



Inspiring a Climate of Change: A Hope-based Approach in Advocating Net-Zero/Low-Carbon Green Living in the Philippines

Micah S. De Leon

Climate Change Service

Department of Environment and Natural Resources





Key Messages of the Synthesis Report of Intergovernmental Panel on Climate Change 6th Assessment Report (IPCC AR6)

Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred resulting to widespread adverse impacts and related losses and damages to nature and people.

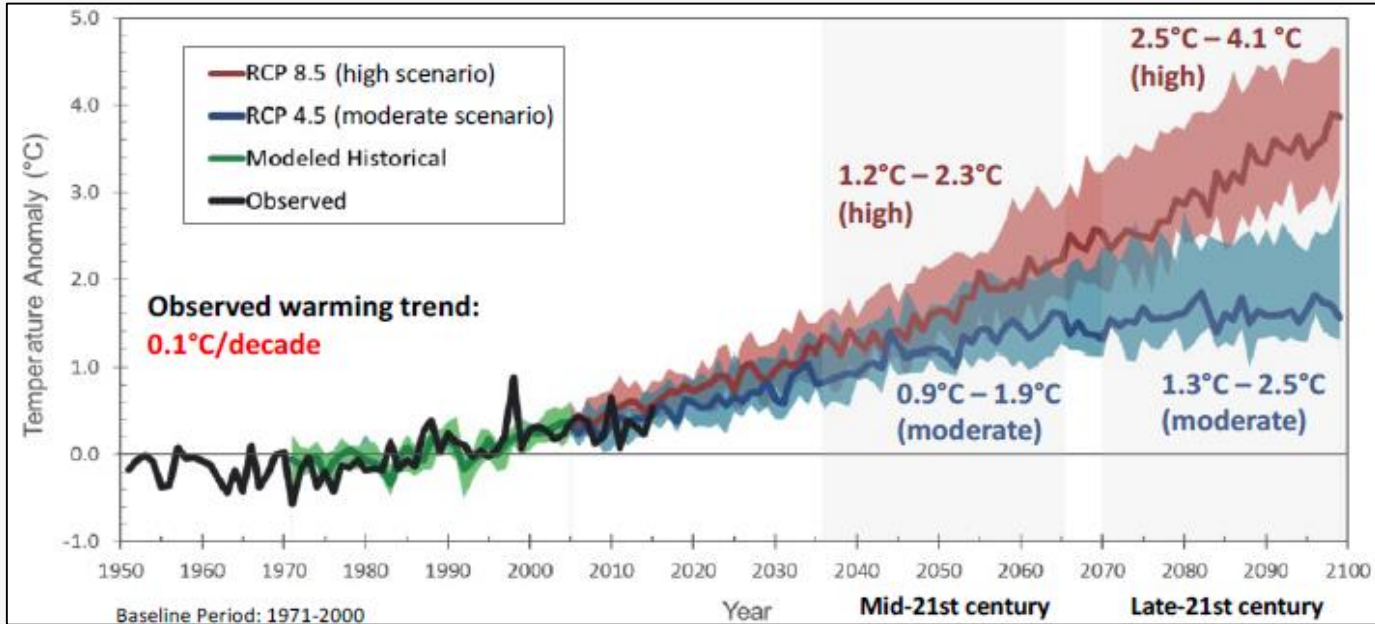
Risks and projected adverse impacts and related losses and damages from climate change escalate with every increment of global warming.

Some future changes are unavoidable and/or irreversible but can be limited by deep, rapid and sustained global greenhouse gas emissions reduction.

Source: Synthesis Report of the IPCC Sixth Assessment Report (AR6)



Observed warming trend in the Philippines projected to continue into the future



Source: PAGASA, 2018. Observed Climate Trends and Projected Climate Change in the Philippines.





Datu Odin Sinsuat, Maguindanao del Norte

Philippines tops global disaster risk index

1st among countries with the highest disaster risk worldwide in 2022, from **8th** place in 2021

