that permits the sale of cultivated protein, also known as lab-grown meat, cultured meat or cell-based meat. It is also leading a charge to allow, regulate and ultimately normalize the commercial sale of cultivated seafood (*See, "Singapore wants to sell the world on cell-cultured seafood," in the BUSINESSMIRROR, November 21, 2022*).

Just like their Southeast Asian neighbors, such as the Filipinos, Singaporeans are partial to eating fish and other marine species like shellfish and crabs. Fish consumption has grown by leaps and bounds, but production has been declining not only because of climate change but because of illegal, unreported, and unregulated fishing. Aquaculture has the potential to beef up fish supply but extreme weather events caused by climate change is threatening its viability.

Advances in biotechnology have paved the way for countries like Singapore to seek alternatives that would somehow reduce its reliance on imports. Other countries like the Philippines, where fish and other marine species are considered an integral part of their diet, should closely watch Singapore's efforts to develop cultured meat and seafood. The Philippines, for one, is now importing some of its fish requirements to fill the gap in its domestic production.



STRATEGIC  
COMMUNICATION  
AND  
INITIATIVES  
SERVICE

# BusinessMirror

*A window look at today's business*

A 10  
PAGE

UPPER  
LOWER

PAGE 1  
STORY

BANNER  
STORY

EDITORIAL

CARTOON

30 NOV 2022

DATE

TITLE: Biotechnology's impact on PAL's Food security PAGE 2

Apart from the possibility that cultured meat could supplement the country's food supply, the production of lab-grown food also presents opportunities for local businesses. Startups in search of investment ideas can consider cell-cultured food. Positioning the Philippines as a hub for lab-grown food items may attract foreign direct investments that the country needs **(See, "More foreign biotech investments eyed," in the BUSINESSMIRROR, November 21, 2022).**

Biotech-enabled production, manufacturing, and service-type activities are included in the 2022 Strategic Investment Priority Plans of the Board of Investments. This means that biotech companies that would invest in the Philippines could avail themselves of fiscal perks and other incentives. Biotech-enabled activities related to food security and research and development could enjoy these incentives for at least five years.

Natural resources continue to dwindle and extreme weather events are increasingly becoming more frequent, making it more difficult to feed a growing population. And as land for crop cultivation shrinks to give way to non-farm activities, the search for alternatives will intensify in the coming years. Biotechnology is one of the tools that policymakers can tap to beef up food supply and increase the availability of raw materials that industries can use to manufacture other products.



# CLIMATE CHANGE: EVERYBODY'S CHALLENGE

Special Feature

# Preparing the country against climate change

By Patricia Taculao

EVERY country faces the impact of climate change, a global phenomenon that has caused distress for decades. Over the years, governments and organizations have learned approaches that mitigated the harmful effects of climate change, preparing the public to become more resilient.

The Philippines, through the efforts of its local government and private organizations, has taken vital steps toward combatting the effects of climate change, equipping Filipinos with the knowledge and tools to achieve the lofty goal of saving the planet.

An average of 20 typhoons enter the Philippine Area of Responsibility annually. Although many Filipinos are aware of this occurrence, the typhoon's intensity takes them by surprise.

The Philippine Atmospheric, Geophysical and Astronomical Services Administration (DOST-PAGASA), for one, warns the rising sea levels in the Philippines could affect various industries in the country.

Rising sea levels arise from the additional four degrees Celsius expected to increase in temperature by the end of the 21st century. Experts from PAGASA note that the continuous climb in temperature has caused sea levels to rise by five inches during the past two decades--three times faster than the world average.

Understanding the gravity of the situation, the national government has since imposed measures that prove its strong commitment to a climate policy and institutional reform agenda.

A decade ago, specifically in 2009, it enacted Republic Act 9729, or the Climate Change Act, into law. It mandates the mainstreaming of climate change considerations in government policy and planning. It became the foundation to create the Climate Change Commission, the National Framework Strategy of Climate Change from 2010 to 2022, and the National Climate Change Action Plan from 2011 to 2028.