Source: World Risk Report 2022





Php 177 B

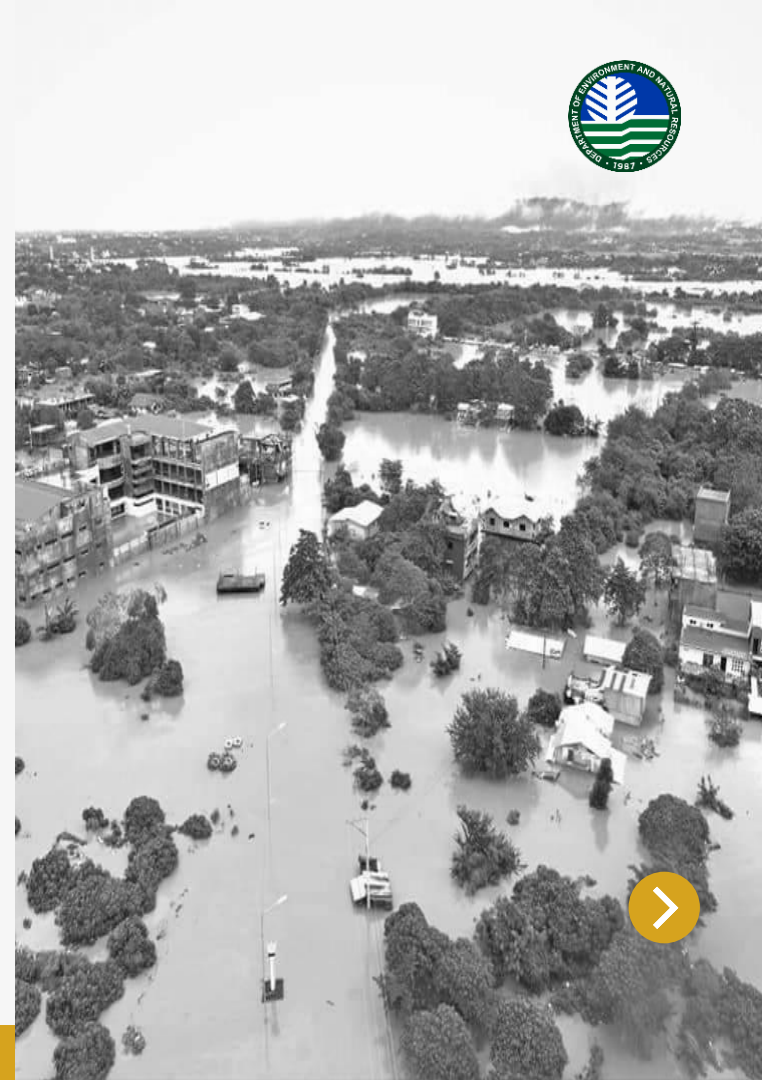
**Expected losses to public and private assets
per year due to typhoons and earthquakes**

In the next 50 years:

40% chance of experiencing
> Php 989 billion
worth of losses

20% chance of experiencing
> Php 1,525 billion
worth of losses

Source: Department of Finance





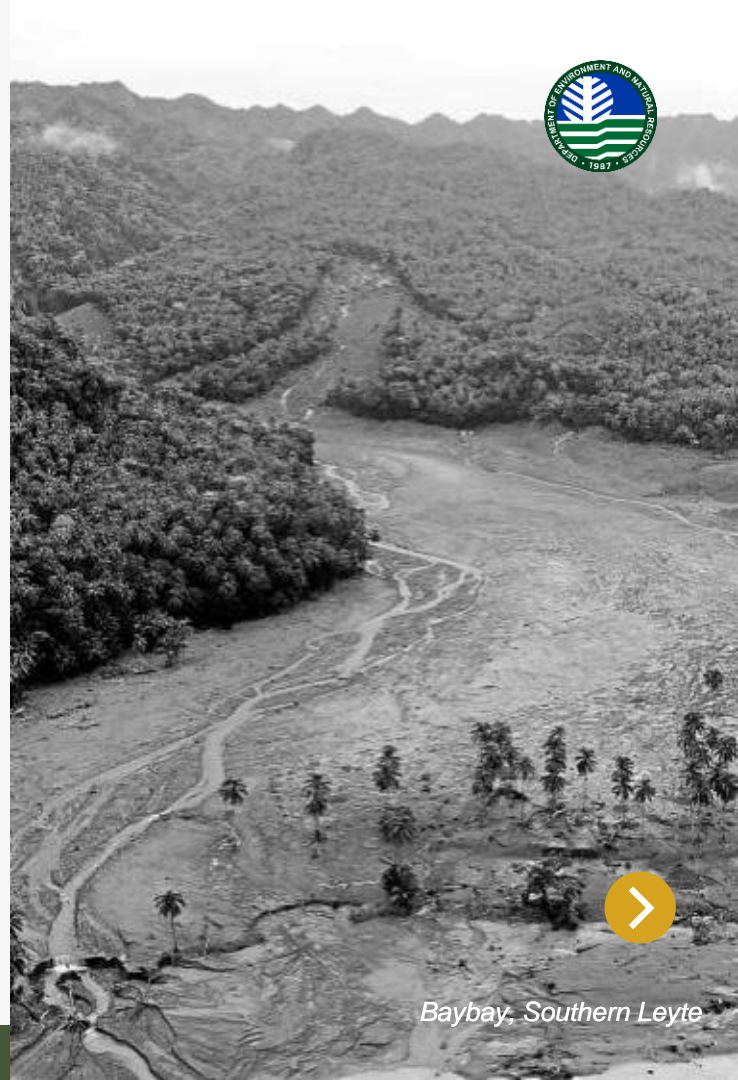
The Adaptation Gap Report 2022

**USD 160–340 Billion
by 2030**

**USD 315–565 Billion
by 2050**

estimated annual adaptation needs

Source: United Nations Environment Programme (2022). *Adaptation Gap Report 2022: Too Little, Too Slow – Climate adaptation failure puts world at risk*. Nairobi. <https://www.unep.org/adaptation-gap-report-2022>



Baybay, Southern Leyte

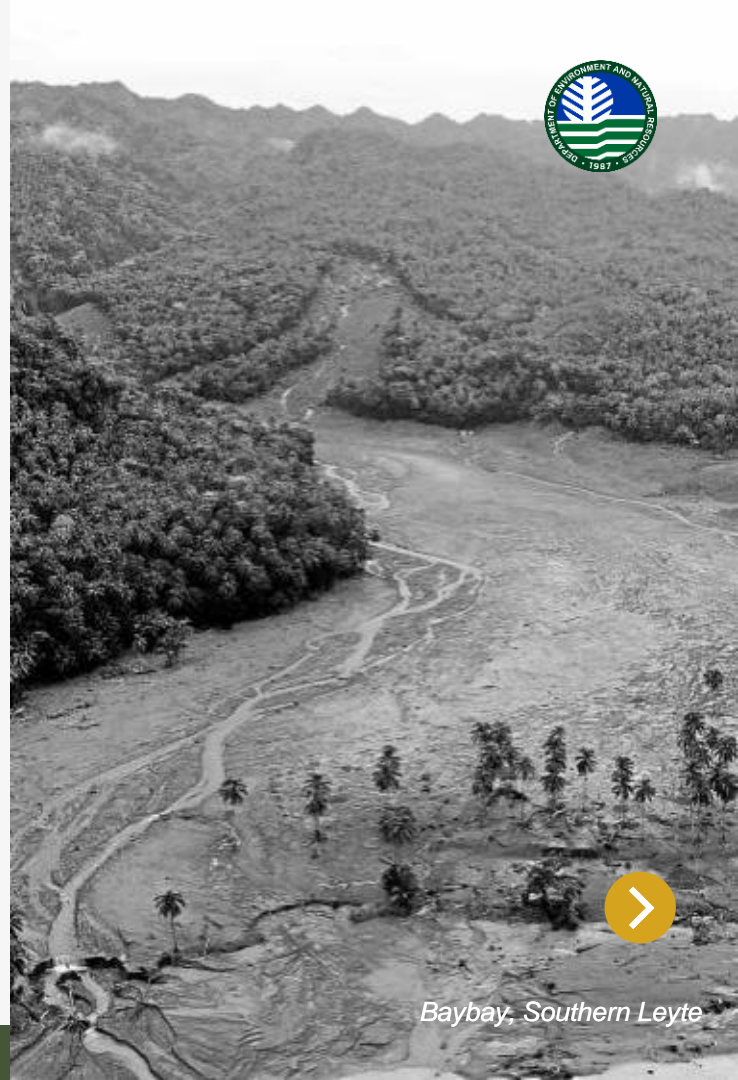


The Emission Gap Report 2022

Policies currently in place point to a 2.8°C temperature rise by the end of the century

Urgent system-wide transformation needed to limit greenhouse gas emissions by 2030

Source: United Nations Environment Programme (2022). *Emissions Gap Report 2022: The Closing Window – Climate crisis calls for rapid transformation of societies*. Nairobi. <https://www.unep.org/emissions-gap-report-2022>



Baybay, Southern Leyte



“

Our actions create ripples of influence that extend far beyond our immediate circles. When we embrace net-zero and low carbon living, we inspire others to follow suit.

”



Republic of the Philippines
Congress of the Philippines
Metro Manila

Fourteenth Congress
Third Regular Session

Begun and held in Metro Manila, on Monday, the twenty-seventh day of July, two thousand nine.

[REPUBLIC ACT NO. 9729]

AN ACT MAINSTREAMING CLIMATE CHANGE INTO GOVERNMENT POLICY FORMULATIONS, ESTABLISHING THE FRAMEWORK STRATEGY AND PROGRAM ON CLIMATE CHANGE, CREATING FOR THIS PURPOSE THE CLIMATE CHANGE COMMISSION, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. *Title.* – This Act shall be known as the “Climate Change Act of 2009”.