The Department of Environment and Natural Resources, tasked with creating an information management system, has a Climate Change Service that addresses the needs surrounding the issue.

Besides the DENR, other government agencies assumed their parts in combatting climate change. Since it's not an easy feat, it requires a significant budget that focuses intently on the issue.



TITLE: *Climate Change: Everybody's Challenge* PAGE *2*

DATE

## *Preparing the Country against Climate Change*

In the recent CCC commemoration of the 15th Global Warming and Climate Consciousness Week held last November 21, Monday, government leaders led by the Department of Finance emphasized the national targets on mitigation and adaptation. It calls for fortified commitments from international channels and the private sector to invest in the Philippines' priorities on climate action.

Future investments will go to climate resiliency programs, which focus on reducing gas emissions, establishing climate-resilient infrastructures, and adapting climate-smart technology, among other approaches.

Philippine President Ferdinand "Bongbong" Marcos Jr. also underscores the need to combat climate change and meet the requirements of the Paris Agreement on the issue, which aims to lessen the amount of greenhouse gas emissions in the environment, thus lowering the level of global warming.

Throughout the Philippines, local government units have mobilized initiatives that contributed to the country's bid for climate resiliency. Some even went far as to ban plastic, impose environmental laws that promote cleanliness, and teach Filipinos about the relevance of climate change in their daily lives.

The national government, along with its foreign counterparts, recognizes that for any effort to become effective, there has to be a collective attempt from them, the private sector, and even everyday citizens.

Some private companies in the Philippines also recognize the role they can play in mitigating the effects of climate change. As a result, they don't hold back in participating however they can in creating a safer place for present and future generations.

An example is Manulife's corporate social responsibility. As one of the leading life insurance firms in the country, Manulife assumes responsibilities that help make life better for everyone.

Manulife actively incorporates climate change considerations in its decision-making for operations, investment decisions, and products and services. The company partnered with Haribon Foundation to demonstrate the relevance of nature-based solutions in preserving the planet.

Forests are a vital part of the planet that keep temperatures down, provide shelter for ecosystems, and prevent soil erosion. Manulife established the

partnership Forests for Life program with Haribon to restore Philippine rainforests. Manulife commits to planting 15,000 seedlings that cover 12 hectares of land in Haribon's conservation areas in Laguna, Quezon, and Rizal.

In the meantime, some companies pledge their corporate social responsibility to the environment through financial efforts. For instance, Landbank, a government-owned bank in the Philippines, focuses on serving the needs of farmers and fishermen, and offers policies supporting initiatives for combatting climate change.

Landbank commits to innovative products and services that allow the bank and its clients to fulfill their sustainability and environmental protection goals through business lines, lowering carbon footprints, and promoting ecological enhancement. Their Environmental Policy on Credit Delivery

ensures that all financed projects are environmentally-sound and compliant with all environmental laws. Meanwhile, the Green Procurement Good Practices guide in setting standards to evaluate products and services.

As for getting the public involved, SM Cares celebrated Children's Month this November through a partnership with SMDC Light Mall and the Emmy-nominated children's show Superbook. They created a specially-designed program that teaches children the significance of disaster preparedness.

It educated children on common disasters in the Philippines, such as earthquakes, volcanic eruptions, and floods, and gave them tips on what to do in times of calamity.

While mitigating the effects of climate change remains the primary goal, the Philippine government and private companies also instill that resiliency through disaster preparedness, can also help the community avoid intense impact. Disaster preparedness is a relevant value to have, particularly when climate change phenomena have increased their intensity. It's something that every industry should learn because of how it could affect their progress in the future.

Mitigating the impact of climate change is an enormous feat that could become successful through the collaborative effort of governments, private companies, and the public. With enough initiatives and participants, the world could lower temperatures to preserve the environment and everything in it.