SEC. 2. *Declaration of Policy.* – It is the policy of the State to afford full protection and the advancement of the right of the people to a healthful ecology in accord with the rhythm and harmony of nature. In this light, the State has adopted the Philippine Agenda 21 framework which espouses sustainable development, to fulfill human needs while maintaining the quality of the natural environment for current and future generations.

Towards this end, the State adopts the principle of protecting the climate system for the benefit of humankind, on the basis of climate justice or common but differentiated responsibilities and the Precautionary Principle to guide decision-making in climate risk management. As a party to the United Nations Framework Convention on Climate Change, the State adopts the ultimate objective of the Convention which is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system which should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. As a party to the Hyogo Framework for Action, the State likewise adopts the strategic goals in order to build national and local resilience to climate change-related disasters.

Recognizing the vulnerability of the Philippine archipelago and its local communities, particularly the poor, women, and children, to potential dangerous consequences of climate change such as rising seas, changing landscapes, increasing frequency and/or severity of droughts, fires, floods and storms, climate-related illnesses and diseases, damage to ecosystems,



The Climate Change Act of 2009 (Republic Act 9729)

- **Mainstreaming of climate change into government policy formulations**
- **Establishment of the framework strategy and program on climate change**
- **Creation of the Climate Change Commission**
- **Development of the National Climate Change Action Plan (NCCAP) for 2011–2028**





The Paris Agreement

A legally binding international treaty on climate change

Adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016

Limit global warming to well below 2°C, preferably to 1.5°C





Paris Agreement

The Parties to this Agreement,

Being Parties to the United Nations Framework Convention on Climate Change,

Article 11

1. Capacity-building under this Agreement should enhance the capacity and ability of developing country Parties, in particular countries with the least capacity, such as the least developed countries, and those that are particularly vulnerable to the adverse effects of climate change, such as small island developing States, to take effective climate change action, including, inter alia, to implement adaptation and mitigation actions, and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

Recognizing that sustainable development, climate change response and

impacts have with equitable access to sustainable development and eradication of poverty,

Recognizing the fundamental priority of safeguarding food security and ending

hunger, and the particular vulnerabilities of food production systems to the adverse impacts

Article 12

Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.

Recognizing the importance of education, training, public awareness, public

participation, public access to information and cooperation at all levels on the matters

addressed in this Agreement,

Recognizing the importance of the engagements of all levels of government and

various actors, in accordance with respective national legislations of Parties, in addressing

climate change,

The Paris Agreement





REPUBLIC OF THE PHILIPPINES
Nationally Determined Contribution
Communicated to the UNFCCC on 15 April 2021

The Republic of the Philippines submits its Nationally Determined Contribution (NDC) in accordance with Decision 1/CP.21 of the Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC).

The Philippines' NDC supports the country's national development objectives and priorities of sustainable industrial development, poverty eradication and inclusive growth, energy security, and social and climate justice, and the transformation of its socio-economic sectors towards a climate and disaster-resilient and low carbon economy.

The Philippines shares the view that the NDC is a means to communicate opportunities for transforming our world with gender-responsive sustainable development options through the commitment of Parties to support and complement each other's endeavors in accordance with the partnership arrangement under the UNFCCC and the Paris Agreement.

Developed through a whole-of-government-and-society approach, the Philippines' NDC upholds the importance of meaningful participation of women, children, youth, persons with diverse sexual orientation and gender identity, differently abled, indigenous peoples, elderly, local communities, civil society, faith-based organizations, and the private sector, and recognizes the indispensable value of inclusion and collaborative participation of local governments in implementing climate actions. It shall enable a market signal to support local and foreign direct green investments. The NDC recognizes the private sector as the country's main engine of economic growth and transformation, and promotes its full engagement in climate change adaptation and mitigation.



Nationally Determined Contributions

Commits to a projected GHG emissions reduction and avoidance of 75% for the period 2020 to 2030 for the sectors of agriculture, wastes, industry, transport, and energy

2.71% is unconditional

72.29% is conditional





2050 Philippine Pathways Calculator

an open, transparent and interactive energy model that can be used by governments, stakeholders and the public to understand how to decarbonise a region or country, and to develop evidence-based policies

Photo source: Solar Philippines





The Philippine Development Plan 2023–2028

**Sub-Chapter 2.3.
Establish Livable
Communities**

**Chapter 12:
Expand and
Upgrade
Infrastructure**

**Chapter 15.
Accelerate Climate
Action and
Strengthen Disaster
Resilience**



Philippine Development Plan (2023–2028)

Chapter 15. Accelerate Climate Action and Strengthen Disaster Resilience



Enhance Adaptive Capacity and Resilience of Communities and Ecosystems to Natural Hazards and Climate Change

Climate and Disaster Risk Resilience of Communities and Institutions Increased

- ✓ **Strengthen the capacity of LGUs and communities in disaster prevention and preparedness**
- ✓ **Boost multi-stakeholder partnership in building and translating knowledge to climate change adaptation and disaster risk reduction**
- ✓ **Align environment, social, and governance (ESG) measures and investments with local adaptation and risk reduction needs and priorities**

Ecosystems Resilience Enhanced

- ✓ **Intensify ecosystem protection, rehabilitation and management**
- ✓ **Promote and expand natural resource-based industries and enterprises**

Low Carbon Economy Transition Enabled

- ✓ **Implement the Nationally Determined Contribution (NDC) policies and measures**
- ✓ **Bolster private sector investments in green development**
- ✓ **Ensure just transition of workers affected by structural changes towards a greener, more sustainable, and low carbon economy**
- ✓ **Expand market opportunities for low carbon technologies and products**



Governance and Intersectionality of Climate Change and Natural Hazard Resilience Improved

CCAM-DRR Cabinet Cluster Road Map

OVERALL GOAL

Climate- and disaster-resilient communities supporting equitable and sustainable development

DESIRED RESULT

By 2022: Enhanced climate- and disaster-resilient communities in:

24 vulnerable provinces

4 Major Urban Centers

Metro Manila
Metro Cebu
Metro Iloilo
Metro Davao

OUTCOME 1:
Increased Adaptive Capacities of Vulnerable Communities

PPA 1

PPA 2

OUTCOME 2:
Ensured Adequate Supply of Clean Air, Water, and Other Natural Resources

PPA 1

PPA 2

OUTCOME 3:
Increased Resilience of Critical Infrastructure

PPA 1

PPA 2

OUTCOME 4:
Enhanced Knowledge, Access to Information & Institutional Capacities

PPA 1

PPA 2





Priority Climate-Vulnerable Areas

Regions	Priority Climate-Vulnerable Provinces/Cities
CAR R5 R7 R8 R9 R10 R12 R13 BARMM	Apayao, Kalinga, Ifugao, Mountain Province Masbate, Sorsogon, Catanduanes Negros Oriental, Siquijor Western Samar, Southern Leyte, Eastern Samar, Northern Samar Zamboanga del Norte Bukidnon Saranggani, North Cotabato, Sultan Kudarat Surigao del Norte, Surigao del Sur, Dinagat Islands Maguindanao, Sulu, Lanao del Sur
4 MUCs	<i>Metro Manila, Metro Iloilo, Metro Cebu, Metro Davao</i>

Criteria:

- **High susceptibility to climate hazards**
- **Situated in critical watersheds/ Areas of focus of the government**
- **High poverty incidence**
- **With convergence sites**





Risk Resiliency Program

To deliver climate change adaptation and mitigation outcomes, particularly on strengthening the resiliency of natural ecosystems and the adaptive capacity of vulnerable communities to short and long term risks in key Philippine landscapes.





Risk Resiliency Program

Objectives

- **Apply program convergence planning and budgeting approach to strengthen the country's actions for climate change adaptation, mitigation, and disaster risk reduction (CCAM-DRR)**
- **Help GoP to optimally use its available budget on priority CCAM-DRR programs**
- **Increase the size and quality of CCAM-DRR responsive investments**

Key Investment Areas

- **Community Livelihood, and Enterprise Continuity Program**
- **Integrated Water Resources Management Program**
- **Enhancing Coastal Protection Program**
- **Climate Information Services Program**
- **Seismic Resiliency Program**





ENHANCING ADAPTIVE CAPACITY



18 Resilience Roadmaps with Investment Portfolios for Risk Resilience developed

78 participants trained on the use of the Provincial Climate Risk Diagnostics Tool

24 provinces assisted on developing project proposals on climate resilient investments