STRATEGIC  
COMMUNICATION  
AND  
INITIATIVES  
SERVICE

30 NOV 2022

TITLE:

PAGE 1

DATE

# Government backs responsible mining in PH

BY DEXTER A. SEE

**B**AGUIO CITY – Environment Secretary Ma. Antonia ‘Toni’ Yulo-Loyzaga underscored that the government supports responsible mining in the context of the country’s inclusive, resilient and sustainable development.

Secretary Loyzaga, who was the guest of honor and speaker during the 68th Annual Mine Safety and Environment Conference held at the CAP Cultural and Trade Center in Camp John Hay, pointed out that minerals are part of the peoples’ daily lives and that they are used in one way or the other across industries.

She admitted that the mining sector had its highs and lows over the past decade but policy and environment had somewhat affected the industry whether good or bad.

The DENR official claimed that minerals are needed to build an industrialized society while strategic minerals such as nickel and copper are also needed to transition to clean energy to mitigate climate change towards a low carbon future.

In the context of the Philippine Development Plan, Loyzaga emphasized that responsible mining deals with regulatory compliance that goes beyond the number of trees that were planted and the number of people that were employed. It begins with the mindset that specifically addresses resilience of people and plant within the core business values cycle. It is a commitment not only to deliver profit to the companies but to be an agent of ecological integrity through environmental improvement, to be a champion for social progress and empowerment. It is a mindset of constant progress in all aspects of triple battlelines that ensures no one is left behind.

She asserted that it is now a challenge to the mining industry stakeholders to operate their mines beyond regulatory compliance in order for the sector to be a critical force for social, economic and environmental change in the country.

According to her, the Annual National Mine Safety and Environment Conference embodies





30 NOV 2022

TITLE: Government backs responsible mining in PH PAGE 2

DATE

ideals as stakeholders gather to share best practices and recognize companies that have attained a level of proficiency in environment protection and mine safety.

Further, she stipulated that the event also reminds the stakeholders that they are doing their best not to win awards but because they have committed to the aforesaid principles and values as part of their core responsibility.

Secretary Loyzaga cited the PusongMinero campaign of the Philippine Mine Safety and Environment Association (PMSEA), a volunteer organization that is a frontrunner in occupational health and safety, sound environmental management and social development, where mining companies led their expertise in search and rescue operations for calamity victims which is yet another community service that goes beyond legal compliance.

As an advocate for climate and disaster resilience, she stipulated that the said endeavor will not merely continue to respond to emergencies but invest in climate and disaster preparedness and disaster prevention before the hard actually strikes.

"Once we understand what we wish to achieve, we hope to be able to simply our approach in managing resource development if that is possible. The mitigation hierarchy that is used in many biodiversity projects in collaboration with the mining sector is a good place to start. The framework is quite basic as it starts with avoidance of all possible environmental impacts. If this cannot be done, then the next option could be to minimize these impacts to a minimum

level. Again, if that option is not available, jointly, the option is to rehabilitate all the disturbed areas and finally, for truly unavoidable destructions we provide for and invest in offsets or improvements in adjacent high value ecosystems and areas left. This is the practice that has begun globally. I hope to be able to engage with you in developing this framework," Loyzaga told the mining industry stakeholders.

She insinuated that the said framework is applicable to mining operations that had been successful and the global examples will show the way. Strategically, the concerned stakeholders and the government can co-create solutions within the concept and framework together.

The DENR Secretary explained that the priority program of the agency that the mining industry may be interested to know is the natural resources geo-special database purposely to have a single database where all the information related to the country's natural resources will be inputted.

In turn, the mining industry will be able to determine which MPSAs are not fully utilized, what areas are covered by small-scale mining, which development areas overlap with the critical ecosystems and protected areas and quantifying the reforestation efforts of mining companies within MPSAs over time.

Moreover, she said that the location and characterization of water resources will be important in enhancing water security for the country which is a perfect example of the old adage what is not measured cannot be managed, nor can it be valued, nor can it be treasured.