MAINSTREAMING CLIMATE CHANGE

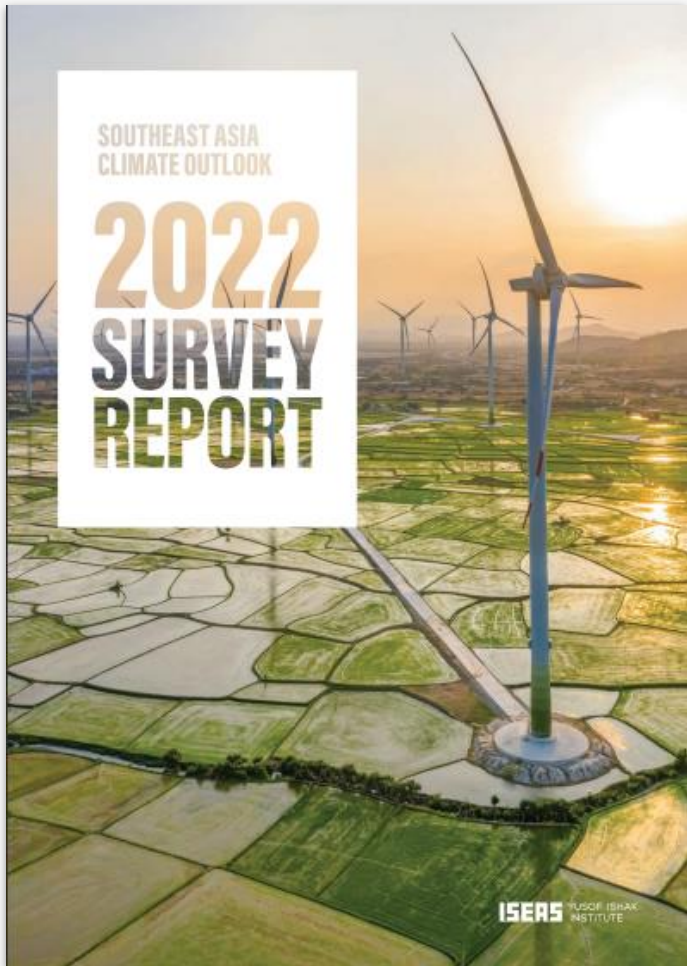


20 cities trained on greenhouse gas inventory, urban green spaces, and climate action planning

Circular Economy Data Platform & Knowledge Portal established (Extended Producers' Responsibility)

80 participants trained on Green Assessment Stage 1 - Remote Sensing and GIS





Filipinos are the ones most worried about climate change based on the 2022 Southeast Asia Climate Outlook Survey

64.3% of Filipino respondents said they found climate change to be “a serious and immediate threat to the well-being of my country”





From Worriers to Warriors: How can we shift the narrative?





Shifting the narratives

**Positive Framing:
Reframing
challenges as
opportunities for
growth**

**Empowering
Language and
Stories:**
Using empowering
words and phrases, and
even good impactful
stories happening on
the ground

**Setting Realistic
Goals:**
Setting achievable
goals and breaking
down larger ones into
manageable steps





Carbon Footprint Reduction Potential of 500 kg CO₂e/capita/year to 1,500 kg CO₂e/capita/year

- ❖ **Vegetarian diets**
- ❖ **Car-free private travel**
- ❖ **Electric cars**
- ❖ **Hybrid cars**
- ❖ **Vehicle fuel efficiency improvement**
- ❖ **Renewable grid electricity**
- ❖ **Renewable off-grid energy**

Source: Institute for Global Environmental Strategies, Aalto University, and D-mat Ltd. 2019. 1.5-Degree Lifestyles: Targets and Options for Reducing Lifestyle Carbon Footprints. Technical Report. Institute for Global Environmental Strategies, Hayama, Japan.





Carbon Footprint Reduction Potential of 200 kg CO₂e/capita/year to 500 kg CO₂e/capita/year



- ❖ **Ride sharing**
- ❖ **Living closer to workplace**
- ❖ **Heat pumps**
- ❖ **Smaller living spaces**
- ❖ **Car-free commuting**
- ❖ **Alternative Dairy Products**
- ❖ **Low carbon protein**



Source: Institute for Global Environmental Strategies, Aalto University, and D-mat Ltd. 2019. 1.5-Degree Lifestyles: Targets and Options for Reducing Lifestyle Carbon Footprints. Technical Report. Institute for Global Environmental Strategies, Hayama, Japan.





Carbon Footprint Reduction Potential of less than 250 kg CO₂e/capita/year

- ❖ Efficiency improvement of home appliances
- ❖ Telework
- ❖ Reduction of food loss
- ❖ Efficiency improvement of food production
- ❖ Saving of hot water
- ❖ Reduction of flights



Source: Institute for Global Environmental Strategies, Aalto University, and D-mat Ltd. 2019. 1.5-Degree Lifestyles: Targets and Options for Reducing Lifestyle Carbon Footprints. Technical Report. Institute for Global Environmental Strategies, Hayama, Japan.



2019 NATIONAL CLIMATE CHANGE CONSCIOUSNESS WEEK



CLIMATE CHANGE NEEDS BEHAVIOR CHANGE

COMIC STRIP-MAKING CONTEST!

Get a chance to win the following prizes!