STRATEGIC  
COMMUNICATION  
AND  
INITIATIVES  
SERVICE

THE DEPARTMENT OF MINES AND GEOLOGICAL SURVEY  
**MANILA BULLETIN**  
THE NATION'S LEADING NEWSPAPER

4  
PAGE

UPPER  
 LOWER

PAGE 1  
STORY

BANNER  
STORY

EDITORIAL

CARTOON

TITLE: *Government back's responsible  
mining in PH*

PAGE *3*

*30 NOV 2022*  
DATE

# HAPPY 124<sup>th</sup>

## FOUNDING ANNIVERSARY



### MINES AND GEOSCIENCES BUREAU

under the leadership of Atty. Wilfredo G. Moncano - Director, MGB Central Office  
and Engr. Mario A. Ancheta - Regional Director, MGB R02

Greetings from

### DIDIPIO MINE

Know more about us at [oceangold.com/operation/didipio-mine](http://oceangold.com/operation/didipio-mine) Follow us on Facebook [www.Facebook.com/DidipioMine](http://www.Facebook.com/DidipioMine)



30 NOV 2022

TITLE:

PAGE

DATE

## Great Barrier Reef risks being added to 'in danger' World Heritage listing

By AGENCE FRANCE PRESSE

**S**YDNEY, Australia – Australia's Great Barrier Reef should be added to a list of "in danger" World Heritage sites, according to UN experts who warned the fading wonder has been "significantly impacted" by climate change.

A UNESCO-tasks report said on Monday warming seas and agricultural pollution had put the reef at risk and that its resilience had been "substantially compromised."

The Great Barrier Reef is one of Australia's premier tourist drawcards and putting it on the in-danger list could substantially tarnish its allure for international visitors.

UNESCO considered listing the reef after a damning report in 2021 but held off following intense lobbying from Australia's previous conservative government.



THIS FILE photo taken on March 7, 2022 shows the current condition of the coral on the Great Barrier Reef, off the coast of the Australian state of Queensland. (AFP)

It first raised the alarm about the reef's deterioration in 2010.

The Australian Marine Conservation Society said the reef supported 60,000 jobs and generated Aus\$6 billion (\$4 billion) in revenue every year.

Australian Environment Minister Tanya Plibersek acknowledged the reef was under threat but said putting it on UNESCO's "World Heritage in Danger" list would be a step too far.

"We'll clearly make the point to UNESCO that there is no need to

single the Great Barrier Reef out in this way," she told reporters. "If this World Heritage Site is in danger, then most World Heritage Sites around the world are in danger from climate change."

World Wildlife Fund spokesman Richard Leck said the UNESCO recommendations should be accepted by the government. "These UNESCO recommendations are a reminder it is our choice to give the world's most iconic reef the best chance of survival," he said.

Marine biologist Jodie Rummer

said the UNESCO report showed Australia had more work to do. "Our action now will determine the frequency and severity of marine heatwaves the reef will face over the coming years," she said.

The report, written by experts from the International Union for Conservation of Nature and UNESCO, acknowledged Australia's commitment to protecting the reef. But it found that despite the "unparalleled science and management efforts," the reef still faced "considerable pressures" linked to climate change and pollution from

agricultural runoff.

Australian scientists reported in May that 91 percent of the reef's coral had been damaged by bleaching after a prolonged summer heatwave. It was the first time on record the reef had suffered bleaching during a La Nina weather cycle, when cooler ocean temperatures would normally be expected.

Conservative prime minister Scott Morrison was voted out earlier this year in favor of a center-left government promising greener policies and greater climate action.



TITLE:

PAGE:

DATE:

**MOUNTAIN ENGINEERING INNOVATION**

# CABLE CARS SEEN TO BOOST CORDILLERA'S VEGGIE TRADE

**By Vincent Cabreza**  
@InqNational

**BAGUIO CITY**—The farming town of Bauko in Mountain Province on Tuesday broke ground for an 800-meter cargo cable system that would efficiently deliver produce to the closest trading post and replace the need for more farm-to-market roads.

Bauko Mayor Randolph Awisan said his town was raising a counterpart fund of about P1 million to build the cargo system designed for micro, small and medium farm entrepreneurs that would run on electricity.

Awisan attended a Mountain Engineering Summit here on Monday, which gave updates on four multidisciplinary technology projects seen as the new frontier for the Cordillera vegetable trade. These projects are being undertaken by a collaboration of universities called "Project Boondock" to address problems that are unique to upland communities, such as landslides that frequently block vegetable transport routes and extreme rainfall that destroys mountainside farms.

The country receives as much as 4,064 millimeters of rain annually, but Baguio alone receives 3,500 to 3,800 mm of yearly precipitation, said Jacob Saytoc, a science research specialist from the Ecosystem Research and Development Bureau of the Department of Environment and Natural Resources.

Extreme weather and poor terrain periodically disrupt the salad vegetable industry of Benguet and sections of Mountain Province and Ifugao, which have a combined trade value of P14 billion as of October, according to the Department of Agriculture (DA).

As much as 80 percent of Metro Manila's daily supply of carrots, cabbage, lettuce, cauliflower, potatoes and green beans are sourced from Benguet.

## Recovery tool

The cable car project, called the Cableways for Agricultural Resource Transport System (CARTS), could be a climate change solution because it does not use fossil fuel, and would be a tool for economic recovery given the impact of unstable world fuel prices on the vegetable supply chain, according to project leader Janice Kay Aquino, a Saint Louis University (SLU) civil engineering professor.

According to Aquino, one of the first engineers to acquire a master's degree in mountain engineering from SLU, food security is a key driver of the economy, given that 40 percent of the country's land area is used to grow food, and employs one out of three Filipinos.

However, most of the Cordillera's terrain has slopes higher than 30 percent, and the transit of agricultural produce and farm input remains a challenge even though 96 percent of the region's main roads have been paved with concrete, she said.

Since the 1960s, winch and pulley systems have been employed by farmers to haul crops, Aquino said.

Conventional pulley systems are driven by diesel-powered engines, but some farmers are more creative and have "repurposed the engines and motor parts of trucks that no longer work," she said.

## Ingenuity

This ingenuity was a drawback for at least one community in Benguet's Tublay town, "which waits for an individual, who knows how to drive, in order to operate their cable car device," Aquino said at the summit.

The makeshift cable car requires an ignition key, and could be launched forward by shifting to first gear.

Each CARTS carriage could carry up to 500 kilograms of crops when it crosses steep mountains and rivers by cables controlled by electric motors, which can be activated by a remote keypad or through a smartphone app, Aquino said.

The system is augmented with a series of cameras to allow operators a "first-person view" of the cargo while in transit.

"Mayor Awisan and his predecessor (Abraham) Akilit also pushed the idea of improving CARTS so it can also carry farmers in the future," Aquino noted.

The DA has been financing smaller cable systems, usually costing P5 million per kilometer, said Cameron Odsey, the agency's Cordillera director.

CARTS, Aquino said, measures how much savings the farmers would earn from using cargo cable cars instead of roads.

According to the Official Gazette, the DA has invested P650 million this year for the improvement of Cordillera's farm-to-market roads.

Project Boondock is also exploring measures to sustain the slope stability of the rice terraces in Mountain Province and Ifugao, and harness the Chico River, which courses through Mountain Province and Kalinga, while protecting riverside communities, said project leader Nathan Vincent Lubrica, an engineering professor at the University of the Cordilleras.

The project is also testing devices that would direct rainwater into aquifers to control flooding while storing rainwater for irrigation during dry spells, Lubrica said. INQ



TITLE:

PAGE

DATE

# 68<sup>th</sup> edition of PMSEA's annual mining conference: resilience, reset and recovery

**T**he 68th Annual Mine Safety and Environment Conference organized by the Philippine Mine Safety and Environment Association was held in Baguio on 15-18 November 2022. The theme of the first face-to-face edition of the ANMSEC following the Covid-induced shutdowns was Resilience. Reset. Recovery.

As the public and industry insiders have come to expect of ANSMEC, the event showcased the best practices of the participating companies in the area of occupational safety and health, environment and social development.