1st prize: php 10,000
2nd prize: php 7,000
3rd prize: php 5,000
7 consolation prizes: php 3,000 each

Entries will be judged on the following criteria:

Story and messages: 40%
Creativity, impact and relevance of theme: 20%
Artistic skill: 20%
Originality: 20%

DEADLINE: NOVEMBER 4, 2019
Submit your entries to:
ccs.denr@gmail.com | cco.denr@yahoo.com




2021 National Women's Month

Mga Kwentong KLIMA-likasan
Tungo sa Katatagan:
A Climate and Disaster Resiliency Recognition Awards

Submit your entries to cco.denr@yahoo.com and ccs.denr@gmail.com on or before May 4, 2021, with filled up entry form.



Ang Tinig Klima

JOIN THE BIGGEST SHORT FILM COMPETITION ON "CLIMATE CHANGE"!

SINIG-LIKHASAN

EXPRESS IN ANY UNIQUE WAY VIA CELPHONE OR DSLR AND WIN CASH PRIZES OF UP TO P50,000

"STORIES OF RESILIENCE & ADAPTATION IN THE FACE OF CLIMATE CHANGE"

VIDEOS MAY BE STYLED AS A NARRATIVE, DOCUMENTARY, OR ART PERFORMANCE LIKE ACTING, MUSIC VIDEO, MIME, SHADOW PLAY, ART INSTALLATION 2 TO 7 MINUTES IN .MOV OR MP4 FORMATS

GET THE MECHANICS AND YOUR FREE ENTRIES @
<https://earthdayjamfoundation.org/> and <https://siniglikhasan2022.com/>

EMAIL YOUR ENTRIES TO:
earthdayjamfoundation@gmail.com
ccs@denr.gov.ph

Deadline : OCT 15, 2022

Earth Day Jam Foundation | DENR Climate Change Services

National Climate Change Consciousness Week 2021
"Klima ng Kinabukasan, Atang Pangalagan"

Youth in Climate Action

TikTok Challenge

Deadline of Submission: November 16, 2021

[f DENRCCS](https://www.facebook.com/denrccs) [✉ ccs@denr.gov.ph](mailto:ccs@denr.gov.ph) www.denr.gov.ph [@climatechange.denr.gov.ph](https://climatechange.denr.gov.ph)

National Climate Change Consciousness Week 2021
"Klima ng Kinabukasan, Atang Pangalagan"

KKK:
Klima, Kalikasan, at Kabataan
Virtual Music Concert

Deadline of Submission: November 16, 2021

[f DENRCCS](https://www.facebook.com/denrccs) [✉ ccs@denr.gov.ph](mailto:ccs@denr.gov.ph) www.denr.gov.ph [@climatechange.denr.gov.ph](https://climatechange.denr.gov.ph)

Community Encounters



Caloocan City



Palawan



Palawan



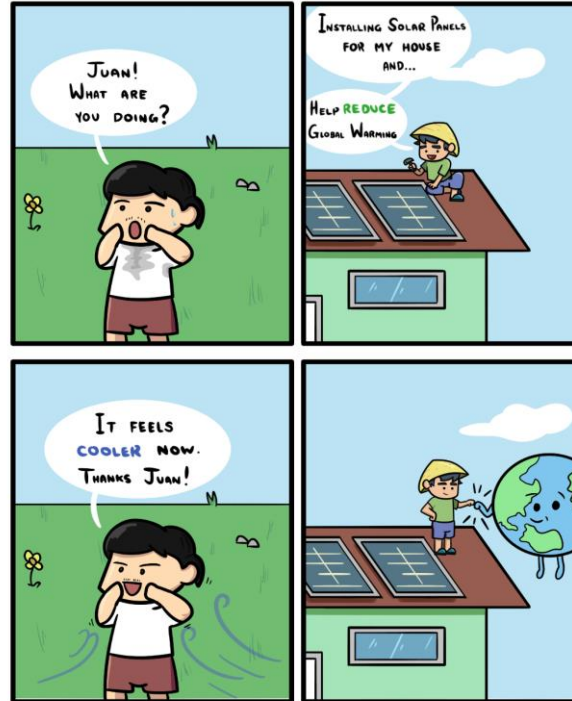
Comic Strips



OUR CHOICES



"Juan Change"



Battle of the Bands



Short Films





Radio Program

DZXL 558
FRI | MAR. 04, 2022
PNP HOTLINE 117
ANG TINIG KLIMA
HOSTS: RAYDOMAN JENNY PAHILANGA AND USEC. ANALIZA REBUELTA-TEH
3:01 pm | 223-76 | 8888-223-78 | [facebook](#) | [RMN DZXL 558 MANILA](#) | [facebook](#) | [RMN NEWS](#) | [twitter](#) | [@NEWSRMN](#) | [WEBSITE](#) | [WWW.RMN.PH](#) | [youtube](#)