The pillar events of ANSMEC are the mining exhibit, the Community Relations Conference (ComRelCon), the Minerals Industry Symposium and the Safety Competition.

PMSEA recognizes the key role of both large-scale and small-scale mining in the

country's overall economic growth, especially in the ongoing efforts to gradually and safely revive the sectors that were heavily impacted by the ongoing COVID-19 pandemic. According to PMSEA President Luis R. Sarmiento, ASEAN Eng., mining does not only concern financial stability but it also covers social, environment and political issues which must be addressed by concerned government agencies, the local governments involved and the private sector.



One of the beloved traditions during ANMSEC is rejuvenating the Norfolk tree that stands along Session Road. The Norfolk tree was planted by PMSEA president Louie Sarmiento and the heirs of the late Mayor Alfonso Tabora during the 2009 edition of ANMSEC. Sarmiento is shown in photo with Apex Mining's Jill Base and Teresa Pacis on the morning of 16 Nov. 2022 when the Norfolk tree was being pruned.



To date, the PMSEA has planted more than 1,500 trees and some 150 endemic plants within the portions of the PMSEA Botanical Garden, which attracts group visitors, too.



PMSEA presented immediate past president, Dr Walter W. Brown (5th from right), with the Pasaalamat ng Minero in recognition of his many contributions to the mining industry.



No less than DENR's Sec. Maria Antonia Yulo Loyzaga awarded the winners of the Mine's Best Personalities Award. In photo, she is with Rachel B. Pingkian of TVIRDI-Balabag, winner of best mine supervisor in the surface category.



30 NOV 2022

TITLE:

PAGE

DATE

## Converge launches #CountdownToZeroWaste campaign, taps partners for e-waste disposal and tarpaulin upcycling

**L**EADING fiber broadband provider Converge ICT Solutions Inc. has launched its group wide waste management campaign focused on waste disposal and recycling of waste as part of its countdown to eliminate waste to landfill output by 2030.

Dubbed the #CountdownToZeroWaste campaign, Converge has partnered with Jontrix Trading Philippines and Green Antz Builders Inc. for the proper processing, management and recycling of waste electrical and electronic equipment (WEEE) or e-waste. It also partnered with Kreation PH for the upcycling of its excess marketing materials such as tarpaulins.

"At Converge, sustainability means walking the talk. We want to show that we are keeping our promises and turning our sustainability commitments into real, tangible company practices. Last year, we established our Solid Waste Management and Hazardous Waste Management Guidelines. This year, we are putting more of the guidelines into practice to ensure that our wastes are recycled, reused and treated properly," said Converge President and Co-Founder Maria Grace Uy.

"As we expand our business, we understand that we have a greater responsibility to operate more sustainably. Thus, we have pledged to achieve zero solid waste to landfill by 2030 as part of our sustainability commitments. To this end, we are embracing circularity and resource efficiency as key levers to reduce our waste," explained Converge Chief Strategy Officer Benjamin B. Azada.

Jontrix Trading and Green Antz Builders are scrap recycling organizations that collect and upscale solid wastes into bricks, chairs and other construction materials to aid in waste reduction. Meanwhile, Kreation is a social entrepreneur that helps women in Rizal to augment their household income by upcycling various materials, like tarpaulins, into bags, mats and other household items.

"This initiative is particularly important because we know that the improper disposal of waste has a direct impact on climate change. Everyday, we see the impact of climate change on our environment. Typhoons are becoming stronger and the devastation is more massive. We've seen this happen several times in the past

year as we strengthened our Disaster Preparedness Protocols," Uy said.

E-waste is now considered one of the fastest growing waste streams in the Philippines. Through its partnership with Jontrix and Green Antz, Converge ensures that its hazardous and e-waste are properly hauled, processed and recycled by Department of Environment and Natural Resources accredited companies.

To kick off the strategic partnership, Converge launched the collection of discarded electronic devices and equipment from employees through zero-waste bins placed in its offices in Pasig and Clark and selected business centers while directing all of its business units to send all used tarpaulins to the head office for proper upcycling and processing.

Azada underscored the importance of recycling e-waste as it contains toxic chemicals and a significant carbon footprint that will continue to impact the environment if these materials are not recycled.

"E-waste is one of the fastest growing waste streams in the world because we are digitalizing our economies. Everyone has electronic gadgets now, our TVs are getting bigger and home appliances are becoming more accessible. The Converge network being pure fiber is already more sustainable. However, we recognize, that we still produce a significant amount of e-waste from our day-to-day operations," he said. "Thus, we are committed to doing our part to minimize waste and to instituting a circular economy where we reduce, reuse, and recycle across our operations and our supply chain."

Aside from fulfilling its zero-waste-to-landfill commitment, Converge also contributes in attaining the International Telecommunication Union's target of increasing the global e-waste recycling rate by 30 percent next year.





TITLE: \_\_\_\_\_

PAGE \_\_\_\_\_

DATE \_\_\_\_\_



**Department of Environment and Natural Resources**  
**ENVIRONMENTAL MANAGEMENT BUREAU**  
DENR Compound, Visayas Avenue, Diliman, Quezon City 1116  
Tel.Nos. (632) 8639-4378  
Website: [www.emb.gov.ph](http://www.emb.gov.ph) Email: [recordsco@emb.gov.ph](mailto:recordsco@emb.gov.ph)



Management System  
ISO 9001:2015  
ISO 14001:2015  
[www.tuv.com](http://www.tuv.com)  
ID: 910003927



## NOTICE OF PUBLIC HEARING

On the **ENVIRONMENTAL IMPACT STATEMENT (EIS)** of the proposed **1400 MW PAKIL PUMPED-STORAGE HYDROELECTRIC POWER PROJECT** of the **AHUNAN POWER INC.** located in **BARANGAYS BANO, BURGOS, RIZAL AND TAFT, MUNICIPALITY OF PAKIL, PROVINCE OF LAGUNA.**

Notice is hereby given to all parties who wish to give their opinion regarding the implementation of the proposed **14000 MW PAKIL PUMPED-STORAGE HYDROELECTRIC POWER PROJECT** to attend the Public Hearing on:

Date	Time	Venue
15 December 2022 (Thursday)	8:00 AM <i>Registration starts at 7:30a.m.</i>	Gymnasium of Saint Peter of Alcantara College Inc., Pakil, Laguna

The Public Hearing is being conducted in connection with the review of the EIS of the aforementioned project by the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR).

The following is the project information:

<b>Project Name</b>	1400 MW Pakil Pumped-Storage Hydroelectric Power Project
<b>Project Location</b>	Barangays Bano, Burgos, Rizal, and Taft, Municipality of Pakil, Province of Laguna
<b>Project Capacity</b>	1,400 MW
<b>Proponent</b>	Ahunan Power Inc. (API)

All interested parties who wish to attend or participate in these Public Hearings should preferably confirm their attendance/participation and may give their opinion(s) in a concise position paper to the **ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT DIVISION (EIAMD)** of this Office through mail or through email at [eia@emb.gov.ph](mailto:eia@emb.gov.ph), at least three (3) days before the Public Hearing schedule. Those who will not be able to register or submit written positions may be given the opportunity to share their issues on the day of the hearing itself.

The project's EIS and Executive Summary for the Public are downloadable at our website: [www.eia.emb.gov.ph](http://www.eia.emb.gov.ph) (*kindly access the Notice of Public Hearing/ Consultation link found in our website*) while copies will be available in the following offices:

- EMB CALABARZON**  
6<sup>th</sup> Floor 1515 DENR By the Bay Bldg., Roxas Blvd., Ermita, Manila  
Tel No. (02) 8536-9784
- Pakil Municipal Hall**  
Municipality of Pakil, Province of Laguna

For more details, please contact the EIAMD Division at this Office at telephone number (02) 8539-4378 loc. 116 through the project casehandlers Engr. Dexter Tabada and Ms. Leonil Gargar.

*[Handwritten signature]*