7 **DZXL 558**
ANG TINIG KLIMA GUEST
MR. GARY DABASOL
Matalom, Leyte
3:12 pm | 733-2473 | [HOTLINE](#) | 8888-223-76 | 8888-223-78 | [facebook](#) | [RMN DZXL 558 MANILA](#) | [facebook](#) | [RMN](#) | FRI | MAY 19, 2023

imn
FRI | FEB. 10, 2023
GUEST:
RD Ma. Victoria V. Abrera
REGIONAL DIRECTOR
DENR ENVIRONMENTAL MANAGEMENT BUREAU
CORDILLERA ADMINISTRATIVE REGION
ANG TINIG KLIMA
RADYOMAN JENNY PAHILANGA & DIR. ELENIDA BASUG
3:05 pm | [twitter](#) | 0967-372-9014 | [TEXTLINE](#) | 0921-431-1044 | 0966-763-2473 | [HOTLINE](#) | 8888-223-76 | 8888-223-78 | [facebook](#) | [RMN DZXL 558 MANILA](#)

DZXL 558
FRI | OCT. 14, 2022
ECC HOTLINES
8-896-7837
8-899-4251
ANG TINIG KLIMA
HOSTS: RAYDOMAN JENNY PAHILANGA AND DIR. ELENIDA BASUG
3:03 pm | [youtube](#) | [DZXL 558](#) | [facebook](#) | 0967-372-9014 | [TEXTLINE](#) | 0921-431-1044 | 0966-763-2473 | [HOTLINE](#) | 8888-223-76 | 8888-223-78 | [facebook](#) | [RMN](#) | [twitter](#) | [@NEWSRMN](#) | [WEBSITE](#) | [WWW.RMN.PH](#) | [youtube](#)

imn **DZXL 558**
ANG TINIG KLIMA
RADYOMAN JENNY PAHILANGA & DIR. ELENIDA BASUG
3:43 pm | 33-2473 | [HOTLINE](#) | 8888-223-76 | 8888-223-78 | [facebook](#) | [RMN DZXL 558 MANILA](#) | [facebook](#) | [RMN NEWS](#) | FRI | FEB. 03, 2023

DZXL 558
FRI | MAR. 04, 2022
GUEST:
MS. FILOMENA
"KAP MENANG" CINGO
BARANGAY CAPTAIN
BARANGAY 415, ZONE 65, CITY OF MANILA
ANG TINIG KLIMA
HOSTS: RAYDOMAN JENNY PAHILANGA AND USEC. ANALIZA REBUELTA-TEH
3:42 pm | [@NEWSRMN](#) | [WEBSITE](#) | [WWW.RMN.PH](#) | [youtube](#) | [DZXL 558](#) | [facebook](#) | 0967-372-9014 | [TEXTLINE](#) | 0921-431-1044 | 0966-763-2473 | [HOTLINE](#)



Recognition Awards

Gary Dabasol
Tacloban City, Leyte,
Philippines

Mang Gary individually planted 10,000 mangroves to provide protection for your family and your communities from strong typhoons.





Recognition Awards

Moises Butic

Ifugao Province, Philippines

Moises Butic, a full-blooded Ifugao and a nature enthusiast, spent his years nurturing the Ifugao “muyong”, a unique forest conservation practice within a small landholding in the Cordilleras.

His mini-nursery served as an immersion center for students and various organizations in Ifugao, where he taught them about seed collection, potting soil preparation, dibbling and plant care and maintenance among others.





SORTING



CRUSHING



FINISHED PRODUCT

Recognition Awards

Adela Jamelo

**Panatao Plastic Waste Recycling Association
Surigao del Norte**

To turn its residual waste into valuable assets for the community, a Residual Plastic Recycling Plant was established.

One plastic school chair is equivalent to 20 kilos of crushed and cleaned residual plastic. The products of the recycling plant are sold to mining companies for their donation drives to nearby schools.



Recognition Awards

Grachelle Andrea Bello Guevara
Executive Director of I CAN make a difference

Among the projects that she initiated is the Solar Reflector Project which aimed to use soda cans to disinfect contaminated water in their community.

The team also launched Passion wEARTHly to reuse plastic bags and convert them into a durable material that can be converted into school bags, raincoats, pencil cases, wallets and purses.





“

Positive messaging can empower individuals by demonstrating that their actions count and that they have a role to play in promoting a net-zero/low-carbon lifestyle.

”





THANK YOU FOR LISTENING.

**For more information, you may contact the
DENR Climate Change Service through:**



**+632 8928-
1194**



**ccs@denr.gov.ph
<https://climatechange.denr.gov.ph/>**